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February 27, 2008

FINAL RECORD OF DECISION

PROJECT NAME:	Hall Brook Dam Removal and Proactive Environmental Restoration
PROJECT MUNICIPALITY:	Adams
PROJECT WATERSHED:	Hoosic
EEA NUMBER:	14152
PROJECT PROPONENT:	Hall Brook Holding, LLC
DATE NOTICED IN MONITOR:	December 24, 2007

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.11 of the MEPA Regulations (301 CMR 11.00), I have reviewed this project and hereby **grant a waiver** from the categorical requirement to prepare an Environmental Impact Report (EIR). In a separate Certificate issued on January 30, 2008, I have set forth the outstanding issues related to the project that can be addressed by permitting agencies.

Project Description

As outlined in the Expanded Environmental Notification Form (EENF) and in supplemental materials provided by the Proponent, the project proposes the removal of the Hall Brook Dam on Hoxie Brook in Adams, MA. Hall Brook Dam is a 24-foot high, 135-foot long stone masonry and concrete structure that was constructed in the 1800s to supply water to former downstream industries. The dam no longer serves any purpose to the dam's owner. The former impoundment has been completely filled in with sediment; Hoxie Brook flows directly on top of the impounded sediment and falls over the dam's spillway. The dam has been rated as possessing "Significant" hazard potential and is in "Unsafe" condition according to the Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS). There is an outstanding Dam Safety Order (issued June 8, 2007) to conduct studies leading to the ultimate removal or

reconstruction of the structure. The dam is located in a densely populated residential and commercial area near downtown Adams.

The Proponent has stated the following goals for the project: 1) removal of the dam to improve public safety; 2) mitigation of sediment transport potential; 3) construction of a stable stream channel and side slopes; 4) mitigation of impacts to neighboring properties and adjacent infrastructure; and 5) proactive restoration of desirable in-stream habitat and improvement of wetland resource areas.

The Proponent proposes a partial breach/removal of the dam and restoration of the Hoxie Brook. The project has been designed following design criteria in EEA's recently published *Dam Removal in Massachusetts* guidance document (EEA, December 2007). The project will consist of removing a portion of the dam such that the remaining channel has the capacity to safely pass the 100 year test flood without overtopping its "banks", which will essentially be the remains of the dam. The portion of the dam below the proposed grades will remain in place.

Following removal of the dam, the Proponent will create a 15 foot wide by 2 foot deep restored stream channel with a series of low stone weirs that will "step" the channel down through the former impoundment and create a series of riffles to enhance in-stream habitat and dissipate energy through the steep stream reach. The bank of the channel will be sloped back and armored with recycled stone from the dam and/or other bio-engineered methods and rounded river cobbles will be installed in the channel bottom. The Proponent notes that in the event that shallow bedrock is encountered, the stream channel design may be modified to allow for a bedrock channel in some places.

Prior to the start of construction, the impoundment area will be dewatered through the temporary division of Hoxie Brook using a temporary coffer dam at the upstream extent of the work. Two 36-inch temporary diversion pipes will be installed to divert Hoxie Brook around the dam site, discharging upstream of a stone check dam that will mitigate against downstream sediment transport. The project will also involve the dredging of less than 2,000 cubic yards of impounded sediment from the riverbed upstream of the dam. Excavation of the sediment will take place "in the dry" in conjunction with the temporary stream channel diversion around the work site.

Jurisdiction

The project is subject to the preparation of a mandatory EIR pursuant to Section 11.03(3)(a)(4) and 11.03(3)(b)(1)(d) of the MEPA regulations because it will result in a decrease in the impoundment capacity of an existing dam and because it will impact more than 5,000 square feet (sf) of bordering vegetated wetlands (BVW). The project will require a Programmatic General Permit from the U.S. Army Corps of Engineers (ACOE) pursuant to Section 404 of the Clean Water Act; a Chapter 253 Dam Safety Permit from DCR; a 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP); possible review from the Massachusetts Historical Commission (MHC); and an Order of Conditions from the Adams Conservation Commission.

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 or potentially required permits with the potential to cause Damage to the Environment. In this case, MEPA jurisdiction on this project extends to wetlands, dam safety and historic resources.

Waiver Request

The proponent submitted an Expanded Environmental Notification Form (EENF) for the project with a request for a waiver from the requirement for the preparation of an EIR. The waiver request was discussed at the consultation/scoping session for the project which was held on January 11, 2008. A Draft Record of Decision (DROD) was issued on January 30, 2008 that proposed to grant the waiver pending comments received during the public comment period on the DROD. No comments were submitted regarding the DROD.

Standards for All Waivers

The MEPA regulations at 301 CMR 11.11(1) state that I may waive any provision or requirement in 301 CMR 11.00 not specifically required by MEPA and may impose appropriate and relevant conditions or restrictions, provided that I find that strict compliance with the provision or requirement would:

(a) Result in an undue hardship for the Proponent, unless based on delay in compliance by the Proponent; and,
(b) Not serve to avoid or minimize Damage to the Environment.

Determinations for an EIR Waiver

The MEPA regulations at 301 CMR 11.11(3) state that, in the case of a waiver of a mandatory EIR review threshold, I shall at a minimum base the finding required in accordance with 301 CMR 11.11(1)(b) stated above on a determination that:

(a) The project is likely to cause no Damage to the Environment; and,
(b) Ample and unconstrained infrastructure facilities and services exist to support those aspects of the project within subject matter jurisdiction.

