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June 15, 2007

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

PROJECT NAME : Farm Gate
PROJECT MUNICIPALITY : Dracut
PROJECT WATERSHED : Merrimack
EOEA NUMBER : 13723
PROJECT PROPONENT : DRACO Homes, Inc.
DATE NOTICED IN MONITOR : May 9, 2007

As Secretary of Energy and Environmental Affairs, I determine that the Draft Environmental Impact Report (DEIR) submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (MGL, c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). However, for the Final Environmental Impact Report (FEIR) to be found adequate, I am requiring the proponent to provide additional information in the FEIR specifically pertaining to wastewater, wetlands, and stormwater for each development phase of the proposed Farm Gate residential development project. This information is necessary to ensure that the requirements of 301 CMR 11.07 are met, that the aspects and issues of the entire project have been clearly described, that a range of project alternatives have been fully analyzed, that the proponent has committed to a set of mitigation that will allow the state agencies to satisfy their Section 61 obligations, and that there will be meaningful opportunities for public review of the additional analysis prior to any Agency action.

Project History

As described in the February 2006 Environmental Notification Form (ENF), the proponent proposed to construct a 52-lot residential subdivision, and 3 individual houses, approval not required (ANR), on a 77.3-acre site abutting Parker Road in Dracut. The project included the construction of approximately 4,390 linear feet (lf) of internal roadway with sidewalks, and associated utilities and stormwater management infrastructure including 5 stormwater detention basins. The project site will be accessed from two separated sites drives located on Parker Road.

Although not described in the ENF, the proponent also proposed to develop an additional 105 residential dwelling units on two contiguous development parcels (113 acres, 59 acres) located off Parker Road and Wheeler Road and adjacent to the Farm Gate project site's northern property boundary in Dracut. According to additional information provided by the proponent during the MEPA Scoping session for this project on February 22, 2006, and the comments received from the Northern Middlesex Council of Governments and the Dracut Assistant Town Manager's Office, the proponent also proposed the development of Wheeler Village, a 72-lot residential subdivision abutting the northern boundary of the Farm Gate development parcel, and Berube Farms, a 32-unit residential subdivision abutting the northern property boundary of the Wheeler Village development parcel.

Wheeler Village

According to the proponent, the Wheeler Village project involves the construction of a 73-lot residential subdivision on a 113-acre site abutting Wheeler Road to the north and the proposed Farm Gate development project to the south. As currently designed, this project will result in the construction of approximately 8.8 acres of impervious surface area and the permanent alteration of approximately 2,700 sf of bordering vegetated wetlands (BVW), and 4.8 acres of 100-foot wetland buffer area. This project site will be accessed from two separate site drives located on Wheeler Road.

Berube Farms

The Berube Farms project involves the construction of a 160-lot residential subdivision on a 250-acre site abutting Wheeler Road and the Wheeler Village development project to the south. This project will result in the construction of approximately 20 acres of impervious surface area and the permanent alteration of approximately 10,200 sf of BVW, and 24 acres of 100-foot wetland buffer area. This project site will be accessed from two separate site drives located on Wheeler Road.

MEPA imposes a requirement on project proponents and state agencies to understand and fully disclose the potential impacts of a project (including cumulative impacts); to study feasible alternatives to a project; and to avoid, reduce, or mitigate environmental impacts (including cumulative impacts) to the maximum extent feasible. As described in the Secretary's Certificate on the ENF, the proponent's proposed Farm Gate project, and the Wheeler Village and Berube Farms projects are considered to be a "common plan or undertaking" pursuant to the anti-segmentation provisions of the MEPA Regulations (Section 11.01(2)(c)). The proponent was therefore required to prepare a Draft and Final EIR (DEIR, FEIR) to discuss the impacts of the proposed Farm Gate project, as well as the potential cumulative infrastructure impacts and site planning issues arising out of the full build-out of the proponent's remaining two contiguous development parcels (173 acres total). When considering the full build-out of the Farm Gate project, and the Wheeler Village and Berube Farms development parcels, it appeared likely that the full-build project would meet the mandatory EIR threshold related to land alteration, wetlands, and possibly rare species.

