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February 8, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

PROJECT NAME	: Quail Ridge Country Club
PROJECT MUNICIPALITY	: Great Road - Acton
PROJECT WATERSHED	: Concord River
EOEA NUMBER	: 12503
PROJECT PROPONENT	: **Quail Ridge** Country Club, LLC
DATE NOTICED IN MONITOR	: December 24, 2007

Pursuant to the Massachusetts Environmental Policy Act (MGL, c.30, ss. 61-62H) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on this project and determine that it **requires** the preparation of a Supplemental Environmental Impact Report (EIR).

The project originally consisted of the construction of an 18-hole golf course with a driving range, a 28,000 square foot (sf) clubhouse, three tennis courts, a swimming pool with changing rooms, and a 5,000 sf turf management/cart storage building. The project would consume about 150,000 gallons per day (gpd) or 22 million gallons annually of irrigation water. It would be supplied by two onsite bedrock wells. The project site contains approximately 154.7 acres. The FEIR was found to be adequate on April 1, 2002. In 2003, the proponent submitted an NPC in which the proponent was proposing to withdraw less than 100,000 gpd from its bedrock wells. The proponent also proposed expanding and lining an existing on-site pond to create an approximately 9.4 million-gallon capacity storage pond of which 7.1 million gallons are useable as irrigation water on the project site (June through September). The proponent is proposing to fill the storage pond during non-peak periods (October to May) from its wells. The Acton Water Supply District has also agreed to sell potable water to the proponent on a temporary and seasonal basis. The proponent was subject to a Water Management Act permit. The Secretary determined that the NPC did not require further MEPA review on November 24, 2003.

On December 17, 2007, this NPC was submitted for MEPA review. The proponent is

proposing to construct approximately 175 age-restricted units (approximately 378,850 sf) in a mix of single-family detached dwellings, town house style duplexes, and garden style residences to be known as the Residences at Quail Ridge (TRQR). The TRQR will replace 9 of the 18 holes on the golf course. Five percent (approximately nine) of the units will be affordable. A 7,500 sf (35-50 seat) restaurant that was part of the original golf course would be built. The golf course driving range would be eliminated. The proposed project will create 19.56 additional acres of impervious area.

Using Land Use Codes (LUC) 230 and 251, the proponent estimated that the TRQR will generate approximately 838 daily vehicle trips. The restaurant was estimated to generate approximately 674 daily vehicle trips using LUC 931. However, the proponent estimated that only 15 percent of the restaurant patrons would originate from points off the site. Therefore, the proponent estimated that the restaurant would generate 102 weekday vehicle trips. Furthermore, with the reduction of the golf course to nine wholes, the proponent reduced the number of golf course trips by 322 fewer weekday vehicle trips. In summary, the proponent has estimated that this NPC would generate an additional 618 weekday vehicle trips and 478 Saturday vehicle trips. The proponent will provide 593 parking spaces for the TRQR with a project total of 798 spaces. In the NPC, the proponent has committed to provide sidewalks along Skyline Drive and the planned TRQR neighborhood.

The proponent has estimated that the TRQR will consume 31,780 gallons per day of potable water and will generate a similar amount of wastewater. Because of the reduction in golf course area, the proponent will reduce the amount of irrigation system water by an estimated 40 percent. As described in the Administrative Consent Order (ACO) in 2003 with MassDEP, the irrigation system for the golf course limited water withdrawals to 100,000 gpd or 900,000 gpd in any three month period. The proponent will impact 3,470 sf of Bordering Vegetated Wetlands (BVW) to construct an access road. It is proposing to replicate approximately 9,820 sf of BVW in an upland area.

The project requires a mandatory EIR pursuant to Section 11.03(1)(a)(2) of the MEPA regulations because it creates ten or more acres of impervious area (19.56 acres). It will require an amended Access Permit from the Massachusetts Highway Department (MassHighway) for access onto Skyline Drive. The project will need to obtain a Groundwater Discharge Permit for its wastewater treatment plant and a Water Distribution System Modification Permit from the Department of Environmental Protection (MassDEP). The proponent has agreed with MassDEP to seek a Water Management Act Permit. It should comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. The proponent will need to obtain a Programmatic General Permit from the U.S. Army Corps of Engineers. The project will be required to obtain an Order of Conditions from the Acton Conservation Commission. MEPA jurisdiction extends to land alteration, traffic, air quality, wetlands, stormwater, water, and wastewater issues that may have significant environmental impacts.

SCOPE

As modified by this scope, the EIR should conform to Section 11.07 of the MEPA regulations for outline and content. The EIR should resolve the remaining issues outlined below. It should address the comments listed at the end of this Certificate to the extent that they are within the scope, and it should include a copy of this Certificate and all comment letters.

