

INCORPORATED 1716

10 BUNKER HILL AVENUE • STRATHAM NH 03885

VOICE (603) 772-7391 • FAX (603) 775-0517

MEMORANDUM

TO: Michael Houghton, Select Board Chair

Joseph Lovejoy, Select Board Vice-Chair

Allison Knab, Select Board

FROM: David Moore, Town Administrator

DATE: February 22, 2022

RE: Select Board Agenda and Materials for the February 22, Regular Meeting

Please allow this memorandum to serve as a guide to the Select Board Meeting agenda for February 22, 2022.

III. Consideration of Minutes

The minutes from your meeting on February 7th are included in your packet for your review and consideration for acceptance at your meeting.

- IV. Treasurer Report (first meeting of the month)
- V. Department Reports & Presentations

A. Trail Management Advisory Committee – Report Back

To view the report back, by the Committee, please follow this link:

https://www.strathamnh.gov/sites/g/files/vyhlif5051/f/uploads/tmac_recommendations_final_2_15_22.pdf

- VI. Correspondence
- VII. Public Comment
- VIII. Public Hearings, Ordinances and/or Resolutions
- IX. Discussion of Monthly Reports (second meeting of the Month)

The Select Board reserves the right to take up business in any order deemed appropriate by the Chair. A motion to enter Non-Public Session in accordance with RSA 91-A:3 may occur at any time during the meeting. Submission of items to be placed on the Agenda must be to the Town Administrator by 4 pm the Wednesday before the scheduled meeting.



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X. New Business and Action Items

A. Town Meeting Preparations

Moderator Emanuel and Town Clerk Deb Bakie will be present to review election preparations. In particular, the different changes in masking protocols begin carried out at our host facilities (SMS) and (CMS). I have included in your meeting materials the Town Meeting guide for the Moderator and Select Board to work off of for the meeting.

B. Update on Future of PFAS Response in Town Center

The State DES-funded work of Underwood Engineers to study to various approaches to addressing PFAS long-term in Town Center is nearing completion. I look forward to sharing updates on this work and working to schedule Underwood to meet with the Board at your March meeting.

C. Request for Release of Funds – 20 Portsmouth Avenue

Please find attached a memorandum from Mark Connors regarding a release of funds.

Large Ground Water Renewal – Golf Club of New England and Annual Monitoring Report – Golf Club of New England

The Annual Monitoring Report from Golf Club of New England requires no action. Under DES rules, the Town of Stratham does have the opportunity to require a public hearing concerning the renewal application. I have enclosed a fact sheet about the permitting process for renewals.

XI. Town Administrator Report

XII. Informational Items

- A. Revised 2022 Select Board Meeting Calendar
- B. Room Reservations Staff Discussions
- C. Chamber Economic Outlook Event 2022 Feb. 17
- D. Emergency Planning Zone Drill (Seabrook) April 6
- E. Age-Friendly Communities Steering Committee Meeting (week of 2-21-2021)
- F. Heritage Commission/Building Inspector Annual Monitoring of Old Town Hall
- G. Boards and Commissions Openings Posted and subject of newsletter



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- H. Reminder April Goals Discussion
- XIII. Reservations, Event Requests & Permits
 - A. Great Bay 5K request to waive fee for Front Pavilion 10/29/22
 - B. Acorn School Earth Day request to waive fee for Scamman Pavilion 4/22/22
- XIV. Review of Recent or Upcoming Board & Commissions Agendas
- XV. Boards and Commissions Nominations & Appointments
 - A. Appointments for consideration: None for this meeting
 - B. Appointments to be voted on:
- XVI. Miscellaneous & Old Business
 - A. PFAS in Town Center
 - B. Open Items Tracking
- XVII. Adjournment



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SELECT BOARD AGENDA FEBRUARY 22, 2022 7:00 P.M.

Hutton Room, Stratham Municipal Center 10 Bunker Hill Avenue, Stratham, NH 03885

This meeting of the Select Board will be held in the Hutton Room of the Stratham Municipal Center

The public may access this meeting at the date and time above using this conference call information. Please dial the conference number (877) 205 7349 and input 2254 when prompted for a user pin/code.

If at any time during the meeting you have difficulty hearing the proceedings, please e-mail dmoore@strathamnh.gov.

To access materials related to this meeting, please see this link: https://www.strathamnh.gov/select-board

- Call to order
- II. Roll Call
- III. Consideration of Minutes February 7, 2022
- IV. Treasurer Report (first meeting of the month)
- V. Department Reports & PresentationsA. Trail Management Advisory Committee Report Back
- VI. Correspondence
- VII. Public Comment
- VIII. Public Hearings, Ordinances and/or Resolutions
- IX. Discussion of Monthly Reports (second meeting of the Month)

The Select Board reserves the right to take up business in any order deemed appropriate by the Chair. A motion to enter Non-Public Session in accordance with RSA 91-A:3 may occur at any time during the meeting. Submission of items to be placed on the Agenda must be to the Town Administrator by 4 pm the Wednesday before the scheduled meeting.

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TOWN OF STRATHAM

INCORPORATED 1716

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- A. Town Meeting Preparations
- B. Update on Future of PFAS Response in Town Center
- C. Request for Performance Bond Release 20 Portsmouth Avenue
- D. Large Ground Water Renewal & Annual Monitoring Report Golf Club of New England
- XI. Town Administrator Report
- XII. Informational Items
 - A. Revised 2022 Select Board Meeting Calendar
 - B. Room Reservations Staff Discussions
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 - E. Age-Friendly Communities Steering Committee Meeting (week of 2-21-2021)
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- XVI. Miscellaneous & Old Business
 - A. PFAS in Town Center
- XVII. Adjournment

MINUTES OF THE FEBRUARY 7, 2022 SELECT BOARD MEETING

Meeting held in the Hutton Room at the Stratham Municipal Center

MEMBERS PRESENT: Board Members Chair Mike Houghton, Vice Chair Joe Lovejoy and Allison Knab.

ALSO PRESENT: Town Administrator David Moore, Finance Administrator Christiane McAllister

At 7:00 pm Mr. Houghton opened the regular meeting.

Mr. Lovejoy motioned to accept the minutes from the January 18, 2022 Select Board meeting. Ms. Knab seconded the motion. All voted in favor. Ms. Knab motioned to accept the minutes from the February 1, 2022 Select Board meeting. Mr. Lovejoy seconded the motion. All voted in favor.

Mr. Houghton deferred talking about the Treasurer's Report until the Finance Administrator arrived.

Mr. Houghton recognized resident Colin Laverty. Mr. & Mrs. Laverty, 121 Stratham Heights Road, Jan 20 appeared before the Board to address a lack in timeliness of snow removal during snow events. Mr. Laverty provided documentation and description of several motor vehicle accidents on Stratham Heights Road within the past 2-3 years. He felt that the snow removal and subsequent cleanup has been an ongoing issue. He asked the Board to address why why response to winter storm events is so poor; 2. why the DPW Director takes the Town's vehicle to his home on a daily basis. What can be done in the way of roadway improvements to make Stratham Heights Road safer? He described the five accidents on that road in the last 2-3 years, saying some of them came very close to people's houses.

Mr. Laverty thanked the Board for their time and consideration.

Mr. Houghton thanked Mr. Laverty for bringing this matter to his attention. He will pursue the issue and convene the department heads involved and will report back. He said that he takes his complaint seriously but he has not heard any other complaints from residents about winter road maintenance throughout Town or on this roadway.

Mr. Anderson, a member of the public in attendance, asked for reasons behind the crashes. Mr. Laverty said two were related to ice on the road, two were distracted drivers, and one was under the influence.

PARKS & RECREATION

Mr. Houghton recognized Parks & Recreation Director Seth Hickey to give his department report. Referring to his previously distributed report, Mr. Hickey updated the Board on his recommendations for the Smyk Park. The baseball and softball programs are moving forward. They are in the process of recruiting coaches. He drafted a write up of the Youth Sports Coordinator position as proposed by the Recreation Commission. Mr. Hickey explained what

youth sports looks like these days, based on engagement of volunteers the past few years. Ms. Knab recognized the many details and knowledge that would be required of a person in that position. She had questions about oversight and how it would fit into the Parks & Rec department. Mr. Lovejoy asked about overlap of programs. Mr. Houghton asked about recruitment efforts for volunteers. Mr. Hickey described what's been done this far. Ms. Knab felt the job description contained a lot of responsibilities. She described her experience on the basketball board. Ms. McAllister had payroll questions for the new position. She and Mr. Hickey will need to meet to discuss further.

Mr. Hickey explained that they are in the planning stages for the Great Bay Food Truck Festival on May 7, from noon to 5pm. He provided an overview of the event. They are coordinating with the DPW director on placement of trucks, meeting with the Police Dept. on safety and parking concerns. There will be only food this year; no beer or wine. Tickets will be sold in advance. This event is in coordination with the Exeter Area Chamber of Commerce. They are working on the marketing plan which will lay out clear expectations for the event.

Mr. Hickey reported that the Trail Management Advisory Committee is moving forward with their final report with a deadline of Feb 18th in mind. The committee would like consideration to continue into the future to be able to carry out their recommendations.

Mr. Hickey continues to work with the Park Association on counter devices at SHP. He stated that the Summer Camp program is sold out with just over 500 participants. The Counselor in Training program has been very successful. The Community Bonfire on January 8th went well. Because of the snow that day, they added a snowshoe hike. The Ski programs are wrapping up. He will have more information in the future regarding the master plan for Steven's Park.

Mr. Houghton was happy to see the engagement returning and programming taking place. There is a stronger comfort level with outdoor programming. Mr. Hickey said that reservations for the pavilions are coming in. The Next TMAC meeting is Feb. 16th but is dependent on progress of the draft report.

Mr. Hickey told Mr. Lovejoy it was a pleasure to work with him these past six years and that he will be missed. Mr. Lovejoy reciprocated the sentiment and expressed appreciation for the work Mr. Hickey and his department has done.

FIRE DEPARTMENT

Mr. Houghton recognized Fire Chief Matt Larrabee. Chief Larrabee has had conversations with his officers and a subcommittee of the department membership about possibly revisiting the 1993 Town Meeting vote that defines the structure of the department to include the election of Fire Chief by department members. They reviewed and discussed the issue in depth. Consensus among the membership was to keep the current model at this time. Chief Larrabee referred to a change in his work schedule which will affect his ability to remain as Chief. He feels he can commit for the next year, but would welcome it if someone would step up. He suggested that, if they couldn't find a volunteer, perhaps a compensation model could be offered. The officers would like the opportunity to perform a search, first from within, then widening it, then bringing a recommendation to the Board. Mr. Lovejoy commented on the cohesion and pride among the

department. Chief Larrabee affirmed that they had discussed some potential issues. Mr. Houghton noted the RSA is 30 years old; it might need updating. He felt a need to have a contingency plan in place to ensure public safety. Chief Larrabee suggested that in order to maintain the good relationship, with Mr. Lovejoy's departure, perhaps another Board member would attend Fire Dept. meetings and other events.

At 8:00 pm Mr. Houghton motioned to go into a non-public session in accordance with RSA 91-A:3, II (a) Personnel. Mr. Lovejoy seconded the motion. Roll Call: Houghton – Yes; Lovejoy – Yes; Knab – Yes

At 8:09 pm Mr. Houghton motioned to come out of the non-public session and seal the minutes noting failure to do so may render the proposed action of the board ineffective. Mr. Lovejoy seconded the motion. All voted in favor.

APPOINTMENTS

Mr. Houghton directed attention to the Age Friendly Committee and listed the applicants. Mr. Lovejoy motioned to appoint Tracy-Lynn Abbott, Lucy Cushman, Richard Swett, Roberta Febo, Christopher Zaremba, Mark Connors and Allison Knab to the Age-Friendly Committee. Ms. Knab seconded the motion. All voted in favor.

Mr. Houghton said we received a letter from Robert Roseen resigning from the Planning Board. Mr. Lovejoy motioned to accept Mr. Roseen's resignation. Ms. Knab seconded the motion. All voted in favor.

Mr. Houghton returned to the Treasurer's report, which Mr. Moore handed out noting that it was unintentionally not included in their packet. Mr. Moore and Ms. McAllister provided general updates about the Finance Office and noticed the 2020 audit was completed. Mr. Houghton thanked Ms. McAllister for her efforts to get the audit complete a feat accomplished following the transition of Finance Administrators. He acknowledged the challenges she faced in coming on Board at a challenging time of the year when there are so many demands and he is is deeply appreciative of the work she's done.

Mr. Houghton asked about the correspondence regarding private well owners on the Seacoast. Mr. Moore spoke briefly about his involvement in the legislative committee which addresses this issue.

Mr. Houghton brought attention to the Select Board meeting schedule. The second meeting of the month was inadvertently omitted from the schedule. Because of the holiday, the board will hold its regular meeting on Tuesday, February 22.

Mr. Moore met with the Moderator and discussed election preparations. The Town Clerk is taking the reins of the facility set up. The Board, Town Administrator and Town Clerk briefly discussed COVID protocols for the first session (election) and second session of Town Meeting. Mr. Lovejoy went to the school deliberative session and was impressed with the logistics. Conversation ensued about the level of accommodations for the upcoming elections and Mr.

Moore indicated he would confer with the Clerk and Moderator prior revisiting the issue with the Board.

Ms. McAllister gave an update on the status of the Warrant articles. The warrant articles and the proposed budget are in for pre-review with DRA. Once finalized, the Board will need to sign. Mr. Moore said the Town Report is being finalized and is due to the printer on Friday.

Mr. Houghton moved on to the open positions on boards and commissions. Mr. Moore will call attention to the vacant boards and commission openings in an upcoming Select Board Newsletter. No one has filed as a candidate for the vacant position on the Trustees of Trust Funds. They discussed how the vacancy might be filled. Ms. McAllister asked if consideration has been given to alternates, which she has found to be effective in helping to manage future vacancies. Mr. Moore will look at the RSA governing the matter. Mr. Moore noted terms expire at Town Meeting. It was decided to swear in candidates who were in attendance at the end of town meeting.

At 8:43 pm Mr. Houghton motioned to go into a non-public session in accordance with RSA 91-A:3, II (a) Personnel. Mr. Lovejoy seconded the motion. Roll Call: Houghton – Yes; Lovejoy – Yes; Knab – Yes

At 10:10 pm Ms. Knab motioned to come out of the non-public session and seal the minutes noting failure to do so may render the proposed action of the board ineffective. Mr. Lovejoy seconded the motion. All voted in favor.

At 10:10 pm Mr. Houghton motioned to adjourn. Mr. Lovejoy seconded the motion. All voted in favor.

Respectfully submitted,

Karen Richard Recording Secretary



Incorporated 1716

10 Bunker Hill Avenue · Stratham, NH 03885 Town Clerk/Tax Collector 603-772-4741

Select Board / Administration/Assessing 603-772-7391 Code Enforcement/Building Inspections/Planning 603-772-7391 Fax (All Offices) 603-775-0517

TO: Select Board Members

FROM: Mark Connors, AICP, Town Planner

DATE: February 18, 2022

RE: 20 Portsmouth Avenue Release of Performance Guarantee for Starbucks

The Town is holding a Performance Guarantee in the amount of \$162,750.00 to guarantee improvements related to the Planning Board's Site Plan approval of the Starbucks facility at 20 Portsmouth Avenue were completed per the approved site plan. The Performance Guarantee required that the site's landscaping be in place for at least one year prior to the release of the bond amount. A Certificate of Occupancy for the development was issued in the Spring of 2020 and the applicant has provided the Town As Built Plans. The site has been constructed per the approved site plan and staff takes no objection to the full release of the Performance Guarantee in the amount of \$162,750.00.

Amount held by Town of Stratham (Starbucks Site Plan): \$162,750.00

Amount recommended to be released: \$162,750.00

The applicant has also requested a release of the Performance Guarantee the Town is holding for the Chipolte Restaurant, also in the Parkman Brook Shopping Center. However, the Planning Board's approval of the Site Plan for Chipolte Restaurant required the applicant to construct sidewalks and pedestrian crossings serving the development. The New Hampshire Department of Transportation has not still yet approved the permits to complete this work, even though it has been pending with NHDOT for many months. Staff has spoken with DOT representatives who are optimistic the permits will be approved by the end of this month. Before DOT will issue the permits, they will need to accept a bond to guarantee the work is constructed per the approved plans. Staff is not comfortable releasing most of the Chipolte performance guarantee the Town is holding until the State accepts the bond for the work. It's important there is some financial commitment is in place to ensure the work is completed. Staff has communicated this to the applicant and will support the release of the guarantee as soon as the NHDOT accepts a bond for the work.

PERFORMANCE AND BOND AGREEMENT

THIS AGREEMENT entered into by and between NP Stratham LLC of 150 E 58th Street, 20th Floor, New York, NY 10155, hereinafter referred to as the "Contractor" and the Town of Stratham in the County of Rockingham and the State of New Hampshire, hereinafter referred to as the "Town."

WHEREAS, the Contractor is obligated to complete various infrastructure improvements and perform other work to be done and performed in accordance with the subdivision/site plans, road profile plans, and specifications related to a certain final approved site plan entitled Starbucks Permit Site Plan 20 Portsmouth Avenue (NH Route 108), Stratham, New Hampshire dated November 27, 2018 and prepared by Eaglebrook Engineering & Survey LLC, as approved by the Planning Board of the Town of Stratham on January 2, 2019 and on file with the Town, and/or recorded at the Rockingham County Registry of Deeds as Plan Number 1-41500, and;

WHEREAS, the Contractor desires to provide the Town security in the form of a Subdivision Bond No. 41395566 ("the Bond"), attached hereto as Exhibit A, to ensure the completion of any and all infrastructure improvements in connection with site work and utilities as detailed on the bound amount worksheet, attached hereto as Exhibit B, that remain undone, incomplete, unfinished, or in need of restoration, all pursuant to the previously cited Planning Board approval and in accordance with the Subdivision and/or Site Plan Review Regulations of the Town of Stratham presently in effect, as those plans and specifications may be adjusted or amended by the reasonable judgment or decision of the Town's construction inspector, all hereafter referred to as "Improvements", and;

WHEREAS, the Contractor agrees, inter alia, to perform the obligations and conditions as

set forth herein on or before May 31, 2020 and further agrees to indemnity, save, and hold harmless the Town against any damages and equitable claims caused by the Contractor's failure to perform under this Agreement, and;

WHEREAS, the Town and the Contractor have agreed to the Bond for the sole benefit of the Town in the event the Contractor, for any reason, fails to fully perform its commitments and obligations as set forth herein with the Town, and;

WHEREAS, the Contractor has delivered to the Town simultaneously with the execution of this Performance and Escrow Agreement the Bond with and for the benefit of the Town in the amount of **One Hundred Sixty Two Thousand Seven Hundred Fifty and 00/100 Dollars** (\$162,750.00). The Bond shall stand in the name of the Town, as Obligee, as security for the Contractor's performance of the work and of this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, undertakings, and other lawful consideration hereinafter set forth, the parties agree as follows:

- 1. That the Town will hold the Bond, in escrow, for the sole benefit of the Town and shall use such funds for the purposes and upon the conditions hereinafter set forth.
- 2. In the event that the Contractor shall default or fail to complete the Improvements or meet and perform its commitments or obligations set forth herein on or before the date cited above and should the Town desire to call upon the Bond to repair and/or correct deficiencies in said Improvements, the Town will file with the Contractor a written statement stating that the Contractor is in default of its performance obligations hereunder and said funds will be used to correct the stated deficiencies caused by the Contractor.
- 3. The Town agrees that any payments received by it from such funds shall be expended solely for the purpose of curing any default or defaults of the Contractor of its obligations

and commitments as set forth in the this Agreement. Such expenditures, as the Town may deem necessary to incur, shall include, but not necessarily be limited to, the reasonable costs of hiring any engineers, contractors, or other consultants, administrative costs of the Town, and/or any legal fees related to this Agreement.

- 4. The Town agrees to inspect the construction and/or infrastructure Improvements installed by the Contractor, from time to time, upon completion thereof and within a reasonable time after receipt of written request to do so from the Contractor and to advise the Contractor of any deficiencies in the said work. The Town reserves the right and ability to hire any engineers, or other consultants as the Town deems necessary to inspect the work, and the Contractor agrees to pay all reasonable cost thereof. The Contractor agrees to cure any such cited deficiencies. In the event the Contractor fails to cure any deficiencies cited within thirty (30) days of citation, the Town shall have the right, but not the obligation, to draw against the Bond for the purpose of curing the said deficiency.
- In the event the Town, it its judgment, finds a deficiency which constitutes an emergency due to the immediate hazard it presents to public health, safety, and/or welfare, the Town may take prompt action as the Town shall deem necessary to cure said deficiency, but shall not have the obligation to do so. The Town shall have the right to draw against the Bond for any and all costs and/or expenses incurred in correcting said deficiency caused by the Contractor.
- 6. The Contractor shall be entitled to examine all documents, which the Town may have in its possession, relating to the Agreement during regular office hours, and the Town will, at the Contractor's request and expense, furnish copies of any said documents that the Contractor may request.

- 7. The Bond shall not be reduced or released until the Town's construction inspector certifies to the Board of Selectmen that all commitments and obligations of this agreement have been met by the Contractor pursuant to the provisions of the Town's Subdivision and/or Site Plan Review Regulations or terms of the stated Planning Board approval.
- 8. If the Contractor shall complete the Improvements and meet its obligations herein prior to the date cited above in a manner satisfactory to the Town or its agents, the Bond shall be reduced by an amount of One Hundred Twenty Five Thousand Two Hundred Fifty Dollars (\$125,250). The remaining minimum amount of Thirty Seven Thousand Five Hundred Dollars (\$37,500) shall remain on the Bond for a period of one (1) year from the date of completion of the work as a maintenance bond for the purpose of landscaping. At the end of the one (1) year period, the Town shall notify the Contractor in writing as to any work required to be performed to correct or fix any deficiencies or undue wear on the Improvements. The Contractor shall have thirty (30) days from that notice in which to correct or fix such deficiencies and upon completion thereof, the maintenance bond shall be released to the Contractor.
- 9. It is expressly understood by the parties hereto that this Agreement is **not** intended for the benefit of any third party, including but not limited to contractors, subcontractors, or materialmen of the Contractor, and is designed solely to protect the Town from any legal or equitable claim and all costs and expenses, to include but not limited to legal fees and/or experts and consultants, arising from the failure of the Contractor to perform its commitments and obligations hereunder. This Agreement shall not be assignable by the Contractor to any third party or successor without the written consent of the Selectmen.

- 10. In the event of the death or incapacity of the Contractor and the failure of the, Contractor's successor or legal representative to act in compliance with the Contractor's commitments and obligations hereunder, the Town shall have the right, but not the obligation, to draw against such funds for the purpose of performing the Contractor's commitments and obligations as set forth herein.
- 11. At such time as the Town by its Selectmen shall deem appropriate, the Selectmen may consider acceptance of the Improvements as a public road, if previously dedicated for that purpose. Upon an affirmative vote of the Selectmen, the Contractor shall render a deed in a form acceptable to the Selectmen conveying the roadway to the Town. Upon recording of the deed at the Rockingham County Registry of Deeds, this Agreement shall terminate and the Bond shall be released to the Contractor.
- 12. It is expressly understood by the parties hereto that a waiver by the Town of any breach or default by the Contractor of the obligations, terms, and/or conditions of this Agreement shall not be deemed a waiver of any other or future breaches and/or defaults thereof.
- 13. If any clause of this Agreement be declared invalid or unconstitutional in whole or in part and is for any reason rendered null and void, the remaining clauses shall remain in full force and effect.