Phase I Waiver Request

The proponent submitted a Notice of Project Change (NPC)/Phase I Waiver Request to the MEPA Office in February 2006 to construct the 52-lot residential subdivision Farm Gate project, and thereby allowing its construction to proceed in advance of the preparation of a DEIR for the full build-out of the site. The Phase I construction activities included the construction of a 55-lot residential subdivision, 3 additional ANR houses lots, approximately 4,390 lf of internal roadway with sidewalks, and associated utilities and stormwater management infrastructure (5 stormwater detention basins) on a 77.3-acre site abutting Parker Road in Dracut. Access to the project site was to be provided from two separated sites drives located on Parker Road. The Farm Gate project's potable water demands and wastewater flows (20,020 gallons per day (gpd)) would be served by the Town of Dracut's municipal water supply and sewer systems, respectively. Phase I would result in the alteration of approximately 3,000 sf of BVW, approximately 6.6 acres of impervious surface area, 100 new surface parking spaces, and the generation of approximately 550 new vehicle trips per day (vtd). Phase I will require a Sewer Connection Permit from MassDEP, and an Order of Conditions from the Dracut Conservation Commission (and hence a Superseding Order from MassDEP if the local Order were appealed).

Subsequent to the filing of the NPC submittal with the MEPA Office, the proponent worked closely with MassDEP to address a number of issues identified in MassDEP's comments on the ENF and the NPC pertaining to the project's potential impacts to wetlands and wastewater. As a result, the proponent provided additional Phase I project information to the MEPA Office that described a revised phased development plan involving a reduced Phase I construction program. The proponent's revised Phase I development activities included the construction of 20 residential housing lots within a 32-acre portion of the project site located to the north of the existing underground gas transmission line (North Development/Phase I), and three existing house lots on Parker Road. According to the proponent, Phase II construction activities would involve the construction of the remaining 35 single family house lots originally proposed Farm Gate development project (South Development/Phase II). The North Development project's potable water demands and wastewater flows (7,280 gpd) would be served by the Town of Dracut's municipal water supply and sewer systems, respectively. Construction of the North Development/Phase I portion of the Farm Gate project would not result in the alteration of bordering vegetated wetlands (BVW), but will alter approximately 13,230 sf of wetland buffer area, and create approximately 0.3 acres of impervious surface area. The North Development project would require a Sewer Connection Permit from MassDEP, and an Order of Conditions from the Dracut Conservation Commission (and hence a Superseding Order from MassDEP if the local Order were appealed).

Wastewater flows from the North Development/Phase I project would be conveyed by gravity sewer to an existing 8" municipal sewer main located in the Parker Road right-of-way. According to the proponent, the Town of Dracut's existing municipal sewer collection/conveyance system has adequate capacity to accommodate the proposed Phase I Waiver project, and the additional flow from the reduced Phase I project is well within the wastewater flow limits established for the Town of Dracut under its Inter-municipal Agreement (IMA) with the City of Lowell for treatment of wastewater flows at the City of Lowell's WWTF. In their comments on the NPC submittal, MassDEP expressed their support of the proposed sewerage of the 23 house lots as part of the North Development/Phase I project. The North Development/Phase I project required a Sewer Extension Permit from MassDEP.

In the June 23, 2006 the Secretary issued a Certificate on the Phase I Waiver request granting the proponent a Phase I Waiver with conditions allowing the proposed Farm Gate/Phase I Waiver project to proceed while the Draft Environmental Impact Report (DEIR) was being prepared. The proponent was asked to provide additional information in the DEIR to respond to comments received on the ENF and the NPC, particularly with respect to issues of wetlands, wastewater, and rare species.

Land Alteration

As currently designed, the proposed full-build project will result in the alteration of approximately 250 acres of land area, approximately 10, 200 sf of bordering vegetated wetlands (BVW), and approximately 21 acres of new impervious areas. Proposed under the Town of Dracut's Open Space Residential Subdivision Development Zoning By-Law, the proponent has proposed to place a total of approximately 139 acres (56%) of the full-build Farm Gate project area (Farm Gate- 40.1 acres, Wheeler Village - 65.4 acres, Berube Farms – 21.0 acres) under a Conservation Restriction (CR) to ensure for their permanent protection.

