



TOWN OF HUDSON

Planning Board

Timothy Malley, Chairman

Bob Guessferd, Selectmen Liaison



12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6008 · Fax: 603-594-1142

PUBLIC MEETING – MAY 18, 2022

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, **May 18, 2022 at 7:00 p.m.** in the “**Buxton Community Development Conference Room**” at Town Hall, 12 School Street, Hudson, NH. The following items will be on the agenda:

- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. MINUTES OF PREVIOUS MEETING(S)
 - 27 April 2022 Meeting Minutes

- VI. OLD BUSINESS
 - A. Barclay Medical Office Building 2 Stonemill Drive
 SP #04-22 Map 246/Lot 1
 Purpose of Plan: To construct a 28’x40’ medical office building with 10 parking spaces and related improvements. Application acceptance & hearing

- VII. NEW BUSINESS
 - A. 11 Tracy Lane Lot Line Relocation 11 Tracy Lane
 SB #02-22 Map 101/Lots 6 & 13
 Purpose of Plan: To propose a lot line relocation between lots 101-6 and 101-13. Application acceptance & hearing.

 - B. 326 Transmission Line Structure Replacement Project Various Locations
 CU #04-22 Eversource ROW
 Purpose: Eversource structure replacement project, which requires temporary wetland impacts.

 - C. Regulation Amendment: §193-10 Driveway Regulations; to allow driveways within 5-foot of the side lot line in the TR Zone only. Public Hearing.

VIII. ADJOURNMENT

Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting.

Brian Groth, AICP
Town Planner

POSTED: Town Hall, Library, & Web – 05/4/22



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MINUTES/DECISIONS OF THE PLANNING BOARD

MEETING DATE: APRIL 27, 2022

In attendance = X

Alternate Seated = S

Partial Attendance = P

Excused Absence = E

Tim Malley
Chair X

Ed Van der Veen
Vice-Chair X

Elliott Veloso
Secretary X

Jordan Ulery
Member X

Dillon Dumont
Member X

James Crowley
Member X

Victor Oates
Alternate E

Michael Lawlor
Alternate E

Bob Guessferd
Select Rep. X

Dave Morin
Alt. Select. Rep. E

Brian Groth
Town Rep. X



- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. MINUTES OF PREVIOUS MEETING(S)

- 13 April 2022 Meeting Minutes

Mr. Ulery moved to accept 23 February 2022 Meeting Minutes.

Motion seconded by Mr. Dumont. Motion carried 6/0/1 (Guessferd abstained)

- VI. CORRESPONDENCE
Notification from Alvirne High School Principal Beals regarding installation of sign at Hills House. No action required.

- VII. NEW BUSINESS (per Chair, items taken up in different order than agenda)

- A. Proposed Regulation Amendment – Driveway Setbacks in TR Zone. Discussion Purpose of Plan: To allow for a second driveway where only one is permitted. Application acceptance & hearing.

Mr. Dumont moved to schedule a public hearing on the proposed amendment to Section 193-10.H of the Driveway Regulations, date certain, May 18, 2022.

Motion seconded by Ulery. Motion carried 7/0/0

- B. May Meeting Schedule

Mr. Ulery moved to reschedule the regular Planning Board meeting from May 11, 2022 to May 18, 2022 so that Board members may attend the Nashua Regional Planning Commission's Annual Forum.

Motion seconded by Mr. Dumont. Motion carried 7/0/0

C. Land Use Regulation Audit Workshop

Purpose: A workshop to review land use regulations for consistency, organization and conformity with applicable laws and regulations. Amendments and/or changes will require a subsequent public hearing.

Town Planner Groth introduced the audit project which will consist of multiple workshops, step by step, to result in a consistent, well organized regulatory foundation for land use policies. This meeting represents the first workshop in which Groth and Mr Cheng from the Nashua Regional Planning Commission (NRPC) proposed a new organizational framework and hierarchy.

Caleb Cheng, Regional Planner III, NRPC, presented the methodology and reasoning for the proposed re-organization of §276 Administrative Requirements, §275 Site Plan Regulations and §289 Subdivision Regulations to each consist of: Article I – General Provisions; Article II – General Requirements; Article III – Procedures; and, Article IV – Plan Requirements. The framework also provides a consist hierarchy of subsections across each regulation document. Mr. Cheng and Mr. Groth then described next steps and queried the Board for a general consensus on the proposed organizational framework so that the Board could embark on the next step, editorial revisions.

The Planning Board indicated agreement with the proposed organizational framework.

VIII. OTHER BUSINESS

Mr. Veloso informed the Board that due to occupational relocation, he tendered his resignation from the Planning Board, and thanked the Board for the opportunity to serve the community. All members and staff present thanked Mr. Veloso for his years of service and acknowledged his valued contribution to the Hudson community.

IX. ADJOURNMENT

Mr. Dumont moved to adjourn. Motion seconded by Me. Veloso. Motion carried (7/0/0)

Meeting adjourned at 8:11p.m.

Brian Groth, AICP
Town Planner

These minutes are in draft form and have not yet been approved by the Planning Board.

Note: Planning Board minutes are not a transcript. For full details on public input comments, please view the meeting on HCTV (Hudson Community Television).

BARCLAY MEDICAL OFFICE BUILDING

SP# 04-22

STAFF REPORT #2

May 18, 2022

(Please refer to 4/13/22 report for earlier comments)

SITE: 2 Stonemill Drive; Map 246 Lot 001-000,

ZONING: R-2 (Residential-Two)

PURPOSE OF PLAN: To construct a 28'x 40' medical office building with 10 parking spaces and related improvements.

PLANS UNDER REVIEW: Site Plan, Map 246 / Lot 1, Barclay Medical Office Building, 2 Stonemill Drive, Hudson, New Hampshire; prepared by: Maynard & Paquette Engineering Associates, LLC, 31 Quincy Street, Nashua, NH 03060; prepared for: Warren R. Barclay, Trustee of Warren and Suzanne Barclay Revocable Trust, 24 Chalifoux Road, Hudson, NH 03051; consisting of 5 sheets and general notes #1-23 on Sheet 1; dated December 29, 2021; last revised May 5, 2022.

Note: Peer review has been performed on the plan set revised April 11, 2022. The Applicant submitted another plan set revised May 5, 2022. Staff comments are related to this plan set revised May 5, 2022.

ATTACHMENTS:

- A. Peer Review Comment Letter #2 (second round of review), prepared by Fuss & O'Neill, dated and received April 22, 2022.
- B. Applicant Response to Peer Review Comment Letter #2, prepared by Maynard & Paquette Engineering Associates, received April 26, 2022.
- C. Email correspondence between Maynard & Paquette Engineering Associates, and Northeast Engineering, PLLC, dated March 2022 and Revised April 19, 2022.
- D. Stormwater Management Report, prepared for Barclay Medical Office Building, prepared by Northeast Engineering, PLLC & Maynard & Paquette Engineering Associates, LLC, last revised April 19, 2022. (e-packet only)

APPLICATION TRACKING:

- May 28, 2020 – The Zoning Board of Adjustment granted the Applicant a variance with stipulations to permit the proposed medical doctor's office.
- March 17, 2022 – Application received.
- April 13, 2022 – Public hearing held.
- May 18, 2022 – Public hearing scheduled.

COMMENTS & RECOMMENDATIONS:

WAIVERS GRANTED

On April 13, 2022 the Planning Board granted the following waivers:

- § 276-11.1.B.(12)(c), to reduce the residential buffer from 100' to 55'
- § 275-8.C.(4), to reduce the parking space dimensions from 10' x 20' to 9' x 18'
- § 276-11.1.B.(15), which requires the plan to show all buildings within 50-feet of the tract
- § 275-8.C.(6), which requires an off-street loading space

PEER REVIEW AND APPLICANT'S RESPONSE

The Peer Reviewer, Fuss & O'Neil, provided comments from a second round of review on April 22, 2022 (**Attachment A**) and the Applicant submitted a response on April 26, 2022

(**Attachment B**) and email correspondence with the stormwater designer (**Attachment C**). Staff reviewed both documents and identified the following remaining issues:

- **Drainage Design/Stormwater Management (F&O #6):**

The Applicant is proposing to use the existing well within the wetland buffer for the proposed medical office, which will require a new water connection. While the Applicant argues that § 290 is not applicable to such a water connection in **Attachment B & Attachment C**, the Peer Reviewer notes that:

“The applicant is proposing improvements within the wetlands buffer which is a Critical Area per the Regulation and will discharge stormwater to a wetlands area. Therefore the minimum post-construction stormwater management standards detailed in Section 290-5.A are required to be met.”

The Applicant has not responded to this item or requests made by Staff.

- **ADA Parking (F&O #1.g):** While the issue with the ADA parking space dimension was resolved in the revised plan, Peer Reviewer expressed concern about the two leaching catch basins, located near where drivers who park on the ADA space would exit their vehicles, being a hazard for drivers who use a cane or walker, especially given that the proposed use being a chiropractor office.
- **Driveway Review (F&O #3):** Staff acknowledges that, with River Road being a State road, NHDOT has jurisdiction over the driveway entrance. The Applicant has made known to Staff that NHDOT requested the stop sign offset from the stop bar.
- **Septic System and Well Design (F&O #5):** Staff acknowledges that NHJDES has jurisdiction over the septic system and well design.
- **Erosion Control (F&O #6.k/p & 8.a):** The Peer Reviewer expressed concern about the lack of erosion control information on the plan. In the latest plan set, the Applicant calls

for a silt fence to be installed along the wetland buffer, which is indicated via a label on the plan (near the southern lot line) and note #18.

- **Screening (F&O #9.b):** The Applicant, via note #23, indicates the approximate tree clearing limits will be the building setback line. The Peer Reviewer recommended that the Applicant show the actual limits of clearing on the plan set.
- **Lighting (F&O #9.c):** The Peer Reviewer recommends the Applicant provide a photometric plan showing the light will not encroach on the abutting property, especially with a proposed light pole less than 15 feet from the abutting lot. The Applicant responded that lighting levels are not great enough and all lights will be hooded and down as already noted on note #14.

ADDITIONAL COMMENTS

1. Sheet 2 (Existing Conditions) is showing a well location labeled “Proposed well for medical office”. Staff believes it is an error and should be removed.
2. The abutter information on the upper left corner for Map 246 Lot 2 is correct. However, the lot label (on the plan) for Map 246 Lot 2 is mislabeled as Map 251 Lot 2.
3. The Applicant previously withdrew a waiver request for reduced parking width aisle since their April 11, 2022 plan set appeared to provide the requisite width. However in the most recent plan set the width has been reduced to avoid wetland buffer impacts. Further, while the April 11th set showed a 24-foot aisle width for almost all spaces, the northern most space of the grouping of 5 spaces does not have a 24-foot aisle. A waiver from §275-8.C.(5)(a) would be required for the current plan set to be approved.

DRAFT MOTIONS

ACCEPT the site plan application:

I move to accept the site plan application for the Barclay Medical Office Building at 2 Stonemill Drive; Map 246 Lot 001-000.

Motion by: _____ Second: _____ Carried/Failed: _____

To GRANT a waiver:

I move to grant a waiver from § 275-8.C.(5)(a), to allow the parking aisle width for perpendicular parking spaces to be less than 24-feet, based on the Board’s discussion, the testimony of the Applicant’s representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

CONTINUE the public hearing to a date certain:

I move to continue the site plan application for the Barclay Medical Office Building at 2 Stonemill Drive; Map 246 Lot 001-000, to date certain, _____, 2022.

Motion by: _____ Second: _____ Carried/Failed: _____



MEMORANDUM

TO: File

FROM: Steven W. Reichert, PE

DATE: April 22, 2022

RE: Town of Hudson Planning Board Review
Barclay Medical Office Site Plan, 2 Stonemill Drive
Tax Map 246, Lot 1; Acct. #1350-994
Fuss & O'Neill Reference No. 20030249.2160

The following list itemizes the second set of documents reviewed related to the Barclay Medical Office Site Plan, located at 2 Stonemill Drive in Hudson, New Hampshire.

- Email correspondence between the Town of Hudson and Fuss & O'Neill, dated between April 5 and April 11, 2022.
- Email from Maynard & Paquette Engineering Associates, LLC, received by Fuss & O'Neill on April 19, 2022, including the following:
 1. Copy of *Stormwater Management Report*, prepared by Northeast Engineering, PLLC, dated March 2022 and Revised April 19, 2022.
 2. Copies of Emails between Maynard & Paquette and Northeast Engineering, various dates.
- Email from Town of Hudson, received by Fuss & O'Neill on April 11, 2022, including the following:
 3. Copy of *Waiver Request Forms*, not dated.
 4. Copy of Site Plan Documents for *Barclay Medical Office Building*, prepared by Maynard & Paquette Engineering Associates, LLC, dated December 29, 2021, revised April 11, 2022, unless otherwise noted, including the following:
 - a. *Site Plan*, Dwg. No. 1 of 4.
 - b. *Existing Conditions Plan*, Dwg. No. 2 of 4.
 - c. *Grading Plan*, Dwg. No. 3 of 4.
 - d. *Site Plan*, Dwg. No. 4 of 4, revised April 5, 2022.
- Email from Town of Hudson, received by Fuss & O'Neill on April 7, 2022, including the following:
 1. Copy of Site Plan Documents for *Barclay Medical Office Building*, prepared by Maynard & Paquette Engineering Associates, LLC, dated December 29, 2021, revised April 5, 2022, including the following:
 - a. *Site Plan*, Dwg. No. 1 of 4.
 - b. *Existing Conditions Plan*, Dwg. No. 2 of 4.
 - c. *Grading Plan*, Dwg. No. 3 of 4.
 - d. *Site Plan*, Dwg. No. 4 of 4.



Memo to File

Fuss & O'Neill Reference No. 20030249.2160

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- Email from Town of Hudson, received by Fuss & O'Neill on April 5, 2022, including the following:
 1. Copy of a letter from Maynard & Paquette Engineering Associates, LLC, to the Town of Hudson, dated April 4, 2022.

SWR:elc

cc: Brian Groth – Town of Hudson
Town of Hudson Engineering Division – File



April 22, 2022

Mr. Brian Groth
Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
Barclay Medical Office Site Plan, 2 Stonemill Drive
Tax Map 246 Lot 1; Acct. #1350-994
Reference No. 20030249.2160

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the second submission of the materials received between April 5 and April 11, 2022, related to the above-referenced project. Authorization to proceed was received on April 8, 2022. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

The project consists of the development of a medical office on an undeveloped portion of a previously developed residential site. Proposed improvements to the site also include the construction of a driveway, parking areas, drainage improvements, and other associated site improvements. The proposed building will be serviced by a private well and subsurface disposal system.

The following items have outstanding issues:

1. Site Plan Review Codes (HR 275)

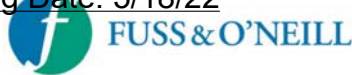
- c. *Former Fuss & O'Neill Comment: HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set. The applicant has proposed ten spaces which exceeds the four parking spaces that are required for the medical office based on its size.*

Current Fuss & O'Neill Comment: The applicant as revised the plan to now include 11 parking spaces. We note that this exceeds the number of spaces (10) stipulated by the Zoning Board of Adjustment for the site.

- e. *Former Fuss & O'Neill Comment: HR 275-8.C.(5). The applicant should review the need for a waiver for minimum parking aisle width on site. The Regulation requires 24 feet for perpendicular parking and the applicant has provided as little as 18 feet in some locations.*

Current Fuss & O'Neill Comment: The applicant has revised the plan to make the aisle width more consistently 24 feet. We note that a vehicle in the handicap parking space and the perpendicular space right behind it may have trouble due to the limited maneuvering room and awkward layout. The handicap driver would have to back out and then turn 180 degrees to get out of the lot in a relatively small space or back up all the way past the

50 Commercial Street
Manchester, NH
03101
t 603.668.8223
800.286.2469
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Vermont



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driveway to turn around. The perpendicular space behind the handicap space does not have a 24-foot drive aisle behind it to make it more difficult for the driver to safely back up.

- g. *Former Fuss & O'Neill Comment: HR 275-9.C.(11). The applicant has proposed one handicap parking space for the site which meets the minimum required. We note that this space does not have any signage shown on the plan as required and details for handicap parking signage and striping were not provided. We also note that the two leaching catch basins are located within this space and one is directly where the driver would exit their vehicle. This may become a hazard for drivers that use a cane or walker. We recommend the applicant relocate the handicap parking space to another one of the spaces in front of the building.*

Current Fuss & O'Neill Comment: The applicant has relocated the handicap parking space on the plan set and added a sign location. We continue to recommend that details for the sign and striping be provided on the plan. The applicant should review the need for the handicap space to be considered van accessible to meet the ADA requirements.

- h. *Former Fuss & O'Neill Comment: HR 275-9.C.(11). The applicant has not provided any spot grades on the plan to show that the sidewalk area adjacent to the handicap parking space in front of the building will be handicap accessible. No curb ramps or detectable pavers are shown at this sidewalk area. Also, the plans only show a step up to the porch. There is no handicapped accessible ramp detailed.*

Current Fuss & O'Neill Comment: The applicant has noted on the Grading Plan that the walk and porch are to slope up to the building and that no step is proposed. The applicant has also provided a spot grade for the handicap parking space and walkway. The area labelled 'porch' does not have any spot grades shown so we are unable to verify if the proposed grading meets ADA requirements. Also, we note that what appears to be a step is still shown on the Site Plan.

- j. **New Fuss & O'Neill Comment:** With the walk area grading being noted as flat and with no curbs at the parking lot, the applicant should review the need for wheel stops on the adjacent parking spaces.

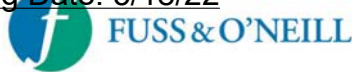
2. Administrative Review Codes (HR 276)

- a. *Former Fuss & O'Neill Comment: HR 276-7.C. The applicant should add a list of waivers to the site plan. We note that some of the waiver item numbers on the waiver request forms provided were illegible or did not match any known Regulation.*

Current Fuss & O'Neill Comment: The applicant has stated that approved waivers will be noted on the site plan. We note that none were noted on the plan set received for review and the applicant has not provided legible waivers to replace those that we were unable to discern in the last review.

- e. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(16). The applicant has not provided all driveways or roadways within 200 feet of the tract. We note that Stonemill Drive is barely shown on the plan set along with the abutter's driveway to the west.*

Current Fuss & O'Neill Comment: The applicant should review the need for a waiver from this Regulation.



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3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)

- a. *Former Fuss & O'Neill Comment:* HR 193.10.E. The applicant has not provided any sight distances for the proposed driveway location on the plan set.

Current Fuss & O'Neill Comment: The applicant has noted that the State approved the driveway permit. The applicant should review the need for a waiver from showing the sight distance on the plan set as this is required by the Town Regulation.

- c. **Former/Current Fuss & O'Neill Comment:** The applicant has noted on the plan set that a NHDOT Driveway Permit was approved, and a copy of the permit was provided. We note that the Permit states that a driveway was approved based on a plan dated April 19, 2021. This plan was not provided as part of the plans received for review (current plan set is dated December 29, 2021), therefore it is unknown if the driveway proposed matches the permit provided.

- d. *Former Fuss & O'Neill Comment:* The applicant has not provided any details for the striping or stop sign proposed for the driveway.

Current Fuss & O'Neill Comment: The applicant has noted in their response letter that this comment is 'Not Correct'. We continue to note that those details are not provided in the plans.

- e. *Former Fuss & O'Neill Comment:* The applicant should review the need to locate the stop sign in line with the proposed stop bar.

Current Fuss & O'Neill Comment: The applicant has noted this comment as being irrelevant. When used in conjunction with a stop sign, a stop bar should be located in line with that stop sign unless there is the potential to obscure sight distance. Sight distance lines were not provided by the applicant for the proposed driveway.

5. Utility Design/Conflicts

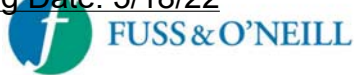
- b. **Former/Current Fuss & O'Neill Comment:** HR 276-13.G. The applicant has noted that a NHDES Septic approval has been granted but we note that no information about that system other than septic tank and leach field locations is shown on the plans. Test pit information and design details are not included in the plans.

- c. *Former Fuss & O'Neill Comment:* HR 276-13.H. The applicant should show the protective well radii on the plan set for both the existing and proposed well locations. We note that per NHDES We 602.09.(a)(2) wells should be located 50 feet from any surface water. We note that the applicant has proposed the new well approximately 35 feet from the edge of Eayrs Pond.

Current Fuss & O'Neill Comment: The applicant has revised the plan and noted that the existing well will now be used to service the existing home and the proposed medical office. No information was provided about the existing well to verify that it's capacity and condition will be adequate for both uses.

- d. *Former Fuss & O'Neill Comment:* HR 276-13.H. The applicant should show the location of the subsurface disposal system for the existing residential home within the site to be sure it is not within the proposed well radius. Also, the existing well for the adjacent residence on River Road is not shown on the plans. This needs to be shown to ensure the proposed septic system is not within the well radius of that well.

Current Fuss & O'Neill Comment: The applicant has added the existing Stonemill Drive home's septic system location to the plans. We note that the existing well is located



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within 75 feet of the septic tank for the existing home. Well radii can be reduced to 50 feet if the tank and piping meets certain requirements of NHDES (see Env-We 602.07.(c)). The applicant should confirm if the existing septic tank meets these requirements. If unable to, the applicant should consider testing of the well to monitor for bacteria or e-coli contamination. Further, the applicant has still not shown the location of the existing well on abutting River Road lot 251/2, so it is still unknown if elements of the proposed septic system are within that lot's well radius.

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- b. *Former Fuss & O'Neill Comment: HR 290-9.A.3. & 290-7.B.16. The applicant should provide test pit information and locations upon the plan set.*

Current Fuss & O'Neill Comment: The applicant stated that the Test Pit information is on the Septic Plan. We note that a copy of this plan was not received for review.

- d. **Former/Current Fuss & O'Neill Comment:** HR 290-5.A.1. & 290.A.3. The applicant should provide language in the Drainage Analysis Report, stating if and how low impact development (LID) strategies for stormwater runoff were evaluated for this project.

- e. *Former Fuss & O'Neill Comment: HR 290-5.A.4. The applicant should provide GRV calculations.*

Current Fuss & O'Neill Comment: The applicant has noted that this is not an AoT application so this Regulation is not applicable. The applicant is proposing improvements within the wetlands buffer which is a Critical Area per the Regulation and will discharge stormwater to a wetlands area. Therefore the minimum post-construction stormwater management standards detailed in Section 290-5.A are required to be met.

- g. *Former Fuss & O'Neill Comment: HR 290-5.A.9. & 290.5.A.11. The applicant should provide the BMP calculation sheets accounting for ESHWT.*

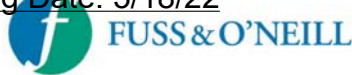
Current Fuss & O'Neill Comment: The applicant has noted that this is not an AoT application so this Regulation is not applicable. The applicant is proposing improvements within the wetlands buffer which is a Critical Area per the Regulation and will discharge stormwater to a wetlands area. Therefore the minimum post-construction stormwater management standards detailed in Section 290-5.A are required to be met.

- h. *Former Fuss & O'Neill Comment: HR 290-5.A.9. & 290.5.A.11. The HydroCAD for the proposed detention basin node does not properly represent the proposed design. The primary outlet is not modeled within the node. There is storage below the lowest outlet, utilizing volume that will be technically occupied by water at all times, since infiltration is not accounted for. The applicant should revise the basin design, setting a starting elevation of the basin or accounting for infiltration. We note the comment above requiring test pits, BMP Worksheets, and accounting for ESHWT.*

Current Fuss & O'Neill Comment: The applicant has noted that this is not an AoT application so this Regulation is not applicable. The applicant is proposing improvements within the wetlands buffer which is a Critical Area per the Regulation and will discharge stormwater to a wetlands area. Therefore the minimum post-construction stormwater management standards detailed in Section 290-5.A are required to be met.

- i. *Former Fuss & O'Neill Comment: HR 290-5.A.9. & 290.5.A.11. The applicant should provide design information for the catch basins, including but not limited to the following:*

1. *Former Fuss & O'Neill Comment: Rim elevations and structure overall height.*



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Current Fuss & O'Neill Comment: A spot grade has been added near one of the catch basins. The applicant should confirm that this elevation is proposed to be the same rim elevation at both catch basins.

2. *Former Fuss & O'Neill Comment:* The HydroCAD calls for a 12' diameter x 6' tall vertical cylinder of stone set at 120.00'. The plan details call for a 5' structure with 3' of stone (11' overall). The applicant should coordinate the plans and the HydroCAD dimensions to match.

Current Fuss & O'Neill Comment: The applicant has noted that the plan detail is over designed. The concrete walls of the catch basin structures do not provide storage capacity. The plans and HydroCAD dimensions should be coordinated to match.

3. **Former/Current Fuss & O'Neill Comment:** The plan details illustrate the CB sump is a regular structure bottom, while the top riser sections are perforated. The applicant should note this for the contractor to install the correct design.
4. *Former Fuss & O'Neill Comment:* The applicant should state on the plan if this 120.0' is the bottom of the basin sump or the bottom of the stone and clarify if this elevation accounts for the pre-treatment volume of the sump.

Current Fuss & O'Neill Comment: The applicant has noted that the rim elevation for the leaching catch basins is 120.0 and 114.33 is the bottom of the sump in response documents with the Stormwater Management Report, but the rim elevation noted on the plans is 126.0. The applicant should clarify and coordinate the plans and report.

- j. **Former/Current Fuss & O'Neill Comment:** HR 290-5.A.12, 290-7.A.9. & 290.9. The applicant should provide an I&M manual.
- k. *Former Fuss & O'Neill Comment:* HR 290-6.A. through 290-6.A.13. The applicant should review the entire section and provide the required erosion control material for the site plan submittal.

Current Fuss & O'Neill Comment: The applicant has not provided any erosion control information on the plan set or satisfied this section of the Regulations.

- l. *Former Fuss & O'Neill Comment:* HR 290-7.A.6. The applicant should provide information as to how the stormwater system is designed to account for frozen ground conditions.

Current Fuss & O'Neill Comment: The applicant has noted this comment as being irrelevant. As this is a requirement of the Regulation the applicant should either provide this information or request a waiver from the Regulation.

- n. *Former Fuss & O'Neill Comment:* HR 290-7.B.16. The applicant should provide snow storage areas upon the plan set.

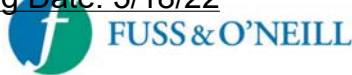
Current Fuss & O'Neill Comment: The applicant has noted that there are plenty of potential snow storage areas in their comment response letter. None of these areas are designated on the plans.

- p. **Former/Current Fuss & O'Neill Comment:** HR 290-6. The applicant should provide the required erosion control details and notes.

7. Zoning (ZO 334)

- a. *Former Fuss & O'Neill Comment:* ZO 334-14.A. The applicant has not provided the proposed building height on the plan set.

Current Fuss & O'Neill Comment: The applicant has noted in their comment response that this is not a site plan issue. Site Plan Regulation section 275-6.P notes compliance with



Mr. Brian Groth
 April 22, 2022
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the provisions of the Zoning Ordinance as a general requirement.

8. Erosion Control/Wetland Impacts

- a. *Former Fuss & O'Neill Comment: HR 290-5.A.10. The applicant should show proposed erosion controls upon the design plans with appropriate details for installation.*

Current Fuss & O'Neill Comment: The applicant has stated "Comment Noted" in their response letter, but have not shown any erosion controls on the plans. This site is located adjacent to a wetlands and some controls will need to be installed within the wetlands buffer, therefore this information is critical to ensure appropriate controls are installed by the contractor to protect that resource, and also to allow the Planning Board to approve their installation within the protected buffer zone.

9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))

- b. *Former Fuss & O'Neill Comment: HR 275-8.C.(8). The applicant has not shown any screening between the site and the neighboring residential lot to the northeast. We note that the existing lot appears to be mostly wooded but the applicant has not shown limits of clearing on the plan to assess the remaining vegetation for screening purposes.*

Current Fuss & O'Neill Comment: The applicant has noted that this comment is irrelevant in their response letter. The applicant has added note #23 to plan sheet #1 which states that approximate tree clearing limits will be the building set back line. We note however that the parking lot is partially outside of this area as are the fence, lighting, and other site elements. We recommend that the applicant show the actual limits of clearing on the plan set.

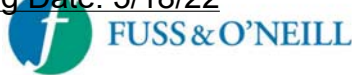
- c. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(14). The applicant has noted that no lighting is proposed on the plan set. The applicant should add the required note stating, "There will be no exterior lighting." We do note that no exterior lighting will make the site quite dark during some winter month hours for patients accessing the office.*

Current Fuss & O'Neill Comment: The applicant has added light pole locations on the plans set and provided a detail. We note that the light poles are located less than 15 feet from the abutting residential lot. The applicant should review the need to provide photometric plans showing that the light will not encroach on the abutting property. The applicant should also provide hours of operation for the proposed lighting. We also note that no building mounted lights are proposed.

11. Other

- c. *Former Fuss & O'Neill Comment: The applicant should provide a detail for the walkway area in front of the porch. It is unclear if that area is to be paved or a sidewalk proposed.*

Current Fuss & O'Neill Comment: The applicant has noted that it will be level paving. We note that with the spot grades provided there may be flat spots across the two eastern parking spaces resulting in potential puddling/icing conditions where people may be walking.



Mr. Brian Groth

April 22, 2022

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The following items require Town evaluation or input:

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- a. *Former Fuss & O'Neill Comment: HR 275-9.A.1. The applicant is proposing a slight increase in the 10-year storm event. The applicant should provide information showing how this increase will not negatively affect downstream drainage systems.*

Current Fuss & O'Neill Comment: The applicant has revised the Stormwater Management Report and the propose drainage system is showing slight calculated increases in the 2, 10, 25 and 100 year storm events. The applicant should review with the Town to determine if a waiver from the Regulation is required for these slight increases.

The following items are resolved or have no further Fuss & O'Neill input:

1. Site Plan Review Codes (HR 275)

- a. *Former Fuss & O'Neill Comment: Hudson Regulation (HR) 275-6.C. The applicant has not proposed to add any sidewalks along River Road as part of this project. We note that there are no existing sidewalks in this area of River Road.*
- b. *Former Fuss & O'Neill Comment: HR 275-6.I. The scope of this review does not include the adequacy of any fire protection provisions for the proposed building.*
- d. *Former Fuss & O'Neill Comment: HR 275-8.C.(4). The applicant has requested a waiver to allow for parking space sizes to be reduced to nine feet by 20 feet for the site.*

Current Fuss & O'Neill Comment: A wavier was granted on April 13, 2022.

- f. *Former Fuss & O'Neill Comment: HR 275-8.C.(6). The applicant has not provided any off-street loading spaces on the plan set. The applicant should review the need for a waiver from this requirement.*

Current Fuss & O'Neill Comment: The applicant has submitted a waiver application. The waiver was granted on April 13, 2022. No further Fuss & O'Neill comment.

- i. *Former Fuss & O'Neill Comment: HR 275-9.F. The applicant did not provide copies of any easements or deeds as part of the package received for review. No existing or proposed easements are shown on the plans.*

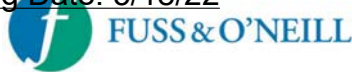
Current Fuss & O'Neill Comment: The applicant has confirmed that there are no easements on the site. No further Fuss & O'Neill comment.

2. Administrative Review Codes (HR 276)

- b. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(12).(c). The applicant should review the need for a waiver from the 100-foot distance between a residential use and a commercial use. We note that this site does not appear to meet this requirement.*

Current Fuss & O'Neill Comment: A waiver for this requirement was granted on April 13, 2022. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(13). The applicant has not included details for any proposed site signage. The applicant has included the note requiring signs to be approved prior to installation.*



Mr. Brian Groth

April 22, 2022

Page 8 of 11

Current Fuss & O'Neill Comment: The applicant has added a three-foot by six-foot business sign to the plan set but did not include any sign details. The sign shall be subject to a sign permit from the Town. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(15). The applicant has not shown all buildings within 50 feet of the tract. We note there is another adjacent residential building to the west that is not shown but appears to be within 50 feet of the lot.*

Current Fuss & O'Neill Comment: The waiver was granted on April 13, 2022.

