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May 15, 2009

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

PROJECT NAME : Greenbrier Condominiums  
PROJECT MUNICIPALITY : Seekonk  
PROJECT WATERSHED : Narragansett Bay  
EEA NUMBER : 13450  
PROJECT PROPONENT : RI Seekonk Holdings LLC  
DATE NOTICED IN MONITOR : April 8, 2009

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 (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00). The proponent may prepare and submit for review a Final Environmental Impact Report (FEIR).

Project Description

The project consists of two parts, the Approved Project and the Expanded Project. Collectively, these two projects will be combined to create the development presented in the DEIR as the Preferred alternative. The Approved Project comprises the initially proposed 160 condominium units, 424 parking spaces, a community center, a wastewater treatment facility (WWTF), and pedestrian trails. Access and egress is provided off Fall River Avenue (Route 114A). This project was reviewed by MEPA in the format of an Environmental Notification

Form (ENF) filed in February 2005. The project was to be developed pursuant to M.G.L. c.40B and include 40 affordable housing units.

In December 2007, the Proponent filed a Notice of Project Change (NPC) with the MEPA office to expand the project into the southern portion of the project site. The project is no longer being proposed under a Comprehensive Permit Application in accordance with M.G.L. Chapter 40B. The Expanded Project includes a reconfiguration of buildings and units on the northern portion of the site (the Approved Project), and the development of condominiums on the southern part of the site. The project will now include 248 units of rental housing on the northern portion of the site, with the design of a new loop-road extension and the creation of an interior landscaped "pond". The southern portion of the site will include the construction of a new cluster-development of six residential condominium buildings and a community center. The southern portion of the site will include an additional 192 housing units, bringing the project total to 440. This portion of the site will be accessed via a separate vehicular ingress and egress off Cole Street (the result of the acquisition of an additional 2.5-acre parcel since the filing of the ENF). An emergency-only through access grassed driveway will be provided between the northern and southern development areas. The project will also include a management office, community common area, laundry-service facility, walking trails, gazebo and designated fishing areas.

Estimated project impacts outlined in the DEIR include: alteration of approximately 46.2 acres of the 78.6-acre project site (36.7 acres of which has been previously disturbed through historic gravel operations), 17.5 acres of impervious area, 1,350 square feet (sf) of Bordering Vegetated Wetlands (BVW) alteration, 51,860 sf of new wetland creation, 120,000 gallons per day (gpd) of water use and wastewater generation, and 2,508 new vehicle trips per day.

### Jurisdiction

This project requires the preparation of a mandatory EIR pursuant to Sections 11.03(1)(a)(2) and Section 11.03(3)(a)(1)(a) of the MEPA regulations because the project will require a State agency action and will result in the creation of ten or more acres of impervious area and will result in the alteration of one or more acres of BVW. The project will require a Section 401 Water Quality Certificate (401 WQC) and a Sewer Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP). The project has a valid Groundwater Discharge Permit (MADEP File No. SE 0-823) that permits a total discharge of 120,500 gpd and a MassHighway Access Permit (MHD Permit No. 5-2006-0602). These permits were approved for the project as presented in the ENF prior to the request for Notice of Project Change (NPC). A modified access permit to Route 114A will be required from MassHighway. The project will require an Order of Conditions from the Seekonk Conservation Commission (or a Superseding Order of Conditions from the MassDEP if the local Order is appealed) for work within wetland resource areas. The project will need to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency (U.S. EPA) for stormwater discharges from a construction site of over one acre. The project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy

and Protocol, as the project was determined on January 9, 2008 to require the preparation of an EIR subsequent to the filing of an NPC.

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that are likely to directly or indirectly cause Damage to the Environment as defined in the MEPA regulations and that are within the subject matter of required or potentially required state permits or agency actions. In this case, MEPA jurisdiction exists over land alteration, stormwater, wetlands, wastewater, transportation, and greenhouse gases.