Dated this day of June, 2019

CONTRACTOR:

y: Molentingu W (Duly Authorized)

TOWN OF STRATHAM By Its Selectman

By: ____

Selectman)

By: Ole M/Ch

(Selectman)

EXHIBIT A

SUBDIVISION BOND

(See attached)

PLATTE RIVER INSURANCE COMPANY

SUBDIVISION BOND

Bond No. 41395566 Bond Term: June 7, 2019 to June 7, 2021

KNOW ALL MEN BY THES	E PRESENTS, that v	ve, NP Stratham L	LC
	River Insurance Con		a corporation organized
and existing under the laws of	of the State of Ne	braska a	nd duly authorized to transact
business in the State of Ne		as Surety,	are held and firmly bound unto
Town of Stratham,			as Obligee in the penal sum of
One Hundred Sixty-Two The	ousand Seven Hundr	ed Fifty & 00/100s	Dollars (\$162,750.00),
lawful money of the United s and Surety hereby bind ourse severally, firmly by these pre	elves and our heirs, a	nich well and truly to dministrators, succes	be made, the said Principal ssors, and assigns, jointly and
WHEREAS the Principal ha	s submitted to the	Town of Stratham	
a site plan titled Starbuck	s Permit Site Plan, 2	O Portsmouth Avenu	e, Stratham, NH
whose terms and conditions referred to as Site Plan.	are hereby incorpora	ted by reference in t	his bond and is hereinafter
WHEREAS the Town of	Stratham,	A STATE OF THE STA	has approved said
plan on condition that said P	rincipal file a surety	bond in the amount	of
One Hundred Sixty-Two The	ousand Seven Hundr	ed Filly & 00/100s	Dollars (\$162,750.00),
in form approved by the Obl by the Site Plan.	igee, securing to the	Obligee actual comp	letion of the work specified
NOW, THEREFORE, the of shall promptly and faithfully otherwise to remain in full for One Hundred Sixty-Two The	complete such Site	Plan, then this obliga event shall the liab	ition shall be null and void,
IN WITNESS WHEREOF	, the Principal and S	urety have hereunto	set their hands and seals this
7th day of June	-	2019.	
		NP Stratham LLC	2 2
		(Principal)	(Seal)
Witness	enganagian da malada kanaga pananakan Audu Malada.	By Juda	en fryn W
Witness Kieryl hord	la .	Platte River Insur (Surety)	ance Company (Scal)
		By	ng Attorney-in-Fact

PLATTE RIVER INSURANCE COMPANY

41395566

F	POWER OF ATTORNEY	71333300
KNOW ALL MEN BY THESE PRESENTS, That the Fits principal offices in the City of Middleton, Wisconsin, of	PLATTE RIVER INSURANCE COMPA does make, constitute and appoint	NY, a corporation of the State of Nebraska, having
JEFFREY P. DELDIN; CHRISTOPHI	ER GREENE; RAEGAN A GUGLIELMO; I	DIANA TOLEDO; PETER J REEVES————
its true and lawful Attorney(s)-in-fact, to make, execute, seal and contracts of suretyship, provided that no bond or underALL WRITTEN INST	and deliver for and on its behalf, as surety, a taking or contract of suretyship executed un RUMENTS IN AN AMOUNTNOT TO EX	nder this authority shall exceed in amount the sum of
This Power of Attorney is granted and is signed and seale Directors of PLATTE RIVER INSURANCE COMPAN	d by facsimile under and by the authority Ψ at a meeting duly called and held on the Ψ	of the following Resolution adopted by the Board of 8th day of January, 2002.
"RESOLVED, that the President, Executive Vice Preside are granted the power and authorization to appoint by a Pother writings obligatory in the nature thereof, one or mothe powers and duties usual to such offices to the business such power of attorney or to any certificate relating theret or facsimile seal shall be valid and binding upon the Comshall be valid and binding upon the Comshall be valid and binding upon the Company in the future which it is attached. Any such appointment may be revoked.	ower of Attomey for the purposes only of re resident vice-presidents, assistant secret sof this company; the signature of such off to by facsimile, and any such power of atto apany, and any such power so executed and re with respect to any bond or undertaking	executing and attesting bonds and undertakings, and taries and attorney(s)-in-fact, each appointee to have iders and seal of the Company may be affixed to any orney or certificate bearing such facsimile signatures at certified by facsimile signatures and facsimile seal g or other writing obligatory in the nature thereof to
In connection with obligations in favor of the Florida De Attorney-in-Fact includes any and all consents for the re required by the State of Florida Department of Transportar making payment of the final estimate to the Contractor and	lease of retained percentages and/or final tion. It is fully understood that consenting	estimates on engineering and construction contracts to the State of Florida Department of Transportation
In connection with obligations in favor of the Kentucky Attorney-in-Fact cannot be modified or revoked unless pr Highways of the Commonwealth of Kentucky at least thin	for written personal notice of such intent h	as been given to the Commissioner - Department of
IN WITNESS WHEREOF, the PLATTE RIVER INSU corporate sent to be hereto affixed duly attested, this 3rd of Attest: John E. Rzepinski Vice President, Treasurer & CFO Suzanne M. Broadbent Assistant Secretary STATE OF WISCONSIN COUNTY OF DANE On the 3rd day of May, 2017 before me personally came in the County of New York, State of New York; that he is which executed the above instrument; that he knows the second of the	Stephen J. Sills, to me known, who being be president of PLATTE RIVER INSURA teal of the said corporation; that the seal affi	PLATTE RIVER INSURANCE COMPANY Stephen J. Sills CEO & President y me duly sworn, did depose and say: that he resides NCE COMPANY, the corporation described in and fixed to said instrument is such corporate seal; that it
was so affixed by order of the Board of Directors of said	corporation and that he signed his name th	ereto by like order.
	O ADTARL	David a. Regele

David J. Regele Notary Public, Dane Co., WI My Commission Is Permanent

I, the undersigned, duly elected to the office stated below, now the incumbent in PLATTE RIVER INSURANCE COMPANY, a Nebraska Corporation, authorized to make this certificate, DO HEREBY CERTIFY that the foregoing attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

Signed and sealed at the City of Middleton, State of Wisconsin this

STATE OF WISCONSIN COUNTY OF DANE

ile wintow Antonio Celii

General Counsel, Vice President & Seccretary

THIS DOCUMENT IS NOT VALID UNLESS PRINTED ON GREEN SHADED BACKGROUND WITH A RED SERIAL NUMBER IN THE UPPER RIGHT HAND CORNER, IF YOU HAVE ANY QUESTIONS CONCERNING THE AUTHENTICITY OF THIS DOCUMENT CALL 800-475-4450. PR-POA (Rev. 10-2017)

PLATTE RIVER INSURANCE COMPANY BALANCE SHEET December 31, 2017

Admitted Assets

Cash and Invested assets:		
Bands	\$	99,858,262
Common stocks		25,382,170
Cash, cash equivalents and short-term investments		18,576,581
Total cash and invested assets		143,817,013
Investment income due and accrued		618,321
Uncollected premiums and agents' balances in course of collection		1,305,927
Deferred premiums, agents' balances and installments booked but deferred and not yet due		3,062,792
Amounts recoverable from reinsurers		1,383
Current federal and foreign income tax recoverable and interest thereon		560,354
Net deferred tax asset		86,390
Receivables from parent, subsidiaries and affiliates		1,331,602
Other admitted assets		15,441
Total admitted assets	\$	150,799,223
Liabilities and Surplus as Regards Policyholders		
Liabilities:	\$	32,577,588
Losses	÷	• •
Reinsurance payable on paid losses and loss adjustment expenses		2,306,236 7,067,355
Loss adjustment expenses		7,067,355 784,193
Commissions payable, contingent commissions and other similar charges		
Other expenses (excluding taxes, licenses and fees)		96,835
Taxes, licenses and fees (excluding federal and foreign income taxes)		156,912
Unearned premiums		20,010,558
Ceded reinsurance premiums payable (net of ceding commissions)		765,606
Amounts withheld or retained by company for account of others		38,458,953
Other Nabilities		299,560
Total liabilities		102,524,796
Surplus as regards policyholders:		4,800,000
Common capital stock		30,739,907
Gross paid in and contributed surplus		12,734,520
Unassigned funds (surplus)		48,274,427
Surplus as regards policyholders		The second secon
Total liabilities and capital and surplus	\$	150,799,223

t, Stephen J. Sills, CEO and President of Platte River insurance Company do hereby certify that to the best of my knowledge and belief, the foregoing is a full and true statutory Statement of Admitted Assets and Liabilities, Capital and Surplus of the Operation at December 31, 2017, prepared in conformity with the accounting practices prescribed by the Insurance Department of the State of Nebraska. IN WITNESS WHEREOF, I have set my hand and affixed the seal of the Corporation at Middleton, Wisconsin.

Stephen J. Sills CEO & President



PRINCIPAL'S ACKNOWLEDGMENT

INDIVIDUAL VERIFICATION

State of		County of	
On this	day of	, in the year 20	, before me personally came
	The second second second	to me known and known to acknowledges to me that he (they) execu	me to be the person(s) who is
(are) described in and who e	ixecuted the interdend mentioners with	economicolos to me me mo Imeli exem	ned the serie.
	**************************************	(Signature and title of official takin	g acknowledgement)
	PARTNERS	HIP VERIFICATION	
State of NEWY	DYX	COUNTY NEW YO	VY.
State of	TIN	Te In the year 20 1	21
On this	Tenton day or 3 1/11	in the year 20 1	before me personally came
assembed in and who execu	ted the foregoing instrument, and ackn	to the known, and knowledges to the known, and knowledges to the that he executed the san	wn to me to be the person who is no, as and for the agt and deed o
the said co-partnership AN	YA PRESS	he lee to	
NOTARY PUBLIC	STATE OF NEW YORK	(Signature and little of official takin	www.
Qualified	n Necesu County		in ecumon medianistic)
My Commission	n Expires 10-03-250RPORA	TE VERIFICATION	
State of		County of	
		. In the year 20	
O(1)17		to me known, who, being	
says that he resides in the C	ally of	that he is the	
of the	to east of the early companion; that the	the corporation described in seal affixed to the said instrument is such	and which executed the foregoing
affixed by the order of the B	oard of Directors of said corporation, a	nd that he signed his name thereto by like	order
	nding/illines		
		(Signature and title of officia) takin	ig acknowledgement)
•	SURETY COMPAN	Y ACKNOWLEDGEMENT	
State of New York	County ofPutnam		
7th	June 2019 hat	ne me personally came. Raegan A.	Guglielmo
the individual described in a	nd who executed the foregoing instrum	ne me personally came rent and to be the Attomey-in-Fact of Plat	to me known to be to River insurance Company,
which is to me known to be	the corporation described in the forego	ing instrument, and which, by its said Atta the Seal of said Corporation; that the Sea	rney-in-Fect executed the same.
such Corporate seal, that it i	was so affixed by order of the Board of	Directors of said corporation; and that he	executed the said instrument as
the act and deed of said Pla certain power of attorney en	Ite River Insurance Company therein o ecuted by said Platte River Insurance	lascribed and for the uses and purposes to Company datedJune 7, 2019	herein mentioned, by virtue of a
•		ch said nower has never been munked an	d is still in full force and affects
and that the said corporation	has received from the Superintenden	ch said power has never been revoked an t of insurance of the State of New York a	cefflicate of solvency and of its
York for the year 1939, and	rantor under Section 327, Unapper 862 That such certification has not been re)	of the Laws of 1939, being Chapter 28 of roked.	the Consolidated Laws of New
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	- Marie Andreas - Andreas	Notary Public	$\overline{\mathcal{C}}$

DIANA TOLEDO #01T06115128 Notary Public, State of New York Qualified in Putnam County My Commission Expires 8/31/20

EXHIBIT B

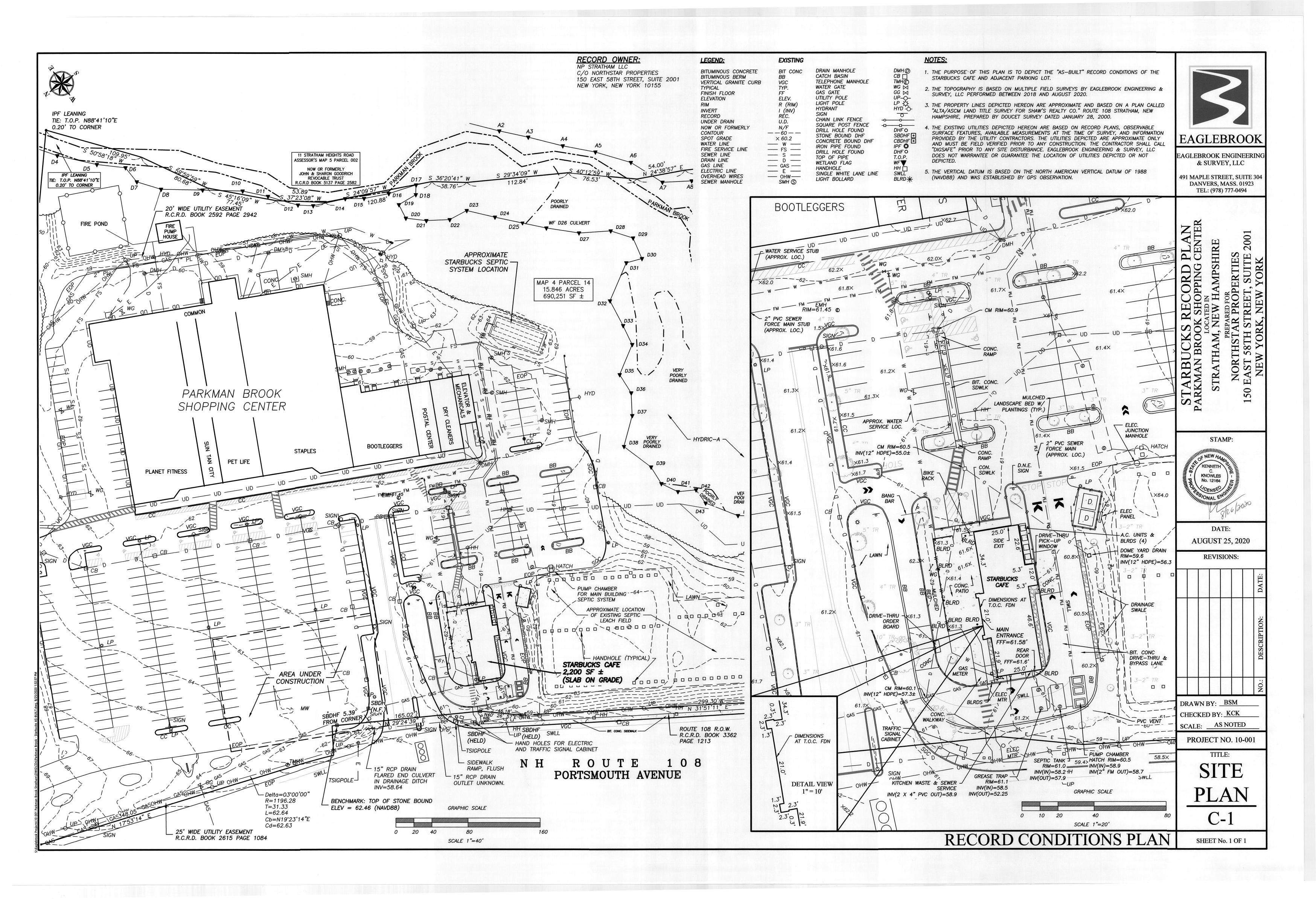
BOND WORKSHEET

(See attached)

Bond Value NP Stratham LLC

Proposed Starbucks, 20 Portsmouth Ave.

DESCRIPTION		PRICE	
Site Construction			
Erosion Control	\$	7,500.00	
Parking lot grading	\$	27,000.00	
Concrete sidewalk	\$	4,800.00	
Bituminous Sidewalk	\$	13,200.00	
ADA Ramps	\$	5,000.00	
Bituminous Curbing	\$	8,000.00	
Traffic/Parking lot striping (crosswalks, fire lane, HC stalls)	\$	2,250.00	
Domestic Water (No Fire)	\$	25,000.00	
Light Poles	\$	15,000.00	
Landscaping	\$	30,000.00	
Drainage	\$	25,000.00	
BOND AMOUNT	\$	162,750.00	





Incorporated 1716

10 Bunker Hill Avenue Stratham, NH 03885 Town Clerk/Tax Collector 603-772-4741 Selectmen's Office/Administration/Assessing 603-772-7391 Code Enforcement/Building Inspections/Planning 603-772-7391 Fax (All Offices) 603-775-0517

Planning Board NOTICE OF DECISION

Petition of:

Kenneth Knowles, Eaglebrook Engineering & Survey LLC

Project Name:

Site Plan Application to construct a free standing 2,200 SF Starbucks restaurant with associated drive through, parking, utilities, and landscaping, including a Conditional Use Permit required by Section 3.8.6.II of Stratham Zoning

Ordinance for request to deviate from requirements of Section 3, GCBD-CZ, at 20 Portsmouth Avenue, Map 4 Lot 14 submitted by Kenneth Knowles, Eaglebrook

Engineering & Survey LLC.

Premises Affected: 20 Portsmouth Avenue, Stratham, NH Tax Map 4 Lot 14

So as to permit:

The construct a free standing 2,200 SF Starbucks restaurant with associated drive

through, parking, utilities, and landscaping at 20 Portsmouth Avenue, Map 4 Lot

14, Stratham, NH.

The Stratham Planning Board, at its meeting of January 02, 2019 and after a public hearing, completed its consideration of the application for the Site Plan Review and Conditional Use Pemit applications to construct a free standing 2,200 SF Starbucks restaurant with associated drive through, parking, utilities, and landscaping at 20 Portsmouth Avenue, Map 4 Lot 14.

The Board based its decision on plans, supporting oral and written information, and records provided by the Applicant, professional staff, consultants for both the Applicant and the Board, and abutters, as reflected in the minutes on file at the Stratham Town Hall. This information shall be incorporated into the decision by reference.

As a result of such consideration, at its meeting of January 02, 2019, the Planning Board found that the application for amendment was complete and in Substantial Compliance with the Stratham Zoning Ordinance and Site Plan Review Regulations. The Planning Board voted unanimously in favor to Grant the Conditional Use Permit and Approve the Site Plan Review based on the information and stated conditions attached and incorporated hereto.

On January 02, 2019, Mr. Paine made a motion to grant the Conditional Use Permit under Section 20.3 of the Zoning Regulations as submitted and justified by the applicant. Mr. Roseen seconded the motion. Motion carried unanimously. And on January 02, 2019, Mr. Roseen made a motion to approve the Site Plan and Conditional Use Permit under Section 3.6 of the Zoning Regulations as submitted and justified by the applicant, subject to conditions (below). The motion was seconded by Mr. Paine. The final vote was unanimous. The project lies in the Gateway Commercial Business District Outer Zone and is located on real property shown on the Stratham Assessors Tax Map 4 Lot 14 with frontage on Portsmouth Avenue.

During the review process, the Applicant and its professional consultants submitted various revisions to the plans along with various supplemental memoranda and correspondence in response to requests by the Planning Board and the Planning Department that reviewed the project. All of these plans, reports and correspondence, and meeting minutes are contained in the Planning Department's files and are hereby incorporated by reference into the public record for this public hearing. Below are the Conditions of Approval as stipulated by the Planning Board:

Conditions Precedent:

- 1. Mylar to show the correct map, lot numbers, and addresses as applicable to Assessing department satisfaction prior to recordation.
- 2. Applicant shall submit one (1) full size paper copy of site plan with Mylar at time of recordation.
- 3. Applicant to add notes on the site plan regarding bike rack to Planning Department satisfaction prior to recordation.
- 4. Applicant to add a note of sign location for "Do Not Block" sign to be installed at the proposed drive-through driveway access to the Mylar.
- 5. Applicant to add a screen fence for the A/C condensers units and additional landscaping screening for the meter panels.
- 6. Applicant to add some additional detail on a grass bio-swale as opposed to the swale as currently labeled. The grass bio-swale would be approximately 24 inches deep of engineered media, 50 percent loam and 50 percent sand or similar mix. These detail notes may be included on the Landscape Plan, with general reference on Mylar.
- 7. Applicant to connect the rooftop to the structure underdrains which shall be of a perforated pipe routed to the catch basins using something similar to a 4 inch septic pipe, which when installed shall be raised approximately 6 inches off the graveled trench bottom in order to promote infiltration.
- 8. Applicant to add a note to the Mylar requiring "year-round access" for the sidewalk, particularly in the winter time.

Conditions Subsequent:

- 1. Applicant to provide a Performance Agreement and Surety to be accepted by the town prior to issuance of a building permit.
- 2. An "As-built" plan set, including 1 (one) copy in electronic format, shall be submitted to the Planning Department prior to issuance of a Certificate of Occupancy.

Planning Board Chair

1/16/2019

2021 ANNUAL MONITORING REPORT

LARGE GROUNDWATER WITHDRAWAL PERMIT NO. LGWP-2001-0001A

THE GOLF CLUB OF NEW ENGLAND STRATHAM AND GREENLAND, NEW HAMPSHIRE

Prepared For (Permittee):

Soft Draw Investments, LLC 167 Winnicutt Rd, Stratham, NH 03885

Prepared By:

Stable Growth Environmental LLC

P.O. Box 955, Dover, NH 03821 (603) 767-8633

January 2022

2021 ANNUAL MONITORING REPORT

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January 2022

Michael L. Parsont, CWS, CPESC

Project Manager, Senior Wetland Scientist

Stable Growth Environmental LLC







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INTRODUCTION

In order to remain in compliance with the requirements of the Large Groundwater Withdrawal Permit No. LGWP-2001-0001A (LGWP), Stable Growth Environmental LLC (SGE) has prepared this annual report on irrigation system, water level monitoring, wetland monitoring and off-site well monitoring requirements at The Golf Club of New England (GCNE) located in Stratham and Greenland, New Hampshire. The GCNE site contains an 18-hole golf course on 441 contiguous acres bounded by Winnicut Road to the southwest, Union Road to the west-northwest, Winniconic Brook along the northeast, and Winnicut River along the east and south (see **Figure 1**). The LGWP covers four on-site production wells, designated as Asset 1, Asset 2, Winnicut 1 and Winnicut 2, utilized for the purpose of irrigation water supply for the golf course.

This is the tenth, and final, annual monitoring report for the GCNE site under the renewal LGWP that was issued on December 18, 2011 for a ten-year period. Data sets in this report begin as of January 1, 2012 or later. For historic data collected and reported under the initial LGWP, refer to the 2011 Annual Monitoring Report, dated January 2012, prepared by GZA GeoEnvironmental, Inc. The groundwater level monitoring data collected in 2021 for the irrigation wells and the offsite private wells has been submitted in an electronic format to the NH Department of Environmental Services (NHDES) as required by the renewal LGWP, and in accordance with Electronic Data Reporting Program Guidelines provided by NHDES in correspondence dated January 25, 2012.

This report includes 2021 information regarding irrigation system performance, water level monitoring results, wetland monitoring results, and groundwater level monitoring results for off-site private wells. Locations of the irrigation wells, wetland monitoring plots and off-site private wells are shown on **Figure 2**. Precipitation data is included on **Figure 3**. Monitoring events have been completed under the direct oversight of Michael L. Parsont, a NH Certified Wetland Scientist.

Precipitation/Drought

During 2021, daily precipitation data was not able to be obtained from the GCNE on-site weather station due to a lightning strike that made the station inoperable. Precipitation data for 2021 was obtained from the weather station at Portsmouth International Airport at Pease in Newington, NH. Drought conditions were checked on the U.S. Drought Monitor website (<u>droughtmonitor.unl.edu</u>) for the State of New Hampshire on a weekly basis throughout the year.

As shown on **Figure 3**, the precipitation pattern in 2021 included below average precipitation in January through April, June, and November-December; it was significantly below average for most of those months (approximately 15 inches total). This was balanced by higher-than-average quantities in May and September (7.7 inches) and significantly higher-than-average quantities for the months of July and October (17.3 inches total). The overall precipitation total for 2021 was 43.4 inches, which was slightly above the average over the past eight years (42.4 inches). There were no drought conditions at GCNE in 2021.

IRRIGATION SYSTEM

Leak Detection Survey

The Golf Club of New England conducts a leak detection survey annually during the initial stages of starting its irrigation system every spring. This process involves filling every irrigation pipe with water, visually inspecting every irrigation head, testing that they work properly and monitoring the pressure maintenance pumps to observe that the system is filled to capacity and is holding pressure correctly. During this process, any deficiencies encountered are immediately rectified to ensure the irrigation system is running at peak efficiency. Additionally, on a regular basis throughout the golfing season, GCNE conducts periodic checks of the irrigation system and corrects any deficiencies detected. During 2021, the following issues were addressed, as noted:

- Three broken pipes at holes 13, 15 and 16; all were leaks at a "bell" fitting. All were repaired with telescopic couplers within 1-2 weeks of the leak.
- Twelve sprinkler head "blow outs" during irrigation start up (old heads with a lot of wear cannot take pressure and fail). All were shut off immediately and repaired.
- Three quick coupler valve leaks at holes 8, 12 and 15. All were repaired with new quick couplers within 1-2 days of noticing the leak.
- Two sprinkler heads stuck "on" overnight at holes 4 and 18. Both ran for approximately six hours, were noticed the next morning and repaired with a new head that day.

Water Meters

There are four bedrock irrigation wells on-site, designated as Asset 1 (IWASSE1), Asset 2 (IWASSE2), Winnicut 1 (IWWINN1) and Winnicut 2 (IWWINN2), and each contains a meter to measure withdrawals. Daily well meter readings were taken by visual inspection and recorded manually. Meter readings were taken on the days recorded, but not necessarily within a 24-hour window of time. **Appendix A** contains the 2021 meter readings for the on-site irrigation wells.