- f. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(17). The applicant has not provided any benchmarks on the plan set.*

Current Fuss & O'Neill Comment: The applicant has added a benchmark to the plan set. No further Fuss & O'Neill comment.

- g. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(22). The applicant has requested a waiver to reduce the green spaces at the front of the lot to 35 feet. We note that based on the 50-foot building setback only 35 feet is necessary therefore a waiver is not needed.*

- h. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.*

3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)

- b. *Former Fuss & O'Neill Comment: The driveway layout at the entrance and overall parking lot configuration doesn't appear to allow for larger trucks to access the site. The applicant should confirm that these are not anticipated and review the need for signage to prevent such trucks from attempting to access the site. The applicant should provide information as to the types of delivery trucks that are expected to access the site.*

Current Fuss & O'Neill Comment: The applicant has noted that this comment is not relevant, and that the driveway is State Highway approved. We assume this response to mean that larger trucks are not anticipated for the site and therefore the comment is not relevant. If the applicant means otherwise then additional information related to anticipated truck access should be provided. No further Fuss & O'Neill comment.

4. Traffic

- a. *Former Fuss & O'Neill Comment: HR 275-9.B. The applicant has not provided any traffic information for review.*

5. Utility Design/Conflicts

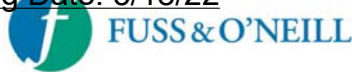
- a. *Former Fuss & O'Neill Comment: HR 276-13.A. The applicant has not shown any connections to electric, telephone or communications lines on the plan set.*

Current Fuss & O'Neill Comment: The applicant has added the underground utility locations on the plan set. No further Fuss & O'Neill comment.

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- c. *Former Fuss & O'Neill Comment: HR 290-5. The applicant should provide the total disturbed area, scaling is approximated at 20,000±sf.*

Current Fuss & O'Neill Comment: The applicant has provided the disturbed area for the



Mr. Brian Groth
 April 22, 2022
 Page 9 of 11

current plan improvements and it's less than 20,000 square feet. No further Fuss & O'Neill comment.

- f. *Former Fuss & O'Neill Comment: HR 290-5.A.5. The applicant should provide the 10-year pre- and post-development stormwater HydroCAD, currently the 5-year is provided.*

Current Fuss & O'Neill Comment: The applicant stated that the calculations provided are sufficient, and then subsequently provided 10 year pre- and post-development calculations in the current Stormwater Report. See comment 6.a regarding storm event conclusions. No further Fuss & O'Neill comment.

- i.5. *Former Fuss & O'Neill Comment: We note the HydroCAD does not utilize the volume of the catch basin within the stone, which would increase volume of the structure.*

Current Fuss & O'Neill Comment: The applicant has noted that the design is meant to be conservative. No further Fuss & O'Neill comment.

- m. *Former Fuss & O'Neill Comment: HR 290-7.A.8. The applicant should stamp the Stormwater Report with a valid NH PE Stamp.*

Current Fuss & O'Neill Comment: The applicant has provided a PE stamp on the revised Stormwater Report. No further Fuss & O'Neill comment.

- o. *Former Fuss & O'Neill Comment: HR 290-8.A.4. & 5. We note the requirement of the applicant to coordinate the need for a Bond or Escrow with the Town Engineer.*

- q. *Former Fuss & O'Neill Comment: HR 290-6. The applicant should provide a level spreader detail upon the plan set.*

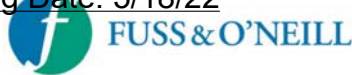
Current Fuss & O'Neill Comment: The applicant has added the level spreader detail on the plan set. No further Fuss & O'Neill comment.

- r. *Former Fuss & O'Neill Comment: The applicant will be required to comply with all provisions of the Town of Hudson's MS4 permit, including but not limited to annual reporting requirements, construction site stormwater runoff control, and record keeping requirements.*

- s. *Former Fuss & O'Neill Comment: Please note that this review was carried out in accordance with applicable regulations and standards in place in New Hampshire at this time. Note that conditions at the site, including average weather conditions, patterns and trends, and design storm characteristics, may change in the future. In addition, future changes in federal, state or local laws, rules or regulations, or in generally accepted scientific or industry information concerning environmental, atmospheric and geotechnical conditions and developments may affect the information and conclusions set forth in this review. In no way shall Fuss & O'Neill be liable for any of these changed conditions that may impact the review, regardless of the source of or reason for such changed conditions. Other than as described herein, no other investigation or analysis has been requested by the Client or performed by Fuss & O'Neill in preparing this review.*

7. Zoning (ZO 334)

- b. *Former Fuss & O'Neill Comment: ZO 334-17 & 334-21. The applicant has noted that the subject parcel is located within the Residential (R-2) zoning district. The proposed use was approved by the Zoning Board of Adjustment on May 28, 2020.*
- c. *Former Fuss & O'Neill Comment: ZO 334-33. The applicant has shown wetlands on the plan set; however, the only proposed disturbance to this area is the installation of a well within the wetland buffer.*



Mr. Brian Groth

April 22, 2022

Page 10 of 11

Current Fuss & O'Neill Comment: The applicant has revised the plan showing the existing well will be used and the proposed well was removed. We note that the only disturbance now would be the water well connection to the proposed building.

- d. *Former Fuss & O'Neill Comment: ZO 334-60. The applicant has not provided any details for any proposed signs on site. The applicant has noted that signs are subject to Planning Board approval prior to installation.*
- e. *Former Fuss & O'Neill Comment: ZO 334-83 and HR 218-4.E. The applicant has noted that the site is located within a designated flood hazard area Zone A. The applicant has shown the limits of Zone A and we note that only the proposed well is located within this area. No other construction is proposed within the flood hazard area.*

8. Erosion Control/Wetland Impacts

- b. *Former Fuss & O'Neill Comment: HR 290-5.A.10. Due to the close proximity of the onsite wetlands, and as to avoid unwanted wetland buffer impacts, the applicant should add a note stating that orange construction fence will be placed at all wetland buffers within 50-feet of proposed grading. This fence is recommended during build out and kept up until the site is complete.*
- c. *Former Fuss & O'Neill Comment: The Town of Hudson should reserve the right to require any additional erosion control measures as needed.*

9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))

- a. *Former Fuss & O'Neill Comment: HR 275-6.L. The applicant has not provided any landscaping on the site plan.*

10. State and Local Permits (HR 275-9.G.)

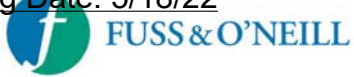
- a. *Former Fuss & O'Neill Comment: HR 275-9.G. The applicant has listed required permits and their status on the plan set.*
- b. *Former Fuss & O'Neill Comment: HR 275-9.G. The applicant provided a copy of the NHDOT Driveway Permit as part of the package received for review. We note that a copy of the NHDES Septic approval was not provided.*
- c. *Former Fuss & O'Neill Comment: Additional local and state permitting may be required.*

11. Other

- a. *Former Fuss & O'Neill Comment: The applicant has shown a one-inch bituminous sidewalk next to the cape cod berm in the detail but has not shown this sidewalk on the plan set. The applicant should coordinate the detail and plan set.*

Current Fuss & O'Neill Comment: The applicant has revised the detail on the plan set. No further Fuss & O'Neill comment.

- b. *Former Fuss & O'Neill Comment: ETGTD Section 565.1.1. The applicant is reminded of Town of Hudson requirements for the importing of off-site fill materials for use in constructing this project. It is recommended that these requirements be stated on the plans for the Contractors attention.*



Mr. Brian Groth
April 22, 2022
Page 11 of 11

Please feel free to call if you have any questions.

Very truly yours,

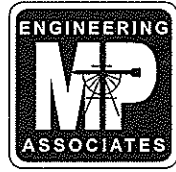
Steven W. Reichert, P.E.

Steven W. Reichert, PE
Digitally signed by Steven W. Reichert, PE
DN: cn=Steven W. Reichert, PE, c=US, o=Fuss & O'Neill, Inc., ou=Fuss & O'Neill, Inc., email=sreichert@fando.com
Date: 2022.04.22 13:51:35 -0400

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File
Maynard & Paquette Engineering Associates, LLC – mpeallc@aol.com



Maynard & Paquette
Engineering Associates, LLC
Consulting Engineers and Land Surveyors
31 Quincy Street, Nashua, NH 03060
Phone (603)883-8433 Fax (603)883-7227
mpeallic@aol.com

Brian Groth
Town Planner
12 School Street
Hudson, NH 03051

April 26, 2022

Re: Barclay Medical Office Building
2 Stonemill Drive
Map 246 / Lot 1

Dear Brian,

With regards to the Fuss & O'Neil comments dated April 22, 2022 we offer the following responses:

1. c, e, g and h – items resolved
2. a, e – items resolved
3. a, c, d, e - NHDOT permit issued/approved. Not planning board jurisdiction
5. b, c, d – Septic plan and wells, NHDES approved.
6. e,g – there are no improvements in the wetlands buffer
h thru p – items resolved.
7. irrelevant
8. item resolved
- 9 b. – irrelevant
c. – lighting levels not great enough. All lights will be hooded and down as already noted on
plan.
- 11 c.- incorrect

From page 7 of 11

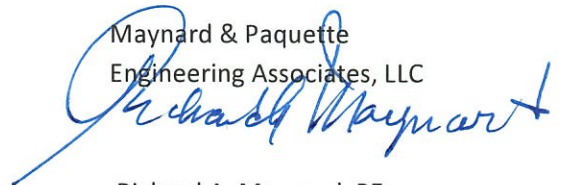
6 a. storm design comments insignificant

The next several comment pages 7 thru 11 including items 1 – 11 have all been resolved.

We trust that the above adequately addresses and resolves all relevant matters.

Very Truly Yours

Maynard & Paquette
Engineering Associates, LLC



Richard A. Maynard, PE



4/19/22, 9:10 AM

Re: Barclay medical office - Hudson

From: jdonison@northeasteng.com,

To: mpeallc@aol.com,

Subject: Re: Barclay medical office - Hudson

Date: Tue, Apr 19, 2022 8:48 am

Attachments: Barclay F&O Drainage review comments and responses from Northeast Engineering dated 4-19-22.pdf (85K), Stormwater Management Report REVISED April 19 2022 Barclay Medical Office Building Hudson NH.pdf (3324K)

good morning

see attached revised stormwater report and the responses to the F&O review comments

note the detention pond will need a note that the outlet will be a broad crested weir outlet at elev 127.1, width of 2.0 ft and length of ft feet

the overall results in the conclusions state:

CONCLUSIONS:

In conclusion, peak site runoff off-site to Point "A" for the 2, 10, 25 and 100 year stormwater frequency events will essentially remain unchanged for post versus pre development conditions. This is accomplished by a detention pond and proposed infiltration/leaching chambers which will capture the runoff from the developed driveway portion of the property (parking lot, section of grass, of River Road and contributing forest areas). Table 2 above presents the overflow outflows from the detention pond and the leaching chambers and Drainage Area no. 1 with total results at Point A which reflect insignificant calculated increases for the 2, 10, 25 and 100 year storm frequency events of 0.01 cfs, 0.02 cfs, 0.26 cfs and 0.1 cfs respectively.

James J. Donison, P.E.
Northeast Engineering, PLLC
95 Quaker Street
Weare, NH 03281

603-759-4065

jdonison@northeasteng.com

From: mpeallc@aol.com <mpeallc@aol.com>
Sent: Monday, April 18, 2022 9:23 AM
To: jdonison@northeasteng.com <jdonison@northeasteng.com>
Subject: Fwd: Barclay medical office - Hudson

JIM did you have chance to review F&O comments on LCB.s ,, etc

Richard / John

-----Original Message-----

From: mpeallc@aol.com
To: jdonison@northeasteng.com <jdonison@northeasteng.com>
Sent: Thu, Apr 14, 2022 11:45 am
Subject: Barclay medical office - Hudson

4/19/22, 9:10 AM

Re: Barclay medical office - Hudson

Memo:

To: Jim Donison

From: R. Maynard, PE

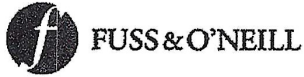
Subject: Barclay medical office bldg.. drainage design (J-12642)

1) Attached is page 4 of Fuss & O'neill (F&O) review . Please look at items "e" thru "k". Particular attention needs to be given to items "h" and "l" which raise questions on the drainage design

2) Drawings from the site plan set are attached indicating grading and drainage as well as the relevant details.

3) Please prepare a response for us to submit addressing F&O's drainage comments/concerns ASAP.

Thank you



Stormwater Report revised 4-19-22 and address below comments.
James J. Donison, P.E.

Mr. Brian Groth
March 31, 2022
Page 4 of 6

Pre-dev 10-year has been provided in 4-19-22 resubmittal

(g) This is not an AOT application, so BMP calculation sheets are not applicable - jjd

The detention pond has been revised with a broad crested weir outlet with outlet elev 127.1 to match det pond bottom. M&P will provide documentation on the test pits. BMP worksheets not applicable as this is not a AOT submittal

LCB's rim is 120.0', 5.0 ft ID. HydroCadd design matches the design plans

The LCB's bottom of 114.33 are the bottom of the sump with stone 18" below that

That is correct and is meant to be conservative

- HR 290-9.A.3. & 290-7.B.16. The applicant should provide test pit information and locations upon the plan set.
- HR 290-5. The applicant should provide the total disturbed area, scaling is approximated at 20,000±sf.
- HR 290-5.A.1. & 290.A.3. The applicant should provide language in the Drainage Analysis Report, stating if and how low impact development (LID) strategies for stormwater runoff were evaluated for this project.
- e. HR 290-5.A.4. The applicant should provide GRV calculations.
- f. HR 290-5.A.5. The applicant should provide the 10-year pre- and post-development stormwater HydroCAD, currently the 5-year is provided.
- g. HR 290-5.A.9. & 290.5.A.11. The applicant should provide the BMP calculation sheets accounting for ESHWT.
- HR 290-5.A.9. & 290.5.A.11. The HydroCAD for the proposed detention basin node does not properly represent the proposed design. The primary outlet is not modeled within the node. There is storage below the lowest outlet, utilizing volume that will be technically occupied by water at all times, since infiltration is not accounted for. The applicant should revise the basin design, setting a starting elevation of the basin or accounting for infiltration. We note the comment above requiring test pits, BMP Worksheets, and accounting for ESHWT.
- i. HR 290-5.A.9. & 290.5.A.11. The applicant should provide design information for the catch basins, including but not limited to the following:
 1. Rim elevations and structure overall height.
 2. The HydroCAD calls for a 12' diameter x 6' tall vertical cylinder of stone set at 120.00'. The plan details call for a 5' structure with 3' of stone (11' overall). The applicant should coordinate the plans and the HydroCAD dimensions to match.
 3. The plan details illustrate the CB sump is a regular structure bottom, while the top riser sections are perforated. The applicant should note this for the contractor to install the correct design.
 4. The applicant should state on the plan if this 120.0' is the bottom of the basin sump or the bottom of the stone, and clarify if this elevation accounts for the pre-treatment volume of the sump.
 5. We note the HydroCAD does not utilize the volume of the catch basin within the stone, which would increase volume of the structure.
- j. HR 290-5.A.12, 290-7.A.9. & 290.9. The applicant should provide an I&M manual.
- k. HR 290-6.A. through 290-6.A.13. The applicant should review the entire section and provide the required erosion control material for the site plan submittal.
- HR 290-7.A.6. The applicant should provide information as to how the stormwater system is designed to account for frozen ground conditions.
- HR 290-7.A.8. The applicant should stamp the Stormwater Report with a valid NH PE Stamp.
- HR 290-7.B.16. The applicant should provide snow storage areas upon the plan set.
- HR 290-8.A.4. & 5. We note the requirement of the applicant to coordinate the need for a Bond or Escrow with the Town Engineer.

This is not a AOT application so GRV not submitted

BMP calculation sheets

4/13/22
M&P
RE-REVISE
A&M

STORMWATER MANAGEMENT REPORT

Prepared for

**2 Stonemill Drive
Barclay Medical Office Building**

**Owner:
Warren R. Barclay
Hudson, NH**

March 2022

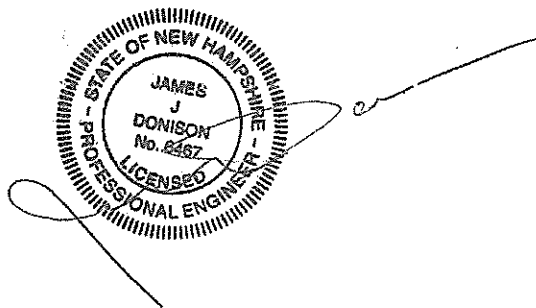
REVISED APRIL 19, 2022

PREPARED BY:

NORTHEAST ENGINEERING, PLLC
James J. Donison, P.E
95 QUAKER STREET
WEARE, NH 03281
603-759-4065

&

Maynard & Paquette Engineering Associates, LLC
31 Quincy Street
Nashua, NH 03060
Phone; 603-883-8433



Drainage Analysis

Purpose and Site Description:

The purpose of this drainage report is to present the pre-development and post development runoff results as part of the redevelopment of the property located at 2 Stonemill Drive, Hudson, NH.

The existing property which is lot 1/Tax Map 246 has an area of 1.43 acres and consists of an existing residential building with a driveway off of Stonemill Drive, a lawn area and the remaining portion of the lot consisting of a wooded area. The lot slopes in a western direction away from River Road towards a brook that traverses the property in a southern direction originating at Eayrs Pond .

The lot is being developed to add a medical office building with 10 parking spaces and a driveway off of River Road plus associated site improvements.

The attached Figures 1, 2, 3, 4, 5 and 6 in the Appendix indicate the subject lot location, topography plan, soils, an aerial photo of the lot and pre-development and post-development drainage areas.

Soils:

The attached Figure 4 includes a soils map from Hillsborough County SCS depicting the site soils. Soils include WdA and WdC - Windsor Loamy Sand. The Soils Map Unit Descriptions are attached in the Appendix. Soils are described as "Excessively Drained, rapid permeability – Hydrologic Group A". **Information provided by Maynard & Paquette Engineering Associates (M&P) indicates that the soils have a percolation/infiltration rate of 5 minutes per inch (12 inches per hour exfiltration rate). A rate of 6 inches per hour has been used in the stormwater calculations design reflecting a 50% design factor.**

Design Methodology:

The site has been designed to meet the Town of Hudson Stormwater Management requirements.

1. This stormwater management system shall be designed so that the twenty-five year twenty-four-hour post-development peak discharge rates does not exceed the twenty-five year twenty-four-hour predevelopment peak discharge rates. The drainage system shall be designed to accommodate a 25-yr storm frequency; as a result the inter-connected Catchbasin Infiltration Leaching Chambers and the

detention pond have been designed to ensure that post-development does not exceed pre-development flowrates.

2. In order to meet these state and town standards, controls must be developed for the two-year and the ten-year twenty-four-hour storm events. The twenty-five year twenty-four-hour storm event has been evaluated to demonstrate that there will not be increased flooding impacts off site.
3. In addition, the 50 year and the 100-year storm frequency storm event has also been evaluated to ensure that the drainage system can accommodate these extreme storm events.
4. Measurement of peak discharge rates for pre and post development conditions shall be calculated at down gradient point (known as Pt A) as indicated on Figures 5 and 6.

This drainage analysis was performed using HydroCad Version 10.0, which utilizes the TR-20 and TR-55 methodology. Calculations have been performed for 2, 10, 25, 50 and 100 year storm frequency events (AMC=2, using precipitation amounts based upon the NRCC (Northeast Regional Climate Center, located at Cornell University in Ithaca, New York) Storm: 2yr.=2.97", 10yr.=4.42", 25yr.=5.54, 50yr.=6.59 and 100yr.=7.84).

Under existing pre-development conditions, runoff from all areas with the exception of the proposed Medical Office parking lot under post-development conditions, flows via overland sheet flow to Point A as indicated on Figures 5 and 6. The drainage area include a contributing area from River Road and the adjacent wooded area.

Under post development conditions, a paved driveway and parking lot with curbing is proposed with all drainage from the contributing paved areas including River Road being directed to either a detention pond with a modeled 2-ft wide broad crested weir outlet to the south of the driveway or to two 5-ft inside diameter catchbasin leaching chambers at the end/downgradient portion of the driveway, with each surrounded by 3 ft of stone (40% voids).

Runoff Results:

The following Table 1 presents the Hydrocad results for pre-development conditions and post development conditions at Point "A" and the proposed leaching chambers and as shown on Drainage Area Plans – Figures 5 and 6.

Runoff Results:

The following Table 1 presents the individual drainage basin information for pre and post development conditions (area, CN factor and Time of Concentration).

Table 1

Sub-Basin	Area - Acre	CN	Tc minutes
PRE Development			
A1	1.577	41	26.0
POST Development		Avg 46	
Grass	0.300	39	
Roads and Roofs	0.242	98	
Woods	1.036	36	

The attached Figures 5 and 6 in the Appendix present the drainage sub-basins for pre and post development runoff along with the proposed site grading and drainage design.

Table 2 presents the summary of Hydrocad results for subareas S1 to Point "A" (pre development conditions) and to Point "A" and the Leaching Chambers for post development conditions and as shown on Drainage Area Plans. The Hydrocad results are attached in the Appendix for pre-development and post development conditions respectively.

The drainage analysis has been evaluated with runoff flowing to Point "A" which is the south-western corner downgradient point of the property. Results for the 2, 10, 25, and 100 year storm frequency events are presented in Table 2.

TABLE 2

Location	Stormwater Peak Runoff – CFS							
	2 Yr pre	2 Yr post	10 Yr pre	10 Yr post	25 Yr pre	25 Yr post	100 Yr pre	100 Yr post
Drainage Area 1		0.0		0.04		0.22		1.04
Leaching Chamber Inflow		0.24		0.37		0.46		0.65
Leaching Chamber Outflow		0.0		0.0		0.0		0.0
Infiltration Basin In Inflow		0.01		0.07		0.13		0.28
Infiltration Basin Outflow		0.01		0.05		0.11		0.24
Point "A"	0.00	0.01	0.03	0.05	0.20	0.26	1.04	1.15
Total Pre-Development	0.00		0.03		0.20		1.04	
Total Post - Development		0.01		0.05		0.26		1.14

CONCLUSIONS:

In conclusion, peak site runoff off-site to Point "A" for the 2, 10, 25 and 100 year stormwater frequency events will essentially remain unchanged for post versus pre development conditions. This is accomplished by a detention pond and proposed infiltration/leaching chambers which will capture the runoff from the developed driveway portion of the property (parking lot, section of grass, of River Road and contributing forest areas). Table 2 above presents the overflow outflows from the detention pond and the leaching chambers and Drainage Area no. 1 with total results at Point A which reflect insignificant calculated increases for the 2, 10, 25 and 100 year storm frequency events of 0.01 cfs, 0.02 cfs, 0.26 cfs and 0.1 cfs respectively.

Stormwater Treatment & Groundwater Recharge:

The proposed leaching chambers will provide treatment, infiltration and filtering of fine sediment.

Erosion Control Measures:

The following erosion control measures will be utilized during construction:

- Silt fence or Siltsoxx
- Prompt revegetation of disturbed areas (loam, seed & mulch) or landscaping.

END

APPENDIX (see attached)

Figure 1 – Location Plan

Figure 2 – Aerial photo of site

Figure 3 – Topographic Figure of site

Figure 4 – Soils plan

Figure 5 - Drainage Subbasin Drainage Areas Pre Development

Figure 6 – Drainage Subbasin Plan of Existing Post Development

Rainfall Amounts Table

Soils Descriptions

Pre Development Hydrocad Results

Post Development Hydrocad Results

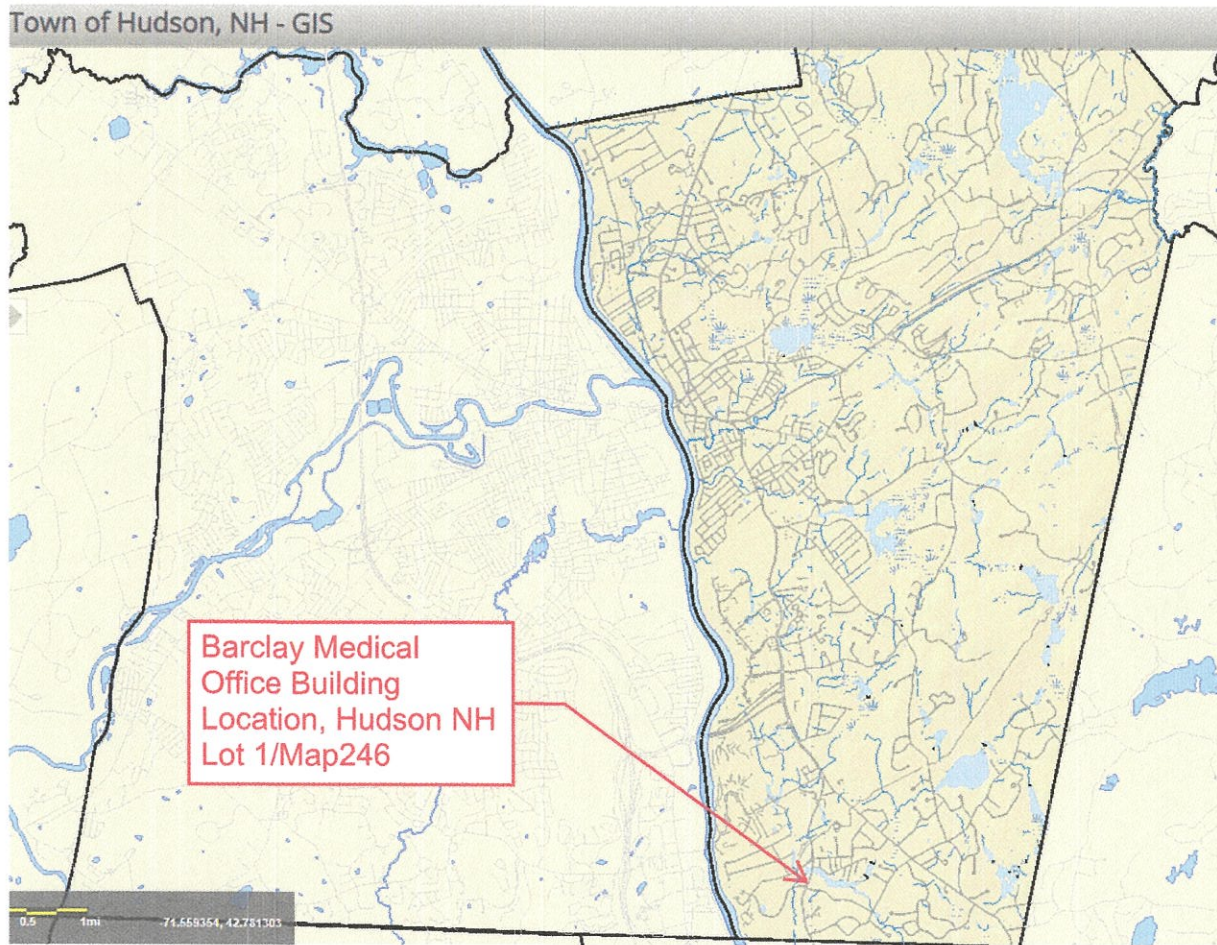


Figure 1 - Site Location - Proposed Barclay Medical Office Building



Figure 2 - Aerial Plan

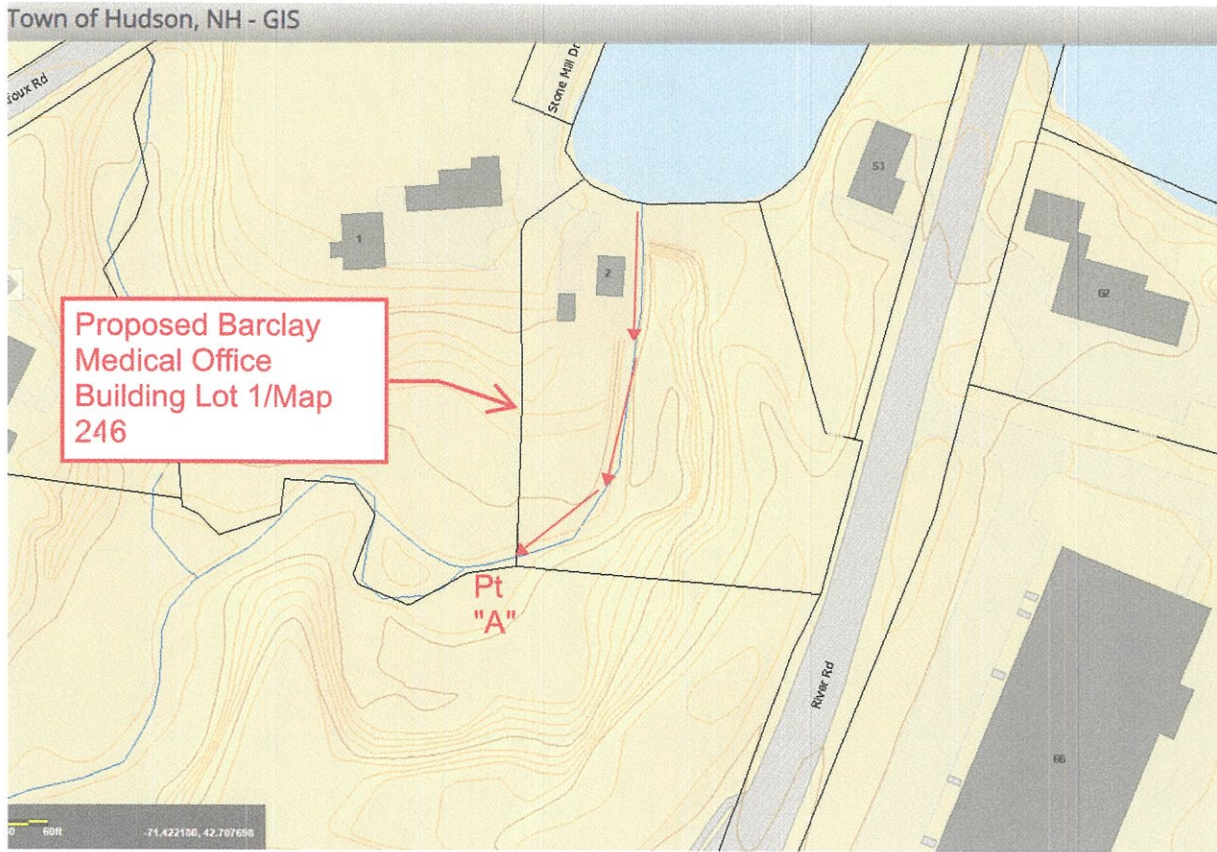
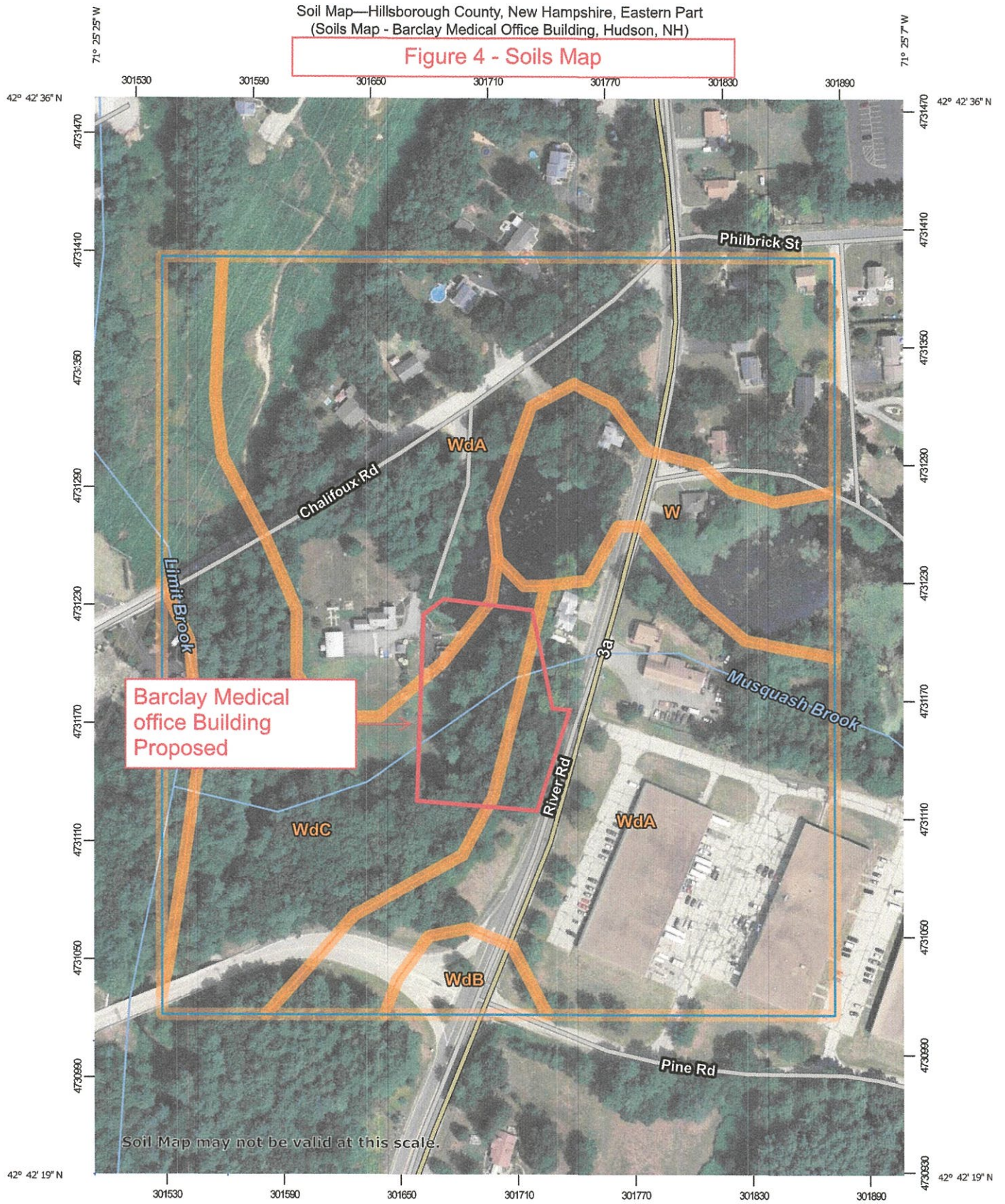


Figure 3 - Topography Plan

Soil Map—Hillsborough County, New Hampshire, Eastern Part
(Soils Map - Barclay Medical Office Building, Hudson, NH)

Figure 4 - Soils Map



Barclay Medical office Building Proposed

Soil Map may not be valid at this scale.