### Project Changes Since Review of the NPC

In response to comments received on the NPC, the Preferred Project Alternative has been modified to further reduce environmental impacts. Key changes include:

- A reduction in parking spaces from 2 spaces per unit to 1.6 space per unit, reducing total parking spaces from 984 to 842;
- Porous pavement will be used in five parking areas for a total of 1.7 acres;
- Implementation of bio-retention filtration technology and vegetated swales in a manner consistent with Low Impact Design (LID) principles;
- Increased setbacks to some property lines and wetland resource areas, including increased vegetated buffers;
- Widening of Route 114A to provide for a three-lane roadway section at the entrance of the Approved project and a four-lane segment at Cole Street near the entrance of the Expanded project; and
- Inclusion of a 225-kW natural-gas-fired co-generation facility capable of supplying power to the entire southern condominium community.

### Review of the DEIR

#### *General*

The DEIR contained a description of the project and a characterization of the existing and proposed project site conditions. The DEIR included a summary of required permit approvals, and a summary table comparing potential environmental impacts between the Approved Project and the Expanded Project. The DEIR outlined a project phasing scheme and construction sequencing program. The DEIR discussed how the project is consistent with Executive Order 385, local land use plans and regional plans for southeastern Massachusetts.

#### *Alternatives*

The Certificate on the NPC requested that the DEIR explore the following project alternatives: a No-Build Alternative, a Reduced Impact Alternative, and a Preferred Alternative. The DEIR assessed the environmental impacts associated with a No-Build Alternative, the alternative originally presented in the NPC, and a Preferred Alternative. The Proponent's

Preferred Alternative presented in the DEIR is equivalent to the Reduced Impact Alternative outlined in the Secretary's Certificate on the NPC. The DEIR included a table that effectively allowed for comparison of the project alternatives, demonstrating that the preferred alternative will avoid, minimize and mitigate damage to the environment as mandated in the MEPA regulations.

#### *Land Alteration*

The DEIR provided site plans of existing and proposed grades depicting conceptual cuts and fills necessary to achieve the project. The DEIR described how project design was advanced in a manner that reduced the overall project footprint, retained vegetated areas, and reduced impervious area. This narrative and supporting graphics demonstrated that building layout, parking areas and stormwater management features were located in a way that minimized project impacts.

#### *Stormwater*

The DEIR included drainage calculations, stormwater system design plans, best management practices (BMPs) designs and models for proprietary BMPs. The DEIR demonstrated that the stormwater system will be designed in conformance with the MassDEP Stormwater Management Regulations (SMR). The DEIR described how peak discharge rates would be controlled, opportunities for stormwater recharge, removal of total suspended solids (TSS), and treatment of stormwater associated with work within the State Highway Layout for transportation-related improvements. The DEIR included a draft Operation and Maintenance Plan for the stormwater management system which outlined inspection schedules and general maintenance requirements for long-term operations. I commend the Proponent for reevaluating the potential to incorporate LID techniques into the project's design. As noted previously, the Preferred Alternative has achieved further reductions in impacts, partially through the implementation of LID techniques such as biofiltration, grassed swales, and pervious pavement.

#### *Wetlands*

Wetland impacts associated with the project are focused on those related to the construction of the access driveway and those associated with the construction of the freshwater pond. Approximately 1,350 sf of BVW have been displaced at the project entrance driveway to the northern housing units (the Approved Project). Two replication areas have been constructed, totaling 2,110 sf in area, to mitigate the Approved Project's driveway improvements. A proposed wetland enhancement pond with deep and shallow marsh components is proposed in 99,550 sf of BVW created artificially by the gravel operation as a result of excavation in former uplands (Wetland H). Through replication and enhancement activities, the project will result in a net gain of nearly 51,000 sf of freshwater wetland that will meet regulatory definitions at the federal, State and local levels. It should be noted that an additional 9,300 sf of wetland impacts have been identified in the DEIR; however they are limited to wetland areas locally-regulated under the Seekonk Wetlands Bylaw.