In May 2012, Multi-Jet water meters were purchased from Master Meter Inc. of Mansfield, Texas and installed to record water usage for the four irrigation wells. Three of these meters were replaced prior to the 2017-18 pumping seasons, and the remaining one was replaced prior to the 2020 pumping season. Per manufacturer's specifications, a meter needs to be calibrated following a total usage of 10.4 million gallons. Three of the meters (from 2017-18) reached that mark during the 2020 pumping season; these were unable to be recalibrated, however, and were replaced prior to the start of the 2021 pumping season. Certificates of calibration and performance specifications for the meters are presented in **Appendix A**.

Irrigation Wells

Groundwater levels in the four on-site irrigation wells (Asset 1 and 2, Winnicut 1 and 2) are monitored using a 200-foot electric-tape water level meter. Depth-to-water measurements are taken from a designated fixed point at the top of each well casing to the water surface. Measurements are recorded in a field log from which the data is later transferred to an excel spreadsheet. These water level measurements are required to be performed at least once every two weeks starting when the golf course opens for business and continuing until at least 30 days after pumping has ceased for the irrigation season, in accordance with correspondence from the NHDES

Drinking Water and Groundwater Bureau dated March 12, 2014. Due to the frequency required for the water level measurements in the irrigation wells, a GCNE staff member was trained to perform this task.

In 2021, the golf course opened for business on April 15 and the initial water level measurements were taken on April 13. The water level measurements were performed at least once every two weeks thereafter until August 11 (pumping ceased on July 8). The irrigation wells water level measurements data is provided in **Table 1**, as well as in the separate electronic reporting file, and graphs of the data are presented in **Figures 4** and **5**.

The irrigation wells were in operation during the following dates in 2021. Asset 1 was turned on May 24, Asset 2 was turned on June 3, Winnicut 1 and Winnicut 2 were turned on June 4. Asset 1 and Asset 2 were shut off for the season on July 5; Winnicut 1 and Winnicut 2 were shut off for the season on July 8. Asset 1 was pumped for a total of 43 days, Asset 2 was pumped for a total of 33 days, Winnicut 1 and Winnicut 2 wells were each pumped for a total of 35 days (see **Appendix A**).

WATER LEVEL MONITORING

As part of the wetlands monitoring program, GCNE conducts groundwater and surface water level monitoring at three wetland monitoring plot locations: Wet Mon 2, Wet Mon 3 and Wet Cont 2 Alternate (Alt). Groundwater and surface water level monitoring takes place three times during the typical growing season for the Seacoast Region of New Hampshire: May, August and October. Water levels are monitored to assess if any adverse impacts may have occurred due to pumping of the on-site irrigation wells. Wet Mon 2 is in the vicinity of the two Winnicut irrigation wells and Wet Mon 3 is in the vicinity of the two Asset irrigation wells. Wet Cont 2 Alt is a control plot located adjacent to Union Road at the outer limit of the estimated sphere of influence of the irrigation wells (see **Figure 2**). Wet Cont 2 Alt permanently replaced Wet Cont 2 in 2014 as the GCNE wetland monitoring control plot (see 2014 Annual Monitoring Report, dated February 2015, for more information).

Methodologies

Groundwater levels are measured in five piezometers at these locations, including one at Wet Mon 2 (PZ-6), and two co-located shallow and deep pairs at each of Wet Mon 3 (PZ-3S and PZ-3D) and Wet Cont 2 Alt (PZ-1S and PZ-1D). The method used to collect depth-to-water measurements in these piezometers includes using an electric-tape water level meter and measuring from the top of the piezometer PVC riser to the water surface. Prior to the 2021 monitor season, PZ-6 was removed, cleaned out and re-set at its previous height (28.0 inches) due to it being clogged with debris.

Surface water levels are measured on three staff gauges at these locations, including one each at Wet Mon 2 (Old SG-6), Wet Mon 3 (SG-3) and Wet Cont 2 Alt (SG-1). The method used to collect depth-of-water measurements at these staff gauges includes using a folding ruler and measuring from the ground surface to the water surface. Measurements are recorded in a field log from which the data is later transferred to an excel spreadsheet.

Results

In 2021, water level monitoring was performed on May 24, August 24 and October 28 by John P. Hayes III, CWS, CSS, who has over 20 years of experience as a Certified Soil Scientist and Certified Wetland Scientist in the State of New Hampshire; over the last 16 years, Mr. Hayes has performed monitoring tasks for several environmental remediation projects, including collecting and reporting hydrogeologic measurements. The May monitoring was completed the same day pumping started for the season at Asset 1 and ten days prior to the start of pumping at the remaining irrigation wells, the August monitoring was completed 51 days after pumping ceased at all wells for 2021, and the October monitoring was completed 112 days after pumping ceased. The 2021 piezometer and staff gauge water level measurements data are provided in **Tables 2** and **3**. The piezometer data is presented graphically in **Figure 6**.

The groundwater level data shows a full recovery occurred in the water table from October 2020 to August 2021, reaching average to above-average annual levels in all locations. High quantities of precipitation in October-December 2020 and July 2021 contributed to this recovery. Average to above-average precipitation in the months of August through October sustained average to above-average levels within all the piezometers.

The surface water level data for Wet Mon 2 shows saturated soils were present during the May monitoring event, approximately five inches of water was present in August, and approximately four inches of water in October. Wet Mon 3 had saturated soils in May, August and October. Wet Cont 2 Alt was dry in May and had saturated soils in August and October. The ponding of water at the Wet Mon 2 location in August and October, and the saturated soils at the other sites, followed significant precipitation events. In August, there was approximately 1.5 inches within 24 hours prior and 2.75 inches within four days prior; and in October, approximately 1.6 inches within 48 hours prior. In comparison, there was minimal precipitation prior to the May monitoring event; there was approximately 0.1 inches within 48 hours and 0.2 inches within the previous two weeks.

WETLAND MONITORING

Wetland vegetation monitoring is conducted by GCNE at the wetland monitoring plot locations identified in the Water Level Monitoring section of this report: Wet Mon 2, Wet Mon 3 and Wet Cont 2 Alt (see **Figure 2**). Wet Mon 2 and Wet Mon 3 are representative of the different types of wetlands on the GCNE property. Wet Mon 2 is in a forested wetland and Wet Mon 3 is in an emergent wetland within the floodplain of the Winnicut River. Wet Cont 2 Alt is a control plot that is located within a scrub-shrub wetland. Observations of vegetation within these plots are made to evaluate diversity, density and wetland status, in comparison to baseline and control site information, in order to assess if any adverse impacts are occurring due to pumping of the on-site irrigation wells.

Methodologies

Grade stakes were installed at each wetland monitoring plot location in order to aid in the data collection process, marking the plot centers, the five-foot radius for the herbaceous vegetation layer, the 15-foot radius for the sapling/shrub vegetation layer and the 30-foot radius for the tree layer. For each monitoring plot, all vegetation within each of the plant layers is identified and recorded on data forms. On these forms, the identified vegetation species for the subject plot are identified by common name and scientific name, and are separated into herbaceous, sapling/shrub

and tree stratums. Important additional information included is percent dominance and percentage of hydrophytes for dominant species within the plot.

The estimated percent cover is recorded for each herbaceous and sapling/shrub species to determine percent dominance within each stratum, and the basal area (estimated at breast height) is recorded for each tree species to determine percent dominance for the tree stratum. Percent dominance in each stratum is calculated using the percent cover or basal area of each species divided by the total percent cover or basal area for the entire plant layer within each monitoring plot. Examining the dominant species within each monitoring plot provides a reliable, long-term monitoring tool to assess the health and abundance of the vegetation found within each wetland area. Trends witnessed among the dominant species will allow for interpretations of how and why changes within the wetland vegetation community may be occurring.

The National Wetland Indicator (NWI) status of each plant species is recorded on the form and is used to determine the percentage of hydrophytes that occur within the vegetation monitoring plots. The NWI status reflects the range of estimated probability, expressed as a frequency of occurrence, of a plant species occurring in a wetland versus non-wetland (upland). Under natural conditions, Obligate Wetland (OBL) species occur almost always in wetlands; Facultative Wetland (FACW) species usually occur in wetlands, but occasionally are found in non-wetlands; Facultative (FAC) species are equally likely to occur in wetlands or non-wetlands; Facultative Upland (FACU) species usually occur in non-wetlands, but occasionally are found in wetlands; and Upland (UPL) species occur almost always in non-wetlands. A hydrophyte is a plant that grows wholly or partly submerged in water, or on a substrate that is periodically deficient in oxygen as a result of excessive water content. A plant that is typically found in wet habitats (i.e. wetlands) is described as a hydrophyte, including the NWI statuses OBL, FACW and FAC. Only the plants that are dominant are used to determine the percentage of hydrophytes that occur within the monitoring plots.

Wetland vegetation monitoring takes place three times during the typical growing season for the Seacoast Region of New Hampshire: May, August and October. A photograph is taken of each wetland monitoring plot during each seasonal monitoring event.

Results

In 2021, wetland vegetation monitoring was performed on May 24, August 24 and October 28 by John P. Hayes III, CWS, CSS (see experience credentials in the Water Level Monitoring section). Photographs taken of the wetland monitoring plots during the monitoring events are presented in **Appendix B**. Vegetation data forms for wetland monitoring plots are presented in **Appendix C**.

The 2021 vegetation data depicts the hydrophytic categorization of dominant species as follows. In Wet Mon 2: 60% hydrophytes in May, 60% in August, and 80% in October. In Wet Mon 3: 75% hydrophytes in May, 80% in August, and 75% in October. In Wet Cont 2 Alt: 75% hydrophytes in May, 75% in August, and 75% in October. The vegetative communities at each monitoring location reflected healthy, functioning wetland conditions through 2021. Plants that typically occur in wetland areas were dominating the vegetative landscape within the plots, based upon the percentage of hydrophytes observed at each monitoring location. The plants at all monitoring plots, during all monitoring events, exhibited indications of growth, reproduction and overall general health. All monitoring sites exhibited normal vegetative fluctuations in response to seasonal variations.

There were no significant changes in 2021 to invasive vegetation species recorded at Wet Mon 2 (glossy buckthorn, *Rhamnus frangula*), Wet Mon 3 (purple loosestrife, *Lythrum salicaria*; and reed canary grass, *Phalaris arundinacea*) or Wet Cont 2 Alt (glossy buckthorn and multiflora rose, *Rosa multiflora*). At Wet Mon 2, the percent dominance of glossy buckthorn appears to have stabilized; there has been minimal change from 2015 to 2021 and its presence was only slightly greater in 2021 than in 2012. At Wet Mon 3, the percent dominance of both purple loosestrife and reed canary grass is showing a decreasing trend, though their presence was still greater in 2021 than in 2012. At Wet Cont 2 Alt, there was limited presence of either of the recorded invasive species in 2021, though their presence was slightly higher than it was in 2013-2014.

An examination of percent dominance shows the wetland monitoring data collected in 2021 is comparatively similar to the data collected from monitoring events of the past several years. This demonstrates the similarity in the wetland vegetation community make-up in terms of abundance, dominance and diversity. The Wet Mon 3 plot location is situated immediately adjacent to the Winnicut River system and the invasive reed canary grass is abundant throughout this riverine system, providing a prolific seed source. Its presence in Wet Mon 3 significantly increased in 2014-2015 and was exacerbated by the 2015-2016 drought conditions, though it has not shown to be worsened by the 2020 drought conditions. The reed canary grass presence is still at a high level in 2021, however it is continuing to follow a decreasing trend.

There has been no evidence to suggest that the increased presence of reed canary grass was related to the pumping of the on-site irrigation wells. As in past years, there are no trends in the 2021 wetland vegetation monitoring data to support that an adverse impact has occurred to the wetland systems as a result of the pumping of the GCNE irrigation wells.

OFF-SITE WELL MONITORING

Groundwater level monitoring is conducted by GCNE at four off-site private bedrock wells and one off-site private overburden well. Written permission was granted by the owners of each private well to perform this monitoring activity. The locations of these wells are presented in **Appendix D** and shown on **Figure 2**. Off-site groundwater levels are monitored to assess if any adverse impacts are occurring due to pumping of the on-site irrigation wells.

Methodologies

Van Essen Instruments TD-Diver water level dataloggers were installed in each of the five off-site wells in April 2018 and measurements began on May 8, 2018. Prior to each installation, the transducer and cable were submerged in a bleach and distilled water solution, then rinsed with distilled water, to ensure no bacteria were introduced into the well. The well cover was disinfected with the solution prior to placing it back on the well. The installer used disposable nitrile gloves when performing these tasks. The optical reader end of each TD-Diver cable was secured at the top of each well casing to allow for easy transfer of transducer data without disturbing the water column. Since the TD-Divers are non-vented, a Baro-Diver was suspended in the overburden well during installation to provide barometric compensation of the data for all the wells. Each of the TD-Divers was programmed to measure water levels at a frequency of once every 12 hours, with readings being recorded at 07:00 and 19:00 every day.

To download the data from the TD-Divers, a Diver-Mate handheld unit is used. The well cover is opened, the Diver-Mate is connected to the optical reader end of the TD-Diver cable, and the data is automatically transferred to the Diver-Mate hard drive. The data is then uploaded to a laptop computer and processed using Diver-Office software to determine depth-to-water measurements. At the time of each download, a manual groundwater level measurement is also taken for each well using an electric-tape water level meter; depth-to-water measurements are taken from a designated fixed point at the top of each well casing to the water surface. Measurements are recorded in a field log from which the data is later transferred to an excel spreadsheet. The water level meter is disinfected prior to insertion into the well by spraying the tape with a bleach and distilled water solution. The data collector uses disposable nitrile gloves to handle the tape, to ensure there is minimal chance of contamination to the well.

The logged data and manual measurements of groundwater levels for the off-site wells are collected on a semi-annual basis, in May and November each year. In the event that a drought trigger occurs, data collection and reporting frequency increases in accordance with the LGWP requirements. The manual measurements are not always taken at the same time of day that the logged data readings are being recorded, so there may be differences in the depth-to-water readings between the manual measurements and the logged data. Changes typically occur in well water levels at varying times of day as influenced by water usage patterns at each property.

Results

In 2021, off-site well monitoring was performed by John P. Hayes III, CWS, CSS (see experience credentials in the Water Level Monitoring section). The semi-annual routine data collections were completed on May 25 and December 9. Attempts to retrieve the data in November were unsuccessful due to equipment failures, including the Diver-Mate handheld unit as well as an upgraded replacement from Van Essen Instruments (VEI). The data was eventually retrieved from the TD-Divers using a loaned demo model from VEI of the original Diver-Mate, however one of the TD-Divers (at the 136 Union Road location) and the Baro-Diver were not responsive. As a result, there is no transducer data provided for 136 Union Road after May 25, 2021. Barometric compensation data for the area was obtained through the end of November 2021 from a weather contractor at the Pease Air National Guard Base in Newington, NH and adapted for use with the Diver-Office software with assistance from VEI. Graphs of the logged data for the off-site wells are presented in **Figures 7** through **11**. The manual groundwater level measurements data is presented in **Appendix D**. The logged data and manual measurements for the off-site wells are provided in a separate electronic reporting file (see additional information provided in the Introduction section).

In 2021, water levels in the off-site wells generally reflected usual seasonal trends, peak domestic water usage, as well as periods of low and high precipitation quantities. Water levels remained static in most of the off-site wells this year with minimal decline following the significantly higher-than-average precipitation quantity for the month of July (10.3 inches), which is usually one of the driest time periods of the year. Recovery in the wells by the end of November 2021 was above average in most of the wells for the end of a monitoring season, following the significantly higher-than-average precipitation quantity for the month of October (7.0 inches). The shallow overburden well at 136 Union Road was at its usual recovery level for late May 2021. Cyclic drops observed on some of the graphs are similar to previous years at those locations and are likely attributable to daily water usages by the private residences.

In general, groundwater levels show a pattern of further recovery over winter months, high levels during spring snowmelt and following, decreasing levels during summer months, followed by increasing levels during late fall. This is a typical seasonal pattern for groundwater levels that is related to precipitation trends and seasonal variations in residential water usage. There are no trends in the off-site well monitoring data to support that an adverse impact has occurred to any of the off-site well water levels as a result of the pumping of the GCNE irrigation wells.

CONCLUSION

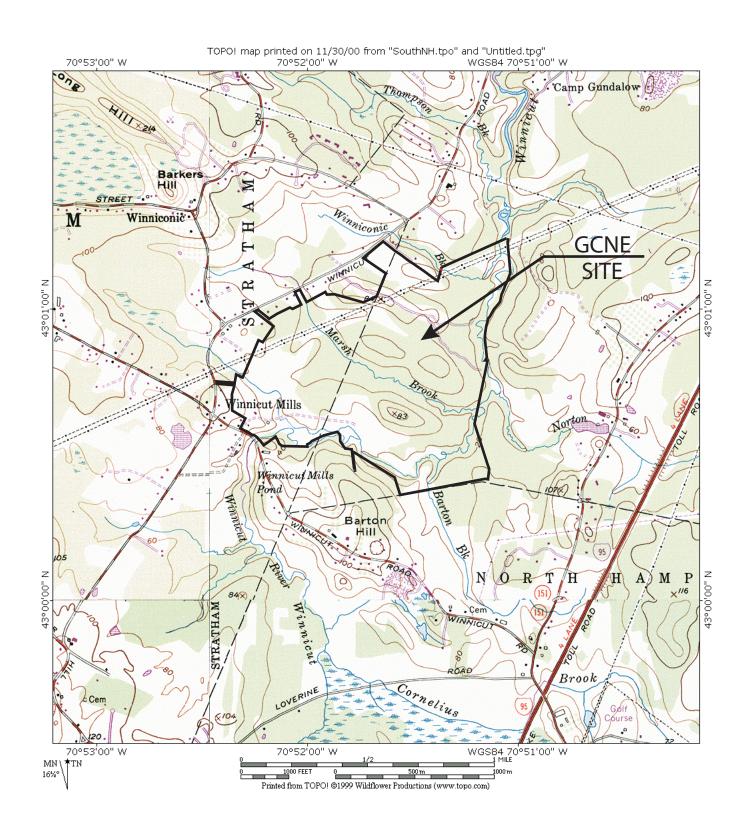
In compliance with LGWP requirements, this report provides a summary of 2021 information at GCNE regarding irrigation system performance; water level and wetland monitoring results; and groundwater level monitoring results for off-site private wells. The data collected during the 2021 monitoring period supports that on-site production well operations did not result in adverse impacts to wetland systems or off-site monitoring wells. The 2021 piezometer and staff gauge data are consistent with seasonal climate conditions and water levels have already rebounded for the year with no residual adverse impact caused by the pumping of the GCNE irrigation wells. The 2021 vegetation plots at the wetland monitoring locations have maintained consistent seasonal patterns.

Water level trends in the off-site private wells reflected the significant precipitation events that occurred at key times, causing static levels through the pumping season and above average recoveries in most of the wells. The data supports that on-site production well operations had no adverse impact on off-site private well water levels over the course of the 2021 monitoring period. Groundwater level fluctuations in 2021 were generally consistent with those observed during previous years. No mitigation requirements, as outlined in the LGWP, were necessary in 2021.



FIGURE 1: SITE LOCUS

GOLF CLUB OF NEW ENGLAND STRATHAM & GREENLAND, NH



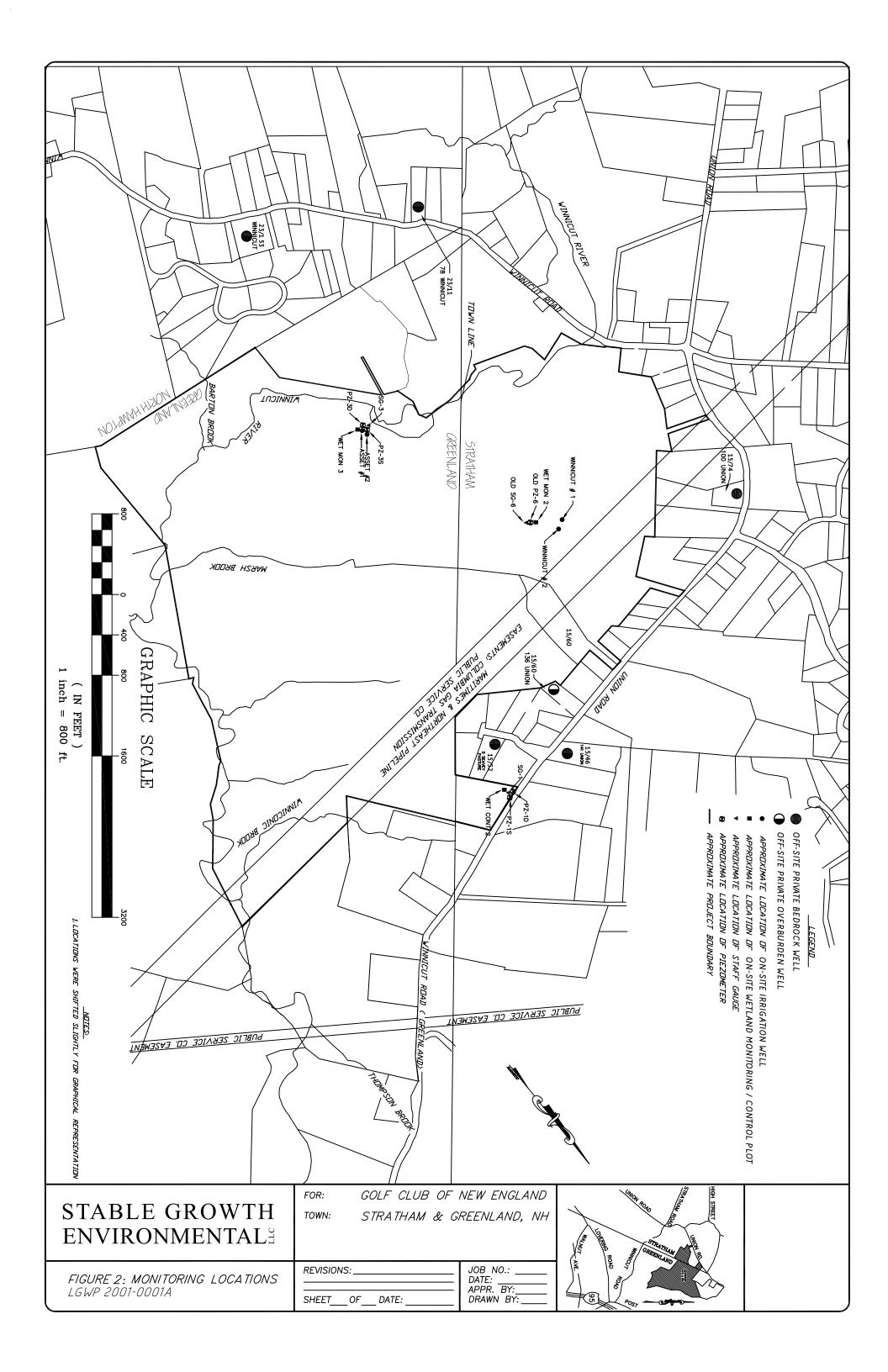


Figure 3
Precipitation Data, 2014 - 2021*
LGWP-2001-0001A
The Golf Club of New England
Stratham and Greenland, New Hampshire

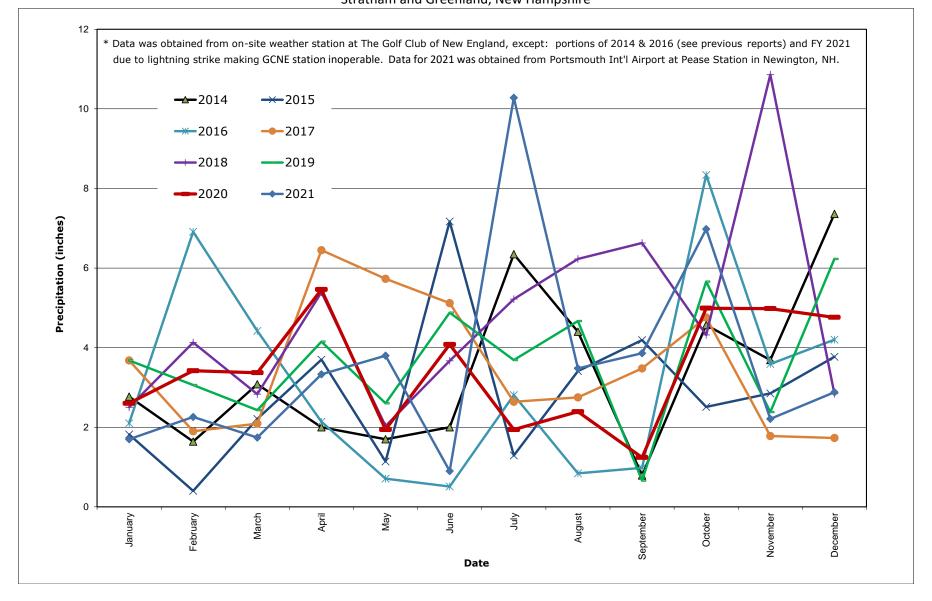


Figure 4
Water Level Measurements Graph for Asset Irrigation Wells, 2012-2021
LGWP-2001-0001A
The Golf Club of New England