Map Scale: 1:2,670 if printed on A portrait (8.5" x 11") sheet.

0 35 70 140 210 Meters

0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Soil Map—Hillsborough County, New Hampshire, Eastern Part
(Soils Map - Barclay Medical Office Building, Hudson, NH)

MAP LEGEND

- Area of Interest (AOI)
 - Area of Interest (AOI)
- Soils
 - Soil Map Unit Polygons
 - Soil Map Unit Lines
 - Soil Map Unit Points
- Special Point Features
 - Blowout
 - Borrow Pit
 - Clay Spot
 - Closed Depression
 - Gravel Pit
 - Gravelly Spot
 - Landfill
 - Lava Flow
 - Marsh or swamp
 - Mine or Quarry
 - Miscellaneous Water
 - Perennial Water
 - Rock Outcrop
 - Saline Spot
 - Sandy Spot
 - Severely Eroded Spot
 - Sinkhole
 - Slide or Slip
 - Sodic Spot
- Water Features
 - Streams and Canals
- Transportation
 - Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background
 - Aerial Photography
- Other
 - Spoil Area
 - Stony Spot
 - Very Stony Spot
 - Wet Spot
 - Other
 - Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hillsborough County, New Hampshire, Eastern Part
Survey Area Data: Version 24, Aug 31, 2021

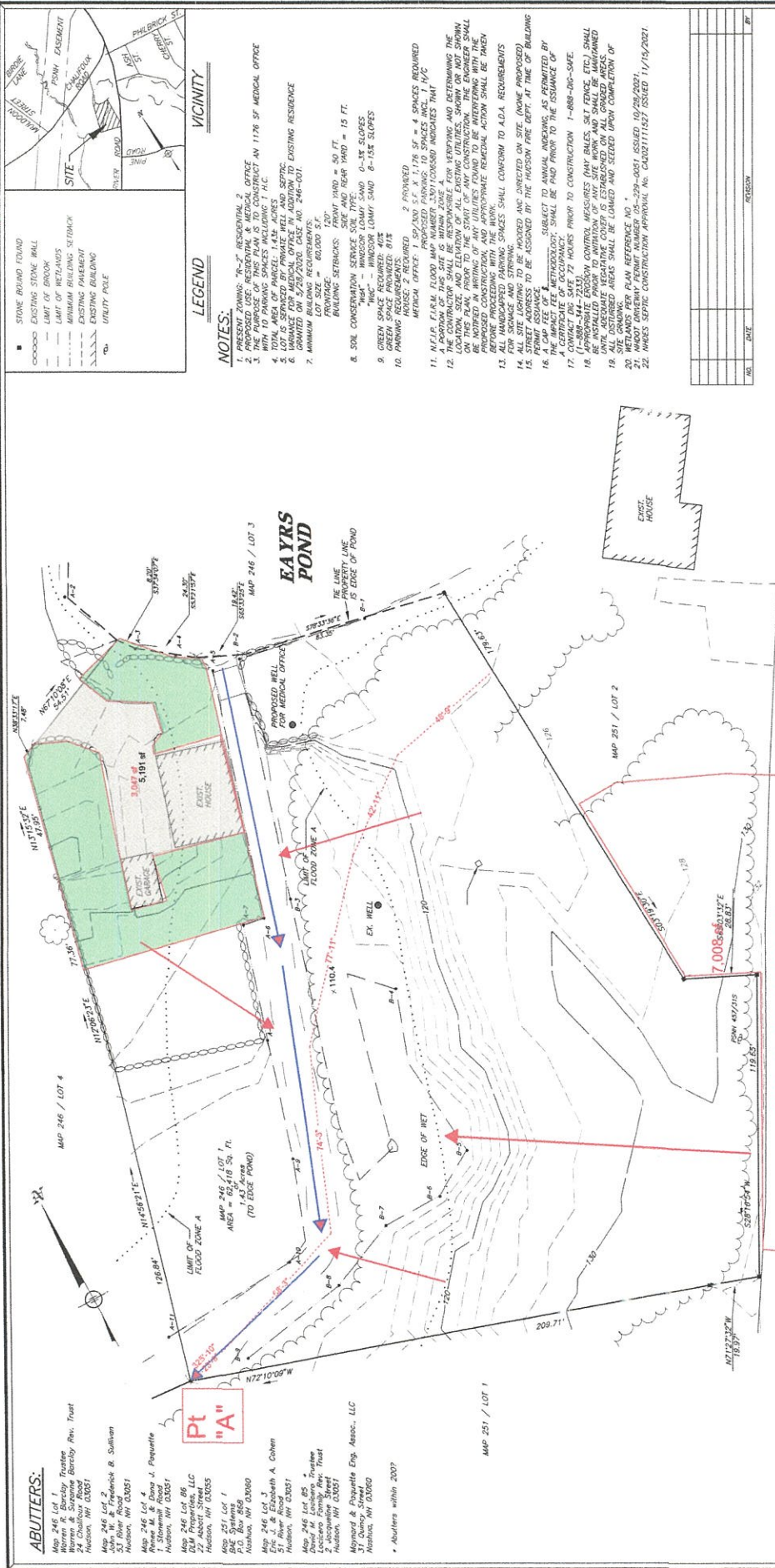
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Aug 6, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
W	Water (less than 40 acres)	3.1	9.5%
WdA	Windsor loamy sand, 0 to 3 percent slopes	21.5	65.3%
WdB	Windsor loamy sand, 3 to 8 percent slopes	0.6	1.9%
WdC	Windsor loamy sand, 8 to 15 percent slopes	7.7	23.3%
Totals for Area of Interest		32.9	100.0%



- ABUTTERS:**
- Map 246, Lot 1, Trustee
Warren & Suzanne Barclay Trust
P.O. Box 393
Hudson, NY 12534
 - Map 246, Lot 2
John W. & Elizabeth A. Cohen
51 River Road
Hudson, NY 12534
 - Map 246, Lot 3
Eric J. & Elizabeth A. Cohen
51 River Road
Hudson, NY 12534
 - Map 246, Lot 4
Warren & Suzanne Barclay Trust
P.O. Box 393
Hudson, NY 12534
 - Map 246, Lot 5
DLA Properties, LLC
27 Abbott Street
Hudson, NY 12534
 - Map 246, Lot 6
DLA Properties, LLC
27 Abbott Street
Hudson, NY 12534
 - Map 246, Lot 7
Map 246, Lot 8
Map 246, Lot 9
Map 246, Lot 10
Map 246, Lot 11
Map 246, Lot 12
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Map 246, Lot 97
Map 246, Lot 98
Map 246, Lot 99
Map 246, Lot 100

PLAN REFERENCE:

- LOT LINE RELOCATION PLAN MAP DATED AUGUST 22, 2001 BY MAYNARD & PAQUETTE ENG. ASSOC., LLC
FIELD BOOK AS PLAN NO. 31561.
- FLOOD ZONE MAPPING FOR MAP 246 / LOT 1 BY MAYNARD & PAQUETTE ENG. ASSOC., LLC

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
 DATE OF MEETING: _____ SIGNATURE DATE: _____

SITE PLANS AND MAPPING FOR MAP 246 / LOT 1 SHALL COMMENCE AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

WARREN & SUZANNE BARCLAY TRUST
 HARRIS R. BARCLAY, TRUSTEE

FIGURE 5 - PRE DEVELOPMENT DRAINAGE AREAS

I CERTIFY THAT THIS PLAN WAS PREPARED FROM BOUNDARY INFORMATION SHOWN ON PLAN REFERENCE 1 AND A FIELD SURVEY LAST MADE ON THE GROUND IN APRIL 2019 HAVING A MAXIMUM ERROR OF CLOSURE OF 1:10,000.

LEGEND

- STONE BOUND STONE WALL
- EXISTING DRAINAGE
- LIMIT OF BROOK
- BOUNDARY
- MINIMUM BUILDING SETBACK
- EXISTING PAVEMENT
- EXISTING BUILDING
- UTILITY POLE

NOTES:

- PROPOSED USE: RESIDENTIAL & MEDICAL OFFICE.
- THE PURPOSE OF THIS PLAN IS TO CONSTRUCT AN 1178 SF MEDICAL OFFICE.
- TOTAL AREA OF PARCELS 1 AND 2 IS 8.45 ACRES.
- LOT 1 IS SEPARATED BY PRIVATE WELL AND SEPTIC.
- PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN.
- MINIMUM BUILDING REQUIREMENTS: 60000 SQ. FT. FLOORAGE.
- MINIMUM BUILDING REQUIREMENTS: FRONT YARD = 50 FT., REAR YARD = 15 FT. SIDE YARD = 10 FT. MINOR DRIVEWAY = 10 FT. MINOR DRIVEWAY = 10 FT. MINOR DRIVEWAY = 10 FT.
- CONSERVATION SERVICE SOIL TYPE: H₂ & H₃ & H₄ & H₅ & H₆ & H₇ & H₈ & H₉ & H₁₀ & H₁₁ & H₁₂ & H₁₃ & H₁₄ & H₁₅ & H₁₆ & H₁₇ & H₁₈ & H₁₉ & H₂₀ & H₂₁ & H₂₂ & H₂₃ & H₂₄ & H₂₅ & H₂₆ & H₂₇ & H₂₈ & H₂₉ & H₃₀ & H₃₁ & H₃₂ & H₃₃ & H₃₄ & H₃₅ & H₃₆ & H₃₇ & H₃₈ & H₃₉ & H₄₀ & H₄₁ & H₄₂ & H₄₃ & H₄₄ & H₄₅ & H₄₆ & H₄₇ & H₄₈ & H₄₉ & H₅₀ & H₅₁ & H₅₂ & H₅₃ & H₅₄ & H₅₅ & H₅₆ & H₅₇ & H₅₈ & H₅₉ & H₆₀ & H₆₁ & H₆₂ & H₆₃ & H₆₄ & H₆₅ & H₆₆ & H₆₇ & H₆₈ & H₆₉ & H₇₀ & H₇₁ & H₇₂ & H₇₃ & H₇₄ & H₇₅ & H₇₆ & H₇₇ & H₇₈ & H₇₉ & H₈₀ & H₈₁ & H₈₂ & H₈₃ & H₈₄ & H₈₅ & H₈₆ & H₈₇ & H₈₈ & H₈₉ & H₉₀ & H₉₁ & H₉₂ & H₉₃ & H₉₄ & H₉₅ & H₉₆ & H₉₇ & H₉₈ & H₉₉ & H₁₀₀
- CONSERVATION SERVICE SOIL TYPE: H₂ & H₃ & H₄ & H₅ & H₆ & H₇ & H₈ & H₉ & H₁₀ & H₁₁ & H₁₂ & H₁₃ & H₁₄ & H₁₅ & H₁₆ & H₁₇ & H₁₈ & H₁₉ & H₂₀ & H₂₁ & H₂₂ & H₂₃ & H₂₄ & H₂₅ & H₂₆ & H₂₇ & H₂₈ & H₂₉ & H₃₀ & H₃₁ & H₃₂ & H₃₃ & H₃₄ & H₃₅ & H₃₆ & H₃₇ & H₃₈ & H₃₉ & H₄₀ & H₄₁ & H₄₂ & H₄₃ & H₄₄ & H₄₅ & H₄₆ & H₄₇ & H₄₈ & H₄₉ & H₅₀ & H₅₁ & H₅₂ & H₅₃ & H₅₄ & H₅₅ & H₅₆ & H₅₇ & H₅₈ & H₅₉ & H₆₀ & H₆₁ & H₆₂ & H₆₃ & H₆₄ & H₆₅ & H₆₆ & H₆₇ & H₆₈ & H₆₉ & H₇₀ & H₇₁ & H₇₂ & H₇₃ & H₇₄ & H₇₅ & H₇₆ & H₇₇ & H₇₈ & H₇₉ & H₈₀ & H₈₁ & H₈₂ & H₈₃ & H₈₄ & H₈₅ & H₈₆ & H₈₇ & H₈₈ & H₈₉ & H₉₀ & H₉₁ & H₉₂ & H₉₃ & H₉₄ & H₉₅ & H₉₆ & H₉₇ & H₉₈ & H₉₉ & H₁₀₀
- CONSERVATION SERVICE SOIL TYPE: H₂ & H₃ & H₄ & H₅ & H₆ & H₇ & H₈ & H₉ & H₁₀ & H₁₁ & H₁₂ & H₁₃ & H₁₄ & H₁₅ & H₁₆ & H₁₇ & H₁₈ & H₁₉ & H₂₀ & H₂₁ & H₂₂ & H₂₃ & H₂₄ & H₂₅ & H₂₆ & H₂₇ & H₂₈ & H₂₉ & H₃₀ & H₃₁ & H₃₂ & H₃₃ & H₃₄ & H₃₅ & H₃₆ & H₃₇ & H₃₈ & H₃₉ & H₄₀ & H₄₁ & H₄₂ & H₄₃ & H₄₄ & H₄₅ & H₄₆ & H₄₇ & H₄₈ & H₄₉ & H₅₀ & H₅₁ & H₅₂ & H₅₃ & H₅₄ & H₅₅ & H₅₆ & H₅₇ & H₅₈ & H₅₉ & H₆₀ & H₆₁ & H₆₂ & H₆₃ & H₆₄ & H₆₅ & H₆₆ & H₆₇ & H₆₈ & H₆₉ & H₇₀ & H₇₁ & H₇₂ & H₇₃ & H₇₄ & H₇₅ & H₇₆ & H₇₇ & H₇₈ & H₇₉ & H₈₀ & H₈₁ & H₈₂ & H₈₃ & H₈₄ & H₈₅ & H₈₆ & H₈₇ & H₈₈ & H₈₉ & H₉₀ & H₉₁ & H₉₂ & H₉₃ & H₉₄ & H₉₅ & H₉₆ & H₉₇ & H₉₈ & H₉₉ & H₁₀₀
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EXISTING CONDITIONS PLAN
BARCLAY MEDICAL OFFICE BUILDING
2 STONEMILL DRIVE
HUDSON, NEW HAMPSHIRE
 MAP 246 / LOT 1

PREPARED FOR: BARCLAY
 TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST
 24 COUNTRY STREET, HUDSON, NEW HAMPSHIRE, 03051
 DR. 8848 PY, 381

DATE: DECEMBER 29, 2021

SCALE: 1" = 200'

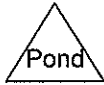
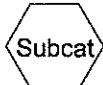
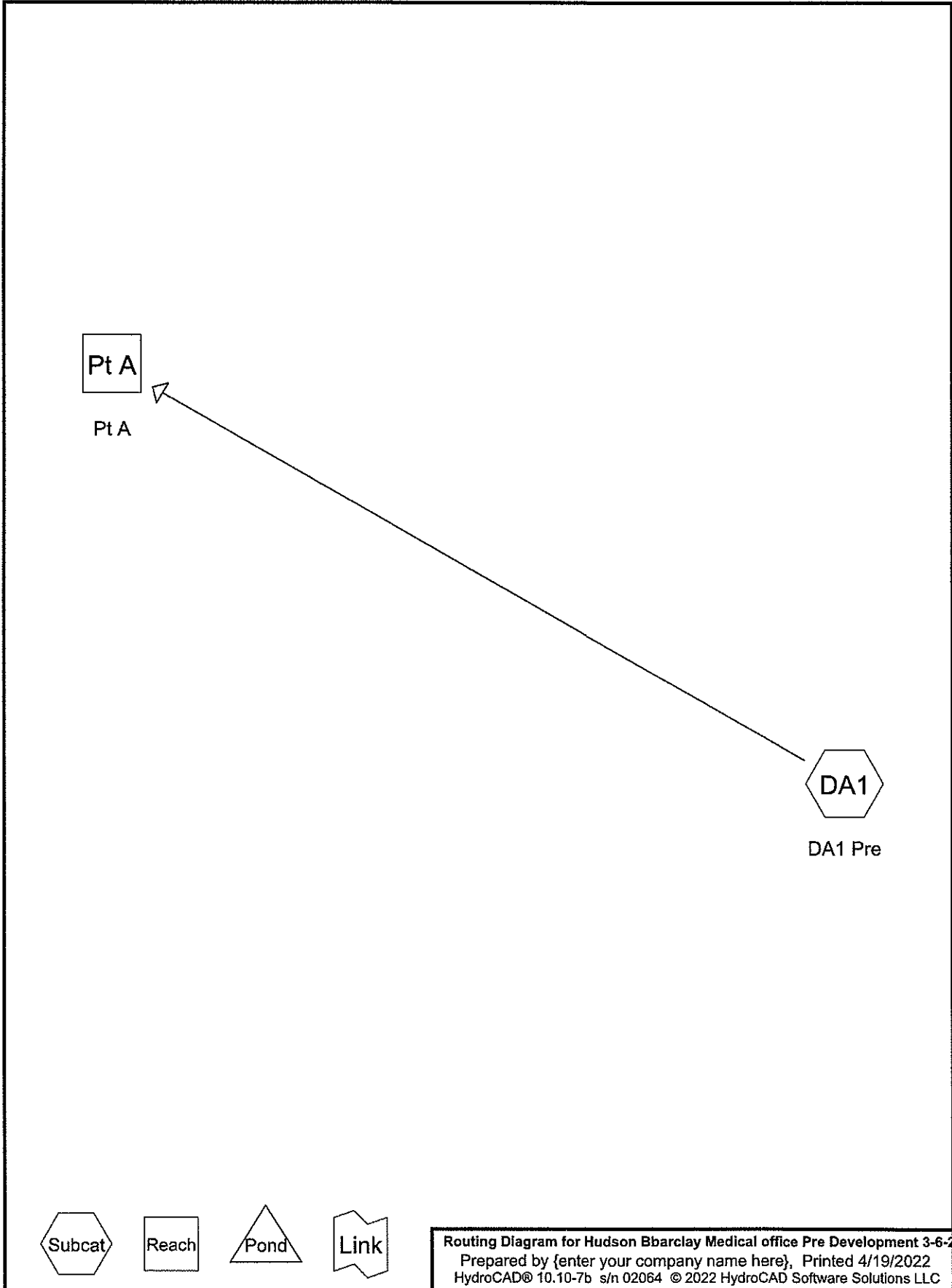
Maynard & Paquette
 Engineering Associates, LLC
 Consulting Engineers and Land Surveyors
 31 Ouney Street, Nashua, NH 03060
 Phone: (603)883-9430 Fax: (603)883-7227

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE STATE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO (2) YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
 DATE OF MEETING: _____ SIGNATURE DATE: _____

SITE PLANS AND MAPPING FOR MAP 246 / LOT 1 SHALL COMMENCE AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

WARREN & SUZANNE BARCLAY TRUST
 HARRIS R. BARCLAY, TRUSTEE



Routing Diagram for Hudson Barclay Medical office Pre Development 3-6-22
Prepared by {enter your company name here}, Printed 4/19/2022
HydroCAD® 10.10-7b s/n 02064 © 2022 HydroCAD Software Solutions LLC

Hudson Bbarclay Medical office Pre Development 3-6-22

Prepared by {enter your company name here}

Printed 4/19/2022

HydroCAD® 10.10-7b s/n 02064 © 2022 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	2.97	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.42	2
3	25-Year	Type III 24-hr		Default	24.00	1	5.54	2
4	100-Year	Type III 24-hr		Default	24.00	1	7.84	2

Hudson Barclay Medical office Pre Development 3-6-22

Prepared by {enter your company name here}

Printed 4/19/2022

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.119	39	>75% Grass cover, Good, HSG A (DA1)
0.126	98	Roofs, HSG A (DA1)
1.332	36	Woods, Fair, HSG A (DA1)
1.577	41	TOTAL AREA

Hudson Barclay Medical office Pre Development 3-6-22

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.577	HSG A	DA1
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.577		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.119	0.000	0.000	0.000	0.000	0.119	>75% Grass cover, Good	DA1
0.126	0.000	0.000	0.000	0.000	0.126	Roofs	DA1
1.332	0.000	0.000	0.000	0.000	1.332	Woods, Fair	DA1
1.577	0.000	0.000	0.000	0.000	1.577	TOTAL AREA	

Hudson Barclay Medical office Pre Development 3-6-2 type III 24-hr 2-Year Rainfall=2.97"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: DA1 Pre

Runoff Area=68,702 sf 8.02% Impervious Runoff Depth>0.00"
Flow Length=670' Slope=0.0360 1' Tc=26.0 min CN=41 Runoff=0.00 cfs 0.000 af

Reach Pt A: Pt A

Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.000 af Average Runoff Depth = 0.00"
91.98% Pervious = 1.451 ac 8.02% Impervious = 0.126 ac

Hudson Barclay Medical office Pre Development 3-6-Type III 24-hr 2-Year Rainfall=2.97"

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Summary for Subcatchment DA1: DA1 Pre

Runoff = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af, Depth> 0.00"
 Routed to Reach Pt A : Pt A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=2.97"

Area (sf)	CN	Description
53,769	36	Woods, Fair, HSG A
3,047	98	Roofs, HSG A
5,191	39	>75% Grass cover, Good, HSG A
2,460	98	Roofs, HSG A
4,235	36	Woods, Fair, HSG A
68,702	41	Weighted Average
63,195		91.98% Pervious Area
5,507		8.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0360	0.09		Sheet Flow, sheet flow brush Woods: Light underbrush n= 0.400 P2= 2.86"
7.0	400	0.0360	0.95		Shallow Concentrated Flow, shallow conc brush Woodland Kv= 5.0 fps
1.0	170	0.0360	2.85		Shallow Concentrated Flow, shallow concentrated flow - .05% Grassed Waterway Kv= 15.0 fps
26.0	670	Total			

Summary for Reach Pt A: Pt A

Inflow Area = 1.577 ac, 8.02% Impervious, Inflow Depth > 0.00" for 2-Year event
 Inflow = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af
 Outflow = 0.00 cfs @ 24.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Hudson Barclay Medical office Pre Development 3-6 Type III 24-hr 10-Year Rainfall=4.42"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: DA1 Pre

Runoff Area=68,702 sf 8.02% Impervious Runoff Depth>0.15"
Flow Length=670' Slope=0.0360 1' Tc=26.0 min CN=41 Runoff=0.03 cfs 0.019 af

Reach Pt A: Pt A

Inflow=0.03 cfs 0.019 af
Outflow=0.03 cfs 0.019 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.15"
91.98% Pervious = 1.451 ac 8.02% Impervious = 0.126 ac

Hudson Barclay Medical office Pre Development 3-6 Type III 24-hr 10-Year Rainfall=4.42"

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Summary for Subcatchment DA1: DA1 Pre

Runoff = 0.03 cfs @ 13.97 hrs, Volume= 0.019 af, Depth > 0.15"
 Routed to Reach Pt A : Pt A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.42"

Area (sf)	CN	Description
53,769	36	Woods, Fair, HSG A
3,047	98	Roofs, HSG A
5,191	39	>75% Grass cover, Good, HSG A
2,460	98	Roofs, HSG A
4,235	36	Woods, Fair, HSG A
68,702	41	Weighted Average
63,195		91.98% Pervious Area
5,507		8.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0360	0.09		Sheet Flow, sheet flow brush Woods: Light underbrush n= 0.400 P2= 2.86"
7.0	400	0.0360	0.95		Shallow Concentrated Flow, shallow conc brush Woodland Kv= 5.0 fps
1.0	170	0.0360	2.85		Shallow Concentrated Flow, shallow concentrated flow - .05% Grassed Waterway Kv= 15.0 fps
26.0	670	Total			

Summary for Reach Pt A: Pt A

Inflow Area = 1.577 ac, 8.02% Impervious, Inflow Depth > 0.15" for 10-Year event
 Inflow = 0.03 cfs @ 13.97 hrs, Volume= 0.019 af
 Outflow = 0.03 cfs @ 13.97 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Hudson Barclay Medical office Pre Development 3-6 Type III 24-hr 25-Year Rainfall=5.54"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment DA1: DA1 Pre

Runoff Area=68,702 sf 8.02% Impervious Runoff Depth>0.41"
Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=41 Runoff=0.20 cfs 0.054 af

Reach Pt A: Pt A

Inflow=0.20 cfs 0.054 af
Outflow=0.20 cfs 0.054 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.054 af Average Runoff Depth = 0.41"
91.98% Pervious = 1.451 ac 8.02% Impervious = 0.126 ac

Hudson Bbarclay Medical office Pre Development 3-6 Type III 24-hr 25-Year Rainfall=5.54"
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Summary for Subcatchment DA1: DA1 Pre

Runoff = 0.20 cfs @ 12.64 hrs, Volume= 0.054 af, Depth> 0.41"
 Routed to Reach Pt A : Pt A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.54"

Area (sf)	CN	Description
53,769	36	Woods, Fair, HSG A
3,047	98	Roofs, HSG A
5,191	39	>75% Grass cover, Good, HSG A
2,460	98	Roofs, HSG A
4,235	36	Woods, Fair, HSG A
68,702	41	Weighted Average
63,195		91.98% Pervious Area
5,507		8.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0360	0.09		Sheet Flow, sheet flow brush Woods: Light underbrush n= 0.400 P2= 2.86"
7.0	400	0.0360	0.95		Shallow Concentrated Flow, shallow conc brush Woodland Kv= 5.0 fps
1.0	170	0.0360	2.85		Shallow Concentrated Flow, shallow concentrated flow - .0.5% Grassed Waterway Kv= 15.0 fps
26.0	670	Total			

Summary for Reach Pt A: Pt A

Inflow Area = 1.577 ac, 8.02% Impervious, Inflow Depth > 0.41" for 25-Year event
 Inflow = 0.20 cfs @ 12.64 hrs, Volume= 0.054 af
 Outflow = 0.20 cfs @ 12.64 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Hudson Barclay Medical office Pre Development 3-Type III 24-hr 100-Year Rainfall=7.84"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA1: DA1 Pre

Runoff Area=68,702 sf 8.02% Impervious Runoff Depth>1.26"
Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=41 Runoff=1.04 cfs 0.166 af

Reach Pt A: Pt A

Inflow=1.04 cfs 0.166 af
Outflow=1.04 cfs 0.166 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.166 af Average Runoff Depth = 1.26"
91.98% Pervious = 1.451 ac 8.02% Impervious = 0.126 ac

Hudson Barclay Medical office Pre Development 3-Type III 24-hr 100-Year Rainfall=7.84"

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Summary for Subcatchment DA1: DA1 Pre

Runoff = 1.04 cfs @ 12.47 hrs, Volume= 0.166 af, Depth > 1.26"
 Routed to Reach Pt A : Pt A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-Year Rainfall=7.84"