Project Description & Regulatory Environment

The Supplemental EIR should provide a detailed project description with a summary/history of the project. It should include existing and proposed readable site plans. The Supplemental EIR should describe any project phasing. It should describe each state agency action required for the project. The Supplemental EIR should demonstrate how the project is consistent with the applicable performance standards. It should contain sufficient information to allow the permitting agencies to understand the environmental consequences related to the project. The Supplemental EIR should discuss how this project is compatible with Executive Orders 385 and 418, the Metropolitan Area Planning Council's (MAPC) MetroPlan and Acton's Master Plan, Open Space Plan, and Zoning. Any proposals for Conservation Restrictions and /or easements at the project site should be discussed in the Supplemental EIR.

Wetlands

Because the proponent will impact 3,470 sf of Bordering Vegetated Wetlands (BVW), the Wetland Section of the Supplemental EIR should contain an alternatives analysis to ensure that impacts to wetland resource areas and buffer zones are avoided, and where unavoidable impacts occur, impacts are minimized and mitigated. It should quantify the amount of temporary and permanent impacts to the resource areas, and there should be a plan to go along with the discussion. The Supplemental EIR should illustrate that the impacts have been minimized and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00).

The Supplemental EIR should address the significance of the wetland resources and buffer zones on site, including public and private water supply; riverfront areas; flood control; storm damage prevention; fisheries; shellfish; and wildlife habitat. It should identify the location of nearby public water supplies and wells.

All resource area boundaries, riverfront areas, applicable buffer zones, and 100-year flood elevations should be clearly delineated on a plan. Bordering vegetated wetlands that have been delineated in the field should be surveyed, mapped, and located on the plans. Each wetland resource area and riverfront area should be characterized according to 310 CMR 10.00. The text should explain whether the local conservation commission has accepted the resource area boundaries, and any disputed boundary should be identified. The Supplemental EIR should

provide an accurate measurement of the wetland resource areas and buffer zones that will be affected by the project.

The EIR should identify the proponent's efforts to obtain an Order of Conditions from the Acton Conservation Commission. The Wetland Section of the Supplemental EIR should contain an alternatives analysis to ensure that all wetland impacts are avoided, and where unavoidable impacts occur, impacts are minimized and mitigated. The Supplemental EIR should illustrate that the impacts have been minimized and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00).

Parking

In order to reduce the amount of impervious area, the Supplemental EIR should identify measures to reduce the number of parking spaces from 593 spaces (about 3.39 spaces per unit) to about 350 spaces (about 2.0 spaces per unit) or less. The Supplemental EIR should also indicate how many spaces are required by zoning.

Drainage

The quality of stormwater runoff generated by the project should be improved by the implementation of Best Management Practices. The project will create approximately 19.56 acres of new impervious area. The Supplemental EIR should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. It should provide pre- and post-drainage calculations. The proponent should recharge roof runoff and should treat stormwater runoff from parking areas and driveways.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. The location of detention/infiltration basins and their distances from wetland resource areas, and the expected water quality of the effluent from said basins should be identified. This analysis should address current and expected post-construction water quality (including winter deicing and sanding analyses) of the predicted final receiving water bodies. Sufficient mitigation measures should be incorporated to ensure that no downstream impacts would occur. The drainage analysis should ensure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

The Supplemental EIR should address the performance standards of MassDEP's Stormwater Management Policy. It should address the groundwater recharge issues and demonstrate that the project will meet the Stormwater Management Policy. The EIR should demonstrate that the design of the drainage system is consistent with this policy, or in the alternative, why the proponent is proposing a drainage system design not recommended by

MassDEP. The proponent should use the MassDEP Stormwater Management Handbook when addressing this issue.

The Supplemental EIR should discuss the consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It should include a discussion of best management practices employed to meet the NPDES requirements, and should include a draft Pollution Prevention Plan. The EIR should identify how this project will comply with the NPDES Phase II Stormwater General Permit, which Acton is required to implement.

The Supplemental EIR should describe the maintenance program for the drainage system, which will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, responsible parties, and back-up systems.

In the Supplemental EIR, the proponent should consider committing to using a non-sodium based deicer on the project's paved surfaces and limiting the use of chemical fertilizers and pesticides on grass areas maintained by the condominium association. The proponent should incorporate its low impact turf management program and integrated pest management plan for the golf course into its management/maintenance program for the residential units.

The Supplemental EIR should address reducing the amount of impervious area proposed on the project site by alternative layout, providing pervious parking areas, and reduced pavement areas.

Water/Wastewater

The Supplemental EIR should identify the source and amount of potable water for the NPC. It should outline the proponent's efforts to reduce water consumption and thereby reduce wastewater generation. It should describe the design of the wastewater package treatment plant, leaching area, and groundwater discharge issues. A site plan should identify the location of the wastewater treatment plant and leaching areas. The EIR should identify the number of proposed bedrooms at the site, and how it determined the 31,780 gpd of wastewater generation. It should address the concerns raised in the comment letters regarding the drip irrigation system in the leaching field. The Supplemental EIR should explain why MassDEP has a Groundwater Discharge Permit application for two-phased project with a flow of 60,000 gpd. Phase I includes 170 age-restricted units, and Phase II includes 412 bedrooms for a senior living facility. This differs from the project described within this NPC.