Farm Gate/Wheeler Village/Berube Farms - Cumulative Impacts

| | FARM GATE | WHEELER VILLAGE | BERUBE FARMS | Cumulative Totals |
|--------------------------|------------------|------------------------|---------------------|--------------------------|
| LAND | | | | |
| Site Area (ac) | 77.3 | 113.8 | 58.9 | 250.0 |
| Land Alteration (ac) | 46.3 | 49.9 | 28.6 | 124.8 |
| Impervious Area (ac) | 6.9 | 8.8 | 5.0 | 20.7 |
| Wetlands Alteration (sf) | 3,008 | 2,681 | 4,479 | 10,168 |
| Buffer to Wetlands (ac) | 1.8 | 13.0 | 9.0 | 23.8 |
| STRUCTURES | | | | |
| Housing units | 55 | 73 | 34 | 162 |
| TRANSPORTATION | | | | |
| Vehicle trips per day | 550 | 730 | 340 | 1620 |
| Parking spaces | 110 | 146 | 68 | 324 |
| WATER/WASTEWATER | | | | |
| GPD of water use | 20,020 | 28,105 | 12,650 | 60,775 |
| GPD wastewater | 20,020 | 28,105 | 12,650 | 60,775 |
| Length of water | 0.83 | 1.10 | 0.69 | 2.62 |

Wetlands

As described in the DEIR, the construction of the full-build project will involve a total of 4 wetlands crossings for internal roadways, and will result in the alteration of approximately 10,200 sf of BVW. The Farm Gate and Wheeler Village residential development projects will each include the construction of one roadway crossing. The proponent has proposed two roadway crossings for the Berube Farms project.

In their comments, MassDEP has indicated that the phased full-build project's alteration of more than 5,000 sf of BVW (approximately 10,200 sf) will require a 410 Water Quality Certificate from MassDEP. MassDEP has requested that the FEIR include additional information to demonstrate the proponent's efforts to avoid, minimize wetlands impacts. The FEIR should demonstrate that the proposed widths for internal roadways and roadway crossings are the minimum allowed under current zoning. The FEIR should respond to MassDEP's comments.

The DEIR contains a small-scale full-build project site plan that shows portions of numerous house lots and internal circulation roadways located within the 100-foot wetland buffer zone. According to the proponent the full-build project will result in the alteration of approximately 24 acres of the 100' wetland buffer zone. The proponent should continue to examine methods of avoiding or minimizing encroachment into buffer zones including, but not limited to, reducing the total number of proposed residential units. The FEIR should evaluate deed restrictions as a method of avoiding future wetland impacts from homeowner activities, and as a method of minimizing water quality impacts associated with residential lawn care. The FEIR should include reasonably scaled site plans for each of the three development parcels that delineate wetland boundaries and buffer zones, and proposed wetlands replication areas and stormwater management best management practices (BMPs). The site plans should also note any applicable local buffer zone requirements. The proponent should certify that all streams identified on the Farm Gate project site, and the Wheeler Village and Berube Farms development parcels, meet the Massachusetts definition for an intermittent or perennial stream, and the DEIR should evaluate potential impacts on these resource areas. The proponent has committed to provide a total of approximately 24,000 sf (2.35:1) of on-site wetlands replication for unavoidable impacts to BVW resource areas resulting from the proposed full-build development project. A detailed wetlands replication plan should be provided in the FEIR which, at a minimum, includes: replication location(s) delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring.

Rare Species

According to the information originally provided in the ENF, the Farm Gate project site was located within priority and estimated habitat for the Spotted Turtle (*Clemmys guttata*). In their comments on the ENF, the Natural Heritage and Endangered Species Program (NHESP) had indicated that the proponent, in consultation with NHESP, agreed to place a Conservation Restriction (CR) on 40.1 acres (52%) of the eastern portion of the project site that would result in avoiding a take of the Spotted Turtle, or having an adverse effect on the Spotted Turtle habitat. According to the comments received from NHESP on the DEIR, NHESP removed the Spotted Turtle from the Endangered Species List on July 14, 2006, and has subsequently determined that only a small portion of the Farm Gate development parcel is located within Priority Habitat and Estimated Habitat. As currently proposed, that portion of habitat area is located within the proponent's Open Space plan which will be permanently protected under a Conservation Restriction (CR). The FEIR should identify the boundaries and describe the terms associated with the CR protection for the Farm Gate, Wheeler Village and Berube Farms development portions of the project.

Water Supply

According to the information provided in the DEIR, the estimated total potable water supply need (60,775 gpd) generated by the proposed full-build residential development project (Farm Gate, Wheeler Village and Berube Farms) will be served by the Kenwood Water Department District which receives its water from the City of Lowell and the Lowell Regional water utility (LRWU). The proponent has indicated that the Kenwood Water Department has granted the proponent approval to connect the full-build project to the Kenwood Water Department District. The proponent has committed to constructing infrastructure improvements to the Kenwood Water Department's water supply system. The FEIR should include a detailed description of the infrastructure improvements to be constructed by the proponent.