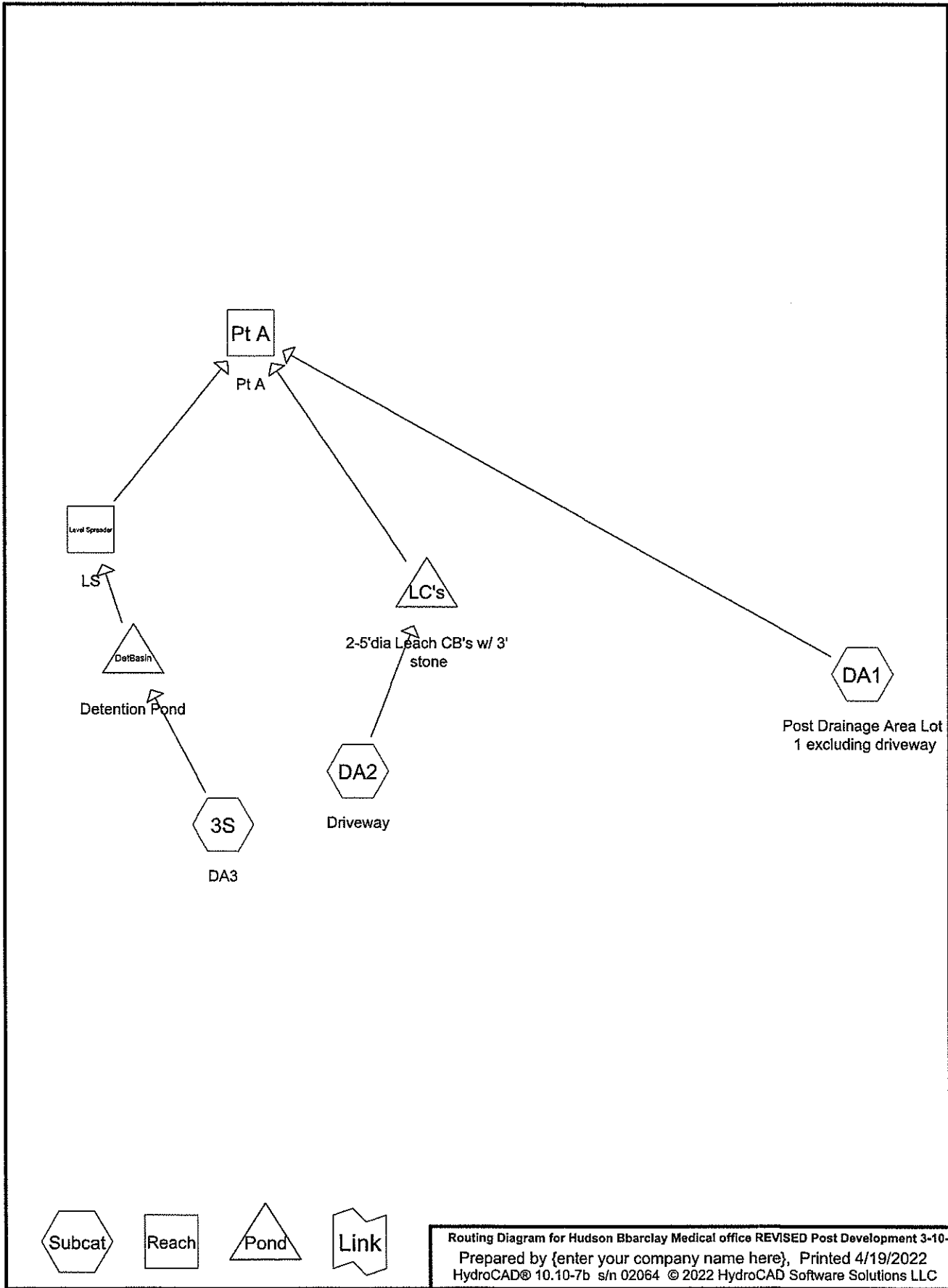
Area (sf)	CN	Description
53,769	36	Woods, Fair, HSG A
3,047	98	Roofs, HSG A
5,191	39	>75% Grass cover, Good, HSG A
2,460	98	Roofs, HSG A
4,235	36	Woods, Fair, HSG A
68,702	41	Weighted Average
63,195		91.98% Pervious Area
5,507		8.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0360	0.09		Sheet Flow, sheet flow brush Woods: Light underbrush n= 0.400 P2= 2.86"
7.0	400	0.0360	0.95		Shallow Concentrated Flow, shallow conc brush Woodland Kv= 5.0 fps
1.0	170	0.0360	2.85		Shallow Concentrated Flow, shallow concentrated flow - .05% Grassed Waterway Kv= 15.0 fps
26.0	670	Total			

Summary for Reach Pt A: Pt A

Inflow Area = 1.577 ac, 8.02% Impervious, Inflow Depth > 1.26" for 100-Year event
 Inflow = 1.04 cfs @ 12.47 hrs, Volume= 0.166 af
 Outflow = 1.04 cfs @ 12.47 hrs, Volume= 0.166 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs



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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	2.97	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.42	2
3	25-Year	Type III 24-hr		Default	24.00	1	5.54	2
4	100-Year	Type III 24-hr		Default	24.00	1	7.84	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.300	39	>75% Grass cover, Good, HSG A (3S, DA1)
0.141	98	Paved parking, HSG A (3S, DA1, DA2)
0.031	98	Paved roads w/curbs & sewers, HSG A (DA1)
0.070	98	Roofs, HSG A (DA1)
1.036	36	Woods, Fair, HSG A (DA1)
1.577	46	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.577	HSG A	3S, DA1, DA2
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.577		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.300	0.000	0.000	0.000	0.000	0.300	>75% Grass cover, Good	3S, DA 1
0.141	0.000	0.000	0.000	0.000	0.141	Paved parking	3S, DA 1, DA 2
0.031	0.000	0.000	0.000	0.000	0.031	Paved roads w/curbs & sewers	DA 1
0.070	0.000	0.000	0.000	0.000	0.070	Roofs	DA 1
1.036	0.000	0.000	0.000	0.000	1.036	Woods, Fair	DA 1
1.577	0.000	0.000	0.000	0.000	1.577	TOTAL AREA	

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 2-Year Rainfall=2.97"
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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DA3 Runoff Area=3,380 sf 34.17% Impervious Runoff Depth>0.29"
 Tc=5.0 min CN=59 Runoff=0.01 cfs 0.002 af

SubcatchmentDA1: Post Drainage Area Lot Runoff Area=61,661 sf 9.23% Impervious Runoff Depth>0.00"
 Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=42 Runoff=0.00 cfs 0.000 af

SubcatchmentDA2: Driveway Runoff Area=3,661 sf 100.00% Impervious Runoff Depth>2.74"
 Tc=5.0 min CN=98 Runoff=0.24 cfs 0.019 af

Reach Level Spreader: LS Inflow=0.01 cfs 0.002 af
 Outflow=0.01 cfs 0.002 af

Reach Pt A: Pt A Inflow=0.01 cfs 0.002 af
 Outflow=0.01 cfs 0.002 af

Pond DetBasin: Detention Pond Peak Elev=127.12' Storage=6 cf Inflow=0.01 cfs 0.002 af
 Outflow=0.01 cfs 0.002 af

Pond LC's: 2-5'dia Leach CB's w/ 3' stone Peak Elev=115.38' Storage=95 cf Inflow=0.24 cfs 0.019 af
 Discarded=0.15 cfs 0.019 af Primary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.019 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.021 af Average Runoff Depth = 0.16"
84.70% Pervious = 1.336 ac 15.30% Impervious = 0.241 ac

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 10-Year Rainfall=4.42"
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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DA3 Runoff Area=3,380 sf 34.17% Impervious Runoff Depth>0.92"
 Tc=5.0 min CN=59 Runoff=0.07 cfs 0.006 af

SubcatchmentDA1: Post Drainage Area Lot Runoff Area=61,661 sf 9.23% Impervious Runoff Depth>0.17"
 Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=42 Runoff=0.04 cfs 0.021 af

SubcatchmentDA2: Driveway Runoff Area=3,661 sf 100.00% Impervious Runoff Depth>4.18"
 Tc=5.0 min CN=98 Runoff=0.37 cfs 0.029 af

Reach Level Spreader: LS Inflow=0.05 cfs 0.006 af
 Outflow=0.05 cfs 0.006 af

Reach Pt A: Pt A Inflow=0.05 cfs 0.027 af
 Outflow=0.05 cfs 0.027 af

Pond DetBasin: Detention Pond Peak Elev=127.15' Storage=21 cf Inflow=0.07 cfs 0.006 af
 Outflow=0.05 cfs 0.006 af

Pond LC's: 2-5'dia Leach CB's w/ 3' stone Peak Elev=116.02' Storage=152 cf Inflow=0.37 cfs 0.029 af
 Discarded=0.23 cfs 0.029 af Primary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.029 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.056 af Average Runoff Depth = 0.42"
84.70% Pervious = 1.336 ac 15.30% Impervious = 0.241 ac

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 25-Year Rainfall=5.54"
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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DA3 Runoff Area=3,380 sf 34.17% Impervious Runoff Depth>1.55"
 Tc=5.0 min CN=59 Runoff=0.13 cfs 0.010 af

SubcatchmentDA1: Post Drainage Area Lot Runoff Area=61,661 sf 9.23% Impervious Runoff Depth>0.46"
 Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=42 Runoff=0.22 cfs 0.054 af

SubcatchmentDA2: Driveway Runoff Area=3,661 sf 100.00% Impervious Runoff Depth>5.30"
 Tc=5.0 min CN=98 Runoff=0.46 cfs 0.037 af

Reach Level Spreader: LS Inflow=0.11 cfs 0.010 af
 Outflow=0.11 cfs 0.010 af

Reach Pt A: Pt A Inflow=0.26 cfs 0.064 af
 Outflow=0.26 cfs 0.064 af

Pond DetBasin: Detention Pond Peak Elev=127.18' Storage=34 cf Inflow=0.13 cfs 0.010 af
 Outflow=0.11 cfs 0.010 af

Pond LC's: 2-5'dia Leach CB's w/ 3' stone Peak Elev=116.50' Storage=196 cf Inflow=0.46 cfs 0.037 af
 Discarded=0.29 cfs 0.037 af Primary=0.00 cfs 0.000 af Outflow=0.29 cfs 0.037 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.101 af Average Runoff Depth = 0.77"
84.70% Pervious = 1.336 ac 15.30% Impervious = 0.241 ac

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 100-Year Rainfall=7.84"
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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DA3 Runoff Area=3,380 sf 34.17% Impervious Runoff Depth>3.10"
 Tc=5.0 min CN=59 Runoff=0.28 cfs 0.020 af

SubcatchmentDA1: Post Drainage Area Lot Runoff Area=61,661 sf 9.23% Impervious Runoff Depth>1.35"
 Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=42 Runoff=1.04 cfs 0.160 af

SubcatchmentDA2: Driveway Runoff Area=3,661 sf 100.00% Impervious Runoff Depth>7.60"
 Tc=5.0 min CN=98 Runoff=0.65 cfs 0.053 af

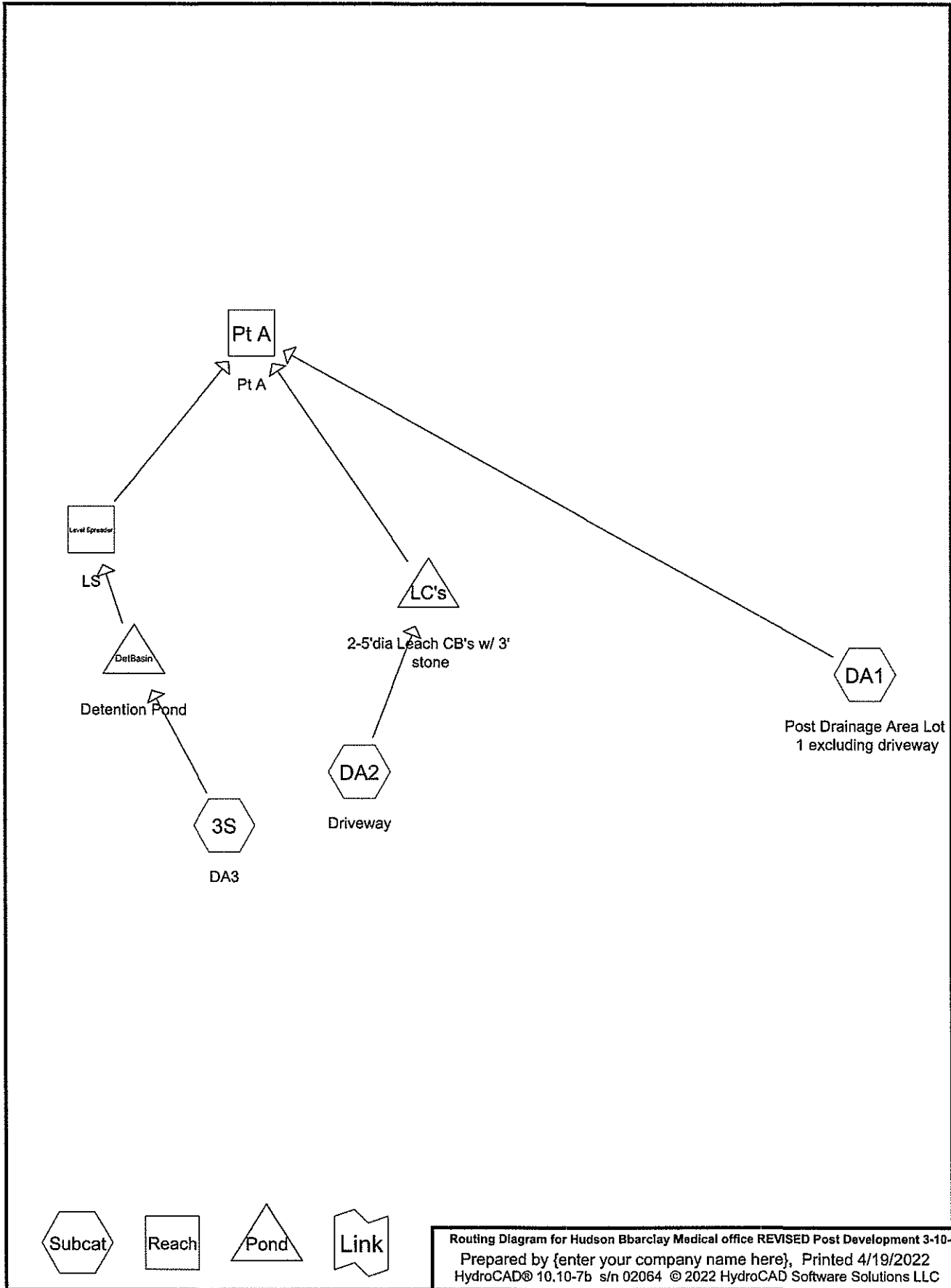
Reach Level Spreader: LS Inflow=0.24 cfs 0.020 af
 Outflow=0.24 cfs 0.020 af

Reach Pt A: Pt A Inflow=1.14 cfs 0.180 af
 Outflow=1.14 cfs 0.180 af

Pond DetBasin: Detention Pond Peak Elev=127.24' Storage=60 cf Inflow=0.28 cfs 0.020 af
 Outflow=0.24 cfs 0.020 af

Pond LC's: 2-5'dia Leach CB's w/ 3' stone Peak Elev=117.48' Storage=285 cf Inflow=0.65 cfs 0.053 af
 Discarded=0.41 cfs 0.053 af Primary=0.00 cfs 0.000 af Outflow=0.41 cfs 0.053 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.233 af Average Runoff Depth = 1.77"
84.70% Pervious = 1.336 ac 15.30% Impervious = 0.241 ac



Hudson Bbarclay Medical office REVISED Post Development 3-10-22

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	10-Year	Type III 24-hr		Default	24.00	1	4.42	2

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 10-Year Rainfall=4.42"
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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment3S: DA3 Runoff Area=3,380 sf 34.17% Impervious Runoff Depth>0.92"
 Tc=5.0 min CN=59 Runoff=0.07 cfs 0.006 af

SubcatchmentDA1: Post Drainage Area Lot Runoff Area=61,661 sf 9.23% Impervious Runoff Depth>0.17"
 Flow Length=670' Slope=0.0360 '/' Tc=26.0 min CN=42 Runoff=0.04 cfs 0.021 af

SubcatchmentDA2: Driveway Runoff Area=3,661 sf 100.00% Impervious Runoff Depth>4.18"
 Tc=5.0 min CN=98 Runoff=0.37 cfs 0.029 af

Reach Level Spreader: LS Inflow=0.05 cfs 0.006 af
 Outflow=0.05 cfs 0.006 af

Reach Pt A: Pt A Inflow=0.05 cfs 0.027 af
 Outflow=0.05 cfs 0.027 af

Pond DetBasin: Detention Pond Peak Elev=127.15' Storage=21 cf Inflow=0.07 cfs 0.006 af
 Outflow=0.05 cfs 0.006 af

Pond LC's: 2-5'dia Leach CB's w/ 3' stone Peak Elev=116.02' Storage=152 cf Inflow=0.37 cfs 0.029 af
 Discarded=0.23 cfs 0.029 af Primary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.029 af

Total Runoff Area = 1.577 ac Runoff Volume = 0.056 af Average Runoff Depth = 0.42"
84.70% Pervious = 1.336 ac 15.30% Impervious = 0.241 ac

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 10-Year Rainfall=4.42"
 Prepared by {enter your company name here} Printed 4/19/2022
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Summary for Subcatchment 3S: DA3

Runoff = 0.07 cfs @ 12.10 hrs, Volume= 0.006 af, Depth> 0.92"
 Routed to Pond DetBasin : Detention Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.42"

Area (sf)	CN	Description
1,155	98	Paved parking, HSG A
2,225	39	>75% Grass cover, Good, I HSG A
3,380	59	Weighted Average
2,225		65.83% Pervious Area
1,155		34.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment DA1: Post Drainage Area Lot 1 excluding driveway

Runoff = 0.04 cfs @ 13.09 hrs, Volume= 0.021 af, Depth> 0.17"
 Routed to Reach Pt A : Pt A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.42"

Area (sf)	CN	Description
40,895	36	Woods, Fair, HSG A
3,047	98	Roofs, HSG A
5,191	39	>75% Grass cover, Good, HSG A
3,201	39	>75% Grass cover, Good, HSG A
1,342	98	Paved roads w/curbs & sewers, HSG A
2,445	39	>75% Grass cover, Good, HSG A
4,235	36	Woods, Fair, HSG A
1,305	98	Paved parking, HSG A
61,661	42	Weighted Average
55,967		90.77% Pervious Area
5,694		9.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0	100	0.0360	0.09		Sheet Flow, sheet flow brush Woods: Light underbrush n= 0.400 P2= 2.86"
7.0	400	0.0360	0.95		Shallow Concentrated Flow, shallow conc brush Woodland Kv= 5.0 fps
1.0	170	0.0360	2.85		Shallow Concentrated Flow, shallow concentrated flow Grassed Waterway Kv= 15.0 fps
26.0	670	Total			

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 10-Year Rainfall=4.42"
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Summary for Subcatchment DA2: Driveway

Runoff = 0.37 cfs @ 12.07 hrs, Volume= 0.029 af, Depth> 4.18"
 Routed to Pond LC's : 2-5'dia Leach CB's w/ 3' stone

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.42"

Area (sf)	CN	Description
3,661	98	Paved parking, HSG A
0	39	>75% Grass cover, Good, HSG A
0	39	>75% Grass cover, Good, HSG A
0	98	Paved roads w/curbs & sewers, HSG A
0	36	Woods, Fair, HSG A
3,661	98	Weighted Average
3,661		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, direct entry

Summary for Reach Level Spreader: LS

Inflow Area = 0.078 ac, 34.17% Impervious, Inflow Depth > 0.92" for 10-Year event
 Inflow = 0.05 cfs @ 12.17 hrs, Volume= 0.006 af
 Outflow = 0.05 cfs @ 12.17 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min
 Routed to Reach Pt A : Pt A

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Reach Pt A: Pt A

Inflow Area = 1.577 ac, 15.30% Impervious, Inflow Depth > 0.20" for 10-Year event
 Inflow = 0.05 cfs @ 12.17 hrs, Volume= 0.027 af
 Outflow = 0.05 cfs @ 12.17 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Pond DetBasin: Detention Pond

Inflow Area = 0.078 ac, 34.17% Impervious, Inflow Depth > 0.92" for 10-Year event
 Inflow = 0.07 cfs @ 12.10 hrs, Volume= 0.006 af
 Outflow = 0.05 cfs @ 12.17 hrs, Volume= 0.006 af, Atten= 22%, Lag= 4.5 min
 Primary = 0.05 cfs @ 12.17 hrs, Volume= 0.006 af
 Routed to Reach Level Spreader : LS

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 127.15' @ 12.17 hrs Surf.Area= 420 sf Storage= 21 cf

Plug-Flow detention time= 10.2 min calculated for 0.006 af (100% of inflow)

Hudson Barclay Medical office REVISED Post Development Type III 24-hr 10-Year Rainfall=4.42"

Prepared by {enter your company name here}

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Page 6

Center-of-Mass det. time= 7.7 min (895.1 - 887.4)

Volume	Invert	Avail.Storage	Storage Description
#1	127.10'	1,010 cf	Custom Stage Data (Conic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.10	400	0	0
128.50	1,100	1,010	1,010
			Wet.Area (sq-ft)
			400
			1,112

Device	Routing	Invert	Outlet Devices
#1	Primary	127.10'	2.0' long x 5.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.05 cfs @ 12.17 hrs HW=127.15' (Free Discharge)
 ↳1=**Broad-Crested Rectangular Weir** (Weir Controls 0.05 cfs @ 0.53 fps)

Summary for Pond LC's: 2-5'dia Leach CB's w/ 3' stone

Inflow Area = 0.084 ac, 100.00% Impervious, Inflow Depth > 4.18" for 10-Year event
 Inflow = 0.37 cfs @ 12.07 hrs, Volume= 0.029 af
 Outflow = 0.23 cfs @ 12.17 hrs, Volume= 0.029 af, Atten= 37%, Lag= 6.0 min
 Discarded = 0.23 cfs @ 12.17 hrs, Volume= 0.029 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Reach Pt A : Pt A

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 116.02' @ 12.17 hrs Surf.Area= 226 sf Storage= 152 cf

Plug-Flow detention time= 5.7 min calculated for 0.029 af (100% of inflow)
 Center-of-Mass det. time= 5.5 min (754.4 - 748.9)

Volume	Invert	Avail.Storage	Storage Description
#1	114.33'	452 cf	12.00'D x 5.00'H Vertical Cone/Cylinder x 2 1,131 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.33'	6.000 in/hr Exfiltration over Wetted area Conductivity to Groundwater Elevation = 114.00'
#2	Primary	120.00'	1.0" x 1.0" Horiz. Orifice/Grate X 8.00 columns X 8 rows C= 0.600 in 12.0" x 12.0" Grate (44% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.23 cfs @ 12.17 hrs HW=115.99' (Free Discharge)
 ↳1=**Exfiltration** (Controls 0.23 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=114.33' (Free Discharge)
 ↳2=**Orifice/Grate** (Controls 0.00 cfs)

ABUTTERS:

Map 246 Lot 1
Warren R. Barclay Trustee
Warren & Suzanne Barclay Rev. Trust
24 Chalifoux Road
Hudson, NH 03051

Map 246 Lot 2
John W. & Frederick B. Sullivan
53 River Road
Hudson, NH 03051

Map 246 Lot 4
Renee M. & Dana J. Paquette
1 Stonemill Road
Hudson, NH 03051

Map 246 Lot 86
DLM Properties, LLC
22 Abbott Street
Hudson, NH 03055

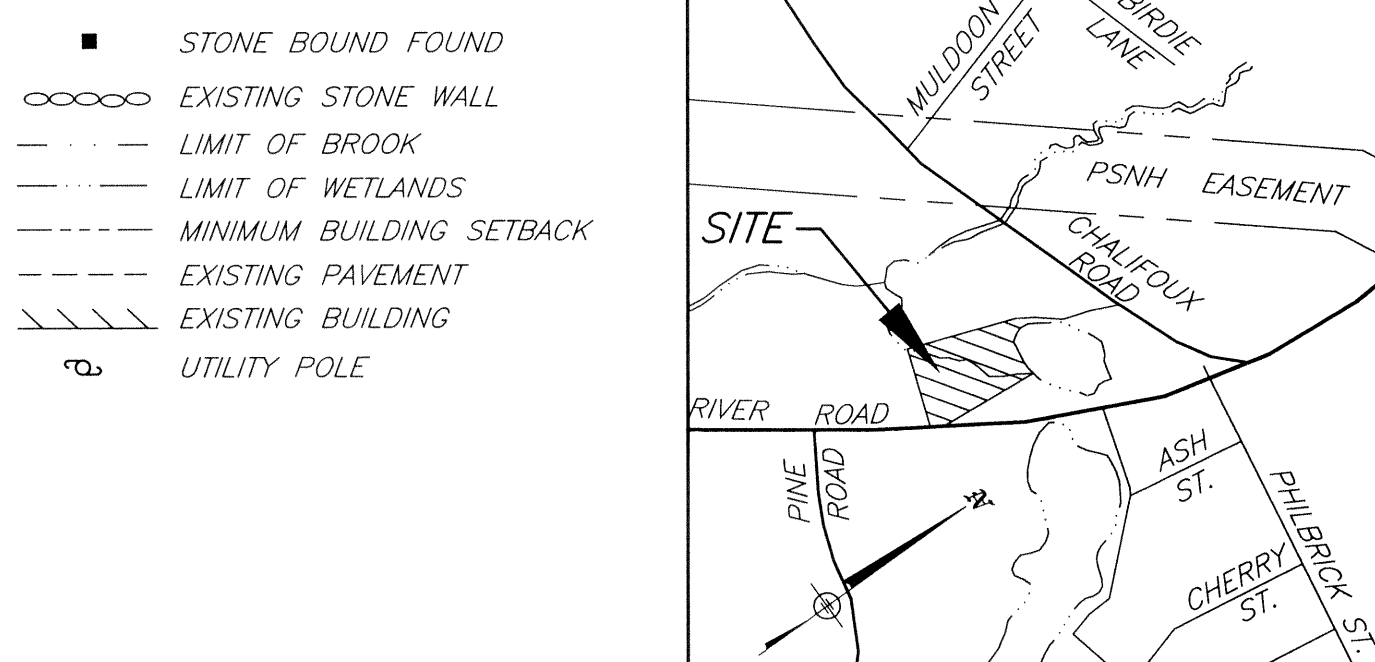
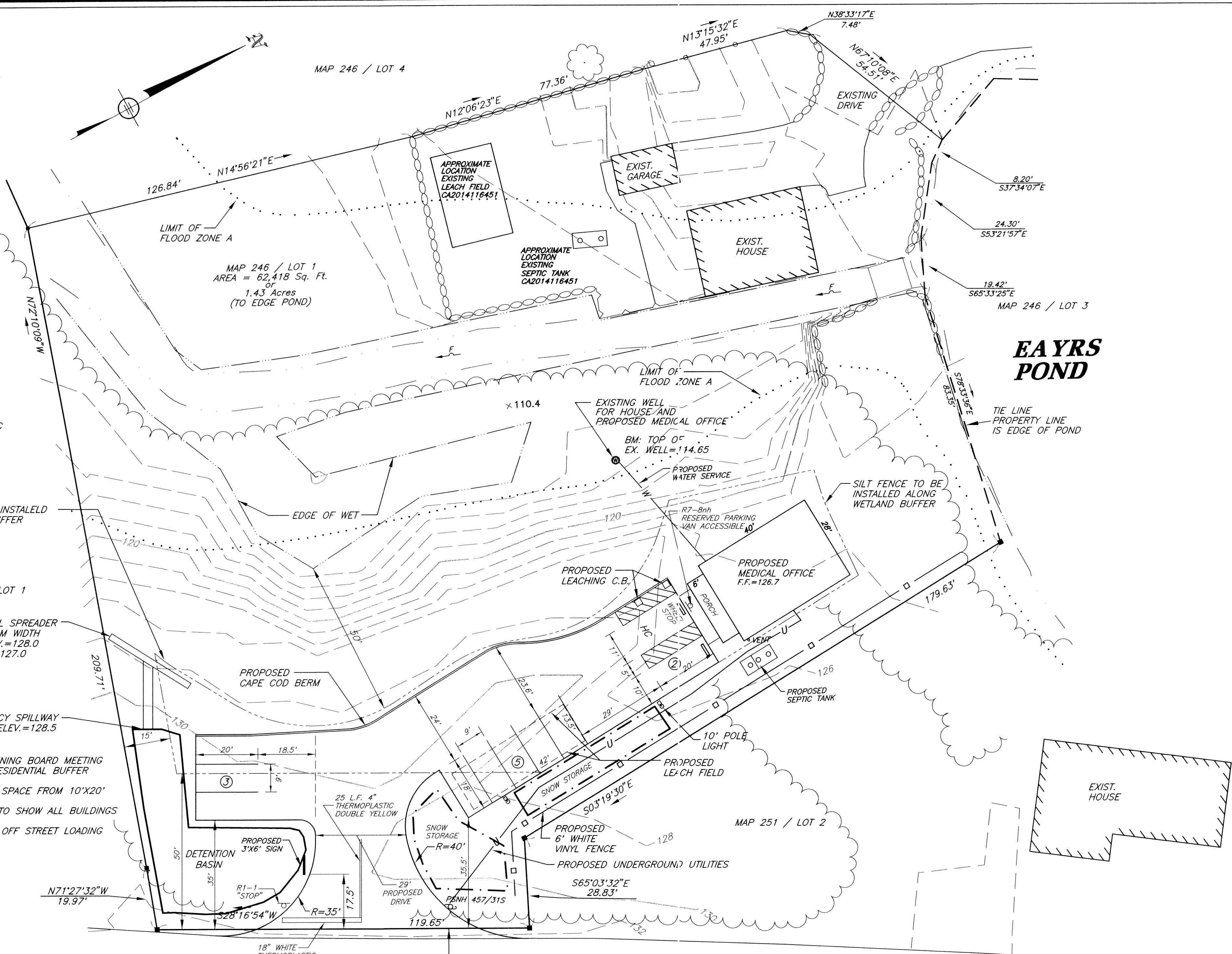
Map 251 Lot 1
BAE Systems
P.O. Box 868
Nashua, NH 03060

Map 246 Lot 3
Eric J. & Elizabeth A. Cohen
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Hudson, NH 03051

Map 246 Lot 85 *
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Locicero Family Rev. Trust
2 Jacqueline Street
Hudson, NH 03051

Maynard & Paquette Eng. Assoc., LLC
31 Quincy Street
Nashua, NH 03060

* Abutters within 200'



LEGEND

VICINITY

NOTES:

- PRESENT ZONING: "R-2" RESIDENTIAL 2
- PROPOSED USE: RESIDENTIAL & MEDICAL OFFICE
- THE PURPOSE OF THIS PLAN IS TO CONSTRUCT AN 1176 SF MEDICAL OFFICE WITH 10 PARKING SPACES INCLUDING 1 H.C.
- TOTAL AREA OF PARCEL: 1.43± ACRES
- LOT IS SERVICED BY PRIVATE WELL AND SEPTIC.
- VARIANCE FOR MEDICAL OFFICE IN ADDITION TO EXISTING RESIDENCE GRANTED ON 5/28/2020. CASE NO. 246-001 WITH THE FOLLOWING STIPULATIONS:
 - THE COMBINED WORK HOURS FOR 2 DOCTORS (Dr. BARCLAY & 1 ASSOC.) SHALL NOT EXCEED FIFTY (50) HOURS PER WEEK.
 - THE TOTAL NUMBER OF PARKING SPACES BE ESTABLISHED AT THE MIN. AMOUNT REQUIRED AND NOT EXCEED TEN (10).
 - THE LOT REMAIN IN COMMON OWNERSHIP AND CANNOT BE SUBDIVIDED OR TRANSFERRED SEPARATELY.
 - THAT THE PLAN BE RECONFIGURED MOVING THE BUILDING OUT OF THE 50' FRONT SETBACK AND RESITUATING THE BUILDING TO THE RIGHT SIDE (NORTH) OF THE PLAN AND THE PARKING AREA TO THE LEFT SIDE (SOUTH) OF THE PLAN.
- MINIMUM BUILDING REQUIREMENTS:
 - LOT SIZE = 60,000 S.F.
 - FRONTAGE: 120'
 - BUILDING SETBACKS: FRONT YARD = 50 FT. SIDE AND REAR YARD = 15 FT.
- SOIL CONSERVATION SERVICE SOIL TYPE:
 - "WdA" - WINDSOR LOAMY SAND 0-3% SLOPES
 - "WdC" - WINDSOR LOAMY SAND 8-15% SLOPES
- GREEN SPACE REQUIRED: 40%
GREEN SPACE PROVIDED: 81%
- PARKING REQUIREMENTS:
 - HOUSE: 2 REQUIRED 2 PROVIDED
 - MEDICAL OFFICE: 1 SP/300 S.F. X 1,176 SF = 4 SPACES REQUIRED
 - PROPOSED PARKING: 10 SPACES INCL. 1 H/C
- N.F.I.P. F.I.R.M. FLOOD MAP NUMBER 33011C0658D INDICATES THAT A PORTION OF THIS SITE IS WITHIN ZONE A.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THIS PLAN, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND TO BE INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- ALL HANDICAPPED PARKING SPACES SHALL CONFORM TO A.D.A. REQUIREMENTS FOR SIGNAGE AND STRIPING.
- ALL SITE LIGHTING TO BE HOODED AND DIRECTED DOWNWARD ON SITE.
- STREET ADDRESS TO BE ASSIGNED BY THE HUDSON FIRE DEPT. AT TIME OF BUILDING PERMIT ISSUANCE.
- A CAP FEE OF \$_____ SUBJECT TO ANNUAL INDEXING, AS PERMITTED BY THE IMPACT FEE METHODOLOGY, SHALL BE PAID PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION 1-888-DIG-SAFE. (1-888-344-7233)
- APPROPRIATE EROSION CONTROL MEASURES (HAY BALES, SILT FENCE, ETC.) SHALL BE INSTALLED PRIOR TO INITIATION OF ANY SITE WORK AND SHALL BE MAINTAINED UNTIL ADEQUATE VEGETATIVE COVER IS ESTABLISHED ON ALL GRADED AREAS.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED UPON COMPLETION OF SITE GRADING.
- WETLANDS PER PLAN REFERENCE NO 1
- NHDOT DRIVEWAY PERMIT NUMBER 05-229-0051 ISSUED 10/28/2021.
- NHDES SEPTIC CONSTRUCTION APPROVAL No. CA202111527 ISSUED 11/15/2021.
- APPROX. TREE CLEARING LIMITS WILL BE THE BUILDING SETBACK LINE.