Findings

Based upon the information submitted by the Proponent and after consultation with the relevant state agencies, I find that the waiver request has merit and that the Proponent has demonstrated that the proposed project meets the standards for all waivers at 301 CMR 11.11(1). I find that strict compliance with the requirement to prepare a Mandatory EIR for the project

would result in undue hardship for the Proponent. The Proponent is required to comply with outstanding Dam Safety Orders to address the condition of the structure in an expedient manner and the preparation of an EIR would delay the implementation of remedial measures at the dam site. Breaching of the dam will limit the risk of an uncontrolled breach in the future. DCR's ODS has indicated its support for the project in comments on the EENF.

I also find that compliance with the requirement to prepare an EIR for the project would not serve to avoid or minimize Damage to the Environment. In accordance with 301 CMR 11.11(3), this finding is based on my determination that:

1. The project is likely to cause no Damage to the Environment:

   The project will have an overall positive impact on the environment. The impoundment is completely filled with sediment and the removal of the dam will not include the dewatering of a significant pond. The breach of the dam will connect the upstream and downstream fisheries in this area of Hoxie Brook. The Proponent will implement channel restoration through the former impoundment. Restoration of the river to a more natural state will provide a healthier and more diverse ecosystem. The creation of a riffle pool stream channel will help increase dissolved oxygen levels in the water, which will improve water quality and riverine biodiversity.

   The proposed step-pool system in the restored stream channel will allow for improved fish passage as compared to existing 24 foot dam. The stone weirs will be constructed such that the top of the weir will coincide with the upstream stream bed elevation and will resemble stone ramps. Between stone weirs, the stream channel will have a minimal slope. The Proponent asserts that the step-pool system will allow fish passing upstream to do so in stages, using short bursts of energy to pass up the steeper sloped rock weirs and then rest in the gently sloped stream channel between weirs.

   The Hoxie Brook channel is within the FEMA 100-year flood zone. The Proponent has performed a dam breach simulation and hydraulic and hydrologic analyses of the Hall Brook Dam spillway and contributory drainage channel. The current spillway does not safely pass the 100-year design flood. Removal of the dam is not expected to increase flooding along Hoxie Brook. Water flowing freely through the restored stream channel will decrease the potential for flooding upstream of the existing dam. The proposed stone weirs and stream bank protection have been sized for 100-year flood flow velocities.

- Due to the steep natural topography of the site, bordering vegetated wetlands (BVW) that have established in the sediment filled impoundment will likely be impacted after removal of the dam and the reestablishment of the natural stream channel. While the EENF estimated a potential loss of 9,200 sf of BVW, supplemental materials provided by the Proponent state that original BVW impacts were over-estimated and that based on consultation with MassDEP wetlands staff, the project will likely result in impacts to approximately 5,680 sf of BVW and 3,520 sf of Bank. The project will file a Notice of Intent for the project under the Limited Project provisions of the Wetlands Protection Act (WPA) at 310 CMR 10.53(4),

following MassDEP's guidance document *Dam Removal and the Wetland Regulations* (MassDEP, December 2007).
The Proponent will conduct wetland and upland seeding and planting in impacted areas but expects that much of the impacted BVW will be lost. The project does not include BVW replication as mitigation for resource area impacts. MassDEP's Dam Removal guidance allows for the waiving of certain traditional mitigation requirements for selected dam removal projects that will provide other environmental benefits. The Proponent cites the guidance to support the fact that 1:1 replication of the impacted BVW is not proposed as part of the project as would normally be required under 310 CMR 10.55(4). The Proponent asserts that the removal of Hall Brook Dam will result in an improvement to Hoxie Brook ecosystem. I concur that dam removal generally improves the natural capacity of a resource area. MassDEP has stated in its comments on the EENF that it supports the Proponent's request for an EIR waiver and that it will address waiving the requirement for wetlands replication during the permitting process.

- The Proponent intends to create permanent vegetation on the newly created slopes on either side of the stream channel. The Proponent will install erosion control blankets along the restored side slopes along with seeding and the installation of live stakes. No exposed sediment or slopes will remain after the project is complete. Supplemental materials provided by the Proponent detailed the proposed planting mix.

- To help mitigate against downstream sediment transport, approximately 2,000 cubic yards of material will be excavated from the existing impoundment area. In order to mitigate against additional downstream sediment transport during construction, a temporary stone check dam will be installed at the downstream limit of work.

- The Proponent has developed a Sediment and Erosion Control Plan and Construction Sequence for the project. Construction is planned to occur during the low-flow season during summer to early fall of 2008 to mitigate adverse impacts to fisheries. Best Management Practices (BMPs) including hay bales and silt fences, a stone check dam, and erosion control blankets will be used to prevent against the erosion and discharge of on-site sediment.

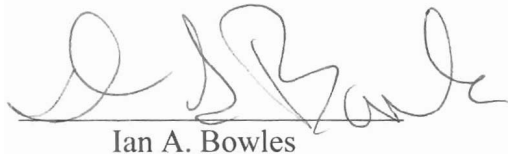
- The Proponent has submitted a Project Notification Form (PNF) to the MHC. On September 2, 2004 MHC determined that the project is unlikely to affect significant historic or archaeological resources. Copies of correspondence between the Proponent and MHC were submitted with the EENF.

2. Ample and unconstrained infrastructure facilities and services exist to support those aspects of the project within subject matter jurisdiction:

- The project consists of a dam removal and does not require new or improved infrastructure facilities or services to support it.

Conclusion

Based on the above findings, I have determined that this waiver request has merit, and issued a Draft Record of Decision (DROD), which was published in the Environmental Monitor on February 6, 2008 in accordance with 301 CMR 11.15(2), which began the public comment period. The public comment period lasted for 14 days and ended on February 20, 2008. No comments were submitted on the DROD. I hereby **grant** the waiver requested for this project from the requirement to prepare a mandatory Environmental Impact Report (EIR), subject to the above findings and conditions.



February 27, 2008
Date

Ian A. Bowles

No comments received

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