The DEIR described existing and proposed wetland conditions on the project site, characterized each wetland in accordance with 310 CMR 10.00, and clearly identified which resource areas are jurisdictional under local, State and federal regulations. A summary of proposed wetland impact areas was provided, describing the area of resources to be impacted and the associated replication types and areas. The DEIR included a discussion of site history, alternative locations, and design considerations associated with the construction of the pond at Wetland H. The DEIR clarified which wetland impacts would be deemed temporary versus permanent and those wetland improvements that would be classified as replication versus enhancement. The project's wetland improvements will be performed in a manner consistent with the MassDEP *Inland Wetland Replication Guidelines* (dated March 2002).

### *Wastewater*

The Approved Project includes a WWTF and leaching fields sized to accommodate and properly treat all wastewater total combined Expanded Project. The WWTF has been constructed and accommodates completed portions of the Approved Project. The DEIR described the WWTF's components, operational requirements, and the history of subsurface investigations and testing. Wastewater flows generated by the Expanded Project will be carried by gravity to a pump station and then delivered to the on-site WWTF by a force main. Permit modifications to the existing wastewater permits are required for the new pipe installation and on-site sewer connections.

### *Transportation*

The DEIR included an updated traffic study prepared in conformance with EOEEA/EOTPW Guidelines for EIR/EIS Traffic Impact Assessments. The project will require a modified MassHighway Access Permit. The DEIR included existing and proposed transportation data, accident data, sight distance information, capacity analyses and a summary of average and 95<sup>th</sup> percentile vehicle queues for each intersection within the study area. The DEIR included conceptual plans for the proposed roadway improvements and included a list of mitigation measures to be implemented by the Proponent to offset transportation-related impacts.

### *Greenhouse Gas Emissions (GHG)*

The DEIR included a GHG analysis performed in conformance with MEPA's Greenhouse Gas Emissions Policy and Protocol (the Policy). The Policy requires projects to quantify carbon dioxide (CO<sub>2</sub>) emissions and identify measures to avoid, minimize or mitigate such emissions. The GHG analysis evaluated CO<sub>2</sub> emissions for three alternatives as required by the Policy including 1) a Base Case corresponding to the 7<sup>th</sup> Edition of the Massachusetts Building Code with the 2006 and 2007 International Energy Conservation Code (IECC) supplements, 2) a Preferred Alternative, which included some energy saving design features, and 3) a Mitigation Alternative, which included additional energy saving elements. The Proponent used the Tech Environmental Energy Model to perform the GHG analysis and has committed to constructing the project in accordance with those energy saving measures modeled in the Mitigation Alternative. The DEIR provided several tables outlining GHG reduction measures associated with project siting, building design and operations, and transportation that were

considered as part of the project. The DEIR also included a discussion of the proposed cogeneration facility and an analysis of use of a 50-kW photovoltaic (PV) system (both owner operated and third party ownership). It was determined that while the PV system appears infeasible at this time, the cogeneration facility is feasible and will be constructed on-site.

As noted in the DEIR, the project's GHG emissions include direct emissions of CO<sub>2</sub> from natural gas combustion for heating and to power emergency generators and indirect emissions of CO<sub>2</sub> from project generated motor vehicle trips and electricity used for lighting, building cooling and ventilation, and operation of other equipment such as computers. The stationary source analysis broke down the data based upon the two distinct parcels within the project area. The northern parcel consists of approximately 257,540 sf of single-family attached townhomes (158 units), 70,000 sf of residential condominium space (two 45-unit buildings) and a 1,743 sf community clubhouse. The southern parcel will consist of 169,332 sf of residential space in six rental condominium buildings (192-units) and a 9,000 sf community center building.

The analysis estimated the stationary source Base Case total CO<sub>2</sub> emissions at 5,496.2 tons per year (tpy). Under the stationary source Preferred Alternative, utilizing mitigation measures as identified in the DEIR, the total CO<sub>2</sub> emissions were estimated at 4,659 tpy, a reduction of 15.2% from the Base Case. Finally, in the stationary source Mitigation Alternative, which implements the same mitigation measures modeled in the Preferred Alternative and adds a cogeneration plant for the southern parcel, total CO<sub>2</sub> emissions were estimated to be 4,004 tpy, for a total reduction of 27.1% in comparison to the Base Case.

