



The

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

LARGE GROUNDWATER WITHDRAWAL PERMIT

NO. LGWP-2001-0001A

to the permittee

SOFT DRAW INVESTMENTS, LLC

P.O. BOX 424

STRATHAM, NH 03885

for the withdrawal of the following volumes of groundwater from the following wells for the purpose of irrigation water supply at The Golf Club of New England located in the towns of Greenland and Stratham, New Hampshire:

Asset 1	75,600 gallons over any 24-hour period
Asset 2	75,600 gallons over any 24-hour period
Winnicut 1	56,200 gallons over any 24-hour period
Winnicut 2	57,600 gallons over any 24-hour period

Date of Issuance: December 18, 2011

Date of Expiration: December 18, 2021

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 wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 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 Requirements:** The permittee shall continue to implement the Water Conservation Plan provided in a Report titled "Draft Final Irrigation Water Supply Hydrologic Report – Large Groundwater Withdrawal NHDES Application – Golf Club of New England" and dated June 2001. In addition to implementing the Water Conservation Plan, the permittee shall complete a leak detection survey for the entire irrigation system once annually prior to startup. The permittee shall repair any leaks that are identified during the leak detection survey within 60 days. The permittee shall provide NHDES with a summary of the results of the leak detection survey and any corrective actions undertaken to repair the irrigation system in an annual report by January 31 of each year.
3. **Metering Requirements:** Withdrawals from all sources must be metered at all times. All meters must be selected, installed, tested, and maintained in accordance with the manufacturer's specifications. The permittee shall provide NHDES with a certificate of calibration and performance specifications for each meter. The permittee shall document and maintain records of all meter maintenance and calibration activities and submit this information to NHDES in an annual report by January 31 of each year. 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 each source during each month; and
 - b) The cumulative total volume withdrawn from each source during each month.
4. **Monitoring and Reporting Requirements:** The permittee shall establish and maintain the monitoring and reporting program as described below:
 - a) **Groundwater Level Monitoring**
 - i. **Off-site Private Bedrock Wells:** The permittee shall install pressure transducers and data loggers and measure water levels at a frequency of at least once every 12 hours in the private bedrock wells serving the following properties. Water level monitoring shall commence at least 30 days prior to initiating a withdrawal from the irrigation wells and shall continue indefinitely as a condition of this permit.

Tax Map / Tax Lot	Property Address	Town
20010001DW03		Stratham
20010001DW01		Stratham
20010001DW19		Stratham
20010001DW10		North Hampton
20010001DW06		North Hampton

- ii. **Off-site Private Overburden Well:** The permittee shall install a pressure transducer and data logger and measure water levels at a frequency of at least once every 12 hours in the private overburden well located at the

following property. Water level monitoring shall commence at least 30 days prior to initiating a withdrawal from the irrigation wells and shall continue indefinitely as a condition of this permit.

Tax Map / Tax Lot	Property Address	Town
20010001DW05O		Stratham

20010001IWASSE1
 20010001IWASSE2
 20010001IWWINN1
 20010001IWWINN2

- iii. On-site Irrigation Wells: The permittee shall measure water levels at a frequency of at least once every two weeks in wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 when the golf course is open for business or pumping groundwater. Water levels shall be measured from a designated fixed point at the top of the casing of each well, consistent with prior readings. The water levels shall be recorded with the date and time of the measurement.

If a private well owner denies permission to monitor water levels or if the identified well cannot be monitored due to a structural limitation, then the permittee shall propose an alternative monitoring location to NHDES for approval. Upon receiving approval from NHDES, the permittee shall install the monitoring well, if a suitable alternative private well or monitoring well is not already available, and monitor water levels at the alternative location at the same frequency required at the original monitoring well.

All water level monitoring shall be completed by a person who can demonstrate, by education or experience, competency in collecting and reporting hydrogeologic measurements.

Monitoring well locations and frequencies may be added or changed if the water level data obtained contradict the information provided in the permittee's application, or if additional data points are required to assess the potential for adverse impacts to occur.

b) Wetland Monitoring

The permittee shall implement the wetland monitoring program as described in the submittal titled "Revised Renewal Application for Large Groundwater Withdrawal Permit LGWP-2001-0001, The Golf Club of New England, Stratham, New Hampshire," prepared for the permittee by GZA GeoEnvironmental, Inc. (GZA), dated December 16, 2011, incorporated herein by reference. Monitoring shall be conducted using the methods proposed, and at the frequency proposed, at on-site monitoring plots Wet Mon 2 and Wet Mon 3 and control plot Wet Cont 2.