Stratham and Greenland, New Hampshire

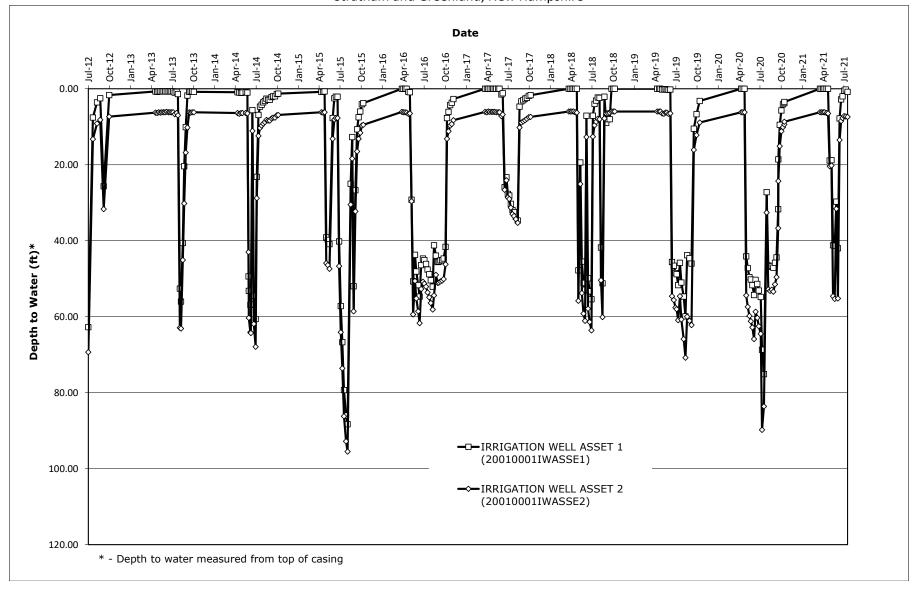


Figure 5
Water Level Measurements Graph for Winnicut Irrigation Wells, 2012-2021
LGWP-2001-0001A
The Golf Club of New England

Stratham and Greenland, New Hampshire

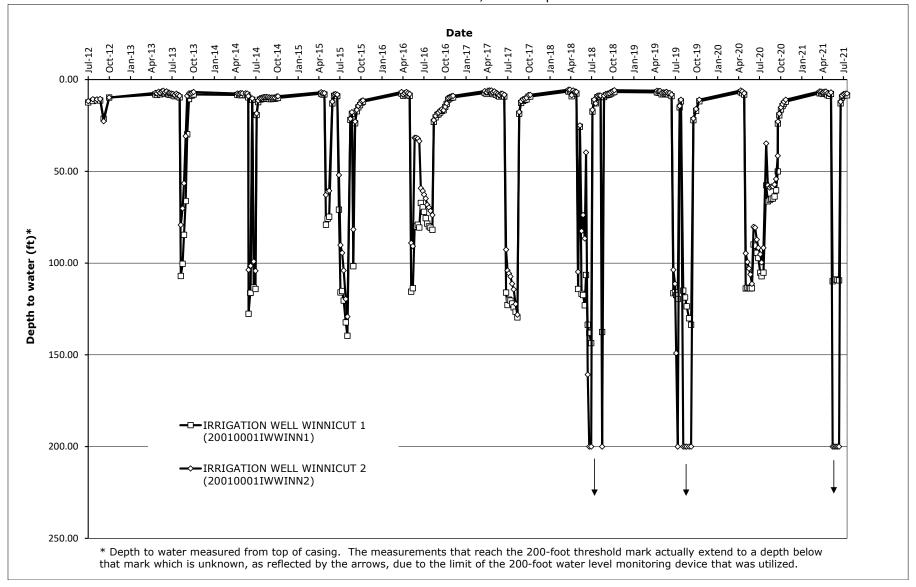


Figure 6
Water Level Measurements Graph for Wetland Monitoring Piezometers, 2012-2021
LGWP-2001-0001A
The Golf Club of New England

Stratham and Greenland, New Hampshire

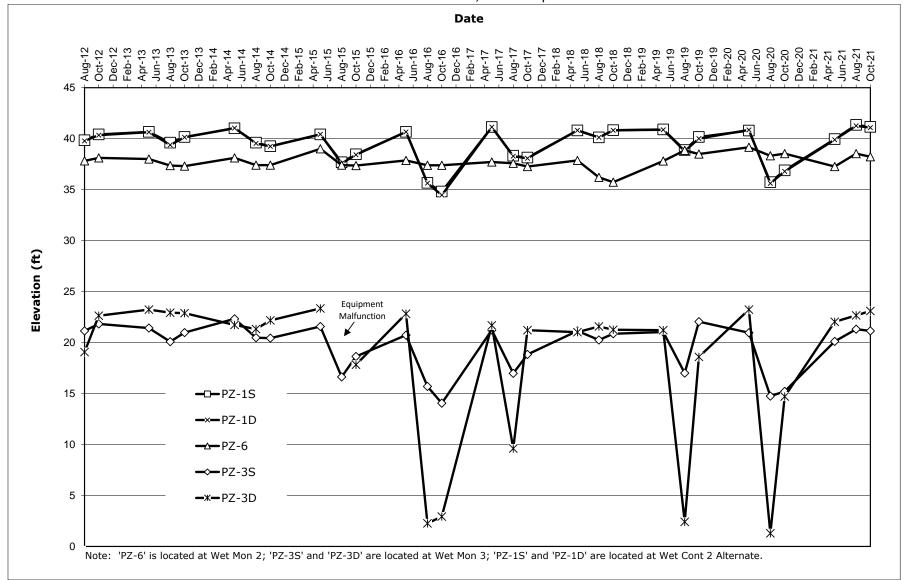


Figure 7 2021 Annual Monitoring Report LGWP-2001-0001A The Golf Club of New England

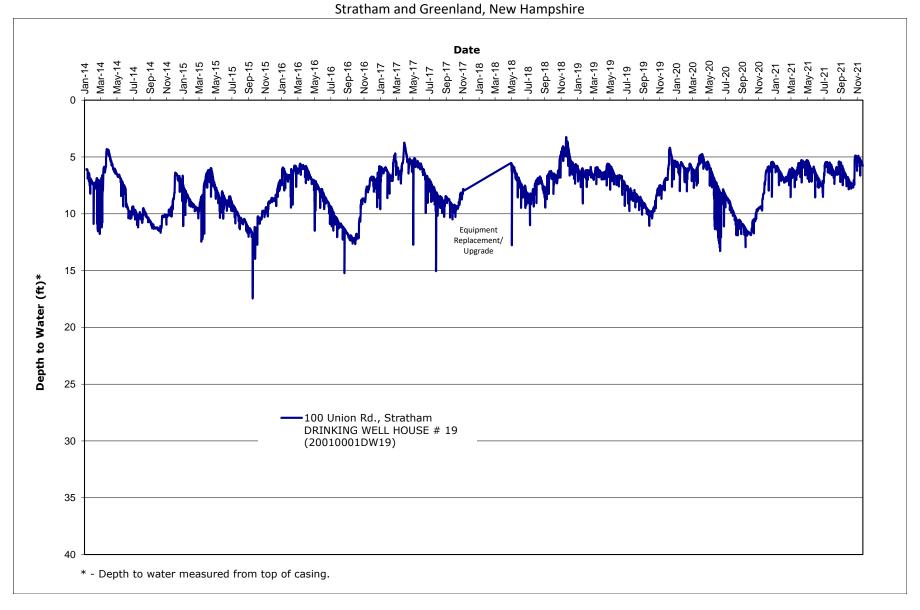


Figure 8
2021 Annual Monitoring Report
LGWP-2001-0001A
The Golf Club of New England

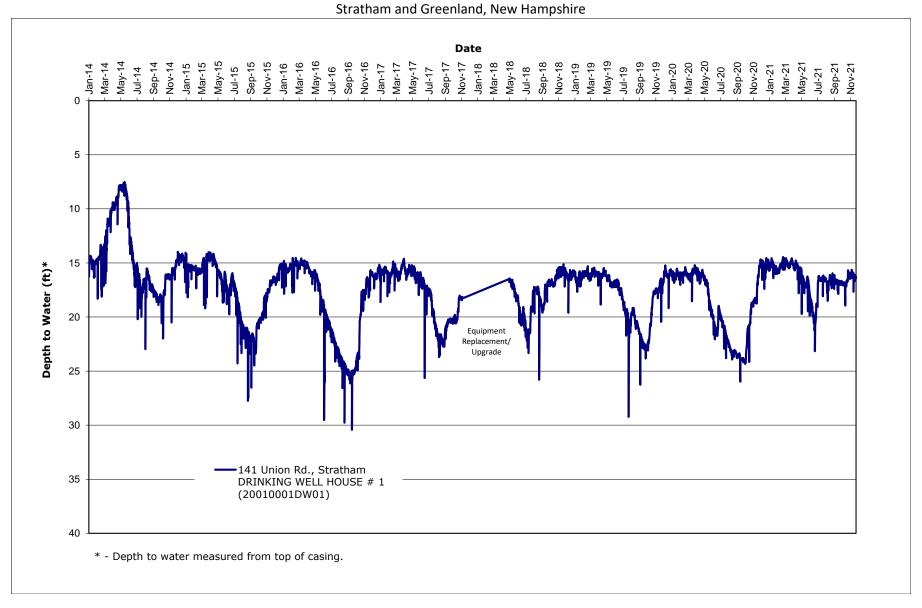


Figure 9
2021 Annual Monitoring Report
LGWP-2001-0001A
The Golf Club of New England
Stratham and Greenland, New Hampshire

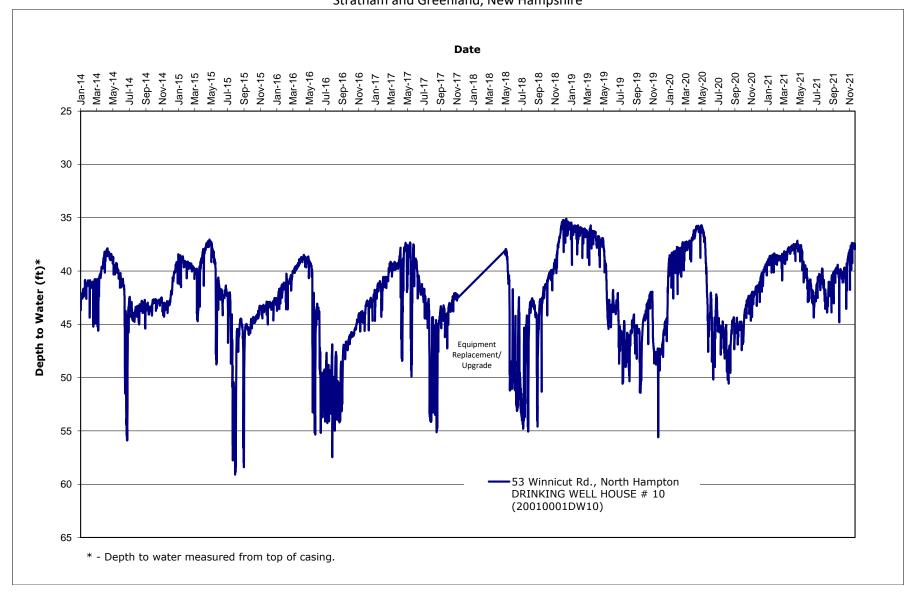


Figure 10
2021 Annual Monitoring Report
LGWP-2001-0001A
The Golf Club of New England
Stratham and Greenland, New Hampshire

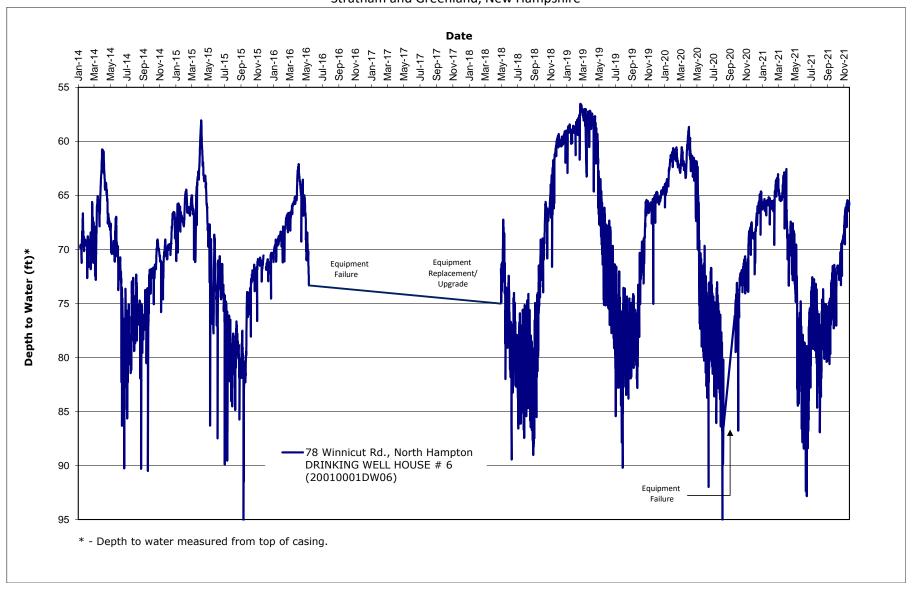
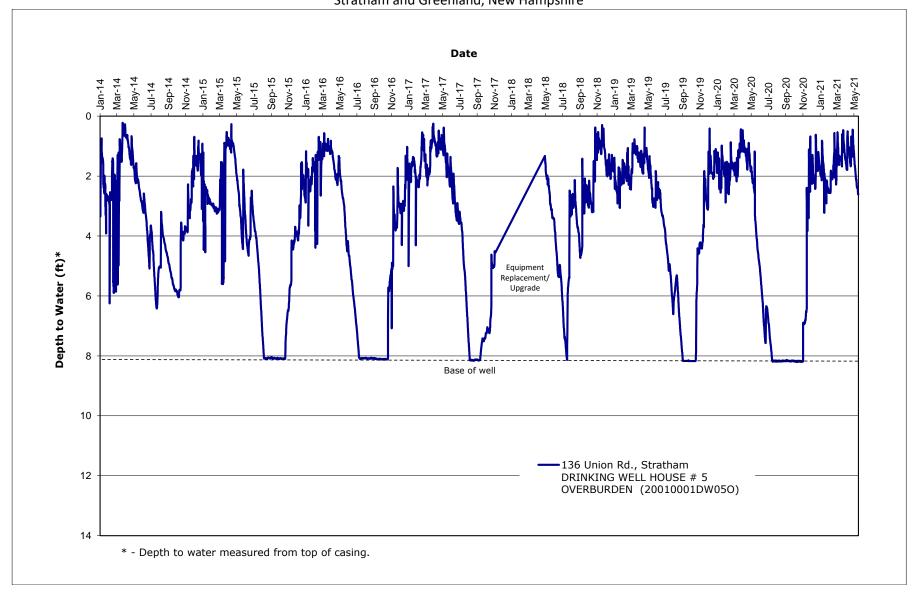
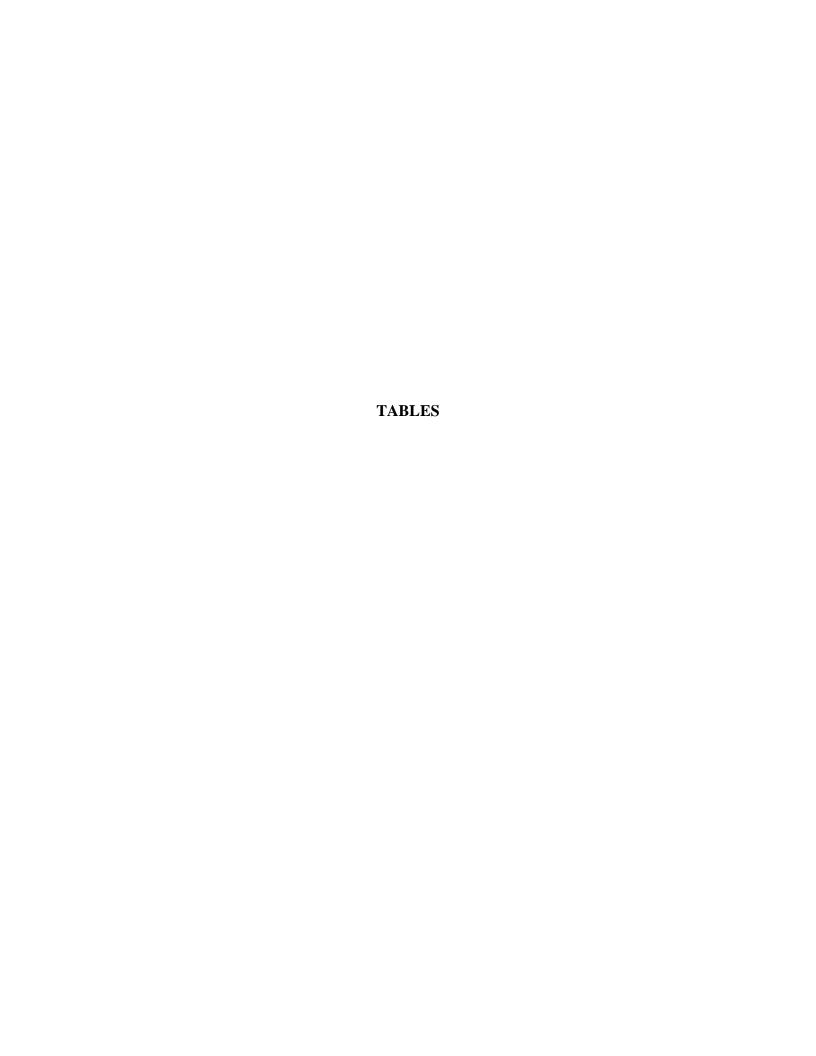


Figure 11
2021 Annual Monitoring Report
LGWP-2001-0001A
The Golf Club of New England
Stratham and Greenland, New Hampshire





2021 Annual Monitoring Report LGWP-2001-0001A

The Golf Club of New England Stratham and Greenland, New Hampshire

Table 1: Water Level Measurements Data for Irrigation Wells, 2021

	Irrigation Well Asset 1 (20010001IWASSE1)	Irrigation Well Asset 2 (20010001WASSE2)	Irrigation Well Winnicut 1 (20010001IWWINN1)	Irrigation Well Winnicut 2 (20010001IWWINN2)	
Date/Time		Depth to wat	ter in well (ft) ²		
4/13/2021 12:10	0.0	6.2	7.5	6.5	
4/20/2021 12:12	0.0	6.2	7.5	6.5	
4/27/2021 12:18	0.0	6.2	7.8	6.9	
5/3/2021 12:07	0.0	6.2	7.4	6.6	
5/11/2021 12:08	0.0	6.4	7.4	6.5	
5/18/2021 12:05	0.0	6.5	8.5	7.5	
5/25/2021 12:11	18.9	20.4	8.8	7.9	
6/2/2021 12:02	18.8	20.2	7.8	7.0	
6/9/2021 12:09	41.2	54.6	109.9	**3	
6/16/2021 12:17	41.3	55.3	109.0	**3	
6/23/2021 12:09	29.7	31.6	108.9	**3	
6/30/2021 12:14	42.0	55.2	109.2	**3	
7/7/2021 12:10	7.8	13.5	109.4	**3	
7/14/2021 12:16	2.8	8.5	12.9	12.1	
7/20/2021 12:11	2.0	7.7	9.7	8.8	
7/27/2021 12:06	0.5	7.2	8.8	7.9	
8/3/2021 12:17	0.2	7.3	8.5	7.6	
8/11/2021 12:08	0.8	7.4	8.6	7.6	

Notes:

- 1.) This data has been graphed on Figures 4 and 5.
- 2.) Depth to water measured from top of casing using an electric-tape water level meter.
- 3.) Measurement is below the 200-foot water level monitoring device.

Table 2: Water Level Measurements Data for Wetland Monitoring Piezometers, 2021¹

Tubic E. Water Ecv	1 ICEOIIICICI	3, 2021			
	Wet Mon 2	Wet Mon 3 PZ-3S PZ-3D		Wet Cont 2 Alt.	
	PZ-6			PZ-1S	PZ-1D
Date	Depth to water in piezometer (ft) ²				
5/24/2021	2.35	4.22	2.1	4.15	4.14
8/24/2021	1.08	3.02	1.47	2.76	2.78
10/28/2021	1.38	3.19	1.04	2.95	2.95

Notes:

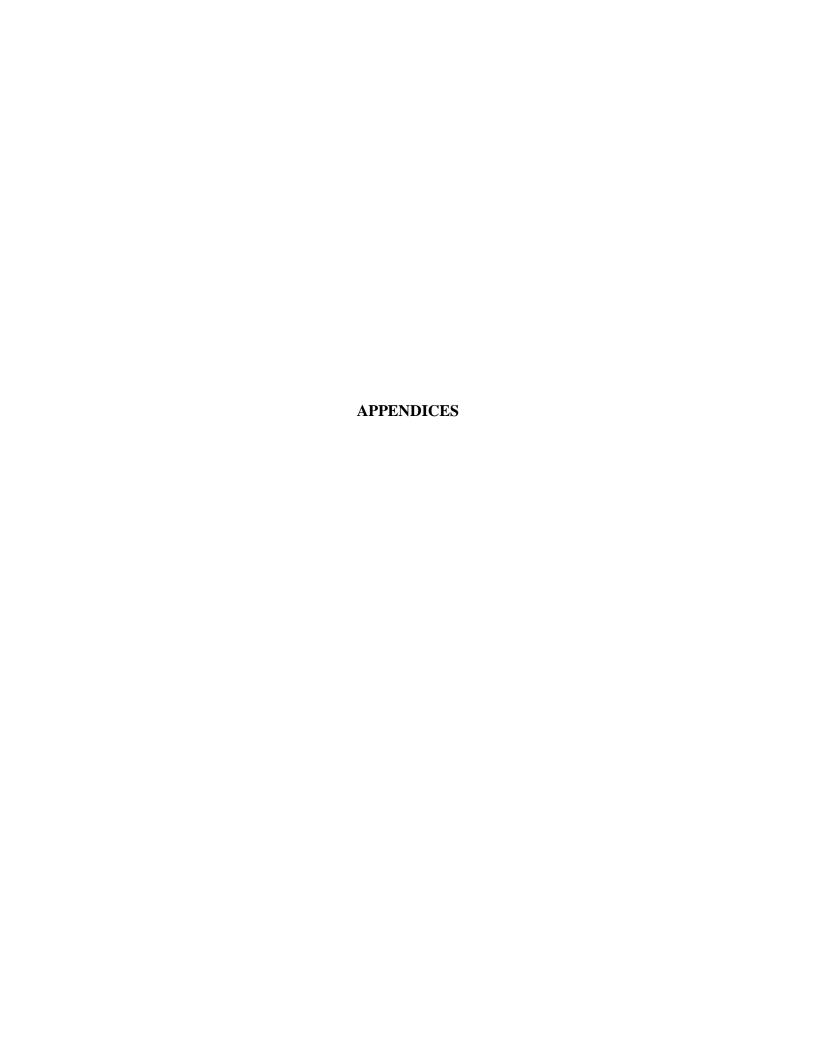
- 1.) This data has been graphed on Figure 6 based on elevation.
- 2.) Depth to water measured from top of PVC riser using an electric-tape water level meter.