I applaud the Proponent for committing to the construction and operation of a 225-kW natural gas-fired cogeneration plant for the southern portion of the project. The DEIR indicates that this mitigation measure will limit indirect emissions of CO<sub>2</sub> on that portion of the project site to those generated by motor vehicle trips, as the cogeneration facility will provide the entire energy load for the southern parcel. This proposed mitigation measure will enable the project to achieve a significant reduction in its overall GHG emissions.

Mobile source emissions were modeled using data gathered as part of the mesoscale study. The GHG analysis estimated CO<sub>2</sub> emissions for the existing conditions, 2012 No-Build conditions, the 2012 Build conditions, and the 2012 Build with Mitigation conditions. The 2012 No-Build conditions are estimated to have approximately 14,376.1 tpy of CO<sub>2</sub> attributable to traffic (the Base Case). Under the 2012 Build conditions, the project will contribute an estimated 232.4 tpy of CO<sub>2</sub>, for a total of 14,608 tpy within the project study area. Under the 2012 Build with Mitigation conditions, the project will contribute an estimated 227.7 tpy of CO<sub>2</sub>, for a total of 14,603.8 tpy within the project study area. This appears to result in a reduction of mobile source GHG emissions of 1%.

Total GHG emissions, indirect and direct emissions attributable to stationary sources and indirect emissions attributable to mobile sources, are estimated at 4,231.7 tpy, a 1496.9 tpy reduction from the Base Case total of 5,728.6 tpy (a 26.1% overall project reduction).

*Construction Period*

The DEIR discussed potential construction period impacts including traffic, noise and vibration, construction equipment emissions, dust, erosion and sedimentation controls, and construction period recycling measures. The Proponent will prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES CGP requirements for implementation during the construction period.

*Mitigation and Section 61 Findings*

The DEIR contained a discussion of proposed mitigation measures to offset the potential environmental impacts associated with the project. The DEIR provided a summary table of each mitigation category and proposed measures. The DEIR included draft Section 61 Findings for MassDEP for both the Section 401 WQC and the Groundwater Discharge Permit Modification with Plan Approval, as well as the modified MassHighway Access Permit

**SCOPE**

While I am allowing the proponent to proceed to the preparation of an FEIR, I note the requests for additional information to assist State agencies with future permitting processes. I anticipate that the FEIR will respond to the scope outlined below with sufficient detail to address the requests of State agencies. I retain my authority to require further review in the form of a Supplemental Final Environmental Impact Report if issues outlined in this Scope and in comments are not thoroughly addressed in the FEIR.

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Certificate. The FEIR should outline any changes in the project between the DEIR and FEIR.

Transportation

The comment letter from the Executive Office of Transportation and Public Works (EOTPW) has outlined several additional transportation-related issues that should be evaluated in the FEIR. The EOTPW comment letter notes that the Route 114A corridor is already congested and the project would worsen delays at the County Street and Cole Street intersections. In response to this concern, the FEIR should explore the feasibility of upgrading the access from Howland Street to allow drivers from the north and east of the site to avoid the County Street intersection. Additionally, the FEIR should consider any other feasible means to prevent site-generated traffic from degrading operations at the Route 114A/County Street intersection.

The DEIR proposed the widening of Route 114A to three lanes near the project driveway and a four lane section near Cole Street as mitigation for project impacts. As requested by EOTPW, the FEIR should address the possibility of expanding the four lane section in the vicinity of the site driveway. The Proponent should consult with the EOTPW Public/Private

Development Unit and the MassHighway District 5 office regarding potential mitigation measures at the intersection of Arcade Avenue/ Mill Road and present findings within the FEIR. The FEIR should also reevaluate the timing of a signal system at the Route 114A/Cole Street intersection based upon the operations analysis.