The Supplemental EIR should describe the background information for the 2003 ACO with MassDEP. As stated earlier, the ACO limited water withdrawals to a certain level. The proponent is now stating that it will reduce water withdrawals for the reduced golf course to 40

percent of its original estimated demand. However, MassDEP reported in its comment letter that the Water Management Act permit application before it is a request to withdraw 26 million gallons per year (mgy) for use in irrigating the 18-hole golf course. The EIR should discuss when the proponent will inform MassDEP of its reduced irrigation demand for the 9-hole golf course, and it should provide the estimated irrigation demand for the 9-hole golf course.

Construction

The Supplemental EIR should present a discussion on potential construction period impacts (including but not limited to noise, dust, wetlands, and traffic maintenance) and analyze feasible measures that can avoid or eliminate these impacts. It should identify the amount of blasting required to develop the site for housing. The Supplemental EIR should estimate the amount of fill to be removed or brought to the site. It should identify the number of truck trips required to handle the filling operation and the truck routes proposed to allow for this filling operation. The Supplemental EIR should show where filling will be required on the site.

Sustainable Design

This project presents a good opportunity to successfully incorporate cost-effective sustainable design elements and construction practices into the project. These elements can minimize environmental impacts and reduce operating costs. The Supplemental EIR should summarize the proponents' efforts to ensure that this project includes Leadership in Energy and Environmental Design (LEED) Certified buildings or the equivalent. I strongly encourage the proponent to consider incorporating elements, such as those noted below, into its project design, construction and management:

- water conservation and reuse of wastewater and stormwater;
- renewable energy technologies to meet energy needs;
- optimization of natural day lighting, passive solar gain, and natural cooling;
- energy efficient HVAC and lighting systems, appliances and other equipment, and solar preheating of air;
- building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy ;
- easily accessible and user-friendly recycling system infrastructure incorporated into the building design;
- development of a solid waste reduction plan;
- development of an annual audit program for energy consumption, waste streams, and use of renewable resources;
- LID principles that reduce stormwater, potable water, wastewater, and wetland impacts and that provide water conservation and the reuse of wastewater and stormwater; and
- LEED certification.

Historical/Archaeological Issues

In its comment letter, the Massachusetts Historical Commission (MHC) has requested that the proponent conduct an archaeological site inspection survey to document the current condition of the archaeological sites and to offer recommendations regarding the site of TRQR. I agree with this request, and I ask the project proponent to undertake this request and summarize the results of this survey in the Supplemental EIR.

Mitigation

The Supplemental EIR should include a separate chapter on mitigation measures. This chapter on mitigation should include a Proposed Section 61 Findings for MassHighway and MassDEP. The Proposed 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 should also be included.

The proponent has committed to the following mitigation measures. In the event that the mitigation for the proposed Brookside Shops project is not in place prior to completion of the TRQR project, the proponent has committed to increase the cycle length at the intersection of Great Road/Main Street and to provide optimal phasing. The proponent will replicate approximately 9,820 sf of BVW in an upland area. It has committed to fund the addition of pavement markings including centerlines and edge lines and stop bars at the Great Road/Harris Street intersection. The proponent will provide a formal left turn lane on the Skyline Drive approach to Great Road that can accommodate approximately four vehicles. It will provide a trailhead and visitor parking spaces where the town of Acton open space land abuts the TRQR. If additional blasting is required during construction of the housing, the proponent has pledged not to utilize Perchlorate as a blasting agent. The mitigation section should identify the costs of these measures.

The mitigation commitments listed in the Certificate for the FEIR must be implemented by the proponent along with the measures listed in the NPC and in this Certificate. The proponent must also forward an electronic copy of the draft Section 61 findings to MassDEP and MassHighway.

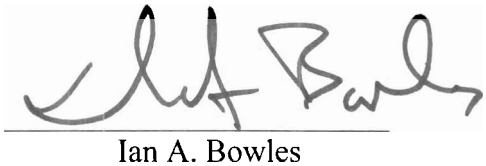
Response to Comments

In order to ensure that the issues raised by commenters are addressed, the Supplemental EIR should include a Response to Comments section. This directive is not intended to enlarge the scope of the Supplemental EIR beyond what has been expressly identified in this Certificate. Each comment letter should be reprinted in the EIR. I defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to

the questions raised.

Circulation

The Supplemental EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Acton officials. A copy of the Supplemental EIR should be made available for public review at the Acton Public Library.



February 8, 2008
DATE

Ian A. Bowles

Comments received:

MHC, 1/8/08
Arthur Bergeron, 1/9/08
Sandi Austin, 1/10/08
Carol Holley, 1/14/08
EOT, 1/15/08
EOT, 1/17/08
MassDEP/CERO, 1/22/08
Anderson & Kreiger, 1/23/08
Mary Michelman, Acton Citizens for Environmental Safety, 1/25/08
Sally Edwards, 1/28/08
Debra Andell, 1/28/08
Organization for the Assabet River, 1/29/08

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