WAIVERS

- GRANTED AT THE APRIL 13, 2022 PLANNING BOARD MEETING
- HTC 276-11.1.B(12)(c) REDUCE RESIDENTIAL BUFFER FROM 100' TO 55'
 - HTC 275-8.C(4) REDUCE PARKING SPACE FROM 10'X20' TO 9'X18'
 - HTC 276-11.1.B(15) REQUIREMENT TO SHOW ALL BUILDINGS WITHIN 50' OF THE SITE.
 - HTC 275-8.C(6) REQUIREMENT FOR OFF STREET LOADING SPACE.

PLAN REFERENCE:

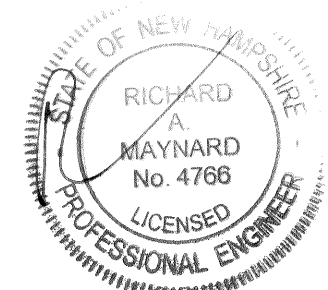
- LOT LINE RELOCATION PLAN MAP 4 / LOTS 2&3, 1 & 2 STONE MILL ROAD, HUDSON, NH. DATED AUGUST 22, 2001 BY MAYNARD & PAQUETTE ENG. ASSOC., LLC. FILED HC RD AS PLAN No. 31567.
- WETLANDS & TOPOGRAPHIC PLAN MAP 246 / LOT 1, 2 STONE MILL ROAD, HUDSON, NH. DATED JAN. 7, 2021 BY MAYNARD & PAQUETTE ENG. ASSOC., LLC.

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
DATE OF MEETING: _____
SIGNATURE: _____ DATE: _____
SIGNATURE: _____ DATE: _____
SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO (2) YEARS FROM DATE OF APPROVAL.

WARREN R. BARCLAY, TRUSTEE _____ DATE _____

I CERTIFY THAT THIS PLAN WAS PREPARED FROM BOUNDARY INFORMATION SHOWN ON PLAN REFERENCE 1 AND A FIELD SURVEY LAST MADE ON THE GROUND IN APRIL 2019 HAVING A MAXIMUM ERROR OF CLOSURE OF 1:10,000.



NO.	DATE	REVISION	BY
1	04-05-2022	REVISIONS PER F&O / TOWN COMMENTS	JY
2	04-11-2022	REVISIONS PER TOWN COMMENTS OF 4-8-22	JY
3	04-25-2022	UPDATES PER 4-13-22 PLANNING BRD. MEETING AND F&O MEMO DATED 4-22-22	JY
4	05-05-2022	REVISED PER TOWN COMMENTS OF 5-4-2022, ADD SHEET 5	JY

SITE PLAN MAP 246 / LOT 1
BARCLAY MEDICAL OFFICE BUILDING
2 STONEMILL DRIVE
HUDSON, NEW HAMPSHIRE

PREPARED FOR:
WARREN R. BARCLAY
TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST
24 CHALIFOUX ROAD
HUDSON, NEW HAMPSHIRE 03051
Bk. 8848 Pg. 381

SCALE: 1"=20'
DATE: DECEMBER 29, 2021

MP ASSOCIATES
Maynard & Paquette
Engineering Associates, LLC
Consulting Engineers and Land Surveyors
31 Quincy Street, Nashua, N.H. 03060
Phone: (603)883-8433 Fax: (603)883-7227

ABUTTERS:

Map 246 Lot 1
Warren R. Barclay Trustee
Warren & Suzanne Barclay Rev. Trust
24 Chalifoux Road
Hudson, NH 03051

Map 246 Lot 2
John W. & Frederick B. Sullivan
53 River Road
Hudson, NH 03051

Map 246 Lot 4
Renee M. & Dana J. Paquette
1 Stonemill Road
Hudson, NH 03051

Map 246 Lot 86
DLM Properties, LLC
22 Abbott Street
Hudson, NH 03055

Map 251 Lot 1
BAE Systems
P.O. Box 868
Nashua, NH 03060

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Eric J. & Elizabeth A. Cohen
51 River Road
Hudson, NH 03051

Map 246 Lot 85 *
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Locicero Family Rev. Trust
2 Jacqueline Street
Hudson, NH 03051

Maynard & Paquette Eng. Assoc., LLC
31 Quincy Street
Nashua, NH 03060

* Abutters within 200'

MAP 251 / LOT 1

MAP 246 / LOT 4

EAYRS POND

MAP 251 / LOT 2

RIVER ROAD

PLAN REFERENCE:

- 1) LOT LINE RELOCATION PLAN MAP 4 / LOTS 2&3, 1 & 2 STONE MILL ROAD, HUDSON, NH. DATED AUGUST 22, 2001 BY MAYNARD & PAQUETTE ENG. ASSOC., LLC. FILED HC RD AS PLAN No. 31567.
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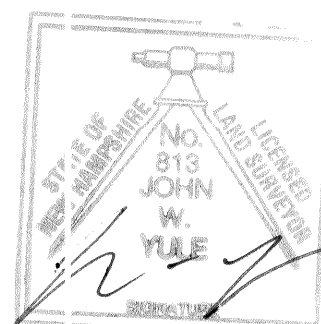
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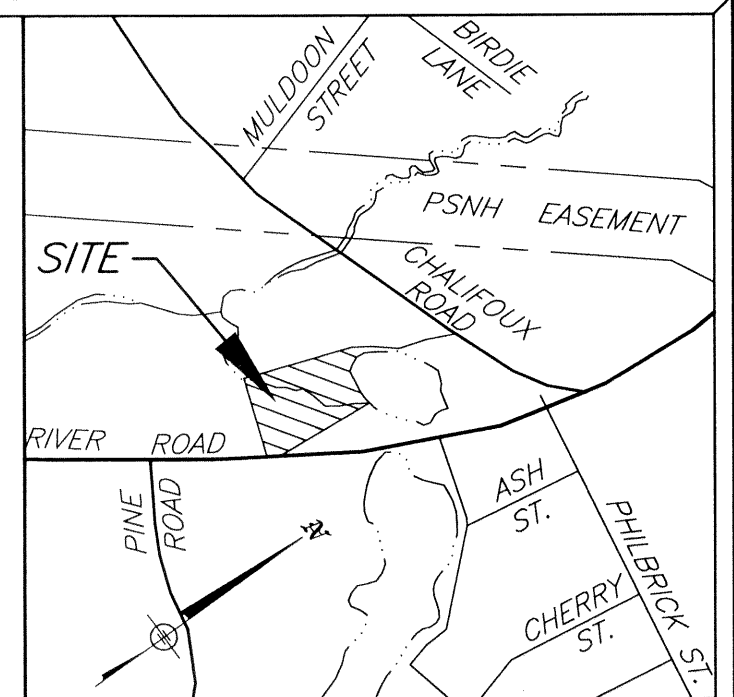
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO (2) YEARS FROM DATE OF APPROVAL.



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- STONE BOUND FOUND
- EXISTING STONE WALL
- LIMIT OF BROOK
- LIMIT OF WETLANDS
- MINIMUM BUILDING SETBACK
- EXISTING PAVEMENT
- EXISTING BUILDING
- UTILITY POLE

LEGEND



VICINITY

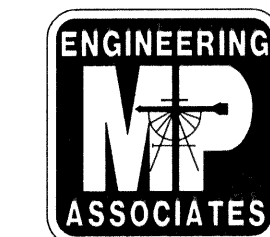
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1	04-05-2022	REVISIONS PER F&O / TOWN COMMENTS	JY
2	04-11-2022	REVISIONS PER TOWN COMMENTS OF 4-8-22	JY
3	04-25-2022	NO CHANGES THIS SHEET	JY
4	05-05-2022	NO CHANGES THIS SHEET, ADD SHEET 5	JY

EXISTING CONDITIONS PLAN
MAP 246 / LOT 1
BARCLAY MEDICAL OFFICE BUILDING
2 STONEMILL DRIVE
HUDSON, NEW HAMPSHIRE

PREPARED FOR:
WARREN R. BARCLAY
TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST
24 CHALIFOUX ROAD
HUDSON, NEW HAMPSHIRE 03051
Bk. 8848 Pg. 381

SCALE: 1"=20'

DATE: DECEMBER 29, 2021



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2 Jacqueline Street
Hudson, NH 03051

Maynard & Paquette Eng. Assoc., LLC
31 Quincy Street
Nashua, NH 03060

* Abutters within 200'

SILT FENCE TO BE INSTALLED
ALONG WETLAND BUFFER

MAP 251 / LOT 1

30' LEVEL SPREADER
2' BOTTOM WIDTH
TOP ELEV.=128.0
BOTTOM=127.0

EMERGENCY SPILLWAY
3' WIDE ELEV.=128.5

PLAN REFERENCE:

- 1) LOT LINE RELOCATION PLAN MAP 4 / LOTS 2&3, 1 & 2
STONE MILL ROAD, HUDSON, NH. DATED AUGUST 22, 2001
BY MAYNARD & PAQUETTE ENG. ASSOC., LLC.
FILED HC RD AS PLAN No. 31567.
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APPROVED BY THE HUDSON, N.H. PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE DATE: _____

SIGNATURE DATE: _____

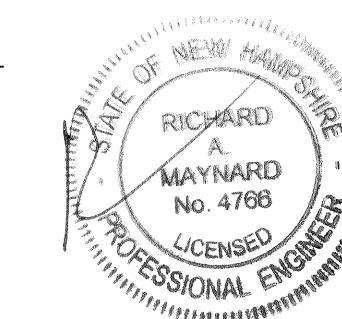
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REGULATIONS OF THE HUDSON
PLANNING BOARD, THE SITE PLAN
APPROVAL GRANTED HEREIN
EXPIRES TWO (2) YEARS FROM
DATE OF APPROVAL.

WARREN R. BARCLAY, TRUSTEE

DATE

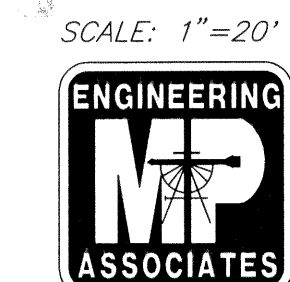
I CERTIFY THAT THIS PLAN WAS PREPARED FROM
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1 AND A FIELD SURVEY LAST MADE ON THE GROUND
IN APRIL 2019 HAVING A MAXIMUM ERROR OF
CLOSURE OF 1:10,000.



GRADING PLAN MAP 246 / LOT 1
**BARCLAY MEDICAL OFFICE BUILDING
2 STONEMILL DRIVE
HUDSON, NEW HAMPSHIRE**

PREPARED FOR:
WARREN R. BARCLAY
TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST
24 CHALIFOUX ROAD
HUDSON, NEW HAMPSHIRE 03051
Bk. 8848 Pg. 381

SCALE: 1"=20'



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Engineering Associates, LLC
Consulting Engineers and Land Surveyors
31 Quincy Street, Nashua, N.H. 03060
Phone: (603)883-8433 Fax: (603)883-7227

DATE: DECEMBER 29, 2021

JWY	JWY	CHECKED	APPROVED	BOOK & PAGE	4	D	12642
DESIGNED	DRAFTED				REVISION	SIZE	JOB NUMBER

NO.	DATE	REVISION	BY
1	04-05-2022	REVISIONS PER F&O / TOWN COMMENTS	JY
2	04-11-2022	REVISIONS PER TOWN COMMENTS OF 4-8-22	JY
3	04-25-2022	UPDATES PER 4-13-22 PLANNING BRD. MEETING AND F&O MEMO DATED 4-22-22	JY
4	05-05-2022	REVISED PER TOWN COMMENTS OF 5-4-2022, ADD SHEET 5	JY

■ STONE BOUND FOUND

○○○○ EXISTING STONE WALL

--- LIMIT OF BROOK

--- LIMIT OF WETLANDS

--- MINIMUM BUILDING SETBACK

--- EXISTING PAVEMENT

--- EXISTING BUILDING

--- DRAINAGE / BROOK

→ FLOW DIRECTION

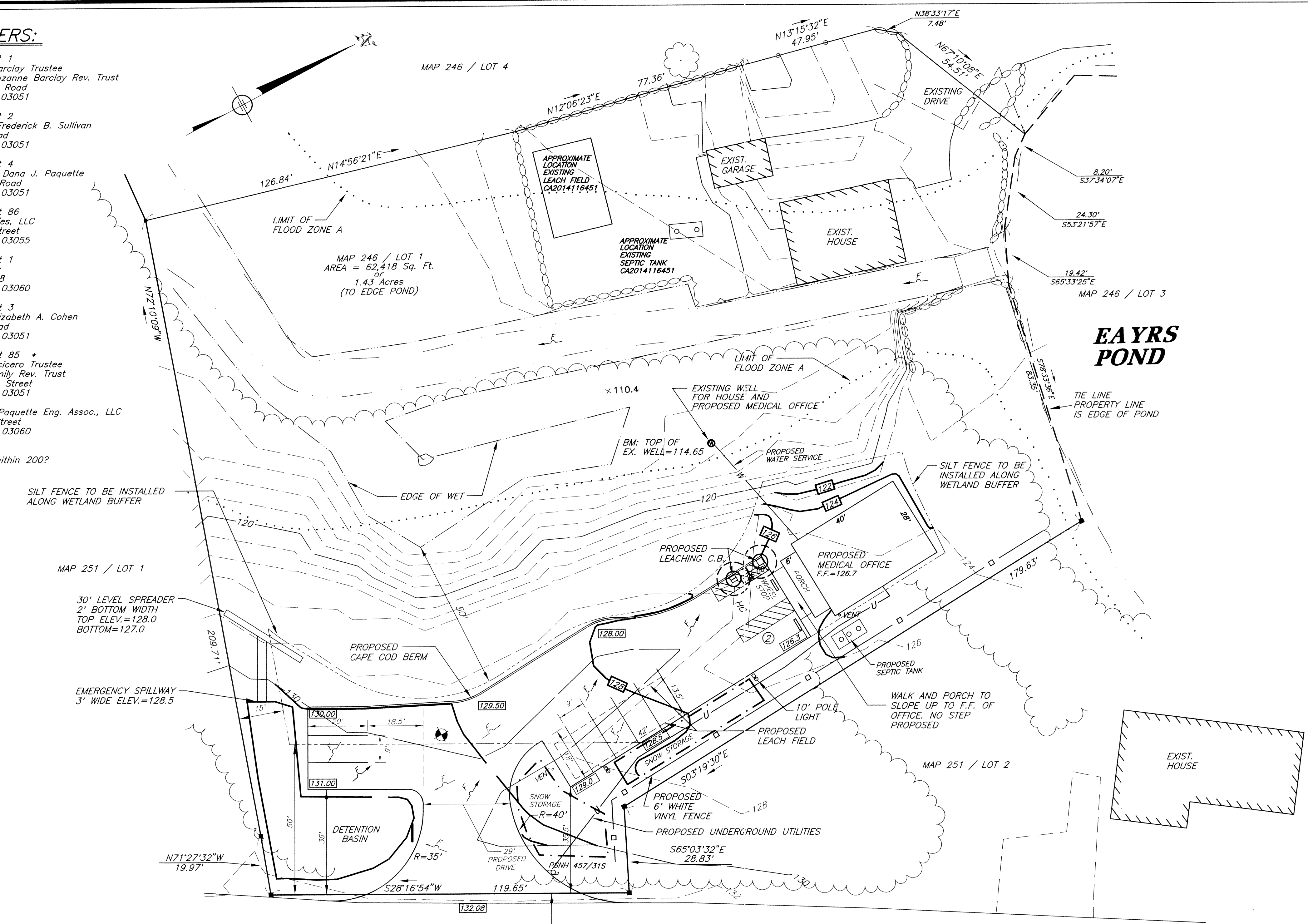
128.00 PROPOSED GRADE

○ UTILITY POLE

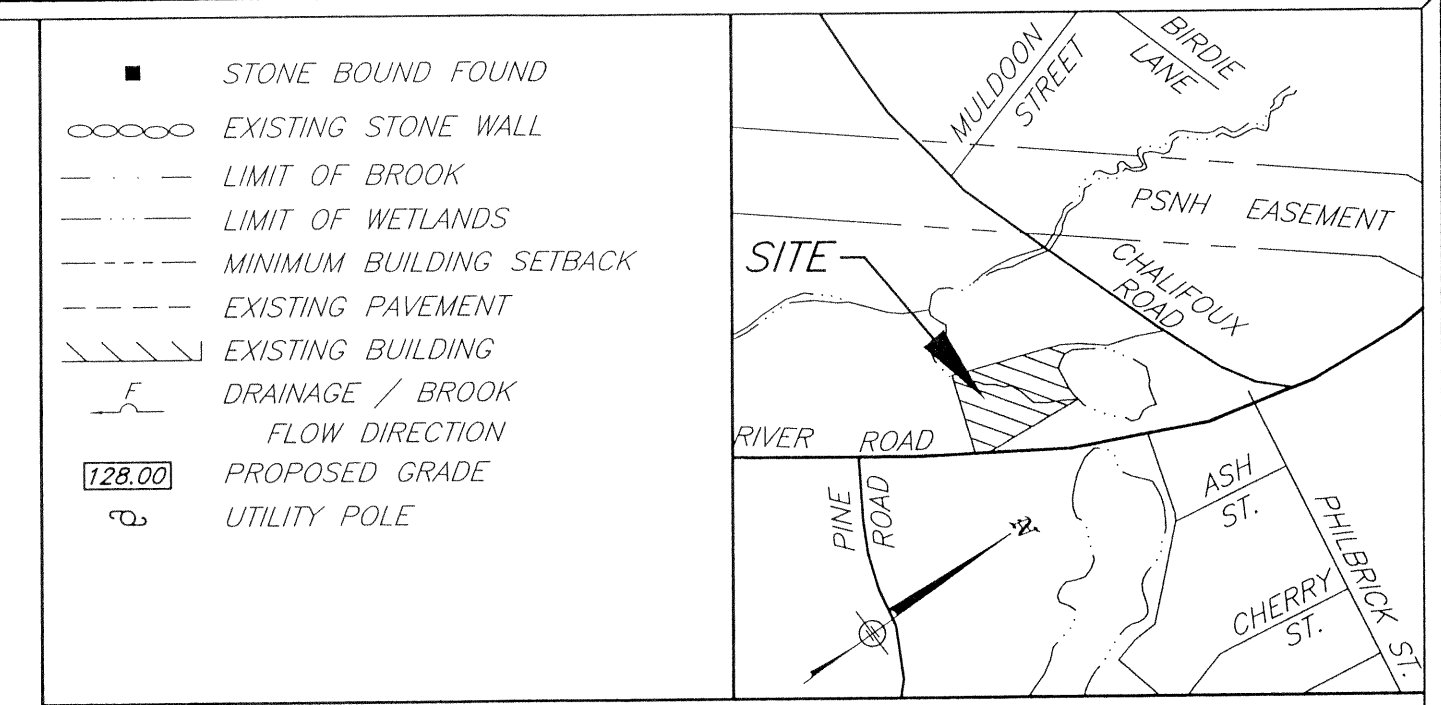
VICINITY

LEGEND

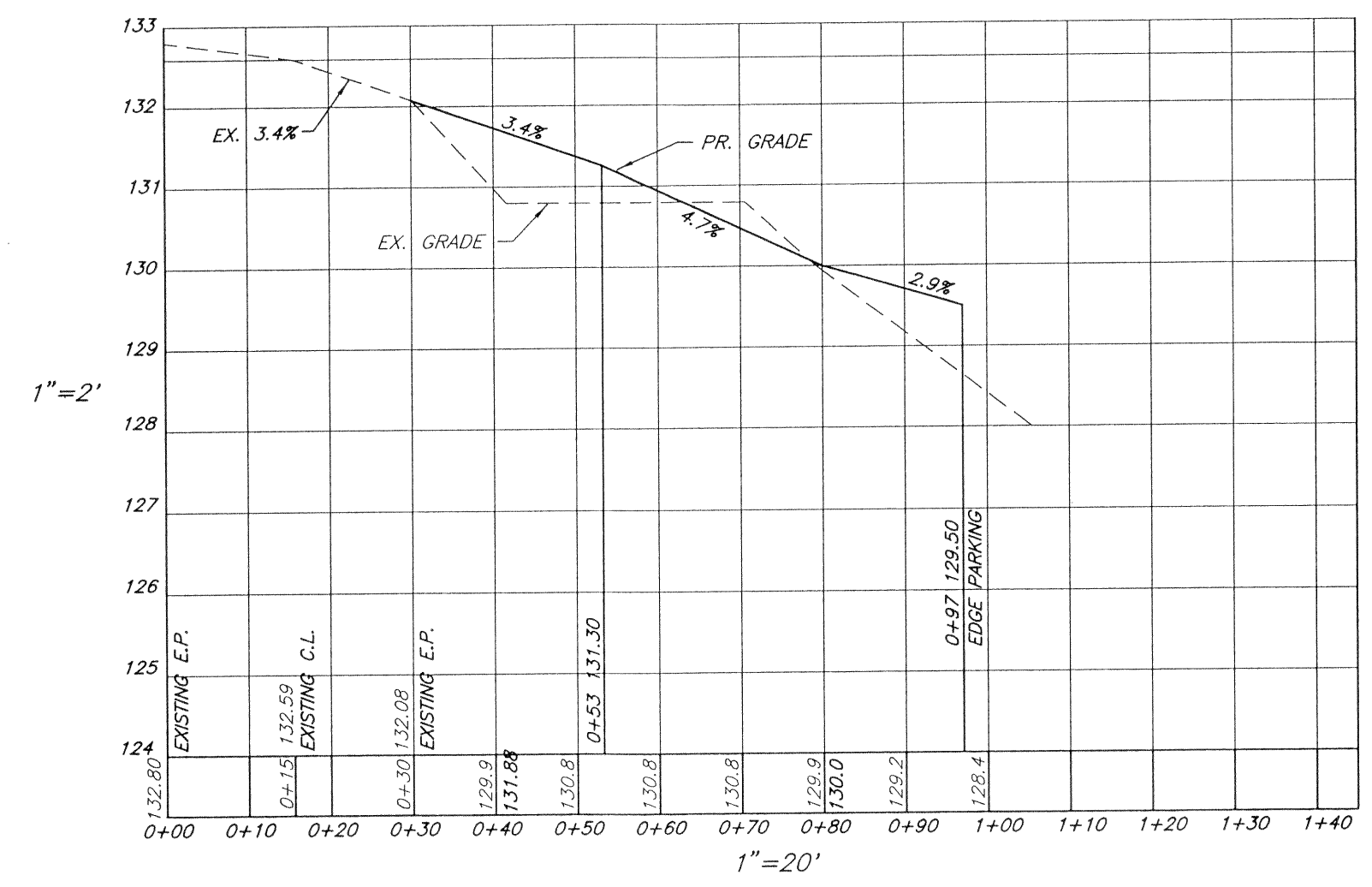
VICINITY



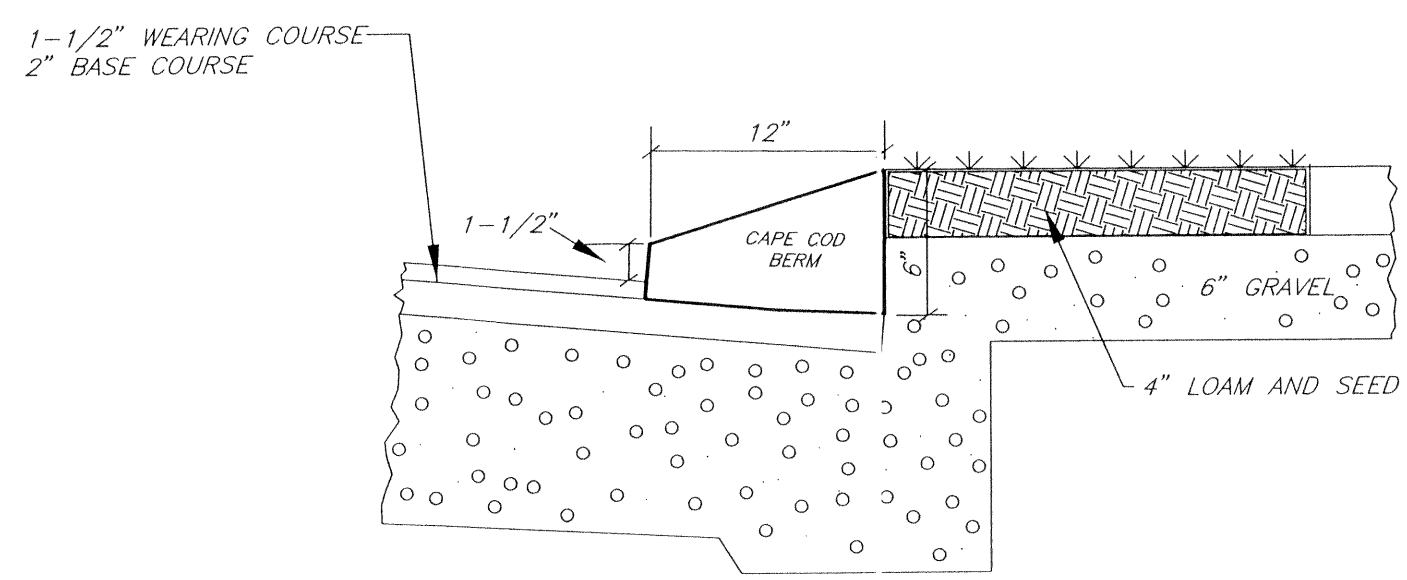
6. COPYRIGHT, ALL RIGHTS RESERVED 2022
MAYNARD & PAQUETTE ENGINEERING ASSOCIATES, LLC