Wastewater

The estimated wastewater flow from the full-build project (approximately 60,800 gallons per day (gpd)) will be conveyed from the project site to the Town of Dracut's wastewater collection system located within the Parker Road right-of-way, and on to the City of Lowell's Regional Wastewater Treatment Facility (LRWTF) for treatment and disposal. Under a 1977 Inter-Municipal Agreement (IMA) between the City of Lowell and the Town of Dracut, the LRWTF will provide wastewater treatment and disposal for up to 3.6 million gallons per day (mgd) of Dracut's wastewater flows. According to the proponent, the Town of Dracut has also entered into an IMA with the Town of Tyngsborough to allocate up to 1.0 mgd of Dracut's 3.6 mgd wastewater flow allocation to Tyngsborough. The estimated wastewater flow from the full-build project will not exceed the Town of Dracut's 2.6 mgd remaining wastewater flow allocation. In addition to the IMAs with the City of Lowell and the Town of Tyngsborough, the Town of Dracut is also currently involved in negotiations with the City of Methuen for an IMA to convey a portion of Dracut's wastewater flows to the City of Lawrence's WWTF via Methuen's sewer collection system. I note that the Town of Dracut has imposed a moratorium on all proposed sewer connections until such time as the IMA with the City of Methuen has been completed.

The FEIR should demonstrate that the proposed discharge of wastewater from the full-build Farm Gate project to the Town of Dracut's municipal sewer collection system and the City of Lawrence's LRWTF is feasible, and that the project's additional wastewater flows (60,800 gpd) can be accommodated within the total remaining volume of wastewater flow allowed to the Town of Dracut under its existing inter-municipal agreements (IMA) with the City of Lowell and the Town of Tyngsborough for treatment of wastewater flows at Lowell's WWTF. The FEIR should demonstrate that the proponent has secured permission from the Town of Dracut to direct the full-build project's wastewater flows to Dracut's sewer collection system. The FEIR should discuss the potential for sewerage the full-build project under the Town of Dracut's Comprehensive Wastewater Management Plan (CWMP) which is currently under MEPA review (EOEEA #11401). MassDEP has indicated that the proponent will need to demonstrate the availability of capacity in the IMAs before any additional flows from the Farm Gate project may be added to Dracut's sewer system. The FEIR should respond to MassDEP's comments including those comments related to the proponent's need to apply for a sewer connection/extension permit prior to the construction of the sewer system for any portion of the proposed full-build project.

Stormwater Resources

The FEIR should include stormwater management plans for the full-build Farm Gate project. For each of the three development parcels, the FEIR should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered, and the indirect impacts to wetlands from receipt of drainage, stormwater runoff and wastewater disposal from the project. This section of the FEIR should discuss the consistency of the drainage plans with MassDEP's Stormwater Management Policy and guidelines, and the Town of Dracut's Storm Water Program. It 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. It should also be demonstrated that the proposed drainage systems would control storm flows at existing levels. The proponent should use the DEP Stormwater Management Handbook when addressing this issue. The FEIR should respond to DEP's comments regarding the proponent's proposed stormwater management plan for the Farm Gate development parcel, and its ability to control peak stormwater runoff rates for the 2, and 10-year, and 24 hour storm events throughout the project site.

I encourage the proponent and the Town of Dracut to work together to identify and evaluate sustainable design alternatives such as Low Impact Development (LID) techniques in site design and stormwater management plans. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features.

For more information on LID, visit <http://www.mass.gov/envir/lid/>. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: <http://www.epa.gov/owow/nps/lid/>.

Comments

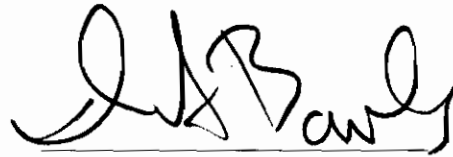
The FEIR should respond to the substantive issues raised in the comments received to the extent that the comments are within the subject matter jurisdiction of MEPA. I recommend that the proponent employ an indexed response to comments format, supplemented as appropriate with direct narrative response.

Circulation

The FEIR 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 Town of Dracut, and City of Lowell officials. A copy of the FEIR should be made available for public review at the Dracut, and Lowell Public Libraries.

June 15, 2007

Date



Ian A. Bowles, Secretary

Comments received:

- 06/08/07 Natural Heritage and Endangered Species Program (NHESP)
- 06/04/07 Town of Dracut, Assistant Town Manager
- 06/08/07 Northern Middlesex Council of Governments (NMCOG)
- 06/12/07 MA Department of Environmental Protection – NERO

IAB/NCZ/ncz

#13723 DEIR Farm Gate, Dracut