Table 3: Water Level Measurements Data for Wetland Monitoring Staff Gauges, 2021

	Wet Mon 2	Wet Mon 3	Wet Cont 2 Alt.				
	OLD SG-6	SG-3	SG-1				
Date	Depth of water at staff gauge (ft) ¹						
5/24/2021	0.02	0.0 ²	0.0 (dry)				
8/24/2021	0.43	0.0 ²	0.0 ²				
10/28/2021	0.36	0.0 2	0.0 ²				

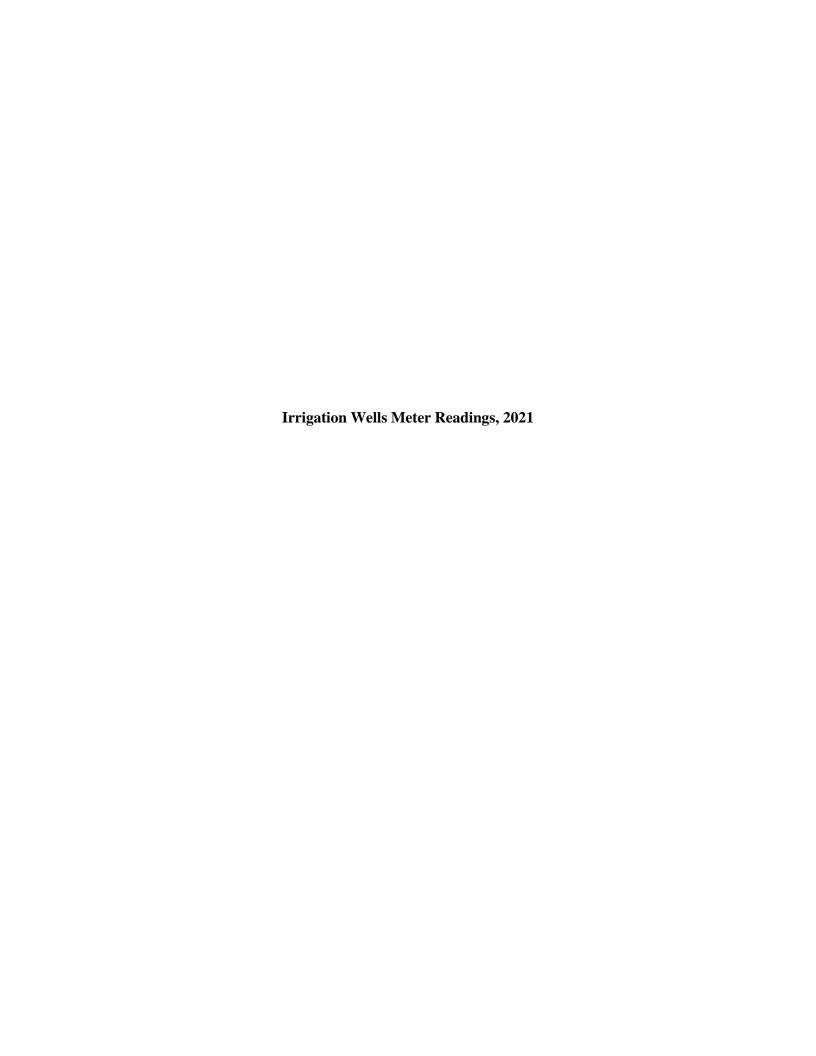
Notes:

- 1.) Depth of water measured from ground surface using a folding ruler.
- 2.) Soil was saturated, though no surface water present.



APPENDIX A

Irrigation Wells Information



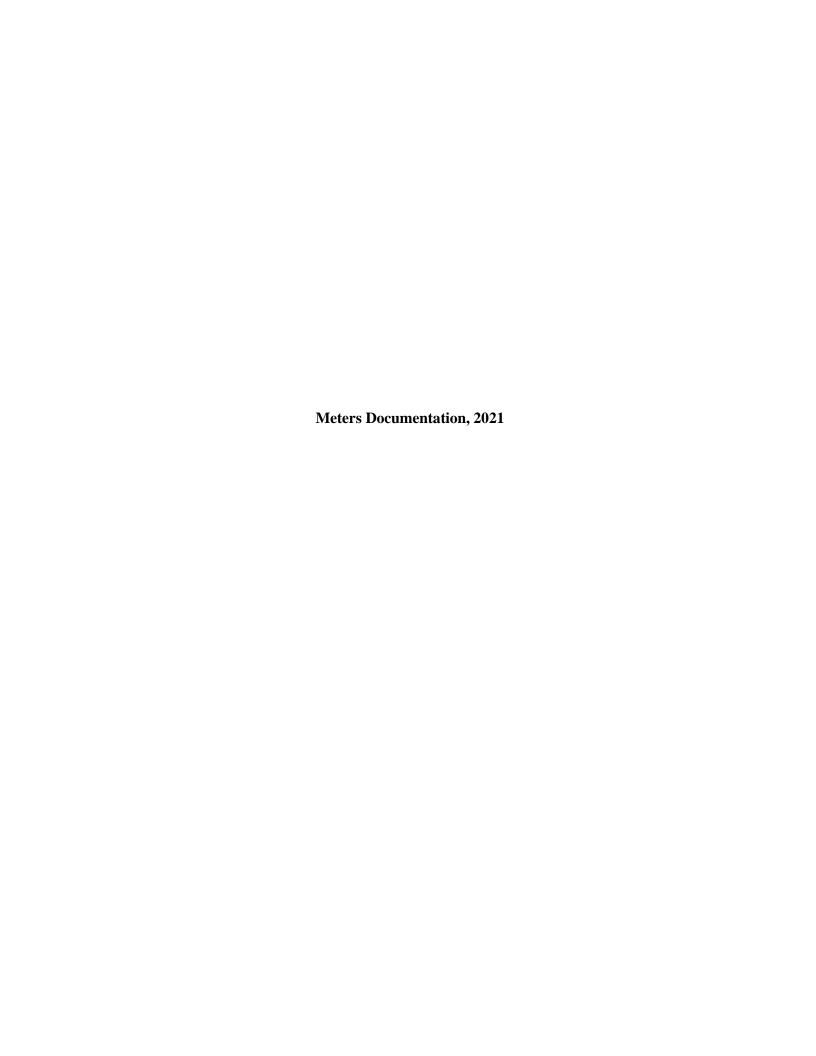
Irrigation Wells Meter Readings, 2021 LGWP-2001-0001A

The Golf Club of New England Stratham and Greenland, New Hampshire

ľ	Asset 1 20010001IWASSE1		Asset 2 200100011WASSE2		Winnicut 1 20010001IWWINN1		Winnicut 2 20010001IWWINN2	
-								
	Serial # 814		Serial # 8940611		Serial # 8929550		Serial # 8929551	
	Close to R 52gpm		Far from River 52gpm		Far from Tee 39gpm		Close to Tee 40gpm	
24-May	4,327,400	START	32gpi		39gpii		40gpii	<u> </u>
25-May	4,374,900	3171111						
26-May	4,417,200							
27-May	4,461,000							
28-May	4,506,600							
31-May	4,508,800							
2-Jun	4,601,000							
3-Jun	4,645,400		100	START				
4-Jun	4,675,800		53,500		100	START	100	START
6-Jun	4,736,000		192,700		82,900		135,900	
7-Jun	4,764,400		263,100		124,900		201,100	
8-Jun	4,795,100		336,600		159,700		253,500	
9-Jun	4,820,000		396,500		203,600		317,700	
10-Jun	4,853,100		476,100		242,000		372,700	
11-Jun	4,879,400		539,500		282,300		431,100	
13-Jun	4,933,600		671,500		364,300		549,000	
14-Jun	4,959,300		735,600		409,500		613,800	
15-Jun	4,990,400		813,500		450,700		673,400	
16-Jun	5,016,700		880,500		486,900		725,900	
17-Jun	5,045,600		951,900		533,000		792,900	
18-Jun	5,069,300		1,012,200		576,900		856,500	
20-Jun	5,123,900		1,151,100		656,900		971,500	
21-Jun	5,149,800		1,216,700		682,400		1,008,200	
22-Jun	5,179,600		1,291,400		723,000		1,067,000	
23-Jun	5,210,400		1,368,800		771,900		1,137,300	
24-Jun	5,240,400		1,417,600		812,900		1,195,500	
27-Jun	5,315,000		1,589,200		917,800		1,342,500	
28-Jun	5,350,500		1,671,100		958,300		1,398,000	
29-Jun	5,370,100		1,716,400		997,700		1,452,000	
30-Jun	5,397,400		1,779,800		1,038,100		1,506,400	
1-Jul	5,425,000		1,843,400		1,079,500		1,561,900	
2-Jul	5,454,100		1,910,500		1,134,400		1,635,200	
4-Jul	5,507,100		2,030,200		1,208,000		1,734,300	
5-Jul	5,539,600	END	2,102,300	END	1,240,500		1,777,700	
6-Jul					1,282,500		1,833,900	
7-Jul					1,324,800		1,890,200	
8-Jul					1,365,400	END	1,944,200	END

NOTES: • WELL METER READINGS WERE TAKEN BY VISUAL INSPECTION AND RECORDED MANUALLY.

- METER READINGS TAKEN ON DAYS RECORDED, BUT NOT NECESSARILY WITHIN A 24-HOUR WINDOW OF TIME.
- $\boldsymbol{\cdot}$ FOR 2021, ALL WELLS WERE SHUT OFF BY JULY 8.





101 Regency Pkwy Mansfield, TX 76063 800-765-6518 Toll Free 817-842-8000 Office 817-842-8100 Fax

January 24, 2022

All multi-jet water meters manufactured, tested and shipped by Master Meter, Inc., are tested according to the standards published by the American Water Works Association. This meter would be covered by ANSI/AWWA Standard C708 for cold water meters – Multi-jet type. This standard states; "The quantity registered on the meter dial shall not be less than 98.5 percent and not more than 101.5 percent of the water actually passed through the meter while the meter is being tested at any rate of flow within the normal test flow limits. At the minimum flow rate the meter shall register not less than 97 percent and not more than 103 percent of the water that actually passes through it".

Multi-jet meters from 5/8" - 2" are tested on a Master Meter custom made gravimetric test bench to confirm all meters conform to these accuracy standards. Your meter test results are:

Meter	Low	Intermediate	High	Test Date	Catalog Number
Serial #					_
21265403	3 99.7	100	99	5/25/2021	M24-A00-A03-0101A-1
21265403	4 98.1	99.8	99.1	5/25/2021	M24-A00-A03-0101A-1
21265403	5 98.9	99.6	99.1	5/25/2021	M24-A00-A03-0101A-1

Please feel free to contact our office if you have any questions concerning the above.

Sincerely,

Frank Munox

Frank Munoz Customer Service Rep Master Meter, Inc.



101 Regency Parkway Mansfield, Texas 76063 800 765 6518 toll free 817 842 8000 office 817 842 8100 fax

03/16/2020

RE: Serial Number 20003175

To whom it may concern:

All meters manufactured, tested and shipped by Master Meter, Inc., are tested according to the standards published by the American Water Works Association. This meter would by the American Water Works Association. This meter would be covered by the American Water meters – Multi-jet Type. The standard states are quantity registered on the of the water actually passed through the meter while the meter is being tested at at the minimum flow rate the meter shall register are setting to the standard states are quantity percent of the water actually passes through the meter while the meter shall register are setting to the standard states are quantity percent and not some than 105 percent of the water that actually passes through

On a 2" Multi-jet met the normal test flow limits are 5 gallons to 100 gallons per minute. The minimum flow would be 1.5 gallons per minute. Below are the actual test results for your meter.

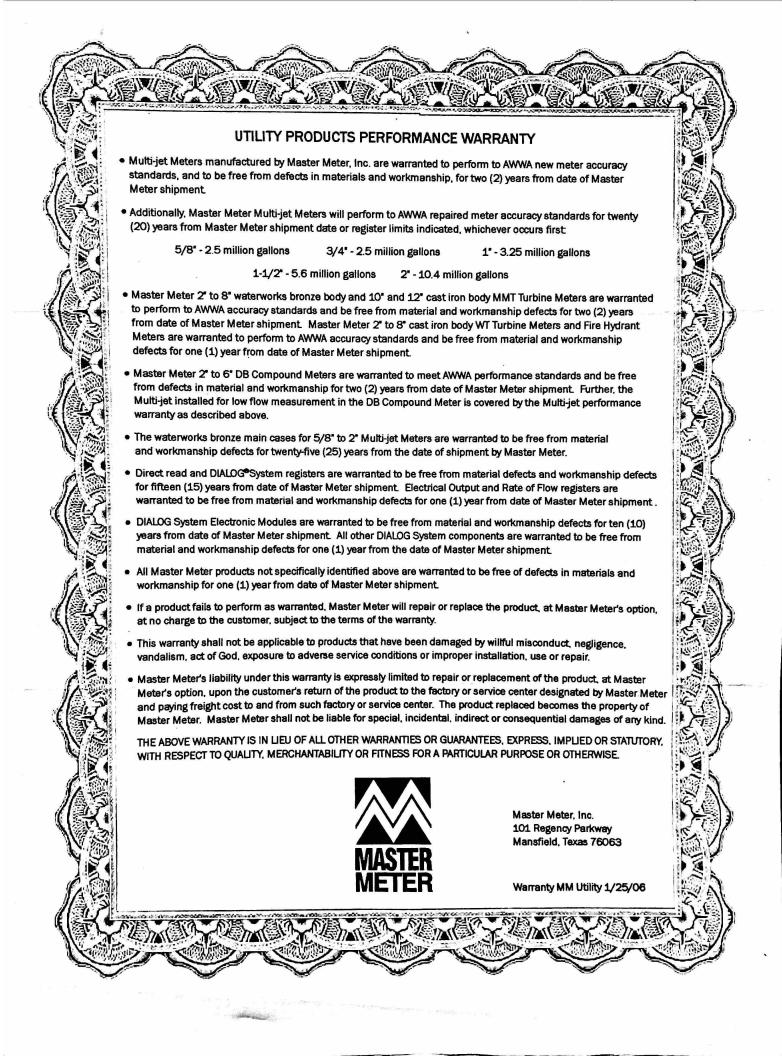
2" USG MULTI-JET METER Direct Read Register

CAT NO	Meter SN	HIGH	INTER	LOW	Engraving Time
M24-A00-A03-0101A-1	20003175	98.8	99.7	99.5	3/16/2020 10:52

Please feel free to contact our office if you have any questions concerning the above.

Sincerely,

MASTER METER, INC



APPENDIX B

Wetland Monitoring Plots Photographs, 2021

Wetland Monitoring Plots Photographs

May 2021

Wetland Monitoring Plots Photographs - May 2021



PHOTOGRAPH NO. 1: Looking toward plot Wet Mon 2, facing west



PHOTOGRAPH NO. 2: From center of plot Wet Mon 2, facing east

Wetland Monitoring Plots Photographs - May 2021



PHOTOGRAPH NO. 3: From center of plot Wet Mon 3, facing northwest



PHOTOGRAPH NO. 4: Looking toward plot Wet Mon 3, facing southeast

Wetland Monitoring Plots Photographs - May 2021



PHOTOGRAPH NO. 5: Looking toward plot Wet Cont 2 Alt, facing southwest



PHOTOGRAPH NO. 6: From center of plot Wet Cont 2 Alt, facing northeast

Wetland Monitoring Plots Photographs

August 2021

Wetland Monitoring Plots Photographs – August 2021



PHOTOGRAPH NO. 1: Looking toward plot Wet Mon 2, facing west



PHOTOGRAPH NO. 2: From center of plot Wet Mon 2, facing east

Wetland Monitoring Plots Photographs – August 2021



PHOTOGRAPH NO. 3: From center of plot Wet Mon 3, facing northwest



PHOTOGRAPH NO. 4: Looking toward plot Wet Mon 3, facing southeast

Wetland Monitoring Plots Photographs – August 2021



PHOTOGRAPH NO. 5: Looking toward plot Wet Cont 2 Alt, facing southwest



PHOTOGRAPH NO. 6: From center of plot Wet Cont 2 Alt, facing northeast

Wetland Monitoring Plots Photographs
October 2021

Wetland Monitoring Plots Photographs – October 2021



PHOTOGRAPH NO. 1: Looking toward plot Wet Mon 2, facing west



PHOTOGRAPH NO. 2: From center of plot Wet Mon 2, facing east

Wetland Monitoring Plots Photographs – October 2021



PHOTOGRAPH NO. 3: From center of plot Wet Mon 3, facing northwest



PHOTOGRAPH NO. 4: Looking toward plot Wet Mon 3, facing southeast

Wetland Monitoring Plots Photographs – October 2021



PHOTOGRAPH NO. 5: Looking toward plot Wet Cont 2 Alt, facing southwest



PHOTOGRAPH NO. 6: From center of plot Wet Cont 2 Alt, facing northeast

APPENDIX C

Wetland Monitoring Plots Vegetation Data, 2021

Wetland Monitoring Plots Vegetation Data

May 2021

PROJECT TITLE: GOLF CLUB OF NEW ENGLAND TRANS	ECT: WET MON	a PLOT:		
DELINEATOR(S): JOHN P. HAYES CSS CWS DATE:	5/24/2/	10 10 10 mm	•	
VEGETATION Stratum and Species	Observed Dominance	Dominance	D NWI Sta O M	tus
HERBACEOUS WILD SASPARILLA (ARDILA MUDICAULIS) CHINNAMON FERN (OSMUNDA CINNAMOMEA) SENSITIVE FERN (ONOCLEA SENSIBILIS) CANADA MAYPLOWER (MAIANTHEMUM CANADENSE) HORSETAIL (EQUICETUM SP.) POISON IVY (TOXICODENDRON RADICANS)	10/60 14/60 8/60 18/60 5./60	17% 13% 13% 30% 8%	N FACU	V V
SAPUNG/SHRUB HIGHBUSH BWEBERRY (VACCINIUM CORYMBOSUM) AMERICAN BEECH (FAGUS GRANDIFOLIA) GLOSSY BUCKTHORN (RHAMNUS FEANGULA) HAWTHORN (CRATAEGUS SP.) BLACK CHERRY (PRUNUS SEROTINA) WHITE OAK (QUERCUS ALBA)	14/34 10/34 4/34 2/34 2/34 2/34	12 % 6%	Y FACU H FAC N FAC N FACU N FACU	
TREE RED MAPLE (ACER RUBRUM) EASTERN HEMLOCK (TSUGA CANADENSIS) WHITE PINE (PINUS STROBUS) AMERICAN BEECH (FAGUS GRANDIFOLIA) WHITE OAK (QUERCUS ALBA)	1937.7 203.8 203.8 182.8 2363.5 19.6 2363.5 19.6 2363.5	8./.	Y FACU N FACU N FACU N FACU N FACU	
OBL FACW FAC *OTHER FAC- Hydrophytes Subtotal (A): 3 Non-hydro	FACU UPI phytes Subtotal (1.545 <u>1.75</u> 6		
HYDROLOGY RECORDED DATA Stream, take, or tidal gage identification: Aerial photography identification: Other identification: NO RECORDED DATA OBSERVATIONS: Depth to Free Water: Depth to Saturation (including capillary fringe):				
Altered Hydrology (explain):		liment [Drainage Patterns within We	fland

PROJECT TITLE: GOLF CLUB OF NEW ENGLANDTRA		
DELINEATOR(S): JOHN P. HAYES CSS CWS DATE	= 5/24/8	V .
VEGETATION Stratum and Species	Observed Dominance	Relative D NWI Status
HERBACEOUS	3540-	37% Y FACW
REED CANARY GRASS (PHALARIS ARUNDINACEA	35/95 7/95	7% NOBL
- C-DC C /CADEX VULPINOIDEA)	#1 (2)	16% NOBL
PROMEDICATION (METALL)	10/95	11% N FACW
SENSITIVE FERN (ONOCLEA SENSIBILIS) PURPLE LOOSTRIFE (LYTHRUM SALICARA)		10% N FACW,
JEWELWEED (IMPATIENS CAPENSIS)		5% NFACW
SILKYPOWOODICOKING	5/95	48% Y FAC.
IN OTHER I ARROW WOOD (VIEW KNOW KECOUNTY	M 12/25	28% YNFACW
	7/25	24% Y FACU
WILD PAISIN (VIBURNUM CASSINOIDES)	1.0/20	
	-	
TREE		
NONE		
· ·		
	7	
III DIGITALIZA	(DROPHYTES	
OBL FACW FAC *OTHER FAC-	FACU UP	<u>.</u>
Hydrophytes Subtotal (A): 3 Non-hyd	rophytes Subtotal (4.
PERCENT HYDROPHYTES (100A/A+B):	75%	
HYDROLOGY		
RECORDED DATA Stream, lake, or tidal gage Identification:		de .
Aerial photography identification: Other identification:		-
NO RECORDED DATA		- F
OBSERVATIONS: Depth to Free Water:		
Depth to Saturation (including capillary fringe):		
Inundated Saturated in Water Marks Doupper 12"	nff Lines Se	diment Drainage posits Patterns
OTHER (explain):		within Welland
COURT D. DT Variet 97/04 Para 1		

PROJECT TITLE: GOLF CLUB OF NEW ENGLAND TRANSECT: WET CONT Z PLOT: 5/24/21 DELINEATOR(S): JOHN P. HAYES CSS CWS DATE: NWI Status Observed Relative VEGETATION Stratum and Species Dominance Dominance HERBACEOUS 44% FACV 35/180 SENSITIVE FERN (ONOCLEA, SENSIBILIS) FACU WILDSTRAWBERRY (FRAGARIA VIRGINIANA) 19% 15/80 FAC YORTHERN ARROWOOD (UTIOURNUM RECOGNITUM) 5/60 60/0 FACU 5180 MULTIFLORI ROSE (ROSA MULTIFLORA) 60% 3/80 GLOSSY BUCKTHOPN (RHAMUNS FRANGULA) Ĭ °/0 FAC POISON IVY (TOXICODEN RAPICANS) FA CM 15/80 19010 FACU 2/80 WHITE ASH (FRAXINUS AMERICANA) 0/0 SAPLING/SHRUB 54% FACW 75/140 SPECKLEDALDER (ALNUS RUGOSA) FACW. 26% SILKY DOGWOOD (CORNUS AMOMUM) 36/140 NORTHERN ARROW WOOD (VIBUR NUM RECOGNITUM)
WHITE ASH (FRAXINUS AMERICANA) FAC 110/0 15/140 FACU 2 % 3/140 GLOSSY BUCKTHORN (KHAMNUS FRANGULA) 6 % FAC 8/140 2% FA.C. 3/140 HAWTHORN (CRATAEGUSSE) TREE FACY 19.6/202.4 10% WHITE ASH (FRAXINUS AMERICANA) FACY 90% 182.8/202.4 WHITE PINE (PINUS STROBUS) NON-HYDROPHYTES HYDROPHYTES FACU UPL FAC-*OTHER FACW OBL FAC Non-hydrophytes Subtotal (B): 1 Hydrophytes Subtotal (A): 3 PERCENT HYDROPHYTES (100A/A+B): 75% HYDROLOGY RECORDED DATA
Stream, lake, or tidal gage Identification: **Identification**: Aerial photography Identification Other NO RECORDED DATA OBSERVATIONS: Depth to Free Water: Depth to Saturation (including capillary fringe): Altered Hydrology (explain): Water Marks Drift Lines Sediment Drainage X Saturated in inundated Deposits **Patierns** upper 12" within Wetland OTHER (explain): CENAL RET Version SHIM Page 1

Wetland Monitoring Plots Vegetation Data

August 2021

PROJECT TITLE: GOLF CTUB OF NEW ENGLAND TRANS	ECT: WET MON	2_ PLOT:	. 4
DELINEATOR(S): JOHN P. HAYES CS5, CWS DATE:	8/24/21		
VEGETATION Statut and Species HERBACEOUS CANADA MAYFLOWER (MAIANTHEMUM CANADENSE) CINNAMON FERN (OS MUNDA CINNAMOMEA) SENSITIVE FERN (ONOCLEA SENSIBILIS) HORSETAIL (EQUISETUM SP) POISON IVY (TOXICODENDRON RADICANS) WILD SARSAPARICLA (ARALIA NUDICAULIS)	Observed Dominance 12 155 25 155 10 155 2 155 3 155	5 0/2 N	FACY
SAPLING/SHRUB HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM) A MERICAN BEECH (FAGUS GRANDIFOLIA) GLOSSY BUCKTHORN (RHAMNUG FRANGULA) HAWTHORN (CRATAEGUS SP) BLACK CHERRY (PRUNUS SEROTINA) WHITE OAK (QUERCUS ALBA) TREE RED MAPLE (ACER RUBRUM) FASTERN HEMLOCK (TSUGA CANADENSIS) WHITE PINE (PINUS STROBUS) AMERICAN BEECH (FAGUS GRANDIFOLIA)	1937,72363,5 1937,72363,5 1937,72363,5 182,82363,5 19.6/2363,5	28% 18% 5% 5% 5% 82% 9%	FAC FACU FACU FACU FACU FACU FACU
HYDROPHYTES OBL FACW FAC *OTHER NON-HYD FAC-	ROPHYTES 2 FACU UP phytes Subtotal (
HYDROLOGY RECORDED DATA Stream, lake, or tidal gage Identification: Aerial photography Identification: Other Identification: NO RECORDED DATA OBSERVATIONS: Depth to Free Water: Depth to Saturation (including capillary fringe): Altered Hydrology (explain): Inundated Saturated in Water Marks Drift upper 12"	tLines □ Se	diment posits	Drainage Patterns within Wetland