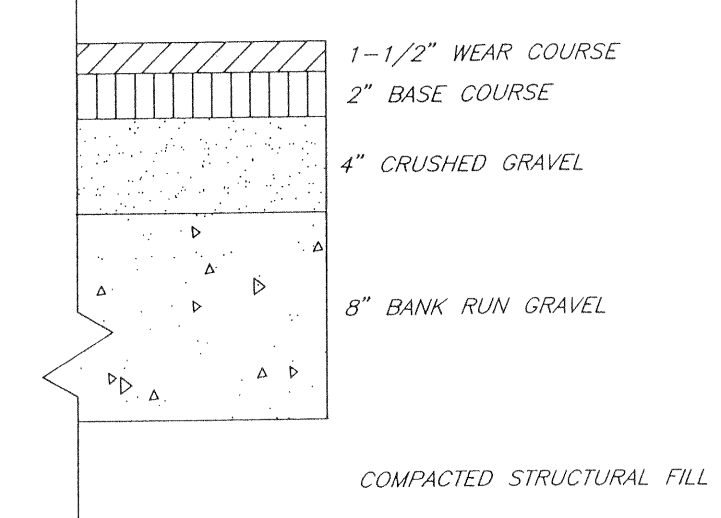
LEGEND VICINITY



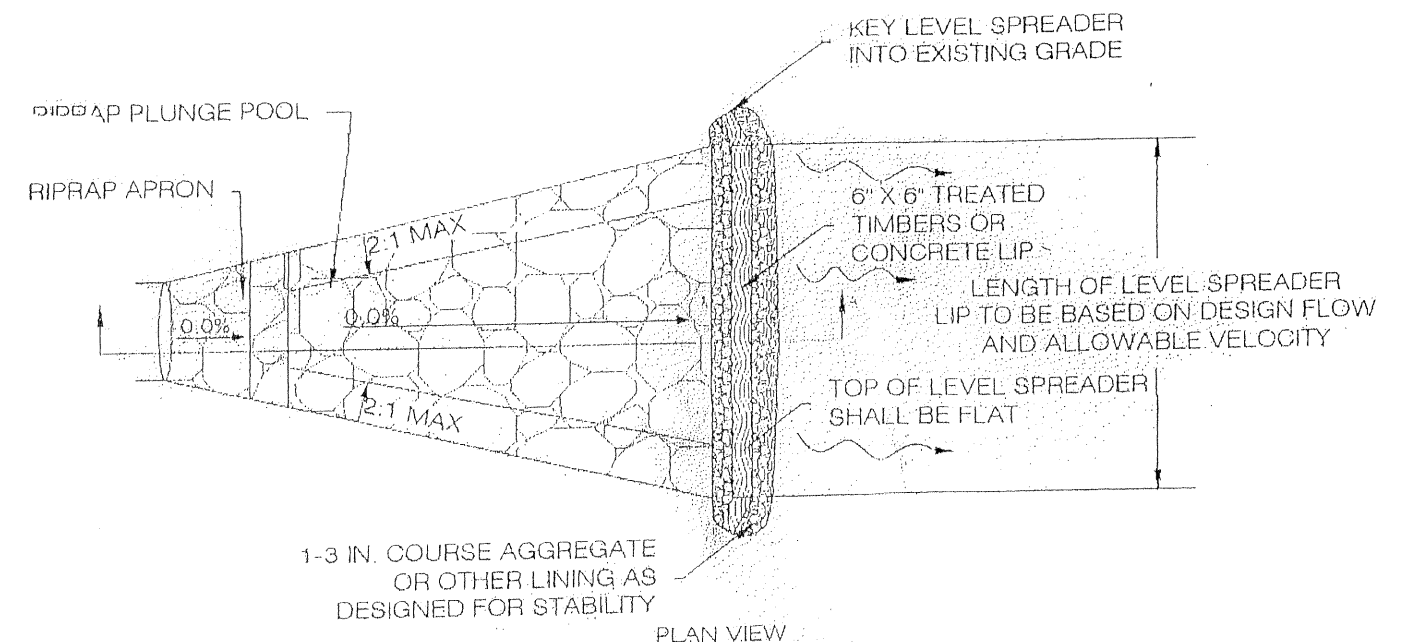
DRIVEWAY PROFILE



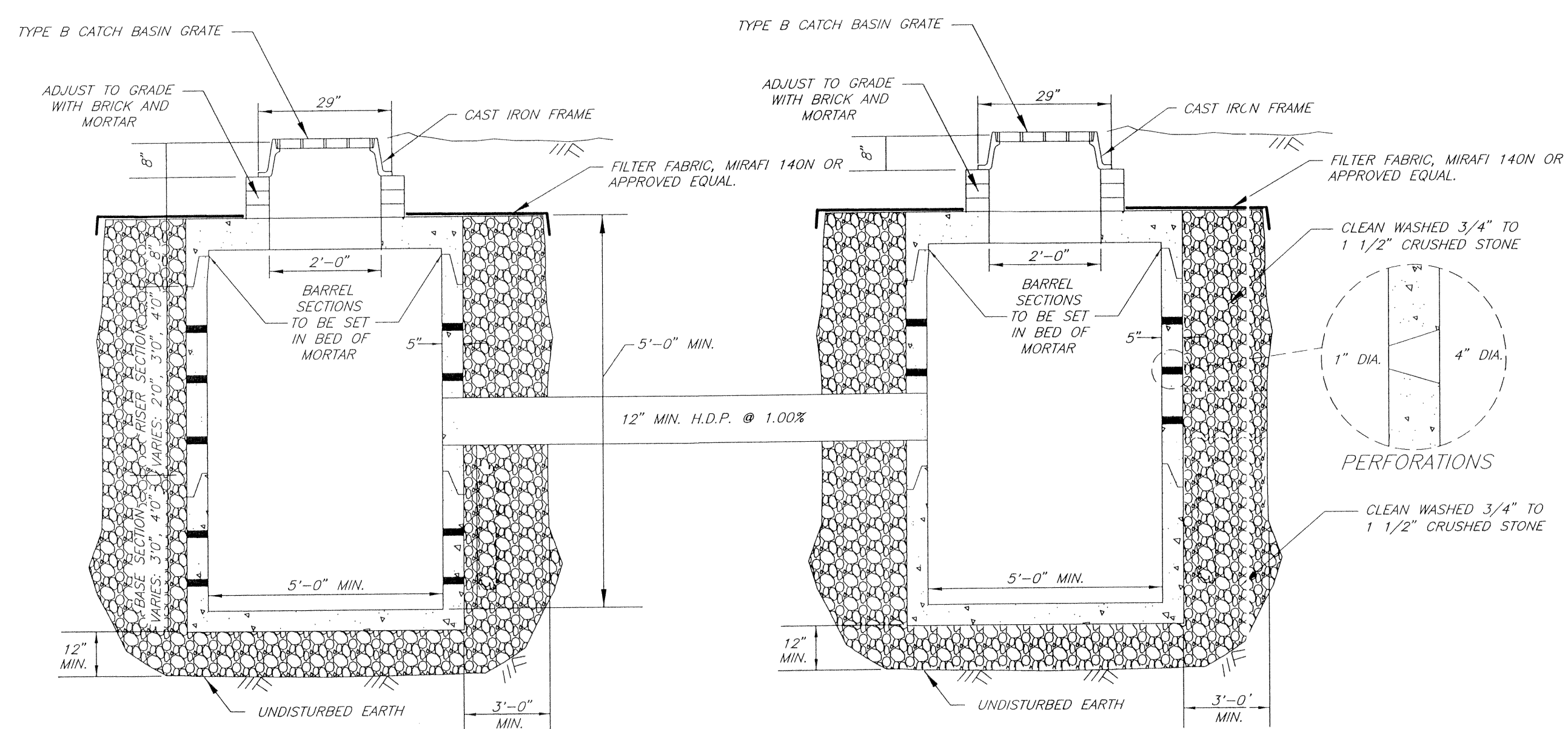
CAPE COD BERM



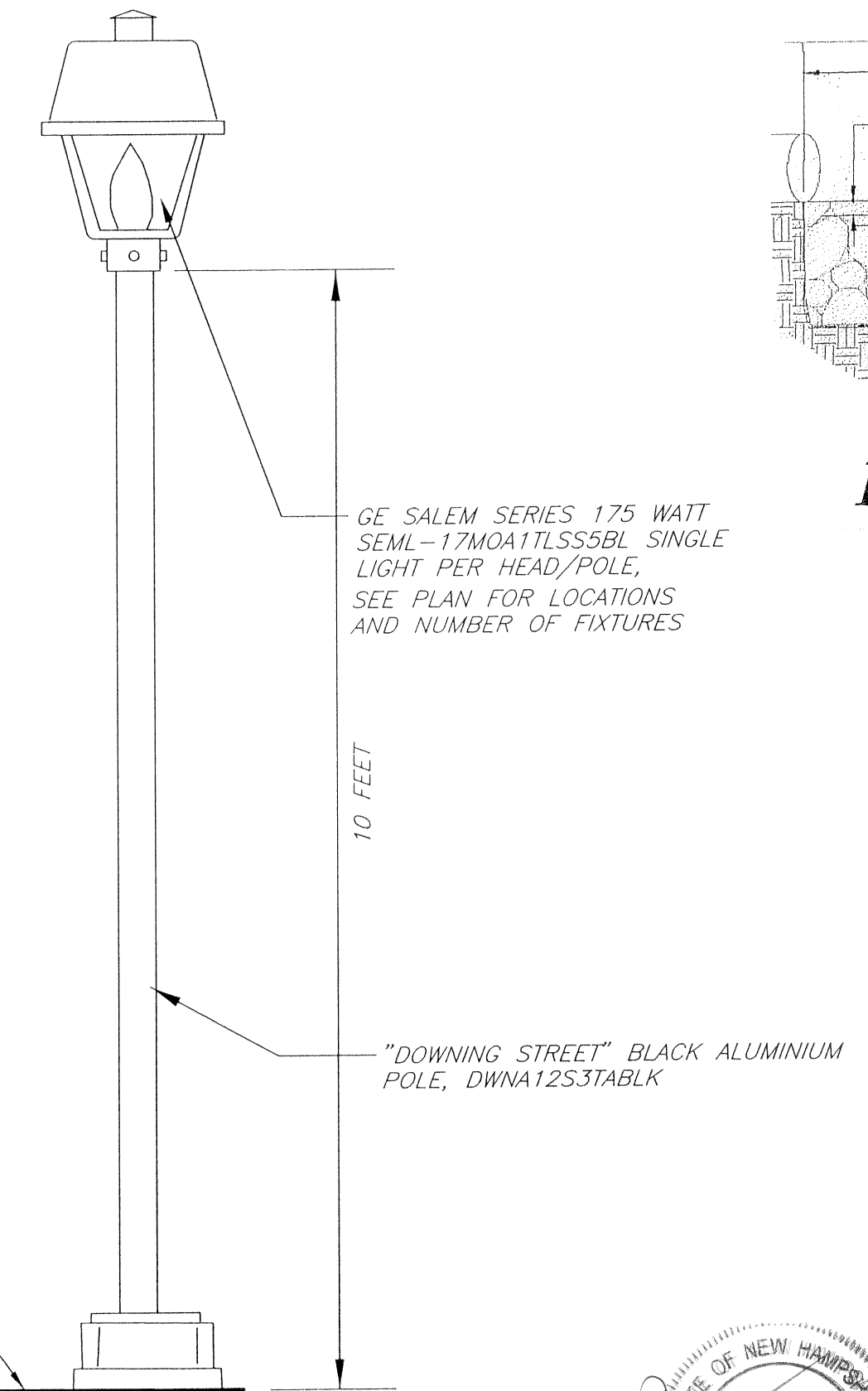
PAVEMENT SECTION



LEVEL SPREADER



DOUBLE LEACHING CATCH BASIN



LIGHT POLE

NO.	DATE	REVISION	BY
1	04-05-2022	REVISIONS PER F&O / TOWN COMMENTS	JY
2	04-11-2022	REVISIONS PER TOWN COMMENTS OF 4-8-22	JY
3	04-25-2022	NO CHANGES THIS SHEET	JY
4	05-05-2022	NO CHANGES THIS SHEET, ADD SHEET 5	JY

SITE PLAN MAP 246 / LOT 1
BARCLAY MEDICAL OFFICE BUILDING
2 STONEMILL DRIVE
HUDSON, NEW HAMPSHIRE
 PREPARED FOR:
 WARREN R. BARCLAY
 TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST
 24 CHALIFOUX ROAD
 HUDSON, NEW HAMPSHIRE 03051
 Bk. 8848 Pg. 381

SCALE: AS NOTED DATE: DECEMBER 29, 2021

ENGINEERING
MP
ASSOCIATES

Maynard & Paquette
 Engineering Associates, LLC
 Consulting Engineers and Land Surveyors
 31 Quincy Street, Nashua, N.H. 03060
 Phone: (603)883-8433 Fax: (603)883-7227

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
 DATE OF MEETING: _____
 _____ SIGNATURE DATE: _____
 _____ SIGNATURE DATE: _____
 SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO (2) YEARS FROM DATE OF APPROVAL.

DESIGNED	DRAFTED	CHECKED	APPROVED	BOOK & PAGE	REVISION	SIZE	JOB NUMBER
JWY	JWY				4	D	12642

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CONSTRUCTION NOTES

- A. GENERAL
EROSION AND SEDIMENT CONTROL PRACTICES INCLUDE THE USE OF THE FOLLOWING: STRAW BALE BARRIERS, SILT SCREEN FENCE BARRIERS, TEMPORARY SEDIMENTATION BASINS, PERMANENT DETENTION/SEDIMENTATION BASINS, GRASS AND/OR ROCK LINED SWALES, DIVERSIONS WITH LEVEL SPREADERS.
1. ALL PERMANENT AND TEMPORARY EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS OF NEW HAMPSHIRE", AUGUST 1992, PREPARED BY NHDES AND RCDD IN COOPERATION WITH USDA-SCS.

Table with columns: TYPE, RATE/100 S.F., USE AND COMMENTS. Rows include HAY OR STRAW, WOOD CHIPS/BARK, JUTE AND FIBROUS MATTING, CRUSHED STONE.

- E. SODDING: SODDING IS DONE WHERE IT IS DESIRABLE TO RAPIDLY ESTABLISH COVER ON A DISTURBED AREA. SODDING ON AREA MAY BE SUBSTITUTED FOR PERMANENT SEEDING PROCEDURES ANYWHERE ON SITE.
D. MAINTENANCE
DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED.

- 2. ALL CONSTRUCTION ACTIVITY SHALL BE DONE IN COMPLIANCE WITH THE EPA'S PHASE II STORM WATER REGULATIONS. THE CONTRACTOR SHALL FILE THE EPA NOTICE OF INTENT (NOI) FORM AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
3. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
a. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN THE AREAS TO BE PAVED;
b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
c. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
d. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

D. SEQUENCE OF CONSTRUCTION

- 1. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS. THESE MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS AND SHALL BE CLEANED AND REPLACED AS NECESSARY.
2. THE LIMIT OF TREE CLEARING AND DEMOLITION SHALL BE MARKED BY THE OWNER/ENGINEER BEFORE ANY WORK IS TO TAKE PLACE.

- B. STRUCTURAL MEASURES
1. STRAW BALE BARRIERS/SILT SCREEN FENCES: STRAW BALE BARRIERS AND/OR SILT SCREEN FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN.
2. SWALES: TEMPORARY AND/OR PERMANENT SWALES ARE TO BE INSTALLED AS SHOWN ON THE PLAN.

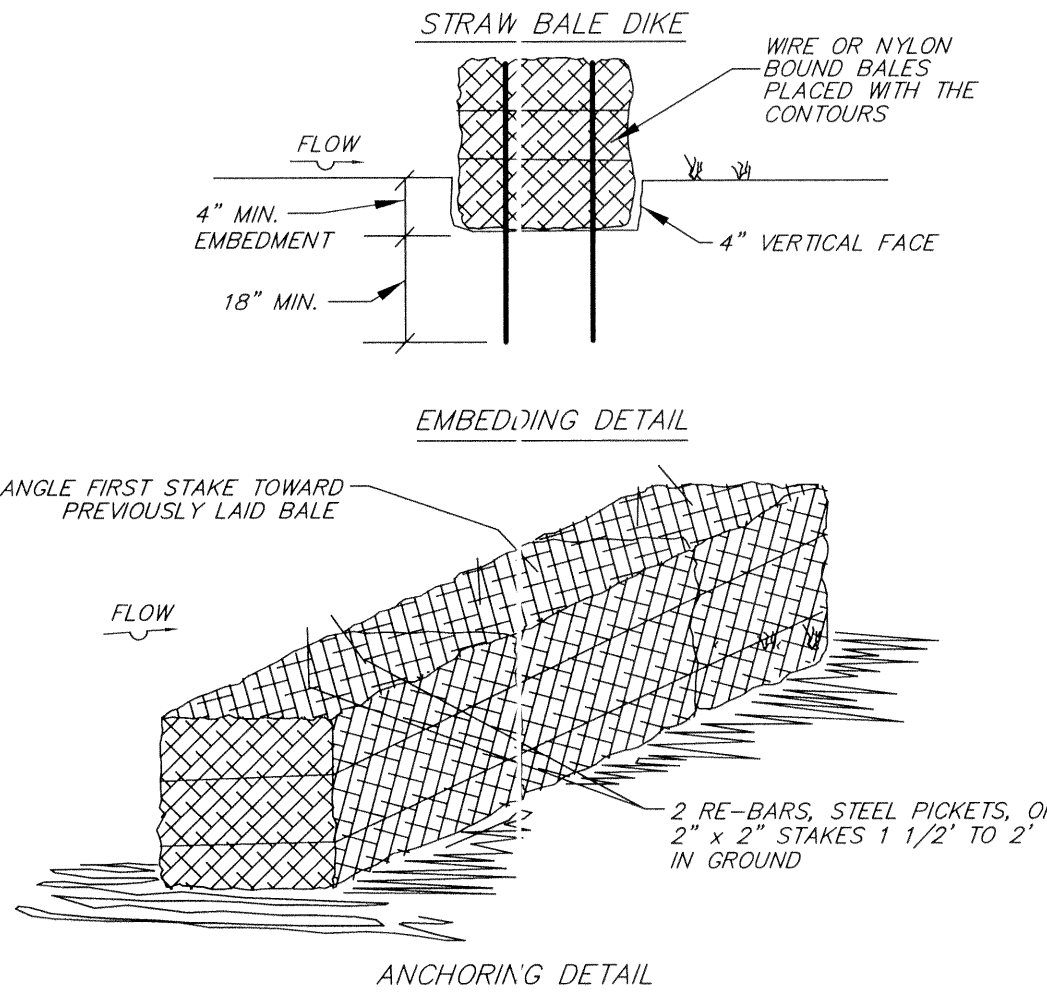
C. VEGETATIVE MEASURES

- 1. TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEED.
2. TEMPORARY SEEDING:
a. BEDDING-REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA.
b. FERTILIZER-FERTILIZER SHOULD BE APPLIED UNIFORMELY OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL.

Table with columns: SPECIES, SEEDING RATE, DATES, DEPTH. Rows include WINTER RYE, OATS, RYEGRASS.

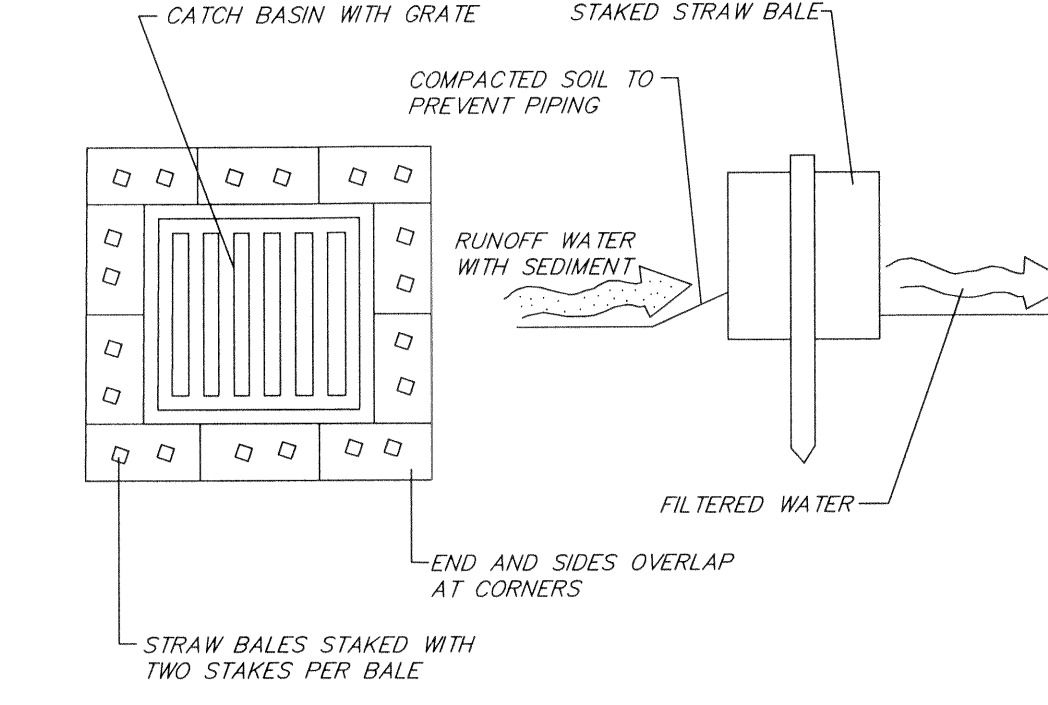
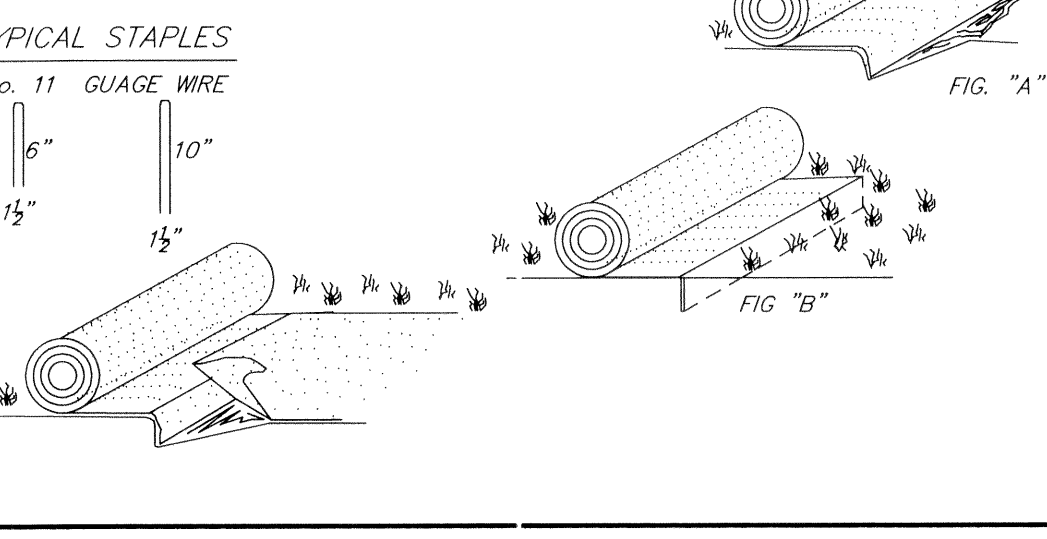
- d. MULCHING: WHERE IT IS IMPRACTICAL TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEED AND MULCH SHOULD BE MULCHED TO FACILITATE GERMINATION.
3. PERMANENT SEEDING:
a. BEDDING-STONES LARGER THAN 4" TRASH, ROOTS, AND OTHER DEBRIS THAT INTERFERES WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED.
b. FERTILIZER-LIME AND FERTILIZER SHOULD BE APPLIED EVENLY OVER THE AREA PRIOR TO OR AT THE TIME OF SEEDING.

Table with columns: TYPE, LBS./ACRE, LBS./1000 S.F., USE. Rows include TALL FRESQUE, CREEPING RED, FRESQUE, RED TOP, TOTAL, CREEPING RED, KENTUCKY BLUEGRASS.



DETAIL FOR STABILIZING WITH JUTE MATTING

- 1. BURY THE TOP ENDS OF THE JUTE STRIPS IN A TRENCH 6 INCHES OR MORE IN DEPTH.
2. TAMP THE TRENCH FULL OF SOIL. SECURE IT WITH A ROW OF STAPLES, 6 INCH SPACING, 4 INCHES DOWN FROM THE TRENCH.
3. OVERLAP AND BURY THE UPPER END OF THE LOWER STRIP AS IN FIGURES "A" AND "B".

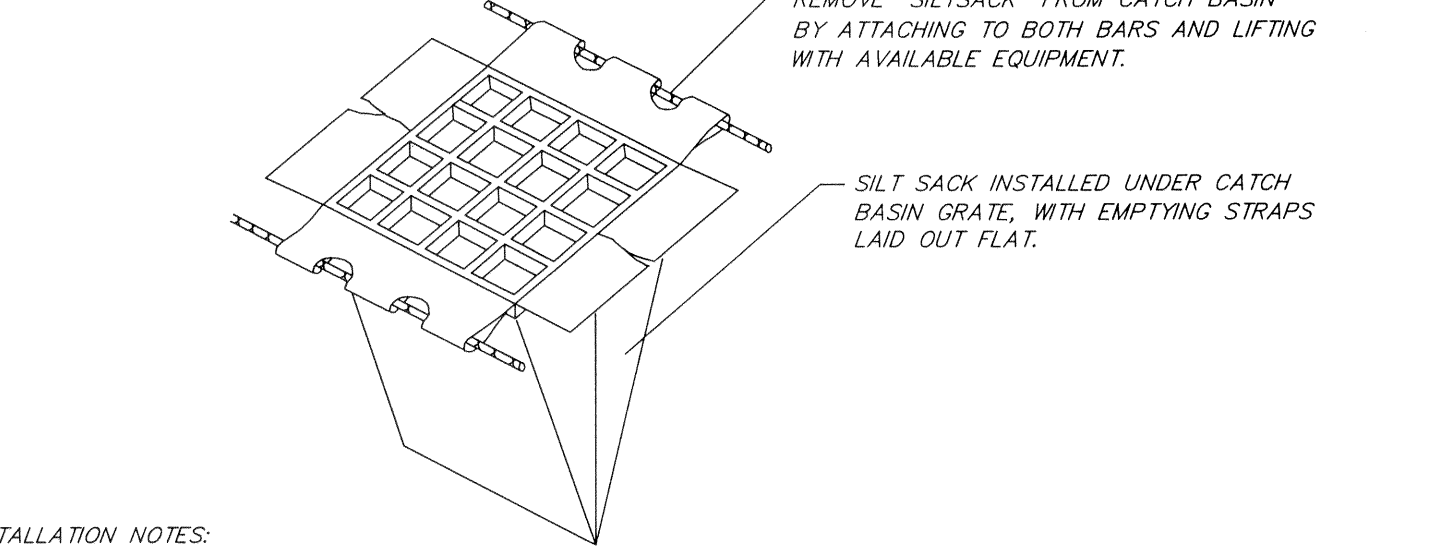


CONSTRUCTION SPECIFICATIONS

- 1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES.

SILT SACK INSTALLATION IN CATCH BASIN

- 1. REMOVE DRAIN GRATE AND INSERT SILT SACK, MAKING SURE THAT THE EMPTYING STRAPS ARE LAID FLAT OUTSIDE OF THE BASIN.
2. REPLACE DRAIN GRATE TO HOLD SILT SACK INTO POSITION.
3. AS SILT SACK BECOMES FULL OF SEDIMENT, REMOVE WITH FRONT END LOADER (OR OTHER SUITABLE EQUIPMENT) AND EMPTY IN TOPSOIL STORAGE AREAS ON SITE.



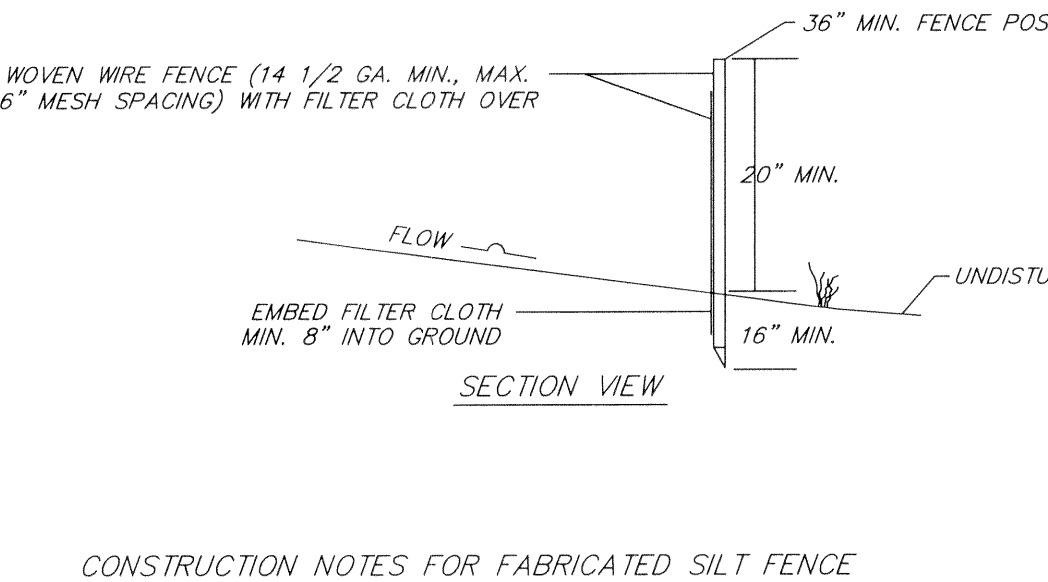
- INSTALLATION NOTES:
1. STRAW BALES MAY BE USED AROUND CATCH BASINS PRIOR TO THE BASE COAT PAVING OPERATIONS.
2. SILT SACKS MAY BE USED PRIOR TO FINAL PAVING, AND MUST BE INSTALLED IN ALL CATCH BASINS AFTER FINAL PAVING.

SITE MAINTENANCE AND INSPECTION PROGRAM

- 4. INSPECTIONS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.
1. CLEANING OF CATCH BASINS TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY QUARTERLY INSPECTIONS AND/OR AFTER SIGNIFICANT RAINFALL EVENTS.

STRAW BALE INSTALLATION AT CATCH BASINS/OUTLET STRUCTURES

- 1. EXCAVATE A 4 INCH DEEP TRENCH AROUND THE INLET. MAKE THE TRENCH AS WIDE AS A STRAW BALE.
2. ORIENT STRAW BALES WITH THE BINDINGS AROUND THE SIDES OF THE BALES, RATHER THAN OVER AND UNDER THE BALES.
3. PLACE BALES LENGTHWISE AROUND THE INLET AND PRESS THE ENDS OF ADJACENT BALES TOGETHER.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP AND MID-SECTION.
3. WHERE TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED TOGETHER.

INSTALLATION PROCEDURE

- 1. LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE.
2. FASTEN WIRE MESH SECURELY TO THE UPSLOPE SIDE OF THE POSTS. USE HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG TO TIE THE WIRES OR HOG RINGS.
3. FASTEN THE FILTER FABRIC TO THE UPSLOPE SIDE OF THE FENCE POSTS AND EXTEND IT 6 TO 8 INCHES INTO THE TRENCH.

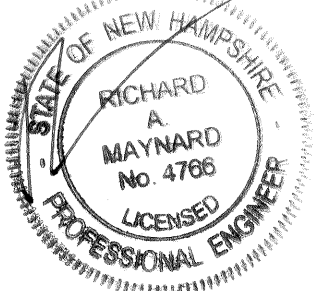
GENERAL SITE CONSTRUCTION SPECIFICATIONS

- 1. ALL GRADING OR DISTURBED AREAS, INCLUDING SLOPES, SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION, IN ACCORDANCE WITH THESE PLANS.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED, AND MAINTAINED IN ACCORDANCE WITH THESE PLANS.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.

Table with columns: NO., DATE, REVISION, REVISION BY. Rows include 1, 2, 3, 4.

STORMWATER POLLUTION PREVENTION PLAN & DETAILS MAP 246 / LOT 1 BARCLAY MEDICAL OFFICE BUILDING 2 STONEMILL DRIVE HUDSON, NEW HAMPSHIRE

PREPARED FOR: WARREN R. BARCLAY TRUSTEE OF WARREN AND SUZANNE BARCLAY REVOCABLE TRUST 24 CHALIFOUX ROAD HUDSON, NEW HAMPSHIRE 03051 Bk. 8848 Pg. 381



SCALE: 1"=20' DATE: DECEMBER 29, 2021

ENGINEERING MP ASSOCIATES Maynard & Paquette Engineering Associates, LLC Consulting Engineers and Land Surveyors 31 Quincy Street, Nashua, N.H. 03060 Phone: (603)883-8433 Fax: (603)883-7227

11 TRACY LANE - LOT LINE RELOCATION

SB# 02-22

STAFF REPORT

May 18, 2022

SITE: 11 Tracy Lane; Map 101 Lot 013-000; and, 19 West Road; Map 101 Lot 006-000

ZONING: Business (B)

PURPOSE OF PLAN: To illustrate a proposed lot line relocation between Hudson lots 101-6 and 101-13.

PLANS UNDER REVIEW:

Lot Line Relocation Plan; prepared by Jeffrey Land Survey LLC, 1 Burgess Drive, Litchfield, NH 03052; prepared for NMMR LLC, owner and applicant, Map 101 Lot 13, Tracy Road, Hudson, NH, Hillsborough County, NH; consisting of a single sheet plan notes 1-8; dated April 2022.

APPLICATION TRACKING:

- April 26, 2022 – Application received.
- May 18, 2022 – Public hearing scheduled.

COMMENTS & RECOMMENDATIONS:

BACKGROUND

There is an existing commercial building on Map 101 Lot 013-000, where AJ's Sports Bar is located alongside several other businesses. AJ's leases part of Map 101 Lot 006-000 immediately behind the sports bar, where there is a softball field, patio area, and horseshoe pit area. The patio and horseshoe pits currently overlap the lot line.

The submitted lot line relocation plan is proposing to adjust the lot line and transfer 6,024 SF parcel from Lot 006 to Lot 013, in order to include the entirety of the patio area and horseshoe pit area. The softball field is proposed to remain on Lot 006. Staff understands that the two property owners have an agreement for patrons of AJ's to use the softball field.

WAIVER REQUESTS

1. **Topography:** The submitted plan provides 2-foot topographic contour lines for the area immediately around the proposed lot line relocation but not the entirety of both lots.

The Applicant is requesting a waiver from § 276-11.1.B (17) to not show topography on the plan, except for the area immediately around the proposed lot line relocation.

- 2. **Approval Block Placement:** The Applicant is requesting a waiver from § 276-11.1.B (4) and § 289-27.A to place the approval block in a location other than the lower-left corner of the plan sheet.
- 3. **Parking area in setback:** The Applicant is requesting a waiver from §276-11.1.B.25 which does not allow parking areas to be in the side or rear setback areas unless allowed by the Planning Board, provided that an equal amount of frontage green area is added to the minimum green area. The existing site provides the minimum frontage green area of 35-feet in addition to extra green area in the northeastern end of the site. Technically, a waiver would eliminate this requirement all together (i.e. no required “extra” green space), while the regulation states that the Board may simply allow it if the extra green space is provided. However, the Board has traditionally dealt with this, and similar matters, as a waiver request.

MINOR PLAN EDITS:

- 1. Plan Title – “Tracy Road” should be “Tracy Lane”. Also, the Map/Lot number and street address of both lots should be included in the plan title.
- 2. Plan date should include day.

DRAFT MOTIONS

ACCEPT the lot line relocation application:

I move to accept the lot line relocation application for the lot line relocation on 11 Tracy Road Map 101 Lot 013-000 and 19 West Road Map 101 Lot 006-000.

Motion by: _____ Second: _____ Carried/Failed: _____

CONTINUE the public hearing to a date certain:

I move to continue the lot line relocation application for the lot line relocation on 11 Tracy Road Map 101 Lot 013-000 and 19 West Road Map 101 Lot 006-000, _____, 2022.

Motion by: _____ Second: _____ Carried/Failed: _____

To GRANT a waiver:

I move to grant a waiver from § 276-11.1.B(17), to not show topography on the plan, except for the area immediately around the proposed lot line relocation, based on the Board’s discussion, the testimony of the Applicant’s representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

To GRANT a waiver:

I move to grant a waiver § 276-11.1.B (4) and § 289-27.A to place the approval block in a location other than the lower-left corner of the plan sheet, based on the Board’s discussion, the testimony of the Applicant’s representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

To GRANT a waiver:

I move to grant a waiver §276-11.1.B.25 to allow parking area within the rear setback as shown in the plan, based on the Board’s discussion, the testimony of the Applicant’s representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

APPROVE the lot line relocation application:

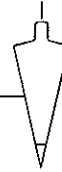
I move to approve the lot line relocation application for Lot Line Relocation Plan; prepared by Jeffrey Land Survey LLC, 1 Burgess Drive, Litchfield, NH 03052; prepared for NMMR LLC, owner and applicant, Map 101 Lot 13, Tracy Road, Hudson, NH, Hillsborough County, NH; consisting of a single sheet plan notes 1-8; dated April 2022; subject to, and revised per, the following stipulations:

1. The Notice of Decision shall be recorded at the HCRD, together with the Plan.
2. Prior to the Planning Board endorsement of the Plan, it shall be subject to final administrative review by Town Planner and Town Engineer.