As requested by EOTPW, the FEIR should report the substance and results of consultation with the Greater Attleboro Taunton Regional Transit Authority (GATRA) regarding the potential expansion of Route 16 or Route 19 service to the site. The Proponent should also consult the Town of Seekonk, Southeastern Regional Planning & Economic Development District (SRPEDD), and MassHighway on other potential measures to reduce traffic, such as extending the Cole Street sidewalk to Fall River Avenue.

### Greenhouse Gas Emissions

I have already noted the Proponent's commitment to energy efficiency design and the incorporation of a cogeneration facility on-site. As part of the FEIR, the Proponent should clarify several items as identified by MassDEP and the Department of Energy Resources (DOER) comment letter and further refine the GHG analysis to evaluate additional opportunities for GHG mitigation.

The FEIR should evaluate opportunities to reduce indirect GHG emissions associated with lighting, such as use of day-lighting, LED and sensor controls. The FEIR should also discuss why occupancy based controls are inappropriate to common areas such as hallways, mechanical rooms, community rooms, etc. Additionally, the FEIR should discuss whether or not individual unit energy metering will be implemented, as this is a viable way to reduce overall energy consumption, particularly in rental units.

The FEIR should reconsider and reanalyze the feasibility of on-site PV based upon the guidance provided from DOER, noting that updated rebate and savings estimates may indicate that a PV system is viable for some portion of the project site. I encourage the Proponent to reconsider going beyond code with building envelope energy efficiency measures such as windows and insulation to gain additional efficiencies. The FEIR should clarify if supply air ducts will be leak checked before they are sealed and insulated.

The FEIR should provide additional information on the cogeneration facility as directed by the DOER comments. This includes consideration of use of a heat driven absorption chiller technology for the cooling in order to secure a larger thermal load, an investigation of opportunities for peak shaving and load shifting, and additional information on the details used to model the combined heat and power (CHP) system.

The FEIR should clarify which TDM measures were modeled as part of the mobile source GHG analysis. The DEIR states that a 2% reduction in project daily traffic is a conservative assumption for implementation of the proposed TDM measures, however it is unclear whether a 2% reduction in traffic trips is directly correlated to a 2% reduction in GHG emissions between the 2102 Build and 2012 Build with Mitigation case. Based upon the



numbers provided in the DEIR, the 2012 Build with Mitigation case reduces CO2 emissions from 232.4 tpy to 227.7 tpy, a reduction of 1%. The FEIR should clarify the results of the mobile source GHG emissions analysis.

Mitigation / Draft Section 61 Findings

The FEIR should include a separate chapter updating and summarizing proposed mitigation measures. This chapter should also include separate permit-specific updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

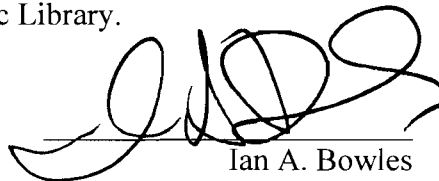
It is anticipated that the Proponent will be required to provide a certification to the MEPA Office indicating that the mitigation measures identified in the MEPA process have been incorporated into the project. As the Secretary typically directs MassHighway to incorporate this self-certification requirement into its Section 61 Finding for both the mobile and stationary source GHG emission components of this project, the draft Section 61 Findings in the FEIR should include this self-certification requirement.

Comments/Circulation

The FEIR should contain a copy of this Certificate and a copy of each comment letter received. The FEIR should respond fully to each substantive comment received to the extent that it is within MEPA jurisdiction. The FEIR should present additional technical analyses and/or narrative as necessary to respond to the concerns raised.

The proponent should circulate the FEIR to those parties who commented on the ENF, to any state agencies from which the proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. A copy of the FEIR should be made available for review at the Seekonk Public Library.

May 15, 2009  
Date

  
Ian A. Bowles

Comments Received:

- 05/08/2009 Massachusetts Department of Environmental Protection – SERO
- 05/12/2009 Executive Office of Transportation and Public Works

IAB/HSJ/hsj