PROJECT TITLE: GOLF CLUB OF NEW ENGLAND TRANS	ECT: WET. MOI	3 PLOT:	
DELINEATOR(S): JOHN P. HAYES CSS, CWS DATE:	8/24/21		
VEGETATION Stratum and Species	Observed Dominance	Relative Dominance	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
HERBACEOUS	791125	30% Y	FACW
REED CANARY GRASS (PHALARIS ARUNDINACEA)	38/125	3%	1
BROAD LEAVED CATTAIL (TYPHA LATIFOLIA)	30/125	240/2	OBL
JOE PYE WEED (EUPATORIUM PERFOLIATUM)	12/125	10 /0	OBL
PURPLE LANSTRIFE (LYTHRUM SALICARA)	201125		
JEWELWEED (IMPATIENS CAPENSIS) SILKY DOGWOOD (CORNUS AMOMUM)	5/105	4% N	FACW FACW
SHRUB /SAPLING	. ,	8	FAC.
NORTHERN ARROW WOOD (VIBURNUM RECOGNITUM)	12/24	29%	NFACW.
SILKY DOG WOOD (CORNUS AMOMUM). WILD RAISIN (VIBURNUM CASSINDIDES)	7/24 5/24		FACU
		-	
TREE			
NONE .			
**.	-		
a contract of the contract of			
	7		
HYDROPHYTES NON-HYD	ROPHYTES		
1 2 1		·	
OBL FACW FAC *OTHER FAC-	FACU UP phytes Subtotal (•
rigarophisto our annie y	80%_	· · · · · · · · · · · · · · · · · · ·	
PERCENT HYDROPHYTES (100A/A+B):	00/0		:
HYDROLOGY	7-	(#)	=
RECORDED DATA Steam, lake, or fidel gage Identification:	2	ás	·
Aerial photography IDENTIFICATION:	-		
Other Identification:			•
OBSERVATIONS:		(w)	
Depth to Saturation (including capillary fringe):			
Altered Hydrology (explain):		· · · · · · · · · · · · · · · · · · ·	
☐ inundated ☐ Saturated in ☐ Water Marks ☐ Drift		diment []	Drainage
upper 12"		posits	Patterns within Wetland
OTHER (explain):	*		,
CENNERPI VersionShibt Page 1			

PROJECT TITLE: GOLF CTUB OF NEW ENGLAND TRANS	ECT:WET CONT	ra PLOT:	
DELINEATOR(S): JOHN P HAYES CSS, CWS DATE:	8/24/21		
VEGETATION Stratum and Species	Observed Dominance	Dominance O	NWI Status
HERBACEOUS	30/75	40% M	
SENSITIVE FERM (ONOCLEA SENSIBILIS) WILD STRAWBERRY (FRAGARIA VIRGINIANA)	8/75	13% N.	FAC
NORTHERN ARROWWOOD (NIBURION)	7/15	9% N	faciu Fa c
MOCTIFLOKA ROSE (ROSA MILIO PRO RAPICANS)	12/15		FAC
GLOSSY BUCKTHORN (RHAMNUS FRANGULA)	8/15	1170 N	The same
N			
SAPLING/SHRUB	75/140	54% Y	NFACW
CRECKIED AIDER (ALAUS RUBUSA)	36/140	764 Y	+ ACM
SITKY DOGMOOD (COISHORDIAM SECOCHITAM)	3/140	11% N 2% N	FACU
NORTHERN ARROUNDED (MERICANA) WHITE ASH (FRAXINUS AMERICANA) GLOSSY BUCKTHORN (RHAMOUS FRANGULA)	8/140	6% N 2% N	FAC
HAWTHORN (CRATAEGUSSP)	3/140	_/•. [[1	,
		10% H	FACU
TREE (AMERICANA)	19.6/202.4	90%	FACU
WHITE ASH (FRAXINUS AMERICANA) WHITE PINE (PINUS STROBUS)	182.8/202.4		
WHILE FIRE CLASS			
HYDROPHYTES NON-HYD	ROPHYTES		
OBL FACW FAC *OTHER FAC-	FACU UP		
ithoropites commit 6 4. 757	phytes Subtotal (B):	
PERCENT HYDROPHYTES (100A/A+B):	15%	Ī	
HYDROLOGY	-		.0
RECORDED DATA Stream, take, or tidal gage Identification:		da .	
Aerial photography identification:			
NO RECORDED DATA		· ·	•
OBSERVATIONS: Depth to Free Water:		-	
Depth to Saturation (including capillary fringe):			
	Hime Flee	diment 🔲 🖸	rainage
inundated Saturated in Water Marks Drift upper 12"	Del	posits F	ragrage Patterns within Welland
OTHER (explain):			ruan Francis
CEMPER-PT Version 97874 Page 1			

Wetland Monitoring Plots Vegetation Data
October 2021

CEMBER IV VendoRNOL Page 1

PROJECT TITLE GOLF CLOB OF NEW ENGLAND TRANSECT: WETMON 3, PLOT: DELINEATOR(S): JOHN P. HAYES CSS, CWS DATE 10/28/2/ Observed **NWI Status** Relative VEGETATION Stratum and Species Dominance Dominance HERBACEOUS 58%YFACW 70/120 REED CANARY GRASS (PHALARIS ARUNOINACEA) 13% NOBL FOX SEDGE (CAREX NULDINDIDEA 15/120 BROADLEAVED CATTAIL (TYPHA LATIFULIA) 10% NOBL 121120 LOE PYE WEED (EUPATORIUM PERFULTATUM) 80/0 NOBL 10/120 PURPLE LOOSTRIFE (LYTHRUM SALTCARA) WOBL 7 % 8/100 SICKY DOGWOOP (CORNUS AMOMUM) NFACW 5/120 SHRUBI SAPLING 12/24 50% KAC. NORTHERN ARROWWOODC VIBURDUM LECOEDIND 29% YFACW 7/24 SILKY DOGWOOD C CORNUS AMONUM) 5/24 WILD RAISIN (VIBURNUM CASSINGIDES) 21% YFACU TREE NONE NON-HYDROPHYTES HYDROPHYTES UPL FACU FAC-FACW *OTHER FAC Non-hydrophytes Subtotal (B): Hydrophytes Subfotal (A): 3PERCENT HYDROPHYTES (100A/A+B): HYDROLOGY RECORDED DATA Statin, take, or tidal gage **Identification**: Identification Aerial photography identification Other NO RECORDED DATA OBSERVATIONS: Depth to Free Water. Depth to Saturation (including capillary fringe): Altered Hydrology (explain): X Saturated in Water Marks Drift Lines Sediment Drainage inundated Deposits **Patierns** upper 12 within Welland OTHER (explain):

A. III

PROJECT TITLE GOLFELUB OF NEW ENGLAND TRANSECT: WET CONTZPLOT: DELINEATOR(S): JOHN P. HAYES CSS, CWS DATE: 10/28/21 Observed Relative **NWI Status** VEGETATION Stratum and Species Dominance **Dominance** HERBACEOUS 17% NIFACW -10160 SENSTITUE FERN (ONOCLEA SENSIBILIS) FASU 12010 WILD STRAWBERRY (FRAGARIA VIRGINIANA 7/60 FAC aa% NORTHERN ARROWN 60 D (VIBURNIM RECOGNITY) 13/60 17 0/0 POISON IVY (TOXICODENDRON RADICANS)
GLOSSY BUCKTHORN (RHAMNUS FRANGULA)
MULTIFLORA ROSE (ROSA MULTIFLORA)
SPECKLED ALDER (ALNUS RUGOSA) 10/60 NFAC 7/60 5 0% NEACU NFACW 17010 10/60 y FACW SAPLING SHRUB 75/140 54% SPECKLED ALDER (ALDUS RUGOSA) YFACW 26 % 36/140 SILKY DOGWOOD (CORNUS AMOMUM) FAC 15/140 110/0 NORTHERNARROWN OOD (VIBURIUM RECOGNITUM) NFACU 2% WHITE ASH (FRAXINUS AMERICANA)
GLOSSY BUCKTHOKN (CHAMNUS FRANGULA) 3/140 NFAC. 60/0 8/140 NFAC. 3/140 HAWTHORN (CRATAEGUS SP) TREE 19.6/202.4 10% FACU WHITE ASH (FRAXINUS AMERICANA) 90% FACU 189.8/202.4 WHITE PINE (PINUS STROBUS) NON-HYDROPHYTES HYDROPHYTES 9 UPL **FACU** FAC-FAC *OTHER OBL FACW Non-hydrophytes Subtotal (B):_ Hydrophytes Subtotal (A): 5 PERCENT HYDROPHYTES (100A/A+B): HYDROLOGY RECORDED DATA Str Stenin, lake, or tidal gage Identification: Aerial photography Identification Identification: Other NO RECORDED DATA OBSERVATIONS: Depth to Free Water. Depth to Saturation (including capillary fringe): Altered Hydrology (explain): X Saturated in Water Marks Drift Lines Sediment Drainage inundated **Patierns** Deposits upper 12" within Welland OTHER (explain):

APPENDIX D

Groundwater Level Monitoring Log

for Off-Site Private Wells, 2021

APPENDIX D

Groundwater Level Monitoring Log for Off-Site Private Wells, 2021 LGWP-2001-0001A

The Golf Club of New England Stratham and Greenland, New Hampshire

Location: 100 Union Rd. Tax Map 15, Lot 74			king Well House #19 0010001DW19
Date	Depth to Water (ft) ¹	TD-Diver data downloaded	Comments
05/25/21 11:25	7.72	·	
12/09/21 13:35	7.38	>	
Location: 141 Tax Map 1			nking Well House #1 0010001DW01
Date	Depth to Water (ft) ¹	TD-Diver data downloaded	Comments
05/25/21 10:45	20.42	~	
12/09/21 12:45	20.48	>	
Location: 53 W Tax Map 23			king Well House #10 0010001DW10
Date	Depth to Water (ft) ¹	TD-Diver data downloaded	Comments
05/25/21 11:55	41.88	·	
12/09/21 14:05	39.75	~	
Location: 78 Winnicut Rd. Tax Map 23, Lot 11		Station ID: 2	nking Well House #6 20010001DW06 der fake rock)
Date	Depth to Water (ft) ¹	TD-Diver data downloaded	Comments
05/25/21 11:40	No measurement taken ²	~	
12/09/21 13:50	No measurement taken ²	~	
Location: 136 Union Rd. Tax Map 15, Lot 60		Over	nking Well House #5 burden 0010001DW05O
Date	Depth to Water (ft) ^{1,3}	TD-Diver data downloaded	Comments
05/25/21 11:05	4.02	Data missing due to Diver malfunction	
12/09/21 13:05	7.46	Data missing due to Diver malfunction	

Notes:

- 1.) Depth to water measured from top of casing using an electric-tape water level meter.
- 2.) No manual measurements taken at 78 Winn well due to probe getting hung up, cable snapped and probe lost in 2020.
- 3.) Top of casing is at bottom of concrete cover (DW05O only).



LARGE GROUNDWATER WITHDRAWAL PERMIT APPLICATION NOTIFICATION FORM



Drinking Water and Groundwater Bureau

Notice of Submittal to the New Hampshire Department of Environmental Services

RSA 485-C:21, Env-Wq 403

PROJECT LOCATION

Site Name and Owner (if	The Golf Club of New England
different than Applicant)	
Address	167 Winnicutt Rd, Stratham, NH 03885
Tax Map/Lot Number	Stratham TM 15, Lot 84 / Greenland TM R-4, Lot 1
Municipality(s) in	Stratham, Greenland, North Hampton
Potential Impact Area	
Community Water Supplier(s)	Aquarion Water Company
in Potential Impact Area	

APPLICANT/OWNER

Name	Brian Hawkes (Owner's Representative)		
Affiliation	Soft Draw Investments, LLC		
Mailing Address 167 Winnicutt Rd, Stratham, NH 03885			
Phone Number	603-772-4900		
Email Address	bhawkes@golfclubne.com		

APPLICATION PREPARER (provide imprint of professional license stamp)

Name	Name Michael Parsont, CWS, CPESC	
Company Name	Stable Growth Environmental LLC	
Mailing Address	P.O. Box 955, Dover, NH 03821	
Phone Number	603-767-8633	
Email Address	mparsont@stablegrowth.net	

^{*}Notice to application preparer: Provide copies of certified mail receipts to NHDES immediately following each submittal.

SUBMITTAL INFORMATION

	SUBM	ITTAL TYPE DATED: February 14, 2022	PROJECT	<u>TYPE</u>
		Preliminary Application		Public Water Supply
		Preliminary Application – Supplemental Information		Bottled/Bulk Water Supply
		Final Report	\boxtimes	Irrigation Water Supply
		Final Report – Supplemental Information		Process Water Supply
	\boxtimes	Permit Renewal Application		Other:
		Other:		
1.	Type c	of proposed water source: X Bedrock well(s), Over	erburden w	ell(s), Spring
2.	Number of proposed water sources: <u>4</u>			
3.	Propos	sed cumulative withdrawal volume in gallons per day: <u>26</u>	<u>5,000</u>	

Project Summary: (please provide a brief description of your proposed project in the space below) **Permit renewal to continue the same withdrawal volume seasonally to utilize for golf course irrigation purposes.**

NOTE: Per RSA 485-C:21, the deadline to request a public hearing for this project is fifteen (15) days following receipt of the Preliminary Application or Final Report. For more information, see the NHDES fact sheet WD-DWGB-22-15 regarding the Large Groundwater Withdrawal permitting process.

REPORT CERTIFICATION STATEMENT

LargeGW@des.nh.gov or phone (603) 271-8866 PO Box 95, Concord, NH 03302-0095 www.des.nh.gov

2020-1-10 Page 1 of 2

By signing this report the signer certifies that the information contained in or otherwise submitted with this report is true, complete and not misleading to the best of the signer's knowledge and belief.

By signing this report the signer understands that submission of false, incomplete or misleading information is grounds for:

- Not approving the report;
- Revoking any approval that is granted based on the information;
- Suspending or revoking the professional license held by the signer if the department is the licensing authority or referring the matter to the appropriate licensing authority for potential action against the professional license held by the signer if other than the department; and
- If the signer is acting as or on behalf of a listed engineer as defined in Env-C 502.10, debarring the listed engineer from the roster.

By signing this report, the signer understands that they are subject to the penalties specified in NH law, currently RSA 641:3, for making unsworn false statements.

By signing this report, the signer and applicant agree to comply with all applicable rules and conditions of the approval, if one is issued.

SIGNATURES

APPLICANT/CONTACT PERSON: Soft Draw Investments, LLC - Brian Hawkes	DATE	February 14, 2022
PRINTED NAME: Brian Hawkes		
*REPORT PREPARER: Michael Parsont, Stable Growth Environmental LLC	DATE	February 14, 2022
PRINTED NAME: Michael Parsont		1 CS1 daily 14, 2022
PROFESSIONAL LICENSE TYPE: Certified Wetland Scientist		
PROFESSIONAL LICENSE NUMBER: 028		

^{*}This cover page must bear the stamp or seal of the NH-licensed Professional Engineer (P.E.) or Professional Geologist (P.G.) who prepared the report.

PERMIT RENEWAL APPLICATION FOR LARGE GROUNDWATER WITHDRAWAL PERMIT NO. LGWP-2001-0001A

THE GOLF CLUB OF NEW ENGLAND STRATHAM AND GREENLAND, NEW HAMPSHIRE

Prepared For (Permittee):

Soft Draw Investments, LLC 167 Winnicutt Rd, Stratham, NH 03885

Prepared By:

Stable Growth Environmental LLC

P.O. Box 955, Dover, NH 03821 (603) 767-8633

February 2022

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Water User and	l Resource Inventory
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Figure 4	Water Resources
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INTRODUCTION

In compliance with the requirements of the Large Groundwater Withdrawal Permit No. LGWP-2001-0001A (LGWP) and New Hampshire Administrative Rule Env-Wq 403.34, Stable Growth Environmental LLC (SGE) has prepared this permit renewal application on behalf of The Golf Club of New England (GCNE). GCNE is located in Stratham and Greenland, New Hampshire. The GCNE site contains a private 18-hole golf course on 441 contiguous acres bounded by Winnicut Road to the southwest, Union Road to the west-northwest, Winniconic Brook along the northeast, and Winnicut River along the east and south (see **Figure 1**).

The initial LGWP was issued on December 18, 2001 and GCNE completed construction of the golf course in 2002. The LGWP was renewed on January 25, 2012 with an expiration date of December 18, 2021. The LGWP has allowed for not-to-exceed volume withdrawals from four on-site production bedrock wells, designated as Asset 1, Asset 2, Winnicut 1 and Winnicut 2, utilized for the purpose of irrigation water supply for the golf course. The golf season has historically run from mid-April through November, with a closing date of Thanksgiving weekend.

Additionally, the LGWP has required the following:

- Water conservation through metering, maintenance of equipment and leak detection;
- Monitoring and reporting for off-site residential wells, on-site production wells, piezometers, staff gauges and wetland monitoring sites; and
- Mitigation requirements for adverse impacts, including four levels of drawdown triggers.

Annual monitoring reports summarizing data collection and analyses for the above items have been submitted since 2002. The locations of the on-site production wells, off-site residential wells, and the wetland monitoring sites are shown on **Figure 2**.

PERMITTEE INFORMATION

- Owner: Soft Draw Investments, LLC
- Owner's Representative: Brian Hawkes, Golf Course Superintendent
- Mailing Address: 167 Winnicutt Road, Stratham, New Hampshire 03885
- Phone Number: 603-772-4900
- Email: <u>bhawkes@golfclubne.com</u>
- Authorized Agent: Michael Parsont, Stable Growth Environmental LLC
- Agent Mailing Address: P.O. Box 955, Dover, New Hampshire 03821
- Agent Phone Number: 603-767-8633
- Agent Email: <u>mparsont@stablegrowth.net</u>

WITHDRAWAL VOLUMES AND 'NO-CHANGE' CERTIFICATION

The LGWP has authorized the following withdrawal volumes:

- 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; and
- Winnicut 2 57,600 gallons over any 24-hour period.

This is a cumulative withdrawal volume of 265,000 gallons per day. GCNE does not request any change to these approved withdrawal volumes. A letter is enclosed in **Appendix A** certifying that no change to the previously-approved withdrawal volume is being sought.

INVENTORY OF CONTAMINANT SOURCES

SGE has completed an evaluation of existing contamination sources within the area that extends a distance of 1,000 feet outside the zone of influence of the production wells withdrawals. Based on the evaluation done for the 2012 renewal, the zone of influence (a.k.a. cone of depression) was estimated using water-level trend data collected from on-site monitoring wells and piezometers, and off-site residential wells in the surrounding area, as well as other locations where groundwater levels were observed to be influenced during the original withdrawal testing program. There have been no trends observed since 2012 to suggest a change in the estimated zone of influence of the production wells. The "study area" is designated as the estimated zone of influence and the 1,000-foot distance from this zone (see **Figures 3A** and **3B**).

A review of known contaminant sources within the study area was completed using information provided by request from the NH Department of Environmental Services (NHDES) OneStop database personnel. The NHDES OneStop database information identifies six potential contamination sites within the study area (see **Table 1** below, as well as **Figures 3A** and **3B**).

Site Type	Site Number	Site Name	Site Address	Grid Cell
UIC	200403077-0013460	Flagg Beauty Salon	98 Union Road, Stratham	Fig 3A – D2 Fig 3B – E3
UIC	200210066-0032578	Golf Club of New England	167 Winnicutt Road, Stratham	Fig 3A – E4 Fig 3B – F6
LAST (Closed)	200606020-0015591	William Holt Property	123 Union Road, Stratham	Fig 3A – C3 Fig 3B – D5
H ₂ O Sample (Closed)	199811001-0008429	Robert & Betty Ann Noble	60 Winnicut Road, North Hampton	Fig 3A – G5 Fig 3B – I7
UIC	200309012-0013084	Winnicut Rd Water Treatment Plant (Aquarion Water Co)	Winnicut Road, North Hampton	Fig 3A – H6 Fig 3B – I8
Hold Tank	200309012-0013099	Winnicut Rd Water Treatment Plant (Aquarion Water Co)	Winnicut Road, North Hampton	Fig 3A – H6 Fig 3B – I8

Notes:

- 1. UIC = Underground Injection Control
- 2. AST = Aboveground Storage Tank

The following three listings were identified with risk levels as "no ambient groundwater quality standard violations onsite". The UIC subsurface system at the Flagg Beauty Salon, located greater than 1,000 feet to the west of the Winnicut production wells, is not anticipated to present a risk to the water supply wells on site. The AST at the William Holt property, located greater than 1,500 feet to the northwest of the Winnicut production wells, had a documented release at some point; however, due to its "Closed" regulatory status it is not anticipated to present a threat to the water supply wells on site. Likewise, the Water (H₂O) Sample site (Noble property), located approximately 2,500 feet to the south of the Asset production wells, has a "Closed" regulatory status and is not anticipated to present a risk to the water supply wells on site.

The UIC subsurface system and holding tank associated with the Aquarion Water Company Water Treatment Plant on Winnicut Road are located over 3,000 feet to the southeast of the Asset production wells at the outer limit of the study area. The risk for contamination posed by operations at this facility to the water supply wells on site is anticipated to be minimal. Additionally, GCNE has a UIC subsurface system onsite associated with their Clubhouse. This system is maintained regularly (the tank is pumped every two years) and there have been no observations to suggest any failure or reason to suspect contamination of the water supply wells. GCNE has two active underground storage tanks at their Maintenance Building, one for gas and one for diesel fuel; monthly checks are performed in-house and an inspection is conducted annually by an independent contractor. There is also a large underground propane tank at the Clubhouse. There have been no issues associated with these tanks.

A windshield survey was completed within the study area by Brian Hawkes and Jim Callahan of GCNE on January 25, 2022. They drove all the public roads within the study area and looked for visible signs of potential contaminant sources as viewable from the vehicle, including potential hazardous/toxic waste and potential petroleum release sites, and made notes of their observations. No new construction was taking place and no visible signs of contaminant sources were observed during this windshield survey, including no potential hazardous/toxic waste or potential petroleum release sites. There are no active remediation sites or other sites with known contaminants in groundwater within the study area.

WATER USER AND RESOURCE INVENTORY

SGE has completed an evaluation of existing water users and water resources within the study area. A review of existing water supply sources and facilities within the study area was completed using information provided by request from the NH Department of Environmental Services (NHDES) OneStop database personnel. The NHDES OneStop database information identifies three active public water systems within the study area, two of which are registered water users (see **Table 2** below, as well as **Figures 3A** and **3B**).

System Type	PWS ID / Water User ID	System Name	System Address	Grid Cell
Non-Transient, Community	1051010 / 20020	Aquarion Water Co	Mill Road, Hampton	Fig 3A – F3/H3 Fig 3B – G5/I5
Transient, Non- Community	2237030 / 20755	Golf Club of NE (Clubhouse)	24 Arnold Palmer Drive, Stratham	Fig 3A – D3 Fig 3B – F5
Non-Transient, Non- Community	2235060	Cornerstone School	146 High Street, Stratham	Fig 3A – B5 Fig 3B – C7

Water resources within the study area, including wetlands and surface waters, were identified using the NHDES OneStop Data Mapper (GRANIT View Water Resources). These are shown within the study area on **Figure 4**, including the estimated zone of influence and the 1,000-foot distance from this zone.

TAX MAPS IDENTIFYING NEW LOTS AND THEIR WATER SOURCES

SGE completed a review of the most current tax maps for the Towns of Stratham (last updated April 2021), Greenland (last updated April 2018) and North Hampton (last updated August 2020). The estimated cone of depression of the withdrawal occurs over five tax maps, including Stratham Tax Maps 11 and 15, Greenland Tax Maps R-4 and R-5, and North Hampton Tax Map 23. Nine new lots have been identified within this area since the previous renewal in 2012, all of which are residential. As documented in their tax records, four of these lots were formed and developed prior to 2012, though the tax maps were not yet updated to include them at the time of the previous renewal. Two of the new lots (R-4/2A and R-4/2B) are currently not developed (vacant land) and the remaining seven lots have bedrock wells as their water source. The nine new lots are shown on the enclosed tax maps (see **Figures 5** through **9**).

MONITOR PROGRAM MODIFICATIONS/OBSERVATIONS/PROPOSED CHANGES

SGE has performed monitoring for GCNE in accordance with LGWP requirements since 2012, including on-site water level and wetland monitoring, as well as groundwater level monitoring at off-site private residential wells. Reports have been submitted annually to NHDES documenting the monitoring results. Monitoring locations are shown on **Figure 2**. Detailed information regarding monitoring locations, methodologies and up-to-date results are available in the 2021 Annual Monitoring Report, dated January 2022. The existing monitoring program and approved modifications to the program, a summary of observations during the monitoring period, and proposed changes to the program are discussed below.