Motion by: _____ Second: _____ Carried/Failed: _____

JEFFREY LAND SURVEY LLC

1 BURGESS DRIVE, LITCHFIELD, NH 03052
(603) 424-4089



April, 2022
Hudson Planning Board
12 School Street
Hudson, NH 03051
RE: Lot Line Relocation Narrative

Dear Board Members,

The applicant proposes a lot line relocation between two lots, Map 101 Lot 13 and Map 101 lot 6, with a street address of Tracy Lane, Hudson, NH. The intent is to transfer a parcel, with an area of 6,024 square feet, from lot 101/6 to 101/13 with the purpose of encapsulating a dining patio and horseshoe pit. Both lots will have adequate frontage and area. Both lots are in Zone Business, with a minimum required area of 1 acre. There are to be no new roadways built. There are to be no new drainage structures installed. There are to be no new buildings at this time.

Please do not hesitate to let me know if you have any further questions.

Gregg R. Jeffrey, LLS
Jeffrey Land Survey LLC
1 Burgess Drive
Litchfield, NH 03052

RECEIVED

APR 26 2022

LOT LINE RELOCATION APPLICATION

TOWN OF HUDSON
PLANNING DEPARTMENT

Date of Application: 4/7/22 Tax Map #: 101 Lot #: 13

Name of Project: LOT LINE RELOCATION PLAN PREPARED FOR NMMR LLC

Zoning District: BUSINESS General SB#: 02-22
(For Town Use Only)

Z.B.A. Action: _____

PROPERTY OWNER:

Name: NMMR LLC

Address: 10 WOOD HAWK WAY

Address: LITCHFIELD, NH 03052

Telephone #: 1-978-771-2283

Fax #: _____

Email: ahughes@ajs-sportsbar.com

PROJECT ENGINEER:

Name: _____

Address: _____

Address: _____

Telephone #: _____

Email: _____

PROPERTY OWNER:

BOSOWSKI PROPERTIES LLC

40 TEMPLE STREET

NASHUA, NH 03060

1-603-882-2702

bosowskiproperties@gmail.com

SURVEYOR:

GREGG R. JEFFREY LLS

1 BURGESS DR.

LITCHFIELD, NH 03052

603-424-4089

gjeffrey@jeffreylandsurvey.com

PURPOSE OF PLAN:

To illustrate a proposed lot line relocation between Hudson lots 101-6 and 101-13.

(For Town Use Only)

Routing Date: _____ Deadline Date: _____ Meeting Date: _____

_____ I have no comments _____ I have comments (attach to form)

_____ Title: _____ Date: _____

(Initials)

Department:

Zoning: ___ Engineering: ___ Assessor: ___ Police: ___ Fire: ___ DPW: ___ Consultant: ___

LOT LINE RELOCATION DATA SHEET

PLAN NAME: LOT LINE RELOCATION PLAN PREPARED FOR NMMR LLC

PLAN TYPE: LOT LINE RELOCATION PLAN

LEGAL DESCRIPTION: Map 101 Lot 6
Map 101 Lot 13

DATE: APRIL 2022

Location:	<u>19 WEST ROAD</u>	<u>11 TRACY LANE</u>
Total Area:	S.F. <u>468,099 sf (EXIST.)</u> <u>462,075 sf (PROP.)</u>	Acres: <u>60,995 sf (EXIST.)</u> <u>67,019 sf (PROP.)</u>
Area in Wetlands:	<u>0 SF</u>	
Zoning:	<u>BUSINESS</u>	
Lots Not Meeting Required Dimensions:	<u>0</u>	
Required Area:	<u>43,560 SF</u>	
Required Frontage:	<u>150 LF</u>	
Water and Waste System Proposed:	<u>EXISTING PRIVATE SEPTIC</u>	
Number of Lots With Existing Buildings:	<u>1</u>	
Existing Buildings To Be Removed:	<u>0</u>	
Flood Zone Reference:	<u>FIRM MAP 33011C0508D</u>	
Proposed Linear Feet Of New Roadway:	<u>0</u>	

LOT LINE RELOCATION DATA SHEET

Dates/Case #/Description/
Stipulations of ZBA,
Conservation Commission,
NH Wetlands Board Action:

(Attach Stipulations on
Separate Sheet)

List Permits Required:

<u>*Waivers Requested:</u>	<u>Hudson Town Code Reference</u>	<u>Regulation Description</u>
	1. 276-11.1(b) 17	topography of entire lot
	2.	
	3.	
	4.	
	5.	
	6.	
	7.	

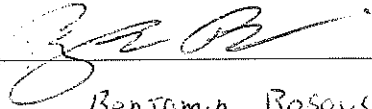
**(Left Column for Town Use)*

(For Town Use Only)	
Data Sheets Checked By: _____	Date: _____

LOT LINE RELOCATION APPLICATION AUTHORIZATION

I hereby apply for *Lot Line Relocation Plan* Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *Lot Line Relocation Plan* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s), by the filing of this application as indicated above, hereby give permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner:  Date: 4/7/22
Print Name of Owner: Benjamin Bosowski

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: _____ Date: _____
Print Name of Developer: _____

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

LOT LINE RELOCATION APPLICATION AUTHORIZATION

I hereby apply for *Lot Line Relocation Plan* Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *Lot Line Relocation Plan* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s), by the filing of this application as indicated above, hereby give permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner:  Date: 4/7/22

Print Name of Owner: ADAM HUGHES

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: _____ Date: _____

Print Name of Developer: _____

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

SCHEDULE OF FEES

A. REVIEW FEES

1. \$170.00 per lot

\$ 170

LEGAL FEES:

The applicant shall be charged attorney costs billed to the Town for Town's attorney review of any application plan set documents.

B. POSTAGE

7 Direct Abutters @ \$4.33 each (or Current Certified Mail Rate) ^{30.31} \$ _____

8 Indirect Abutters (property owners w/in 200 feet) \$ 4.64
@\$0.58 each (or Current First Class Rate)

C. TAX MAP UPDATE FEE

2 to 7 lots (# of lots x \$30.00) + \$25.00 (min. \$85.00)

\$ 85

8 lots or more (min. \$325.00)

\$ _____

TOTAL

\$ 289.95

(For Town Use Only)

AMOUNT DUE: \$ _____

DATE RECEIVED: _____

RECEIPT NO.: _____

RECEIVED BY: _____

NOTE: fees below apply only upon plan approval, NOT collected at time of application.

F. RECORDING FEES:

The applicant shall pay the costs of recording the final site plan layout prior to final site plan approval, in accordance with fees established by the County. Recording fees must be paid prior to recording.

Recording of Plan @ \$24.00/sheet + \$2.00/surcharge plan
Land & Community Heritage Investment Program (LCHIP) fee @ \$25.00
Easements/Agreements @\$10.00/first sheet, \$4.00/each sheet thereafter +
\$2.00/surcharge/doc. + First Class return postage rate

G. COST ALLOCATION PROCEDURE AMOUNT CONTRIBUTION AND OTHER IMPACT FEE PAYMENTS:

To be determined by the Planning Board at time of plan approval and shall be paid by the applicant at the time of submittal of the Certificate of Occupancy Permit requests.

*****The applicant shall be responsible for all fees incurred by the town for processing and review of the applicant's application, plan and related materials.*****

LOT LINE RELOCATION WAIVER REQUEST FORM

Name of the Lot Line Relocation Plan: LOT LINE RELOCATION PLAN PREPARED FOR NMMR LLC

Street Address: 11 TRACY STREET & 19 WEST ROAD, HUDSON NH

I ADAM HUGHES hereby request that the Planning Board waive the requirements of item 276-11.1(b) 17 of the Lot Line Relocation Plan

Checklist in reference to a plan presented by GREGG R. JEFFREY LLS

JEFFREY LAND SURVEY LLC (name of surveyor and engineer) dated APRIL, 2022

for property tax map(s) 101 and lot(s) 6,13 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

A topographic survey of the entirety of the two lots would cause unnecessary financial burden on the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

The applicants wish to transfer a small parcel of land from Hudson Lot 101/6 to lot 101/13. The area of the transfer is 6,024 square feet. The larger of the two lots, 101/6, is currently at 10.7 acres. The applicant believes that surveying and plotting topography for 10.7 acres would be unbeneficial to illustrating the transfer of such a small parcel.

At the current scale, it would require a plan set of at least 6 sheets to illustrate the the entire lot of 101/6, therefore, granting ^{Signed} of the waiver is in keeping with the spirit and intent of the ordinance.

Applicant or Authorized Agent

LOT LINE RELOCATION WAIVER REQUEST FORM

Name of the Lot Line Relocation Plan: LOT LINE RELOCATION PLAN PREPARED FOR NMMR LLC

Street Address: 11 TRACY STREET & 19 WEST ROAD, HUDSON NH

I ADAM HUGHES hereby request that the Planning Board
waive the requirements of items 276-11.1.B.(4) & 289-27.A of the Lot Line Relocation Plan
Checklist in reference to a plan presented by GREGG R. JEFFREY LLS

JEFFREY LAND SURVEY LLC (name of surveyor and engineer) dated APRIL, 2022
for property tax map(s) 101 and lot(s) 6,13 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

The relocation of the Planning Board approval box would incur an unnecessary
burden on the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

Because of the size of the areas of the two lots combined, the windows used to illustrate
the areas, at the scales shown, fit very nicely on one 22"x34" sheet. To accomplish this,
The approval box was shifted to the right along with the rest of the required certifications.
Since there would be no substantive change in the intent of the plan, and all information
would still be on the recorded mylar, granting of the waiver is in keeping with the spirit
and intent of the ordinance.

Signed:

Applicant or Authorized Agent

LOT LINE RELOCATION WAIVER REQUEST FORM

Name of the Lot Line Relocation Plan: LOT LINE RELOCATION PLAN PREPARED FOR NMMR LLC

Street Address: 11 TRACY STREET & 19 WEST ROAD, HUDSON NH

I ADAM HUGHES hereby request that the Planning Board waive the requirements of item 276.1.B.25 of the Lot Line Relocation Plan Checklist in reference to a plan presented by GREGG R. JEFFREY LLS

JEFFREY LAND SURVEY LLC (name of surveyor and engineer) dated APRIL, 2022 for property tax map(s) 101 and lot(s) 6,13 in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Subdivision/Site Plan regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

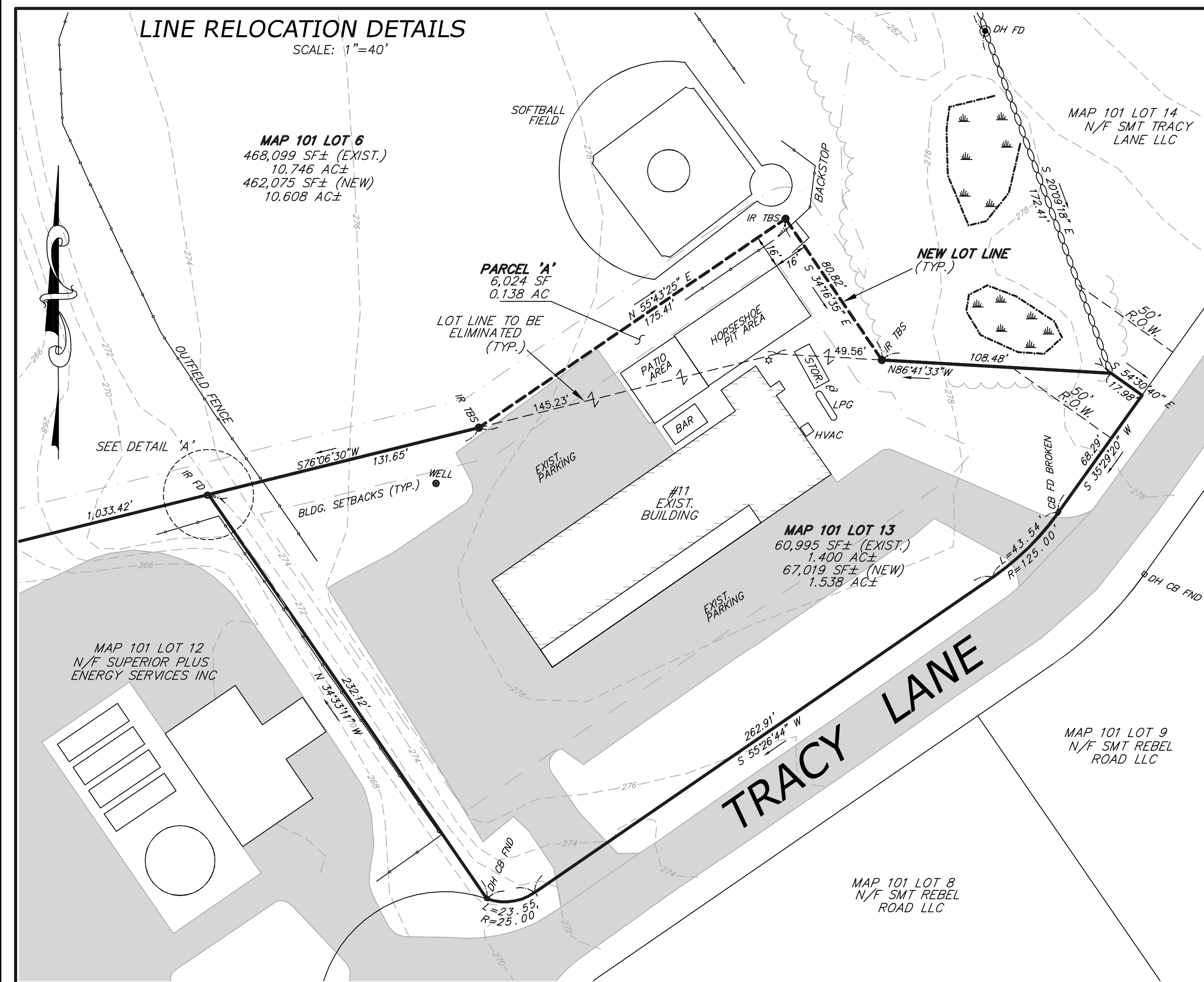
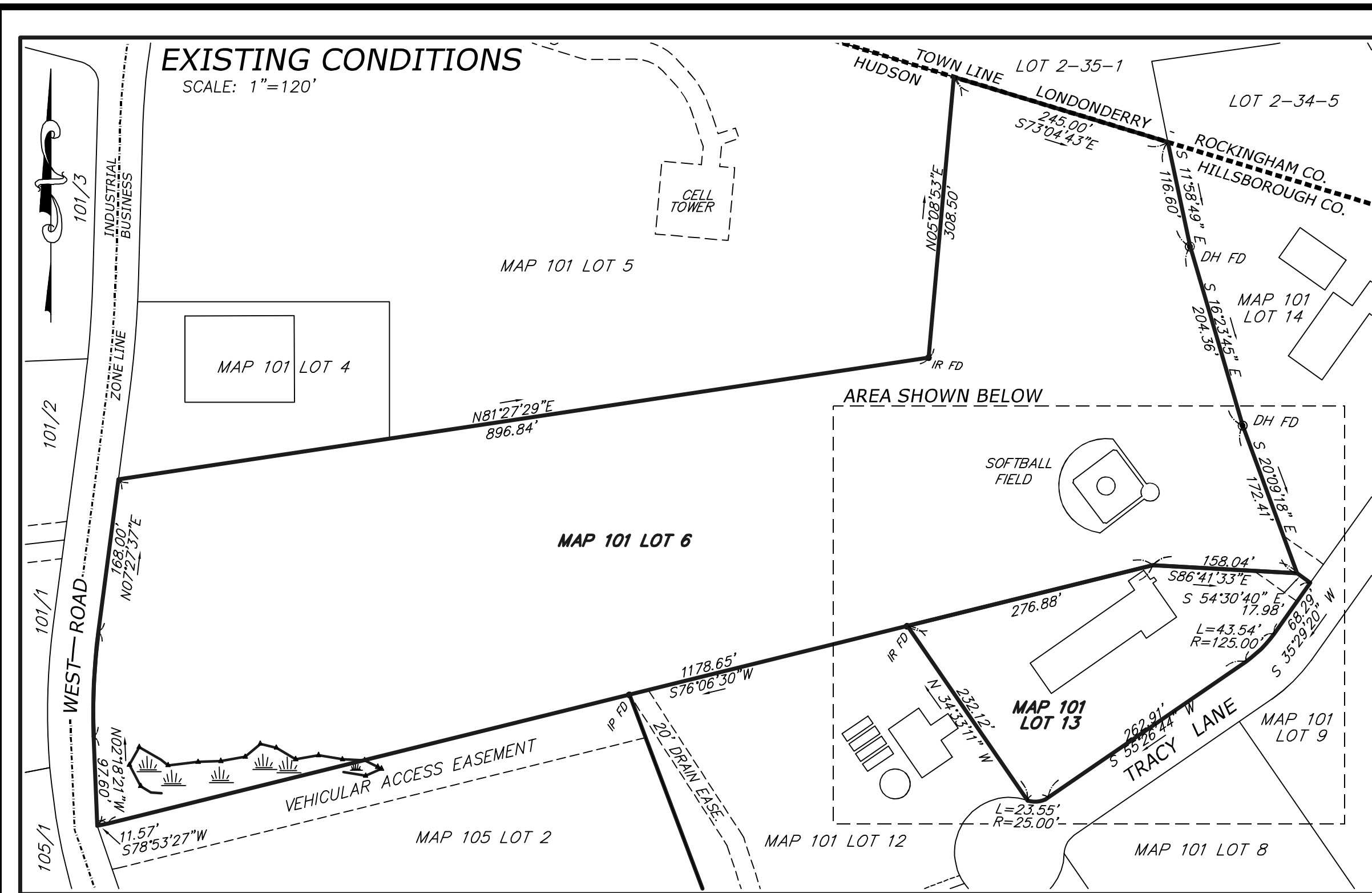
The requirement that no parking areas may be within the side or rear setbacks would place an undue burden on the applicant.

Reason(s) for granting this waiver, relative to not being contrary to the Spirit and Intent of the Subdivision/Site Plan regulations: (if additional space is needed please attach the appropriate documentation hereto):

The existing rear parking area is currently non conforming and a portion exists on the abutting parcel. The relocated lot line would encapsulate the existing parking area so that it is entirely on the applicant's property. Since the proposed lot line would make the lot more conforming, granting of the waiver is in keeping with the spirit and intent of the ordinance.

Signed:


Applicant or Authorized Agent

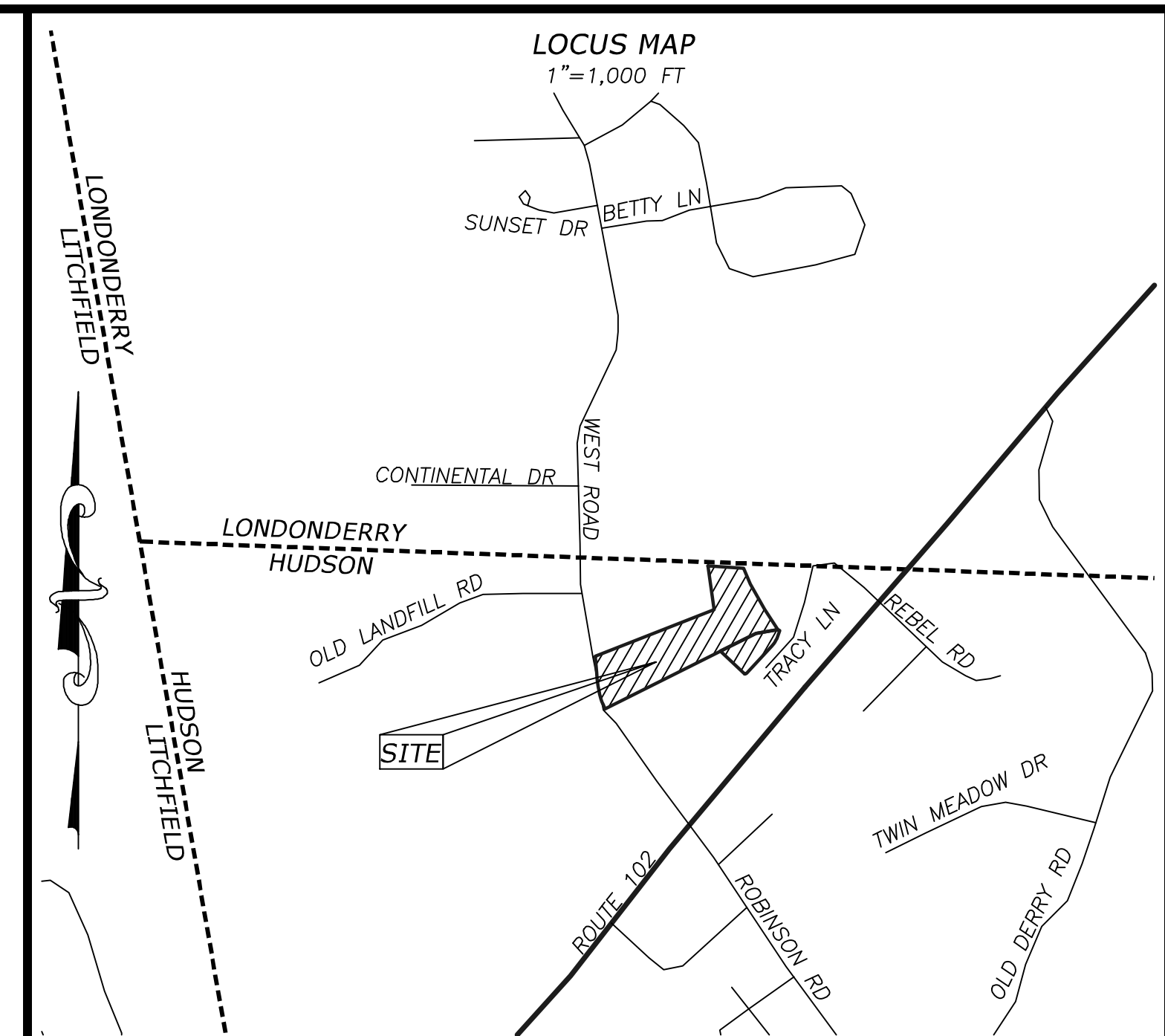
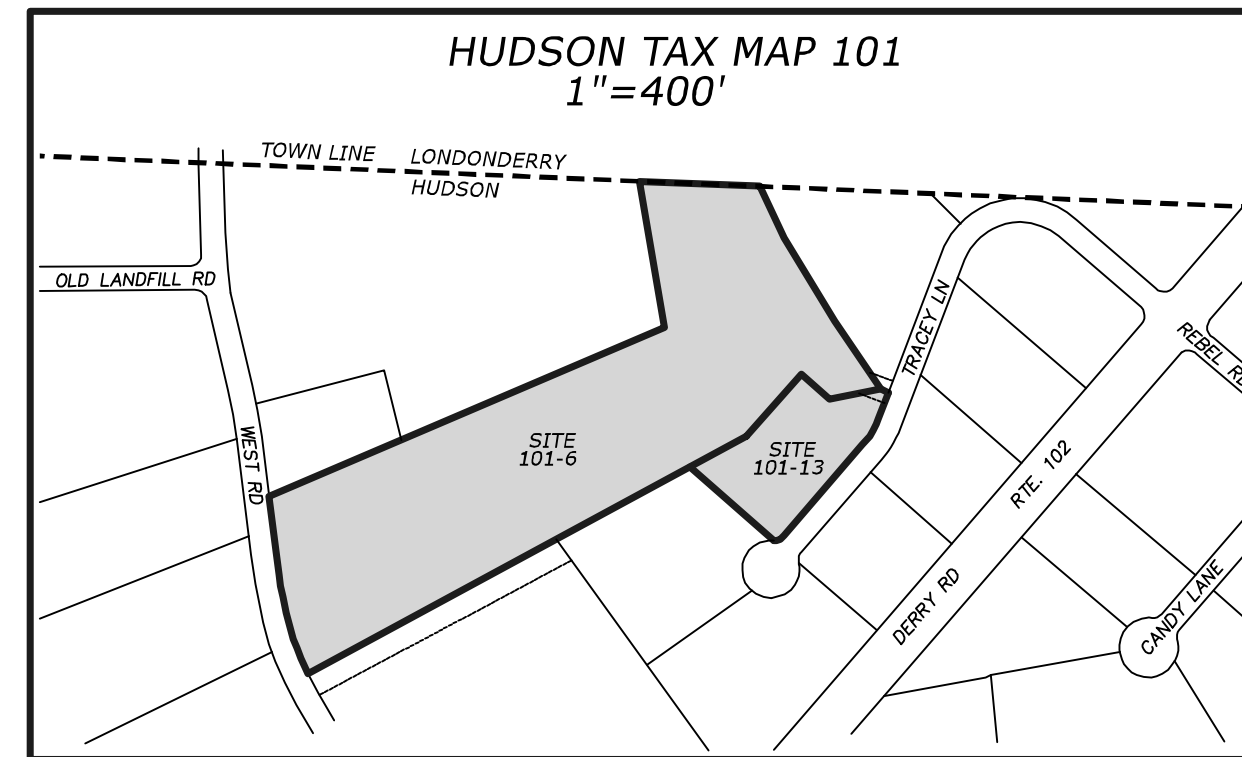


REFERENCE PLAN:

- "FILION LOT LINE RELOCATION 2 WEST ROAD, HUDSON, NEW HAMPSHIRE" DATED OCTOBER 22, 1999 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS (HCRD) AS PLAN 30321.
- "GALLANT TRUCK EQUIPMENT INC. SITE PLAN @ 1"=30'-0" " DATED AUGUST 30, 1988 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS (HCRD) AS PLAN 22831.
- "HAMM II SUBDIVISION, 2 WEST ROAD, HUDSON, NEW HAMPSHIRE" DATED DECEMBER 6, 1999 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS (HCRD) AS PLAN 30416.
- "MAP 101/LOT 13 CODOMINIUM SITE PLAN, TRACY LANE CONDOMINIUM" DATED MAY 23 2008 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS (HCRD) AS PLAN 36143.
- "FRED FULLER OIL CO., INC. TRACY LANE, HUDSON, NEW HAMPSHIRE" DATED FEBRUARY 28, 1996 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS (HCRD) AS PLAN 28040.



CONTACT DIG SAFE 78 HOURS PRIOR TO CONSTRUCTION
1-888-DIG-SAFE

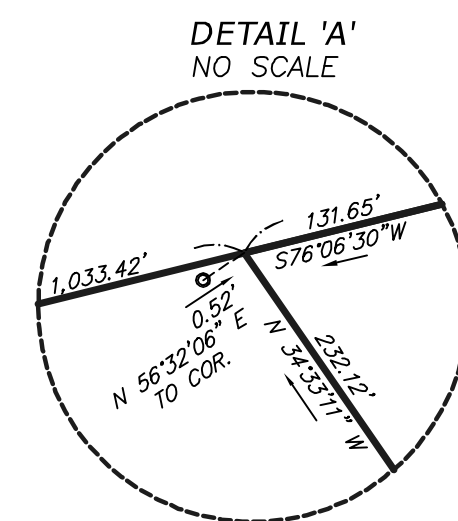


PLAN NOTES:

- THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE A LOT LINE ADJUSTMENT BETWEEN HUDSON LOT 101/6 AND 101/13.
- TOTAL LOT AREA OF TWO PARCELS = 529,094 SF± OR 12.146 AC±.
- OWNER OF RECORD: NMMR LLC
- CURRENT ZONING DISTRICT: BUSINESS
MINIMUM SETBACKS: FRONT= 50'
SIDE= 15'
REAR= 15'
MIN. AREA = 43,560 SF
MIN. AREA (TOWN WATER & SEWER)= 43,560 SF
MIN. FRONTAGE= 150'
- FOR BOUNDARY INFORMATION SEE PLAN REFERENCE 1.
- TOPOGRAPHIC INFORMATION DEPICTED HEREON IS A RESULT OF AN ON-THE-GROUND SURVEY PREPARED BY THIS OFFICE APRIL 2022.
- NO PORTION OF THE PROPERTY IS WITHIN THE 100-YEAR FLOOD PLAN AS PER FIRM MAP NUMBER 33011C0508D
- THE LOCATION OF ANY UNDERGROUND UTILITIES SHOWN IS APPROXIMATE. JEFFREY LAND SURVEY MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. CONTRACTOR IS TO CONTACT DIGSAFE PRIOR TO ANY EXCAVATION.

OWNER, LOT 101-6
BOSOWSKI PROPERTIES LLC
40 TEMPLE STREET
NASHUA, NH 03060
BK. 9431 PG. 1634

OWNER, LOT 101-13
NMMR LLC
10 WOOD HAWK WAY
LITCHFIELD, NH 03052
BK. 9001 PG. 2168



APPROVED WAIVERS

CHECKLIST ITEM	DESCRIPTION
276-11.1(b) 17	TOPO OF LOTS

PLAN LEGEND

IRON PIPE FOUND	○ IP FND
IRON ROD TO BE SET	● IR TBS
DRILL HOLE TO BE SET	● DH TBS
LOT LINE TO BE ABANDONED	--- 4 --- 4 ---
PROPOSED LOT LINE	-----
STONEMASS FENCE	=====
CHAIN LINK FENCE	-----
UTILITY POLE	○
CONTOUR LINE	--- 274 ---

OWNER OF MAP 101 LOT 13		OWNER OF MAP 101 LOT 6	
SIGNATURE _____	DATE _____	SIGNATURE _____	DATE _____
DATE _____		DATE _____	

PURSUANT TO THE SUBDIVISION OF LAND REGULATIONS OF THE HUDSON PLANNING BOARD, SUBDIVISION APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SUBDIVISION PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

CERTIFICATIONS:

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING APRIL OF 2022. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1:10,000).

LICENSED LAND SURVEYOR _____ DATE _____

REV. 3		BY:
REV. 2		BY:
REV. 1		BY:

LOT LINE RELOCATION PLAN
PREPARED FOR
NMMR LLC
OWNER AND APPLICANT, MAP 101 LOT 13
11 TRACY ROAD
HUDSON, NH
HILLSBOROUGH COUNTY, NH

JEFFREY LAND SURVEY LLC
1 BURGESS DRIVE
LITCHFIELD, NH 03052

SHEET 1 OF 1

1"=40' DATE: APRIL 2022

EVERSOURCE TRANSMISSION LINE

CU# 04-22

STAFF REPORT

May 18, 2022

SITE: Eversource Maintained Right-of-Way and Utility Easements across multiple lots

ZONING: General-One (G1) & Residential-Two (R2)

PURPOSE OF PLAN: Eversource structure replacement project.

PLANS UNDER REVIEW: 326 Transmission Line – Structure Replacement Project, Hudson, New Hampshire, Conditional Use Permit Planset; prepared by GZA GeoEnvironmental, Inc., 5 Commerce Park North, Suite 201, Bedford, NH 03110; prepared for Eversource Energy, 13 Legends Drive, Hooksett, NH 03106; consisting of 5 Map Sheets dated April 2022 and Notes on Sheet S1 and details Sheet 2 dated February 18, 2022.

ATTACHMENTS:

- A. Recommendation from Conservation Commission, May 10, 2022

APPLICATION TRACKING:

- April 19, 2022 – Application received.
- May 9, 2022 – Public hearing scheduled by the Hudson Conservation Commission.
- May 18, 2022 – Public hearing scheduled by the Hudson Planning Board.