The wetland monitoring program shall continue indefinitely as a condition of this permit. All work shall be conducted under the direct oversight of a New Hampshire Certified Wetland Scientist. Results of the wetland monitoring and surveys must provide a determination as to whether or not an adverse impact has occurred, may occur, or has not occurred over the monitoring period.

An annual monitoring report and all monitoring data shall be submitted to NHDES annually by January 31 of each year. The annual monitoring report shall note any

relevant observations that may affect the water level measurements or wetland plot observations and include all field notes documenting the monitoring activities for the preceding year. The results of the tri-annual wetland surveys and associated impact assessment shall be included in the annual monitoring report unless requested sooner by NHDES.

The annual monitoring report and all monitoring data collected per section 4b above shall be submitted in an electronic format and hard copy format. All water level monitoring data collected per section 4a above shall be submitted in an electronic format only.

5. Mitigation Requirements

- a) In the event that adverse impacts occur, the permittee shall comply with all of the requirements below and with the impact mitigation and source replacement requirements of Env-Wq 403.
- b) Within 90 days of receipt of this permit, the permittee shall notify in writing via certified mail the owners of all properties served by private wells or public wells not owned by the permittee within the area estimated to be the influence area of wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2, as illustrated on Figure 4, titled "Water Supply/Inventory Locations and Wetlands Resources" included in the submittal titled "Revised Renewal Application for Large Groundwater Withdrawal Permit LGWP-2001-0001, The Golf Club of New England, Stratham, New Hampshire," prepared for the permittee by GZA, dated December 16, 2011. The permittee shall provide the following to NHDES: 1) a map depicting the locations of the properties notified, labeled with tax parcel numbers; 2) a table listing the property owners, by tax parcel number; 3) one copy of the notification letter; and 4) copies of the certified return mail receipts. The permittee shall explain to property owners with wells in the identified area that their well may be influenced by the withdrawals from wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2. The permittee shall provide the property owners with contact information for both the permittee and NHDES in the event they believe they may be adversely impacted by the withdrawal.
- c) 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 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.
- d) NHDES will routinely review the results of all monitoring data, and if water level monitoring data indicate that groundwater is being extracted at a rate that exceeds natural recharge on average, then NHDES will modify the permit in accordance with Env-Wq 403 in order to prevent adverse impacts from occurring. In addition, the permittee shall operate the withdrawal in accordance with the management procedures described below:

DROUGHT MANAGEMENT PROCEDURES

STAGE I

In the event that the following trigger occurs, production from wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 shall be reduced to 75% of the permitted withdrawal volume.

Trigger: Moderate Drought conditions as determined by the U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, U.S. Department of Commerce/National Oceanic and Atmospheric Administration, and the National Drought Mitigation Center.

As part of Stage I Management Procedures, the permittee shall increase the frequency of reporting of all on-site and off-site water level measurements to NHDES, and submit all measurements electronically to NHDES by the 15th and last day of each calendar month.

STAGE II

In the event that the following trigger occurs, production from wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 shall be reduced to 50% of the permitted withdrawal volume.

Trigger: Severe Drought conditions as determined by the U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, U.S. Department of Commerce/National Oceanic and Atmospheric Administration, and the National Drought Mitigation Center.

As part of Stage II Management Procedures, the permittee shall continue reporting all on-site and off-site water level measurements to NHDES electronically by the 15th and last day of each calendar month.

STAGE III

In the event that the following trigger occurs, the combined production from wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 shall be reduced to less than 57,600 gallons over any 24-hour period.

Trigger: Extreme Drought Conditions as determined by the U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, U.S. Department of Commerce/National Oceanic and Atmospheric Administration, and the National Drought Mitigation Center.

As part of Stage III Management Procedures, the permittee shall continue reporting all on-site and off-site water level measurements to NHDES electronically by the 15th and last day of each calendar month.

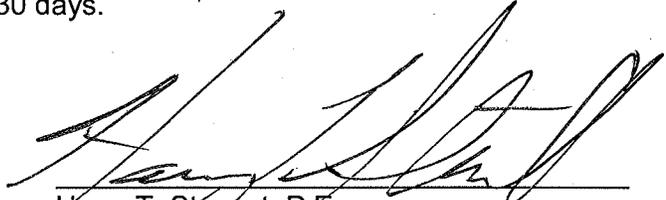
STAGE IV

In the event that the following trigger occurs, the withdrawals from wells Asset 1, Asset 2, Winnicut 1, and Winnicut 2 shall cease.

Trigger: Exceptional Drought conditions as determined by the U.S. Drought Monitor which is administered by the U.S. Department of Agriculture, U.S. Department of Commerce/National Oceanic and Atmospheric Administration, and the National Drought Mitigation Center.

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 at least 365 days prior to its expiration date. 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.



Harry T. Stewart, P.E.,
Director Water Division