ON-SITE MONITORING

The existing on-site water level and wetland monitoring program consists of groundwater level, surface water level, and wetland vegetation data collections at three wetland plot locations, including one control site. Monitoring at these plots is conducted three times per year during the growing season, in May, August and October. Groundwater levels are collected from five piezometers; two of the sites, including the control site, have co-located deep and shallow pairs. Surface water levels are collected from staff gauges at the three monitoring sites. Observations of vegetation within these plots are made to evaluate diversity, density and wetland status, in comparison to baseline and control site information. An approved modification made to this program (in 2014) was re-locating the control plot. This was due to an increase in invasive upland plant species at the original site, making it no longer suitable for use as a monitoring control site.

Water level measurements are also conducted at the four on-site production wells. These water level measurements are performed at least once every two weeks, starting when the golf course opens for business and continuing until at least 30 days after pumping has ceased for the irrigation season. An approved modification (in 2014) changed this requirement from "once every two weeks...when the golf course is open for business or pumping groundwater".

According to the data collected during the 10-year monitoring period, pumping the on-site production wells has not resulted in adverse impacts to the hydrology or vegetation of the monitored wetland systems. All wetland monitoring locations have shown consistent seasonal patterns. The piezometer and staff gauge data have been consistent with seasonal climate conditions and water levels have rebounded annually with no residual adverse impact caused by the pumping of the wells. The vegetation plots at the wetland monitoring locations have also maintained consistent seasonal patterns. An examination of percent dominance shows the wetland vegetation data has been comparatively similar over the years, demonstrating the similarity in the wetland vegetation community make-up in terms of abundance, dominance and diversity.

There has not been a significant change to the presence of invasive species in the vegetation plots, with the exception of reed canary grass (*Phalaris arundinacea*) in the plot located immediately adjacent to the Winnicut River system. This invasive species is abundant throughout the riverine system, so a prolific seed source is present. Its presence significantly increased in 2014-15 and was exacerbated by the 2015-16 drought conditions, though it has not shown to be worsened by the 2020 drought conditions. The reed canary grass presence was still at a high level in 2021, however it is continuing to follow a decreasing trend. There has been no evidence to suggest that the increased presence of reed canary grass is related to the pumping of the on-site wells. Overall, there are no trends in the wetland vegetation monitoring data to support that an adverse impact has occurred to the wetland systems as a result of the pumping of the production wells.

OFF-SITE MONITORING

The existing groundwater level monitoring program at off-site private residential wells consists of the recording of water level measurements at a frequency of once every 12 hours at five locations, including four bedrock wells and one overburden well. The data is downloaded annually from the dataloggers in November and is submitted in an electronic format designated by NHDES as part of the annual monitoring report. Data is downloaded and submitted on a more frequent basis when drought conditions trigger mitigation stages, as outlined in the LGWP. There were two approved modifications to this program in 2016. An off-site private bedrock well was being monitored at 5 Seavey Pasture; it was removed from the monitoring network due to failure of the installed datalogger, our inability to retrieve it as a result of problematic well conditions, 14 years of data measurements indicated no impacts from the irrigation wells, and the continued monitoring of a nearby bedrock well. An amendment was made to LGWP condition 5d related to Stage 1 Drought Management Procedures, allowing submittal of electronic data by the last day of the month.

According to the data collected during the past 10-year monitoring period, water levels in the off-site wells generally reflected usual seasonal trends, peak domestic water usage, as well as periods of low and high precipitation quantities. Groundwater level trends have generally maintained the following typical seasonal pattern: decreasing levels during the summer, increasing levels during the fall, with recovery observed over the winter and highest levels present in the spring. Magnitudes of fluctuation have varied from year to year, due to changes and timing of precipitation events as well as seasonal variations in residential water usage. There are no trends in the off-site well monitoring data to support that an adverse impact has occurred to any of the well water levels as a result of the pumping of the GCNE production wells.

PROPOSED CHANGES

There are no changes being proposed for the existing on-site water level and wetland monitoring program. SGE is requesting to make two changes to the existing groundwater level monitoring program at off-site private residential wells. The first is to remove 136 Union Road from the program, a shallow overburden well (surface and shallow-groundwater fed) that SGE believes is not providing useful information, especially since there is a bedrock well monitoring location across the street at 141 Union Road (see **Figure 2**). There are multiple issues at this site, including the need during each monitoring event for SGE field personnel to remove a heavy, severely cracked concrete cover in order to download the datalogger data; it is allowing rainwater to enter and will need to be replaced (for a second time since monitoring began) to prevent it from collapsing into the well as a result of this practice. Additionally, miscellaneous debris are at the bottom of the well, including accumulating sediment, and access to the well requires significant ongoing maintenance as it is overgrown with thick thorn bushes, has had beehives present, and was recently blocked by a large tree blowdown.

The second requested change is to remove 78 Winnicut Road from the program. The issues at this site are associated with it being a deep well, requiring a lengthy cable for the datalogger, which SGE has found to be less reliable for accessing data; as a result, it has needed to be replaced once and may need to be replaced again due to continuing problems. The well is also extremely crowded (with wires, etc.) that caused SGE to lose an expensive water level probe in 2020 when it got hung up trying to remove it (manual measurements are no longer taken at this location as a result). There is another bedrock well monitoring location nearby at 53 Winnicut Road. With the removal of 136 Union Road and 78 Winnicut Road, monitoring would remain at strategic locations encircling the GCNE production wells to the north-northeast (141 Union Road), south (53 Winnicut Road) and northwest (100 Union Road), see **Figure 2**. SGE believes these provide sufficient data to assess the potential for adverse impacts to occur as a result of the GCNE production well pumping.

GROUNDWATER PRODUCTION VOLUME AND CONTROL FACTORS

There are three irrigation storage ponds on site, fed by precipitation, five golf holes of surface drainage (approximately 25 acres) and the four production wells. Total storage capacity of the ponds is approximately 11,000,000 gallons. Depending how much water is in the ponds from snow melt and spring rains dictates when pumping starts for the season. Water is pumped from the production wells to the storage ponds and is then released from the ponds to the irrigation system, as needed for watering the golf course. The need for water is based on weather conditions (mainly precipitation) and turf management requirements. Significant variability in the volume of water pumped can occur based on these factors. Approximately 100 acres of turf grass is normally irrigated through the growing season. However, depending on weather conditions and how they want the course to play, only greens, tees and fairways may be irrigated (approximately 38 acres).

In general, more water is used in the summer months with higher temperatures and drier air. Drought years require the most water use, average precipitation years require less, and years with excessive rain require the least. 2015-16 and 2020 were significant drought years and required the most pumping, while 2013 and 2021 were years that had excessive rain during the summer and required the least pumping. GCNE manages water on the site closely and incorporates water conservation considerations into the process, so only the water that is needed is pumped or distributed to the irrigation system.

Past 10 years of well pumping data, in gallons:

2012: July 2 through October 1 = 6,441,700

2013: August 27 through September 3 = 1,502,500

2014: June 18 through July 27 = 7,216,100

2015: May 24 through September 29 = 17,986,600

2016: May 25 through October 27 = 17,330,900

2017: July 6 through September 7 = 8,826,000

2018: May 25 through September 12 = 12,135,000

2019: July 3 through October 8 = 17,799,600

2020: May 21 through October 13 = 22,616,500

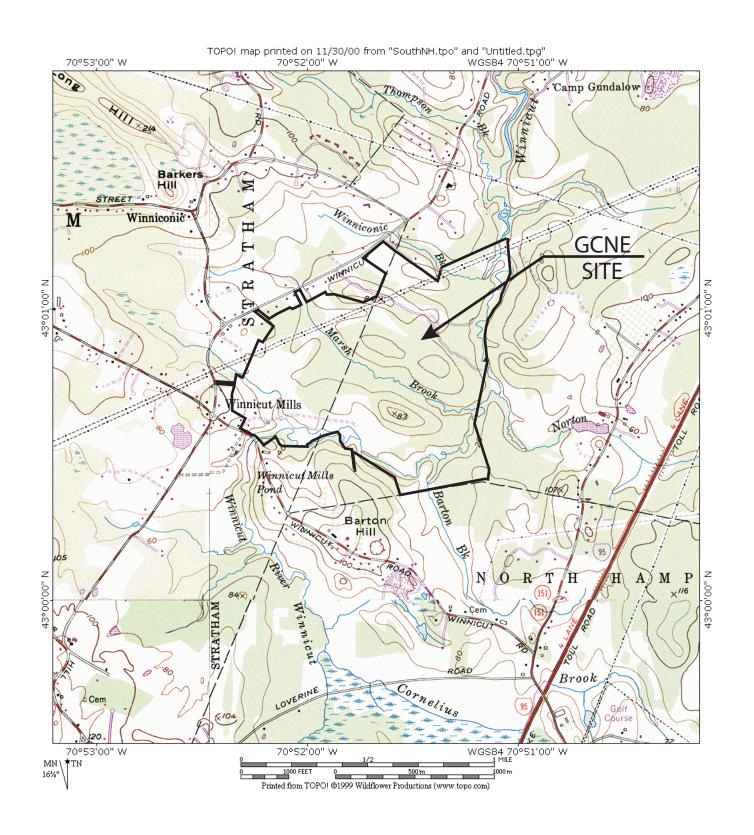
2021: May 24 through July 8 = 6,624,100

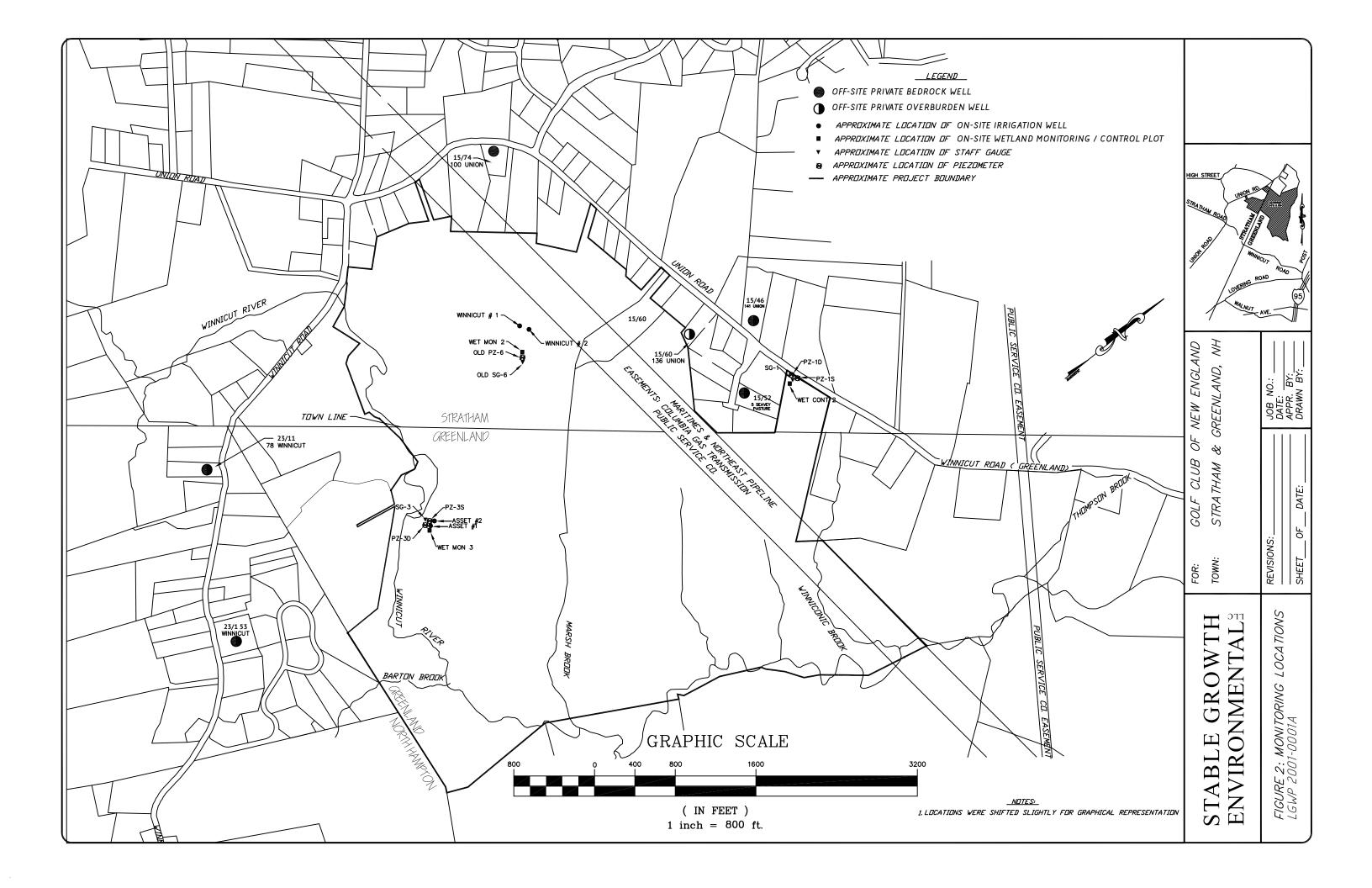
The average pumping season length over the past ten years was approximately three months. Per the LGWP, the total allowed withdrawal for a three-month pumping season is 24 million gallons. 2019 was the highest pumping season for a non-drought year (though still well below the allowable threshold) due to the following factors. Four holes had suffered significant winter damage and required re-sodding (18,500 square feet); significant work was done on the driving range and required re-sodding (38,500 square feet); and hosting the Seacoast Amateur Tournament required taller grass in rough areas to make the course more challenging, all of which required the use of more water. Additionally, though it was an average rain year overall, September had extremely low precipitation totals.

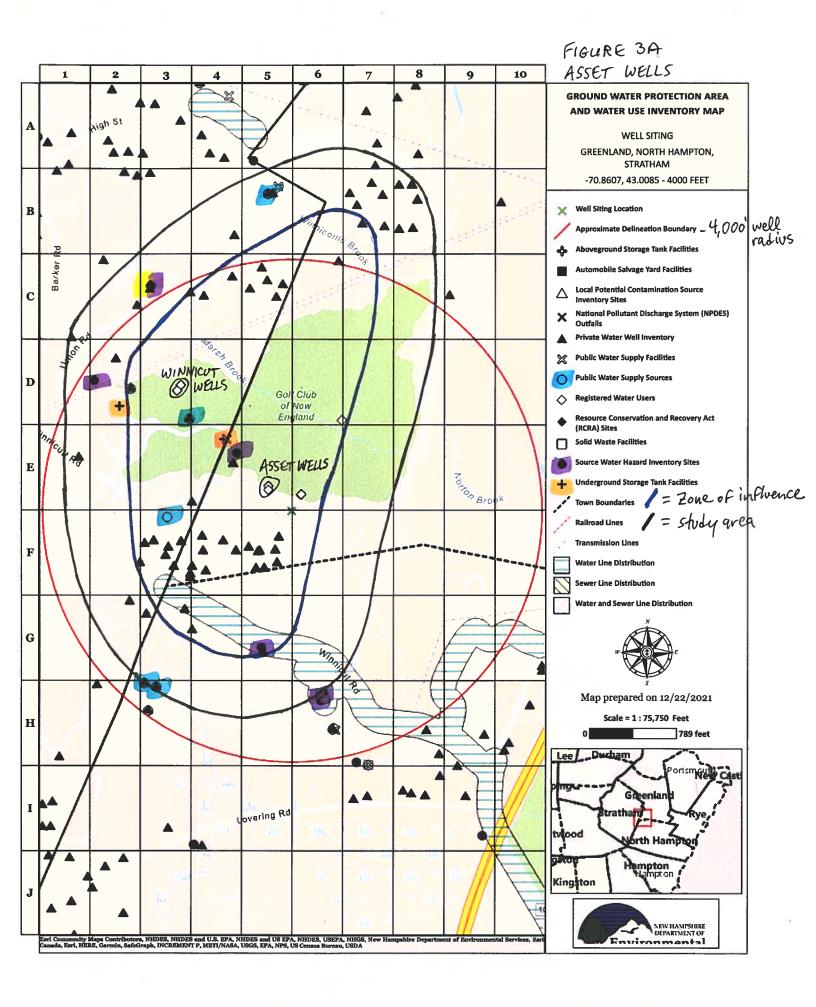


FIGURE 1: SITE LOCUS

GOLF CLUB OF NEW ENGLAND STRATHAM & GREENLAND, NH







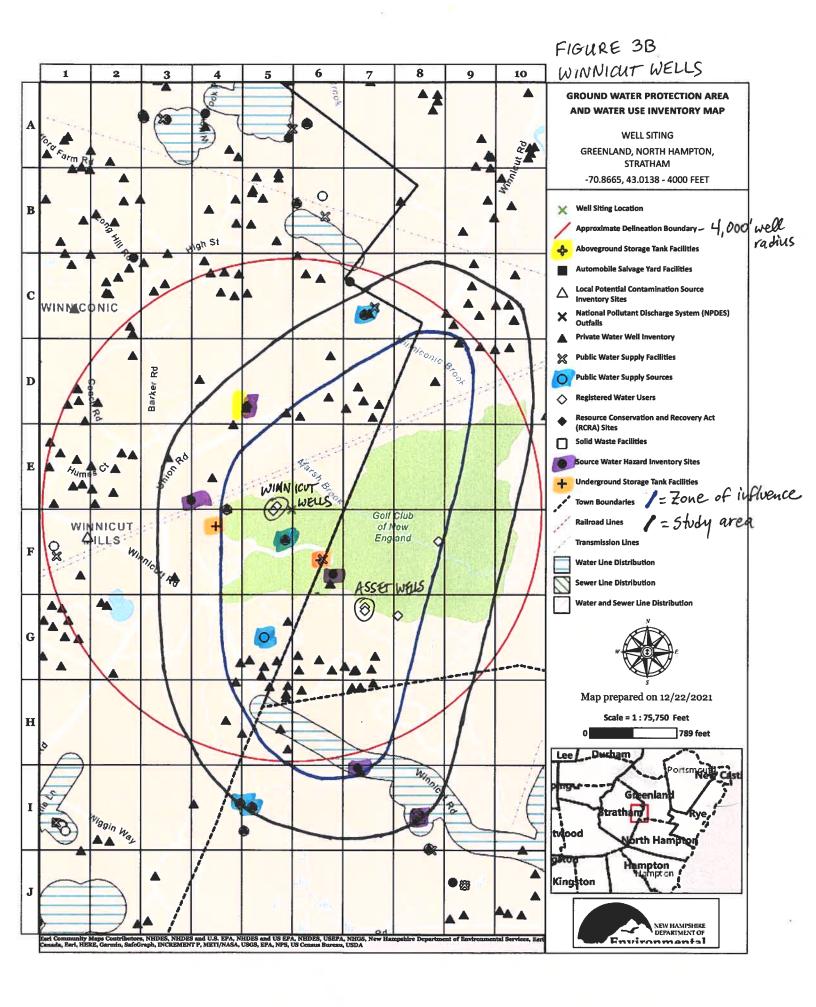


FIGURE 4 WATER RESOURCES

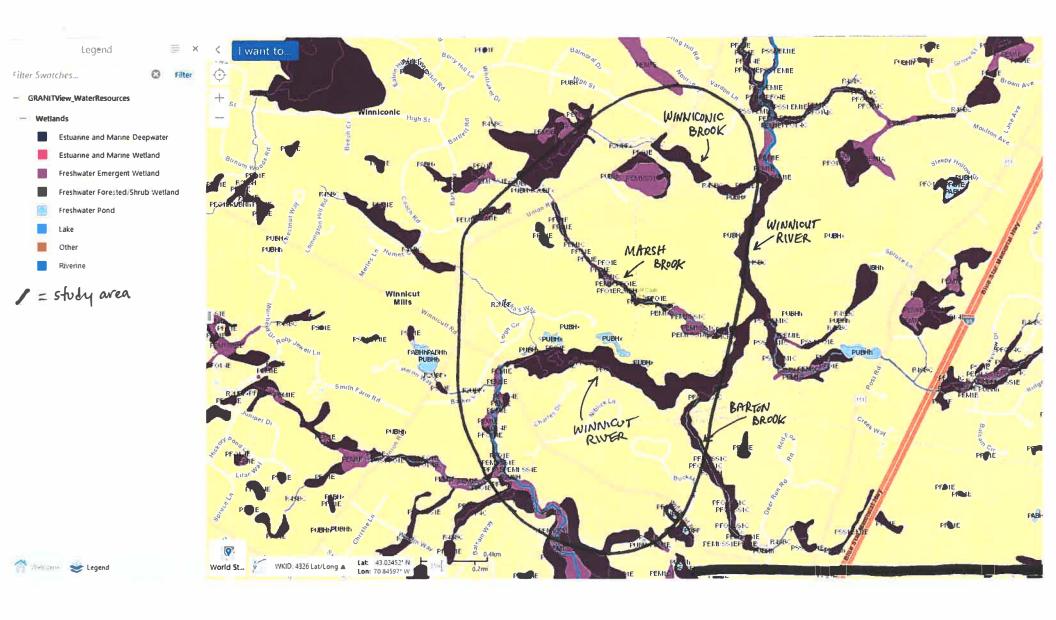
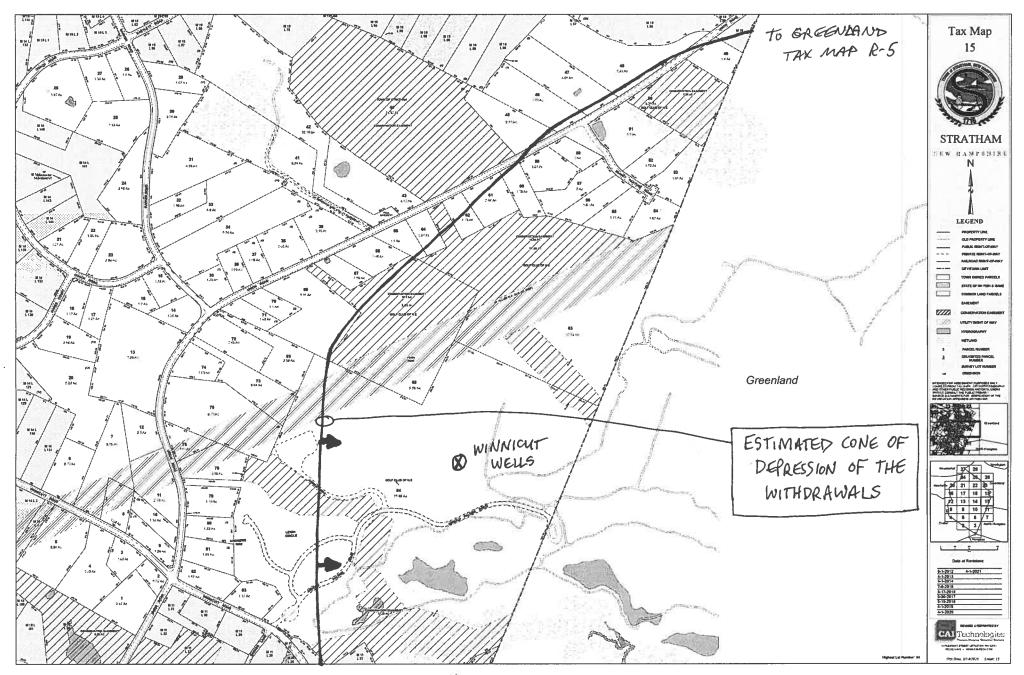
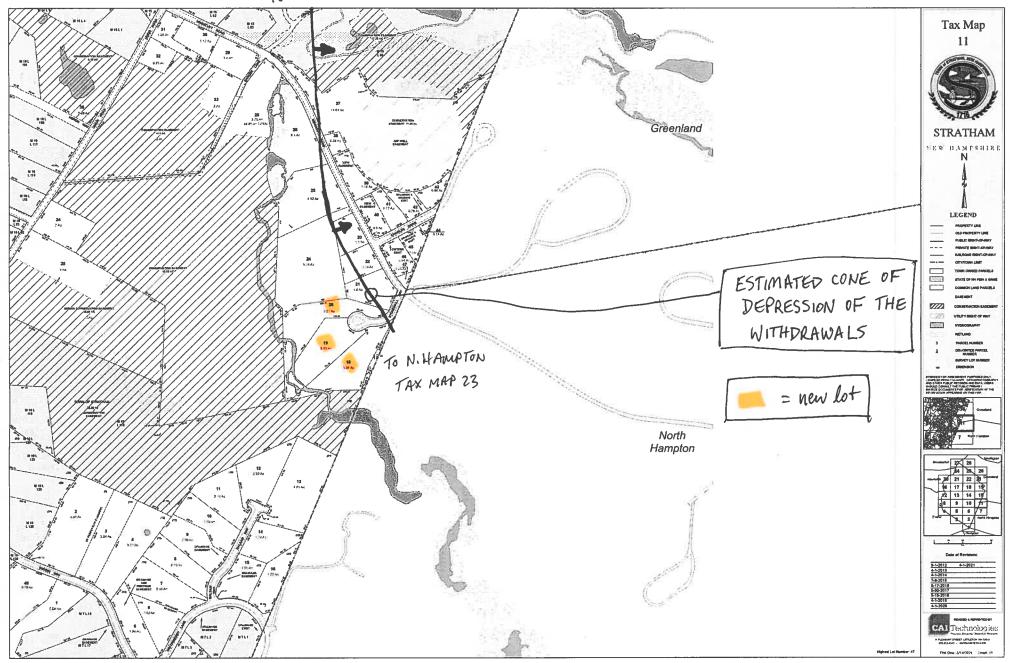


