NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

LARGE GROUNDWATER WITHDRAWAL PERMIT

NO. LGWP-2006-0001A

to the permittee

HOOKSETT VILLAGE WATER PRECINCT
7 RIVERSIDE STREET
HOOKSETT, NH 03106
(603-485-3392)

for the withdrawal of the following volume of groundwater from the following well for the purpose of community water supply:

East Well 576,000 gallons over any 24-hour period

Date of Issuance: June 30, 2016
Date of Expiration: June 30, 2026

Pursuant to authority in N.H. RSA 485-C:21, the New Hampshire Department of Environmental Services (NHDES), hereby grants this permit to withdraw groundwater from the East Well subject to the following conditions:

1. The permittee shall comply with the requirements of Env-Wq 403 and RSA 485-C at all times.

2. Water Conservation: The permittee shall implement the approved Water Conservation Plan, signed February 28, 2013, in accordance with Env-Wq 2101 and NHDES' approval dated March 7, 2013.

3. Metering Requirements: Withdrawals from the well must be metered at all times. All meters must be selected, installed, tested, and maintained in accordance with Env-Wq 2101. The permittee shall read source water meters to adequately report the following volumes to the reporting program referenced in condition No. 6 of this permit:

   a) The 24-hour peak day volume withdrawn from the source during each month and the date the water use occurred; and

   b) The cumulative total volume withdrawn from the source during each month.

4. Monitoring and Reporting Requirements: The permittee shall maintain the surface water monitoring and reporting program as described below:

   a) Protecting Low Flows in Brickyard Brook: The permittee shall maintain the surface water monitoring station (staff gauge, stilling well, and v-notch weir) in Brickyard Brook at the box culvert beneath Route 3A installed to monitor surface water flow. On an annual basis, during non-freezing conditions, the permittee shall install a pressure transducer and data logger in the stilling well and measure surface water levels in Brickyard Brook at a frequency of at least once every hour.

      To protect low flows in Brickyard Brook, the diversion of water from Brickyard Brook to Pinnacle Pond shall be limited to times when flow in Brickyard Brook, as measured at the surface water monitoring station, is 0.51 cubic feet per second (cfs) or greater; and shall not result in flow in Brickyard Brook, as measured at the surface water monitoring station, being reduced below 0.51 cfs. At no time shall the diversion result in the cessation of flow of water over Old Brickyard Dam, provided that water was flowing over the dam prior to the start of the diversion. When a diversion is not occurring and when non-freezing conditions exist, the permittee shall cap the inlet of the diversion pipe to prevent flow from entering the pipe.

      The permittee shall inspect the surface water monitoring station and diversion pipe cap throughout the year after freezing conditions and high flow events to ensure proper operating conditions. The permittee shall retain records of all maintenance and calibration activities.

   b) Pinnacle Pond Water Level Management: The permittee shall maintain the surface water monitoring station (staff gauge and stilling well) in Pinnacle Pond installed to monitor the surface water level in the pond. On an annual basis, during non-freezing conditions, the permittee shall install a pressure transducer and data logger in the stilling well and measure surface water levels in Pinnacle Pond at a frequency of at least once every hour.

Provided that the flow threshold specified in condition No. 4a is met before and after starting a diversion of water from Brickyard Brook to Pinnacle Pond, the permittee shall operate the diversion such that the water level in Pinnacle Pond remains near the outlet of the diversion pipe, as feasible.

On an annual basis after ice out, the permittee shall evaluate whether any changes in the horizontal or vertical position of the staff gauge have occurred due to repeated freeze-thaw cycles of the pond during winter months. The horizontal position of the staff gauge and the vertical elevation of the 5-foot mark on the staff gauge shall be measured relative to a permanent reference mark on the shoreline that is readily accessible and not subject to disturbance. The permittee shall retain records of all maintenance and calibration activities

c) Brickyard Brook Diversion Tracking: The permittee shall maintain the flow meter installed in the diversion pipe downstream of the gate valve to monitor the volume of water diverted from Brickyard Brook to Pinnacle Pond.

Each time water is diverted from Brickyard Brook to Pinnacle Pond, the permittee shall record the following information:

- The start and stop date of the diversion;
- The surface water level and corresponding flow rate in Brickyard Brook prior to starting, on a daily basis during, and after stopping the diversion;
- The surface water level in Pinnacle Pond prior to starting, on a daily basis during, and after stopping the diversion; and
- The flow meter reading prior to starting and after stopping the diversion.

For each diversion, the permittee shall calculate the volume of water diverted from Brickyard Brook to Pinnacle Pond based on the flow meter readings. In the event flow meter readings are not available (e.g, in the case of equipment malfunction), the permittee shall estimate the volume of water diverted using data from past diversions.

The permittee shall maintain the flow meter in accordance with manufacturer's specifications. The permittee shall retain records of all meter maintenance and calibration activities.

The surface water monitoring program shall continue indefinitely as a condition of this permit. All work shall be conducted by a person who can demonstrate, by education or experience, competency in collecting and reporting hydrologic measurements.

An annual monitoring report, all monitoring data, and details of all maintenance and calibration activities shall be submitted in an electronic format to NHDES annually by January 31 of each year. The annual monitoring report shall note any relevant observations that may affect the measurements and include all field notes documenting the monitoring activities for the preceding year.

5. Mitigation Requirements

   a) In the event that an adverse impact occurs, the permittee shall comply with all of the requirements below and with the impact mitigation and source replacement requirements of Env-Wq 403.

   b) Where the status of an unanticipated impact is not clear, the permittee shall gather information needed to quantify the impact and determine its status relative to the adverse impact criteria defined under RSA 485-C:21, V-c and provide this information to NHDES within 48 hours of being notified by NHDES. A verified adverse impact shall be mitigated in accordance with Env-Wq 403.

6. The permittee shall maintain its registration with the NHDES Water Use Registration and Reporting Program and maintain the water use reporting requirements established by RSA 488, Env-Wq 2102, and this permit.

7. The permittee shall apply for renewal of this permit between 90 and 365 days prior to its expiration date in accordance with Env-Wq 403. The permittee shall continue to comply with all conditions in this permit until the permit is renewed or the facility is closed in accordance with all applicable requirements, regardless of whether a renewal application is filed.

Any person aggrieved by any terms or conditions of this permit may appeal in accordance with RSA 21-O:7, IV within 30 days.

Eugene J. Forbes, P.E.,
Director Water Division

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