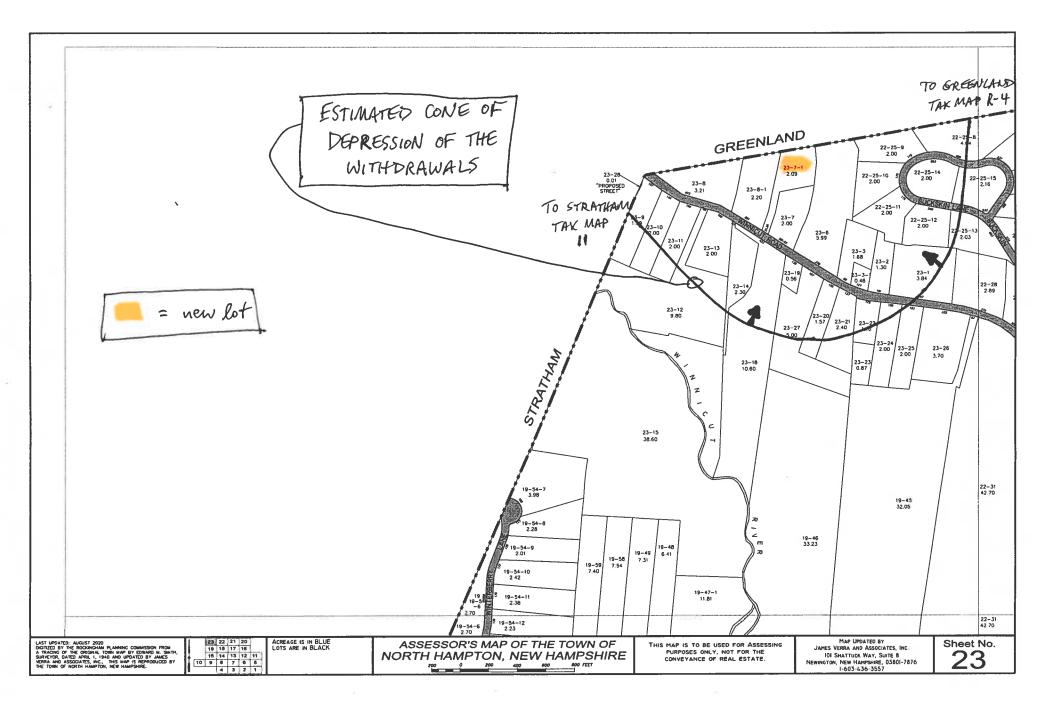
FIGURE 5

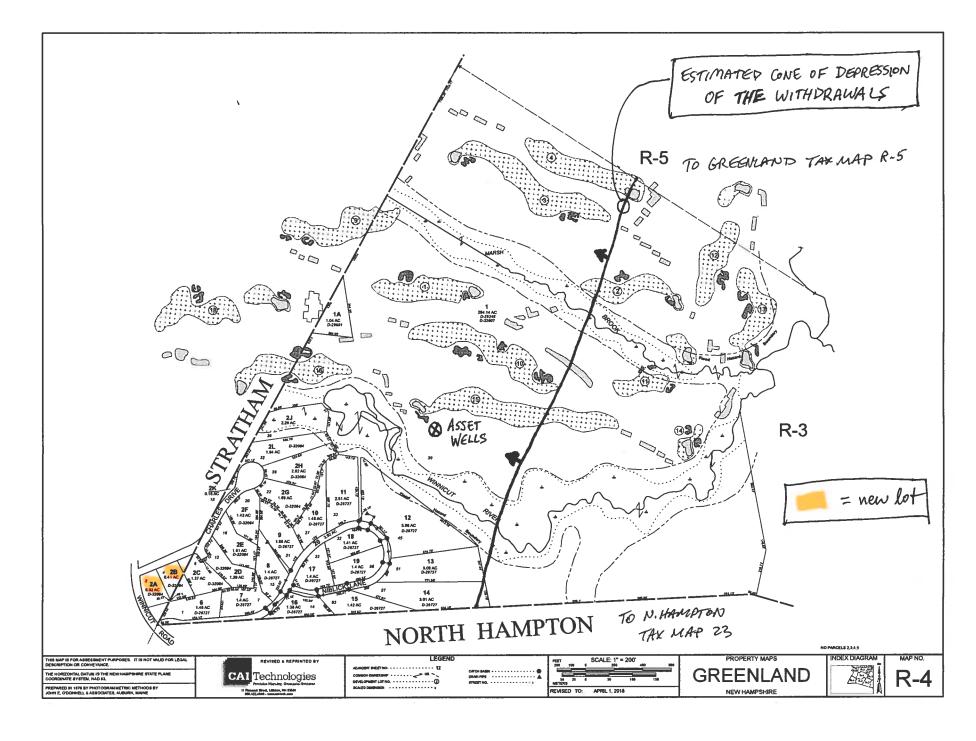


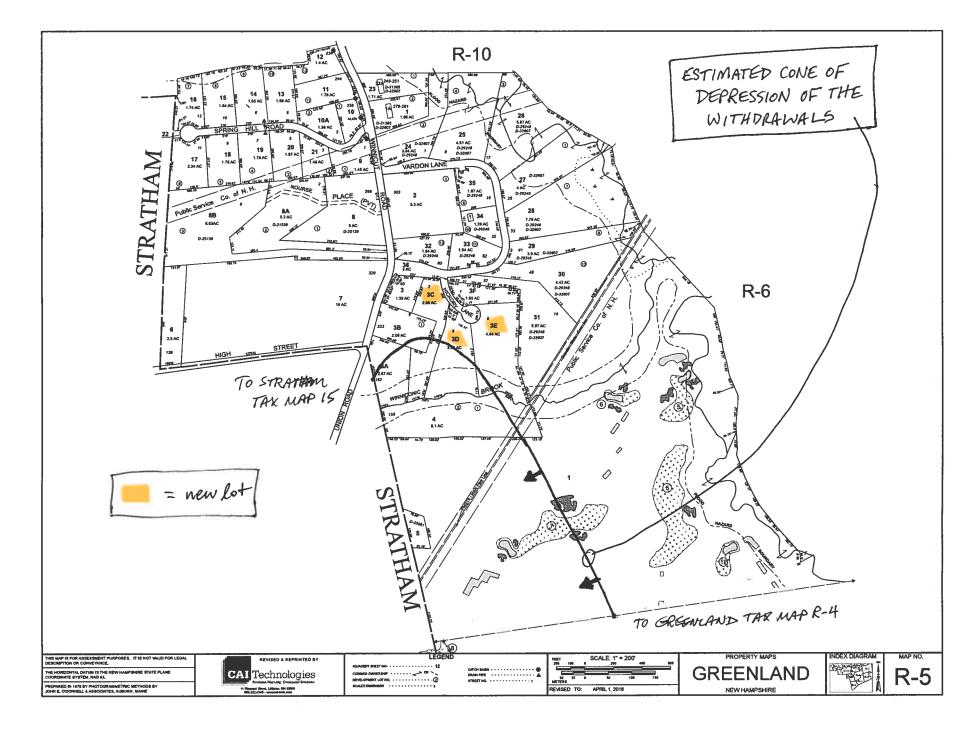
TO STRATHAM TAX MAP II

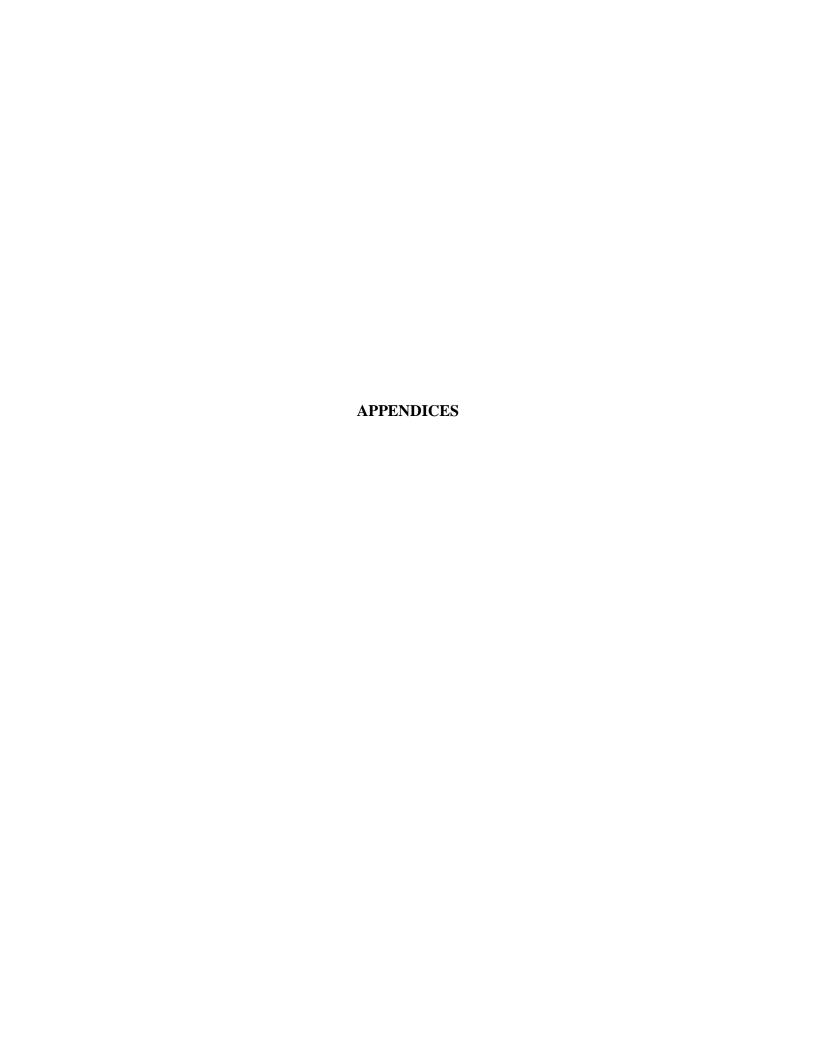
TO STRATHAM TAX MAP 15











APPENDIX A

Certification Letter



February 1, 2022

NHDES Drinking Water Groundwater Bureau:

The Golf Club of New England (GCNE) Large Groundwater Withdrawal Permit No. LGWP-2001-0001A previously authorized the following withdrawal volumes:

- 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; and
- Winnicut 2 57,600 gallons over any 24-hour period.

GCNE does not request any change to these approved withdrawal volumes. This letter certifies that no change to the previously-approved withdrawal volumes is being sought.

Sincerely,

Brian Hawkes, Owner's Representative

Soft Draw Investments, LLC

ENVIRONMENTAL





29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

DWGB-22-15 2019

Large Groundwater Withdrawal Permitting Process

In 1998, the Groundwater Protection Act (RSA 485-C) was amended to ensure that adverse impacts to water resources from new large groundwater withdrawals are properly identified and mitigated within the state of New Hampshire. As a result, any new groundwater withdrawal from wells installed after August 1998 and greater than 57,600 gallons over any 24-hour period (equivalent to an average of 40 gallons per minute) is considered to be a large groundwater withdrawal and must obtain a permit from the New Hampshire Department of Environmental Services (NHDES). Withdrawals from wells installed prior to August 1998 are exempt and do not have to comply with these requirements in accordance with RSA 485-C:22.

In order to obtain a large groundwater withdrawal permit, the well owner or applicant, typically a public water supplier, bottled water manufacturer, or golf course, must complete an extensive testing and review process that often takes over a year to complete. The details of the permitting process and requirements can be found in RSA 485-C:21-25 and NHDES administrative rules Env-Wq 403, Large Groundwater Withdrawals. This process is summarized below:

1) Preliminary Permit Application

The applicant must submit to NHDES a preliminary large groundwater withdrawal permit application that is signed and stamped by a professional geologist or engineer and includes the following:

- Large Groundwater Withdrawal Permit Application Notification Form.
- Description of intended groundwater use and proposed withdrawal volume.
- Preliminary delineation of potential impact area including the maximum extent of the withdrawal's zone of influence, recharge area and down-gradient area.
- Preliminary list of water users, potential and known contamination sources and a water resources inventory in the vicinity of the potential impact area.
- Conceptual hydrologic model and identification of data gaps in the conceptual hydrologic model.
- Proposed withdrawal testing program that includes at least a 5-day pumping test, monitoring of surrounding wells (as available), and water quality testing.

2) Preliminary Application Public Notification and Administrative Review

The applicant must send by certified mail a copy of the preliminary permit application and any subsequent application materials, to all municipalities and community water suppliers located in the potential impact area of a proposed withdrawal. Upon receiving the application, NHDES must review the applica-

tion to determine if it is administratively complete and notify the applicant if any additional information is needed to complete the application.

3) Preliminary Application Public Hearing

Pursuant to RSA 485-C:21, a municipality or water supplier located in the potential impact area has 15 days after the receipt of the preliminary permit application to request NHDES conduct a public hearing on the application. NHDES must conduct the public hearing within 30 days of the request and the hearing is typically held within the municipality that requested the hearing. The public hearing is an opportunity for NHDES and the applicant to discuss the project and for the public to submit oral testimony for the project record.

4) Preliminary Application 45-Day Public Comment Period

A 45-day public comment period follows the public hearing or if a hearing is not requested, the 45-day public comment period follows the date the preliminary permit application was received by the municipality or water supplier. NHDES considers all relevant recommendations and comments received during the 45-day comment period or at the public hearing. Comments should be submitted directly to the NHDES large groundwater withdrawal program (see contact information below).

5) Approval of the Preliminary Application

Following the comment period, NHDES must approve or deny the preliminary application in accordance with the rules. NHDES may also request that the applicant provide supplemental information in accordance with the requirements of the rules and establish deadlines for the submission of this information.

6) Withdrawal Testing

The applicant must establish a monitoring network that may include, depending on the site and well, monitoring of other public water supply wells, private water supply wells, other test wells, surface waters and wetlands. If private wells are included in the monitoring network, the applicant must mail out "offer to monitor" letters to surrounding well owners to request access to their wells. Once the monitoring network has been approved by NHDES, the applicant can conduct the withdrawal testing program that includes three phases:

- Initial background or ambient period that includes measuring water levels at the production well (with the pump off) and the surrounding monitoring network.
- 5-day (or more) pumping period of the production well at the proposed withdrawal rate. NHDES typically conducts a site visiting during this portion of the testing process.
- Recovery period after the pumping has ceased in the production well.

7) Final Report

After completing withdrawal test, the applicant must submit a final report to NHDES that contains the following items:

- Revised withdrawal permit volume: A revised permit volume may be requested provided the revised volume is less than or equal to the withdrawal volume demonstrated during withdrawal testing.
- Revised delineation of the potential impact area.
- Updated inventory of water users and water resources in the potential impact area.
- Revised conceptual hydrologic model based on data collected during withdrawal testing.
- Detailed description of the withdrawal testing program.
- Analysis of the data collected that fully summarizes the withdrawal testing results.

- Assessment of impacts or potential impacts from the proposed withdrawal to existing water users or natural resources.
- Proposed monitoring and reporting program designed to ensure that adverse impacts will not occur as a result of the proposed withdrawal.
- Proposed plan, if necessary, to mitigate any potential adverse impacts should they occur.

8) Final Report Public Hearing

A municipality or water supplier located in the potential impact area has 15 days after the receipt of the final report to request NHDES conduct a public hearing on the report. NHDES must conduct the public hearing within 30 days of the request and the hearing is typically held within the municipality that requested the hearing. The public hearing is an opportunity for NHDES and the applicant to discuss the final report and for the public to submit oral testimony for the project record.

9) Final Report 45-Day Public Comment Period

A 45-day public comment period follows the public hearing. If a hearing is not requested, the 45-day public comment period follows the date the final report was received by the municipality or water supplier. NHDES considers all relevant recommendations and comments received during the 45-day comment period or at the public hearing.

10) Technical Review

NHDES completes a technical review for a proposed large groundwater withdrawal within 45 days of a public hearing as described above or, if no hearing is requested, within 45 days of receipt of the final report. Using the adverse impact criteria in <u>RSA 485-C</u>, NHDES evaluates the permit application to verify that adverse impacts will not occur as a result of the proposed withdrawal. Adverse impacts are defined in <u>RSA 485-C:21</u> as the following:

- (a) Reducing the withdrawal capacity of a private water supply well of a single residence as a result of the reduction of available water that is directly associated with the withdrawal as determined by the following:
 - (1) Any reduction in capacity for wells with a capacity less than Water Well Board recommended optimum minimum flow capacity of 4 gallons per minute for 4 hours before the withdrawal;
 - (2) Any reduction in capacity below 4 gallons per minute for 4 hours, for wells that had a capacity greater than 4 gallons per minute for 4 hours, before the withdrawal; or
 - (3) A reduction in capacity where the well still has a capacity between 4 gallons and 10 gallons per minute for 4 hours and the user provides information indicating that the reduction in flow has resulted in the inability to meet his or her water needs.
- (b) Reducing the capacity of a public drinking water supply below the minimum withdrawal rates required per consumer determined by the following:
 - (1) Minimum daily amounts of drinking water shall be determined per use based on the design flow criteria established for public water supply systems established in rules adopted by the department; or
 - (2) Where it is verified that such wells were unable to produce the design flow before the withdrawal began, the adverse impact shall be any reduction in the ability to produce water;
- (c) Reducing the capacity of a water supply that is used for a multiple-unit dwelling, but that is not a public water supply, that results in the inability to continue established activities or maintain existing water capacity requirements;

- (d) Reducing the capacity of a private, non-residential, non-drinking water supply that results in the inability of a commercial, industrial, agricultural, or retail facility to continue established services or production volumes;
- (e) Reducing the ability of a registered water user to produce volumes equivalent to the average daily withdrawal for a specific calendar month as determined by discharge measurements and reports made to the department in accordance with the water use reporting requirements under RSA 488 or other previous water use reporting requirements of the department;
- (f) Reducing surface water levels or flows that will, or do, cause a violation of surface water quality rules adopted by the department;
- (g) Causing a net loss of values for submerged lands under tidal and fresh waters and its wetlands as set forth in RSA 482-A;
- (h) Causing the inability of permitted surface water or groundwater discharges to meet permit conditions;
- (i) Reducing river flows below acceptable levels established pursuant to RSA 483;
- (j) Causing the contamination of groundwater obtained from wells or surface waters from contaminated groundwater whose flow has been altered by the withdrawal, or causing the contamination of an aquifer or contributing to the spread of any existing contamination; and
- (k) Causing the long-term predictable rate of replenishment of the aquifer that is the source of the withdrawal to be exceeded.

11) Final Decision

If the permit application information demonstrates the withdrawal will not produce adverse impacts, NHDES will issue a large groundwater withdrawal permit. If the permit application information indicates that an adverse impact may occur, but can be mitigated, a withdrawal permit shall be granted under the following conditions:

- Sufficient information is provided verifying that any adverse impact will not be immediate or irreversible.
- Adverse impacts can be prevented by mitigation.
- A monitoring and reporting program is implemented as approved by NHDES.

If the permit application information is insufficient for NHDES to complete a technical evaluation, NHDES will either issue a conditional approval contingent upon the results of monitoring and reporting requirements, or require that additional analysis or hydrogeologic testing be completed for the withdrawal prior to issuing a permit.

Public Involvement

NHDES recognizes that numerous stakeholders are often interested in the large groundwater withdrawal permitting process after the public hearing(s) and comment period portions have been completed. Therefore, NHDES is always available to meet and discuss technical issues relating to the proposed withdrawal permitting process. Furthermore, all documents, reports and data submitted to NHDES regarding the withdrawal are available for review, by appointment, at our offices at 29 Hazen Drive, Concord, NH. Other public records, including large groundwater withdrawal permits, project narratives and ongoing water level monitoring data for active permits, are available on the NHDES large groundwater withdrawal website, or by contacting the program staff directly.

Expiration of Approvals

- An approved Preliminary Application expires within four years of issuance if the applicant does not submit the final report.
- A large groundwater withdrawal permit expires within five years of issuance if the withdrawal is not activated.
- A large groundwater withdrawal permit must be renewed ten years from the date of issuance for active large groundwater withdrawals.

For More Information

Please contact Andrew Koff at <u>(603) 271-8866</u> or Stephen Roy at <u>(603) 271-3918</u>. The Drinking Water and Groundwater Bureau can be contacted at <u>(603) 271-2513</u> or by email at <u>LargeGW@des.nh.gov</u>.

Note: This fact sheet is accurate as of July 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.

2022 SELECT BOARD MEETING SCHEDULE¹

Adopted by the Select Board on October 18, 2021 – REVISED February 15, 2022

DATE OF MEETING	<u>DEPARTMENT TO REPORT</u>
Monday, January 3, 2022	Police, 2022 Goals check-in
Tuesday, January 18, 2022	Assessing, Planning, Legislative Delegation
Thursday, February 3, 2022 ²	Public Hearing on Budget/Warrant
Monday, February 7, 2022	Parks & Recreation
Tuesday, February 22, 2022	Town Meeting Preparations
Monday, March 7, 2022	Library, 2022 Goals check-in
Tuesday, March 8, 2022	Town Meeting (First Session - Ballot portion)
Saturday, March 12, 2022	Town Meeting (Second Session)
Monday, March 21, 2022	Public Works
Monday, April 4, 2022	Treasurer Report and Fire, Building
Monday, April 18, 2022	Assessing, Planning, 2022 Goals check-in
Monday, May 2, 2022	Police
Monday, May 16, 2022	Parks & Recreation
Tuesday, May 31, 2022	Library, Legislative Delegation
Monday, June 20, 2022	Public Works, 2022 Goals check-in
Tuesday, July 5, 2022	Fire, Building
Monday, July 18, 2022	Assessing, Planning
Monday, August 1, 2022	Police, Parks & Recreation
Monday, August 15, 2022	Signatures meeting only, if needed
Tuesday, September 6, 2022	Library
Monday, September 19, 2022	Public Works
Monday, October 3, 2022	Treasurer Report, Building
Monday, October 17, 2022	Assessing, Planning
Monday, November 7, 2022	Police, Fire
Monday, November 21, 2022	Parks & Recreation
Monday, December 5, 2022	Public Works
Monday, December 19, 2022	Fire, Building, 2022 Goals check-in

 $^{^1}$ For reference only, school vacation weeks are February 28 to March 4^{th} and April 25 to April 29th 2 In accordance with NH RSAs as summarized by NH Municipal Association, the last day to hold a public hearing on the budget is February 11, 2021. This date is subject to finalization.

2022 Regional Housing Needs Assessment & Survey



NH Regional Planning Commissions are launching regional housing needs

assessments; a multi-faceted

project to review current housing trends and better understand needs to plan for future housing options that meet demand and ensure a high quality of life for all New Hampshire residents. Regional Planning Commissions are a political subdivision of the state and support a local membership



of municipalities in their planning and community development responsibilities. This effort is being conducted in partnership with the New Hampshire Office of Planning and Development, and is funded by a American Rescue Plan State and Local Fiscal Recovery Fund grant.

Affordable housing is crucial to the New Hampshire economy. The low housing inventory, increased population and rising prices affects families who want to live and work in the state.

- October 2021, the statewide median sales price was \$375,000, almost 13% higher than October 2020 (NH Housing Market Snapshot, 2021).
- 2021 two-bedroom median gross rent increased to \$1,498, up 6% from the previous year.
- NH vacancy rates have fallen to under 1% (0.9%), 0.6% for two-bedroom units (NH Housing Rental Survey Report, 2021).
- To afford the statewide median cost of a typical two-bedroom apartment with utilities, a New Hampshire renter would have to earn 128% of the estimated statewide median renter income, or over \$59,900 a year (NH Housing Rental Survey Report, 2021).

The year-long Regional Housing Needs Assessment (RHNA) project begins with a community survey, which will be conducted by each regional planning commission, and encourages residents to share what impact the housing situation has had on them; what has worked, and what needs to change. The link to each region's survey is available at www.nharpc.org/rhna.

Community engagement will be critical for this project, and we are hoping to hear from you! For more information and to participate in your region's survey:

Rockingham Planning Commission Regional Housing Needs Assessment Project:

https://www.therpc.org/RHNA

For more information contact Sarah Tatarczuk, Regional Planner at statarczuk@therpc.org; 603-658-0523.