COMMENTS & RECOMMENDATIONS:

BACKGROUND

From the Applicant's narrative:

The proposed project involves the replacement of eight 326 Transmission Line structures. The utility structures have been subject to environmental damage (weathering, woodpecker holes, etc.), and must be replaced for the lines to continue to function safely and reliably. The proposed 2022 structure replacements were selected based on site visit evaluations of the 326 Transmission Line.

The 326 Transmission Line ROW is approximately 18 miles in length, beginning at the Scobie Pond Substation in Londonderry, NH, and ending at the New Hampshire-Massachusetts border and has a width of approximately 300 feet... The Site crosses through residential, and rural properties, as well as three public roads, Marie Lane, Bush Hill Road and River Road. Natural cover within the ROW includes upland shrublands and wetland emergent and scrub-shrub habitats. In the Town of Hudson, the proposed work area is located west of Kienia Road, north of Bush Hill Road and east and west of River Road.

Tighe and Bond delineated wetlands in 2018 and GZA reviewed wetland boundaries in 2022. In addition, GZA will be submitting a separate wetland permit through the New Hampshire Department of Environmental Services for the proposed project in Hudson.

Eight structures are proposed to be replaced in Hudson along the 326 Transmission Line. The utility structures will be approximately 5-10 feet higher than the existing utility structures due to updated National Electrical Safety Code requirements.

In the Town of Hudson, the proposed project requires approximately 36,793 sq. ft. of temporary wetland impact to palustrine emergent and scrub-shrub wetlands that are located within the existing maintained utility ROW for construction access and temporary work pad placement. [Breakdown in the following table:]

Table 1 – Summary of wetlands and associated temporary wetland and buffer impacts.

Wetland ID	Temporary Wetland Impact (SF)	Local Buffer Impact (SF)
HW-51	3,466	1,170
HW-45	5,357	2,833
HW-81	27,970	2,020
Total	36,793	6,023

Wherever possible, temporary access is proposed using existing access routes to limit temporary disturbance to natural wetlands and wetland buffers.

STAFF COMMENTS

The application is proposing to replace utility structures on an existing transmission line. The project will cause temporary disturbances for access, which will be minimized wherever possible.

While the rehabilitation and repair of existing structures is a permitted use within the Wetland Conservation Overlay District, the additional work including temporary access ways and work areas may be considered conditional uses subject to permit.

The Conservation Commission has reviewed this application and provided a positive recommendation (**Attachment A**).

DRAFT MOTIONS

ACCEPT the conditional use permit application:

I move to accept the conditional use permit application for the 326 Transmission Line – Structure Replacement Project, within the Eversource Maintained Right-of-Way and Utility Easements across multiple lots in Hudson, New Hampshire.

Motion by: _____ Second: _____ Carried/Failed: _____

CONTINUE the public hearing to a date certain:

I move to continue the conditional use permit application for the 326 Transmission Line – Structure Replacement Project, within the Eversource Maintained Right-of-Way and Utility Easements across multiple lots in Hudson, to date certain, _____, 2022.

Motion by: _____ Second: _____ Carried/Failed: _____

APPROVE the conditional use permit application:

I move to approve the Conditional Use Permit application #04-22, for the 326 Transmission Line – Structure Replacement Project, within the Eversource Maintained Right-of-Way and Utility Easements across multiple lots in Hudson, New Hampshire, as depicted in:

326 Transmission Line – Structure Replacement Project, Hudson, New Hampshire, Conditional Use Permit Planset; prepared by GZA GeoEnvironmental, Inc., 5 Commerce Park North, Suite 201, Bedford, NH 03110; prepared for Eversource Energy, 13 Legends Drive, Hooksett, NH 03106; consisting of 5 Map Sheets dated April 2022 and Notes on Sheet S1 and details Sheet 2 dated February 18, 2022.

Motion by: _____ Second: _____ Carried/Failed: _____

Forward to: Town Planner Brian Groth and Planning Board Chairman Tim Malley

Eversource Energy: 326 Transmission Line Structure Replacement CUP

Conservation Commission Comments and Recommendations

On May 09, 2022 members of the Hudson Conservation Commission held a meeting with representative Kurt Nelson from Eversource and Lindsey White GZA GeoEnvironmental to hear the companies proposed infrastructure upgrades along the 326 Transmission Line ROW. The projects entails replacement of eight structures at five locations along the corridor starting in northern Hudson and concluding at the end of the ROW near the Merrimack River. The work will necessitate wetland crossings and buffer impacts but all of the proposed crossings and impacts for this work will be temporary with full restoration of the various site locations to occur at the conclusion of work.

Commission members were satisfied with the project presentation and answers to the questions posed. A decision was made not to hold a site visit at this time as this project is similar to other infrastructure upgrades performed by Eversource in the past and that this applicant has followed through with all work and conditions stated by their representatives. The HCC Chairman did suggest that during the construction phase commission members could visit the various locations to see how the work is progressing and to get an idea of techniques used by the company for pre and post construction.

HCC Recommendations to the Planning board as part of a Condition of Approval

No additional Conservation Commission recommendations at this time. After review of the presentation materials along with an informative question and answer session the Conservation Commission members are satisfied that the applicant addressed all of the members concerns both verbally and in Construction Sequence and other Notes found on Sheet S1 and dated 02/18/2022. Reference project number 04.0190999.70

Mr. Kallgren moved to forward a favorable recommendation to the Planning Board for the proposed work along the 326 Transmission Line ROW based on the applicants testimony and the commission comment listed above to the Planning Board as part of the Conditional Use Permit Application filed on April 15, 2022

Motion Second Mr. Dickinson, motion carried 5/0/0

William Collins

William Collins, HCC Chairman



Known for excellence.
Built on trust.

GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

5 Commerce Park North
Suite 201
Bedford, NH 03110
T: 603.623.3600
F: 603.624.9463
www.gza.com



April 15, 2022
File No. 04.0190999.70

Town of Hudson
Planning Board
Attn: Timothy Malley, Chairman
12 School Street
Hudson, New Hampshire 03036

Re: Conditional Use Permit Application
Eversource Energy
326 Transmission Line Structure Replacement Project
Hudson, New Hampshire

Dear Chairman Malley:

This letter transmits a Conditional Use Permit Application on behalf of Public Service Company of New Hampshire doing business as Eversource Energy (Eversource), for the 326 Transmission Line Structure Replacement Project (see attached **Figure 1, Locust Plan**). On behalf of Eversource, GZA GeoEnvironmental, Inc. (GZA) is requesting consideration of a Conditional Use Permit Application for required temporary impacts within the Town of Hudson Wetlands Conservation District.

The proposed project involves the replacement of eight 326 Transmission Line structures. The utility structures have been subject to environmental damage (weathering, woodpecker holes, etc.), and must be replaced for the lines to continue to function safely and reliably. The proposed 2022 structure replacements were selected based on site visit evaluations of the 326 Transmission Line.

The 326 Transmission Line ROW is approximately 18 miles in length, beginning at the Scobie Pond Substation in Londonderry, NH, and ending at the New Hampshire-Massachusetts border and has a width of approximately 300 feet. See **Figure 3 – Access and Permitting Plans** for a depiction of the proposed project. The Site crosses through residential, and rural properties, as well as three public roads, Marie Lane, Bush Hill Road and River Road. Natural cover within the ROW includes upland shrublands and wetland emergent and scrub-shrub habitats. In the Town of Hudson, the proposed work area is located west of Kienia Road, north of Bush Hill Road and east and west of River Road.

Tighe and Bond delineated wetlands in 2018 and GZA reviewed wetland boundaries in 2022. In addition, GZA will be submitting a separate wetland permit through the New Hampshire Department of Environmental Services for the proposed project in Hudson.

Eight structures are proposed to be replaced in Hudson along the 326 Transmission Line (see **Figure 2, Permitting and Impact Plans**). The utility structures will be approximately 5-10 feet higher than the existing utility structures due to updated National Electrical Safety Code requirements.



In the Town of Hudson, the proposed project requires approximately 36,793 sq. ft. of temporary wetland impact to palustrine emergent and scrub-shrub wetlands that are located within the existing maintained utility ROW for construction access and temporary work pad placement (see **Table 1**). GZA and Eversource worked closely to review the structure location and construction access during the design of the project to minimize impacts in the Wetland Conservation District. Wherever possible, temporary access is proposed using existing access routes to limit temporary disturbance to natural wetlands and wetland buffers.

Table 1 – Summary of wetlands and associated temporary wetland and buffer impacts.

Wetland ID	Temporary Wetland Impact (SF)	Local Buffer Impact (SF)
HW-51	3,466	1,170
HW-45	5,357	2,833
HW-81	27,970	2,020
Total	36,793	6,023

In accordance with *Article IX.334.37 of the Hudson Zoning Ordinance*, the Planning Board shall, in addition to referencing the findings references in the preceding section, considering all relevant facts and information prior to making a decision on any application for a Conditional Use Permit; and find, that to the extent possible, the project voids and minimizes impacts to land situated within the District, including but not limited to the following:

- A. ***The proposed activity minimizes degradation of land situated within the District and offsets potential adverse impacts to functions and values of wetlands, surface waters, and vernal pools including but not limited to their capacity to: Support fish and wildlife, Attenuate flooding, Supply and protect surface and groundwater resources, Remove sediments, Remove pollutants, Support wetland vegetation, Promote public health and safety, and Moderate fluctuations in surface water levels.***

The access for the project has been sited to avoid areas within wetlands and wetland buffers to the greatest extent practicable. Proposed impacts have been avoided in Wetlands HW-49, HW-50, HW-47, and HW-46. In addition, the project utilizes existing access routes within the ROW to limit and prevent new disturbance. Where access routes temporarily cross a wetland, the proposed project has been designed to minimize temporary wetland impacts by using wetland matting. Matting will be temporarily placed in narrow sections of wetlands where available and within existing access routes in order to provide appropriate access and prevent rutting.

Temporary wetland impacts will be restored upon completion of work. Eversource has retained GZA to complete regular erosion control inspections during construction and provide guidance to the contractor to maintain compliance with local, state, and federal environmental permits. In addition, GZA will coordinate with the contractor to complete best management practices (BMPs) to protect rare, threatened, and/or endangered species during construction.

After construction activities are complete, upland work areas will be re-contoured to minimize slopes and to re-establish gradients of the adjacent landscape to the greatest extent possible. Wetland areas will be mulched and restored using a native seed mix as necessary. Erosion controls will be removed when adjacent areas are stabilized.



- B. *The proposed activity will have no significant negative environmental impact to abutting or downstream properties and/or hydrologically connected water and/or wetland resources including; Increased potential for erosion, siltation, and turbidity of surface waters, Loss of fish and wildlife habitats, Loss of unique habitat having demonstrable natural, scientific, or educational value, Loss or decrease of beneficial aquatic organisms and wetland plants and their habitat, Increased danger of flooding and/or transport of pollutants and Destruction of economic, aesthetic, recreational, and other public and private uses and values of the wetland community.***

As previously mentioned, impacts were avoided and minimized to the greatest extent practicable by utilizing existing access roads and avoiding unnecessary temporary impacts to wetlands by placing utility poles outside of wetland boundaries and wetland buffers where possible. Timber matting will be used where wetlands must be crossed to limit and prevent rutting and maintain a buffer between tracked vehicles and wetland vegetation. There are no alternative routes that both provide access to poles and minimize impacts to wetlands and wetland buffers.

- C. *The proposed activity or use cannot practicably be located otherwise on the site to eliminate or reduce impact to the Wetland Conservation Overlay District.***

Impacts were avoided and minimized to the greatest extent practicable by utilizing existing access roads and avoiding unnecessary temporary impacts to wetlands by placing utility poles outside of wetland boundaries and wetland buffers where possible. Timber matting will be used where wetlands must be crossed to limit and prevent rutting and maintain a buffer between tracked vehicles and wetland vegetation. There are no alternative routes that both provide access to poles and minimize impacts to wetlands and wetland buffers.

- D. *The proposed activity incorporates the use of the Best Management Practices recommended by the New Hampshire Department of Environmental Services and/or other state agencies having jurisdictions.***

The maintenance project will incorporate the use of the New Hampshire Department of Environmental Services Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire.

- E. *All applicable federal and/or state permit(s) have been received for the proposed activity in accordance with New Hampshire Code of Administrative Rules, Part Env-Wt 100-800 and Section 404 of the Federal Clean Water Act, as amended.***

All applicable federal and/or state permits will be received prior to construction activity in accordance with NH Code of Administrative Rules. This includes a state Statutory Permit by Notification wetlands permit and a state Alteration of Terrain Permit. The town will be sent the permit approvals.

- F. *Where applicable, proof of application to all required state and/or federal permits.***

As previously mentioned the town will be sent the required state federal permits.



Please feel free to contact us with any questions.

Very truly yours,
GZA GEOENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Conor Madison".

Conor Madison, CPESC, CESSWI
Project Manager

A handwritten signature in black ink, appearing to read "Tracy Tarr".

Tracy Tarr, CWS, CWB, CESSWI
Associate Principal

A handwritten signature in black ink, appearing to read "Deborah M. Zarta Gier".

Deborah M. Zarta Gier, CNRP
Consultant/Reviewer

CEM/DMZ/TLT

Attachments: Conditional Use Permit Application Form
Photo Log
List of Abutters
Figure 1 – Locus Plan
Figure 2 – Permitting and Impact Plans
Application Fee



*Town of Hudson
12 School Street
Hudson, NH 03501*

CONDITIONAL USE PERMIT APPLICATION: **WETLAND CONSERVATION OVERLAY DISTRICT**

Revised August 30, 2021

Applications must be received at least 21 days prior to the Planning Board and Conservation Commission meetings at which the application will be heard. *The following information must be filed to each board.*

CONSERVATION COMMISSION:

1. Ten (10) copies of the completed application, including the project narrative that demonstrates that the proposal meets the conditions of Article IX of the Zoning Ordinance.
2. Ten (10) reduced size plan sets (sheet size: 11" X 17"). Plans require the stamp of a licensed land surveyor and a certified wetlands scientist. At a minimum, plans must show topography and any wetland within fifty (50) feet of the proposed project.

***Complete Applications should be delivered to the Engineering Department (603)886-6008.**

PLANNING BOARD:

1. Fifteen (15) copies of the completed application, including the project narrative that demonstrates that the proposal meets the conditions of Article IX of the Zoning Ordinance.
2. Three (3) full size folded plan sets (sheet size: 22" x 34") and fifteen (15) reduced size plan sets (sheet size: 11" X 17"). Plans require the stamp of a licensed land surveyor and a certified wetlands scientist. At a minimum, plans must show topography and any wetland within fifty (50) feet of the proposed project.
3. A list of direct abutters and indirect abutters, and two (2) sets of mailing labels for abutter notifications.
4. All of the above application materials, including plans, shall also be submitted in electronic form as a PDF.
5. Check should be made payable to the Town of Hudson, and submitted to the Planning Department.

***Complete Application & check should be delivered to the Planning Department (603)886-6008.**

Revised plans and other application materials must be filed with the Planning Department *no later than 10:00A.M., Tuesday ONE WEEK prior to the scheduled meeting, as applicable. The purpose of these materials is hardcopy distribution to Planning Board members, not review. Any plan revisions that require staff review must be submitted no later than 10:00A.M., Tuesday TWO WEEKS prior to the scheduled Planning meeting. Depending on the complexity of changes, more time may be required for review. Please contact the Town Planner if you have any questions on this matter.*

PLEASE NOTE:

1. To prevent submission of redundant information, submission of a complete Subdivision or Site Plan Application may be used to satisfy some of the requirements for the Conditional Use Permit Application, where applicable.
2. No postage fees or mailing labels are required when submitting with a subdivision or site plan application.
3. Prior to filing an application, it is recommended to schedule an appointment with the Town Planner and Town Engineer.

CONDITIONAL USE PERMIT APPLICATION

Date of Application: 4/15/22 Tax Map #: See Attached Lot #: _____

Site Address: Eversource Maintained ROW

Name of Project: 326 Transmission Line Structure Replacement Project

Zoning District: G1 & R2 General CUP#: _____

(For Town Use Only)

Z.B.A. Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Kurt Nelson

Address: 13 Legends Drive

Address: Hooksett, NH 03106

Telephone # 603-634-3256

Email: kurt.nelson@gza.com

PROJECT ENGINEER or SURVEYOR:

CERTIFIED WETLANDS SCIENTIST:

Name: _____

Tracy Tarr

Address: _____

5 Commerce Park North

Address: _____

Bedford, NH 03110

Telephone # _____

603-232-8739

Email: _____

tracy.tarr@gza.com

PURPOSE OF PLAN:

Eversource structure replacement project.

(For Town Use Only)

Routing Date: _____ Deadline Date: _____ Meeting Date: _____

_____ I have no comments _____ I have comments (attach to form)

_____ Title: _____ Date: _____

(Initials)

Department: _____

Zoning: ___ Engineering: ___ Assessor: ___ Police: ___ Fire: ___ DPW: ___ Consultant: ___

SITE DATA SHEET

PLAN NAME: 326 Transmission Line Structure Replacement Project

PLAN TYPE: (Site Plan, Subdivision, or other) Permitting Plans

LEGAL DESCRIPTION: MAP Please see attached LOT _____

DATE: _____

Location by Street: Please see attached

Zoning: G1 & R2

Proposed Land Use: Maintained Cleared Right-of-Way

Existing Use: Maintained Cleared Right-of-Way

Total Site Area: S.F.: 14,766,840 Acres: 339

Total Wetland Area (SF): 39,553

Permanent Wetland Impact Area (SF): 0

Permanent Wetland Buffer Impact Area (SF): 0

Temporary Wetland Impact Area (SF): 39,553

Temporary Wetland Buffer Impact Area (SF): 6,023

Flood Zone Reference: N/A (Flood Zone X)

Proposed Mitigation:

(For Town Use Only)

Data Sheets Checked By: _____ Date: _____

CONDITIONAL USE PERMIT APPLICATION AUTHORIZATION

I hereby apply for *Conditional Use Permit* and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *Conditional Use Permit* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Hudson Conservation Commission, the Town Planner, the Town Engineer, and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner:  _____ Date: 4/11/22

Print Name of Owner: Kurt Nelson for Eversource Energy

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer: _____ Date: _____

Print Name of Developer: _____

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

*Eversource Corporate Officers:

CEO Joseph Nolan

CFO Phillip Lembo

Exec VPs James Hunt, Penelope Connor, Christine Carmody, Gregory Butler, Werner Schweiger

SCHEDULE OF FEES

(Fee covers both Conservation Commission & Planning Board)

A. REVIEW FEES:

1. Conditional Use Permit
\$100 Flat Fee \$ 100.00

LEGAL FEE:

The applicant shall be charged attorney costs billed to the Town for the Town's attorney review of any application plan set documents.

B. POSTAGE:

<u>42</u>	Direct Abutters @\$4.33 (or Current Certified Mail Rate)	\$ <u>181.86</u>
<u>18</u>	Indirect Abutters (property owners within 200 feet) @\$0.58 (or Current First Class Rate)	\$ <u>10.44</u>

TOTAL \$ 292.30

(For Town Use)

AMOUNT RECEIVED: \$ _____	DATE RECEIVED: _____
RECEIPT NO.: _____	RECEIVED BY: _____

PHOTO LOG
326 Transmission Line OPGW Replacement Project
Hudson, New Hampshire
Photos Taken: March 3 & 8, 2022



Photograph No. 1: Looking northwesterly at proposed access across Wetland HW-5.1 towards Structure 80 of the 326 Line to be replaced. Timber matting will be used in the wetland portion of the access route.



Photograph No. 2: Looking northeasterly at proposed access route to Structure 123 of the 326 Line to be replaced, associated with Wetland HW-45. Timber matting will be used in the wetland portion of the access route.

PHOTO LOG
326 Transmission Line OPGW Replacement Project
Hudson, New Hampshire
Photos Taken: March 3 & 8, 2022



Photograph No. 3: Looking northeasterly at proposed access towards Structure 153 of the 326 Line to be replaced, across Wetland H-81. Timber matting will be used in the wetland portion of the access route.



Photograph No. 4: Looking northeasterly at proposed access and work pad location for Structure 153 of the 326 Line to be replaced, associated with Wetland HW-81. Timber matting will be used in the wetland portion of the access route and work pad.

PHOTO LOG
326 Transmission Line OPGW Replacement Project
Hudson, New Hampshire
Photos Taken: March 3 & 8, 2022



Photograph No. 5: Looking northwesterly at proposed access route associated with Wetland HW-81 and Structure 152 of the 326 Line to be replaced. Timber matting will be used in the wetland portion of the access route.



Photograph No. 6: Looking northeasterly at proposed access route and work pad associated with Wetland HW-81 towards Structure 152 of the 326 Line to be replaced. Timber matting will be used in the wetland portion of the access route and work pad.



326 Transmission Line Structure Replacement Project
Eversource Energy
Direct Abutters List
Hudson, New Hampshire

Wetland Scientist

GZA GeoEnvironmental, Inc.
Attn: Tracy Tarr, CWS, CESSWI
5 Commerce Park North, Suite 201
Bedford, NH 03110

Owner

Eversource Energy (a.k.a. PSNH)
PO Box 270
Hartford, CT 06141

Tax Map 208-010-000

Michaud, Raymond J.
170 Bush Hill Road
Hudson, NH 03051

Tax Map 208-011-000, 107-030-000

Public Service of NH
PO Box 270
Hartford, CT 06141

Tax Map 195-007-000

Boucher, Kenneth A.
45 Gibson Road
Hudson, NH 03051

Tax Map 112-025-002

Ormond, Paul
67B Kienia Road
Hudson, NH 03051

Tax Map 208-009-000

Tessier, Carlene Ann Trustee
168 Bush Hill Road
Hudson, NH 03051

Tax Map 208-018-000

Steck, Paul
146 Jeremy Hill Road
Pelham, NH 03076

Tax Map 201-012-000

Mills, James
118 Bush Hill Road
Hudson, NH 03051

Tax Map 112-006-000

Devlin, Daniel J. Trust
1 Marie Lane
Hudson, NH 03051

Tax Map 112-024-000

Fallon, Gary
8 Rosemary Drive
Hudson, NH 03051

Tax Map 241-033-000

Lacoshus, Frank
31 Dracut Road
Hudson, NH 03051

Tax Map 240-014-000

Steele Farm LLC
2 Friel Golf Road
Hudson, NH 03051

Tax Map 112-025-001

Geisler, Ruth
1066 Collins Boulevard
Ogden, UT 84404

Tax Map 112-027-000

Beaulieu, Thomas
71A Kienia Road
Hudson, NH 03051

Tax Map 241-038-000

Fontaine, Dennis
34 Dracut Road
Hudson, NH 03051

Tax Map 112-023-001

Burris, Thomas
63A Kienia Road
Hudson, NH 03051

Tax Map 246-067-000

Oak Hill Associates, LLC
20 Trafalgar Street #602
Nashua, NH 03063

Tax Map 208-015-000

Sir Isaac Way Realty Trust
166 Middle Road
Byfield, MA 01922

Tax Map 107-018-000

O'Halloran, David
30 Breakneck Road
Hudson, NH 03051

Tax Map 241-022-000

Beliveau, Erica
11 Jacqueline Street
Hudson, NH 03051

Tax Map 240-023-000

Leboeuf, Gerald L. Tr
30 River Road
Hudson, NH 03051

Tax Map 112-004-000

Cates, Christina M.
66A Kienia Road
Hudson, NH 03051

Tax Map 240-022-000

Haigler, Richard
30 River Road
Hudson, NH 03051

Tax Map 112-026-000

Baker, Barabara
69 Kienia Road
Hudson, NH 03051

Tax Map 240-011-000

Schilling, Paul
35 River Road
Hudson, NH 03051

Tax Map 112-021-001

Albert, Paul D.
59A Kienia Road
Hudson, NH 03051

Tax Map 112-005-001

Vigeant, Leonard A. Tr
31 Autumn Circle
Hudson, NH 03051

Tax Map 241-021-000

Severance, Ethan
12 Jacqueline Street
Hudson, NH 03051

Tax Map 241-028-000

Durand, Robert K Trust
7 Blueberry Lane
Hudson, NH 03051



**326 Transmission Line Structure Replacement Project
Eversource Energy
Direct Abutters List
Hudson, New Hampshire**

Tax Map 240-021-000

Quintal, J Miguel
28 River Road
Hudson, NH 03051

Tax Map 241-027-000

Loughran, Shawn
9 Blueberry Lane
Hudson, NH 03051

Tax Map 240-013-000

Braccio, Vincent
27 River Road
Hudson, NH 03051

Tax Map 112-003-000

Ben-Lu, LLC
5 Bailey Road
Salem, NH 03079

Tax Map 112-019-000

Murray, Shawn P.
55 Kienia Road
Hudson, NH 03051

Tax Map 246-065-000

Leblanc, Paul R.
41 River Road
Hudson, NH 03051

Tax Map 107-019-000

Dupras, Ernest R III
31 Breakneck Road
Hudson, NH 03051

Tax Map 241-037-000

Monahan-Fortin Prop. II, LLC
20 Trafalgar Sq, STE 610
Nashua, NH 03063

Tax Map 112-022-000

Vaccaro, Jeffery R.
61 Kienia Road
Hudson, NH 03051

Tax Map 240-012-000

Fournier, Donna
29 River Road
Hudson, NH 03051

Tax Map 246-066-001

Byron, James A
39 River Road
Hudson, NH 03051

Tax Map 240-010-000

Duncanson, Mark A.
37 River Road
Hudson, NH 03051



326 Transmission Line Structure Replacement Project
Eversource Energy
Indirect - Abutters List
Hudson, New Hampshire

Wetland Scientist

GZA GeoEnvironmental, Inc.
Attn: Tracy Tarr, CWS, CESSWI
5 Commerce Park North, Suite 201
Bedford, NH 03110

Owner

Eversource Energy (a.k.a. PSNH)
PO Box 270
Hartford, CT 06141

Tax Map 240-013-001

Dwarkamai, Inc
2340 Lexington Lane
Naperville, IL 60540

Tax Map 112-020-000

Lloyd, Derek S.
57 Kienia Road
Hudson, NH 03051

Tax Map 107-020-000

Labrecque, Kyle S.
29 Breakneck Road
Hudson, NH 03051

Tax Map 202-001-000

Steck, Paul
146 Jeremy Hill Road
Pelham, NH 03076

Tax Map 112-007-000

Forsberg, Lisa
3 Marie Lane
Hudson, NH 03051

Tax Map 241-035-001

Golen, Chad
17 Dracut Road
Hudson, NH 03051

Tax Map 241-039-000

Zorbas, Sotirios
4 Brookfield Road
Hudson, NH 03051

Tax Map 241-023-00

Martin, Joseph
9 Jacqueline Street
Hudson, NH 03051

Tax Map 246-068-000

J.K.S Realty LLC
20 Trafalgar Sq. STE #602
Nashua, NH 03063

Tax Map 112-018-000

St. Laurent Realty LLC
8 Breakneck Road
Hudson, NH 03051

Tax Map 246-064-001

Vieira, JR, Bruce J.
43 River Road
Hudson, NH 03051

Tax Map 241-020-000

Molley, Stephen
10 Jacqueline Street
Hudson, NH 03051

Tax Map 112-008-000

Guilbeault, Robert
5 Marie lane
Hudson, NH 03051

Tax Map 241-029-00

Fontaine, Daniel
5 Blueberry Lane
Hudson, NH 03051

Tax Map 241-035-000

117 Dracut Road LLC
17 Dracut Road
Hudson, NH 03051

Tax Map 112-011-000

Pilat, Dawn M.
2 Marie Lane
Hudson, NH 03051

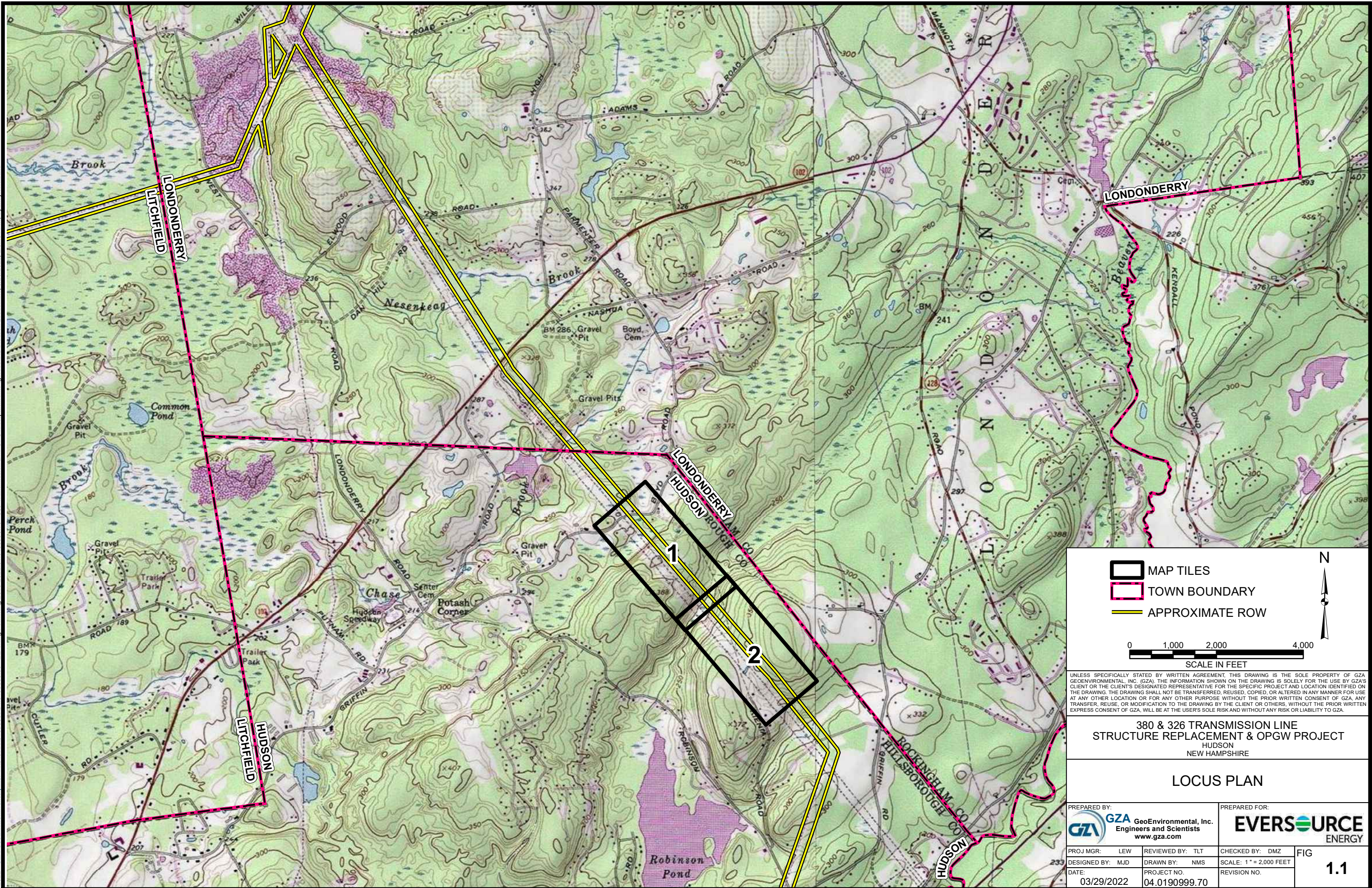
Tax Map 107-018-000

O'Halloran, David
30 Breakneck Road
Hudson, NH 03051

Tax Map 107-018-000

O'Halloran, David
30 Breakneck Road
Hudson, NH 03051

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MAP TILES
 TOWN BOUNDARY
 APPROXIMATE ROW

SCALE IN FEET

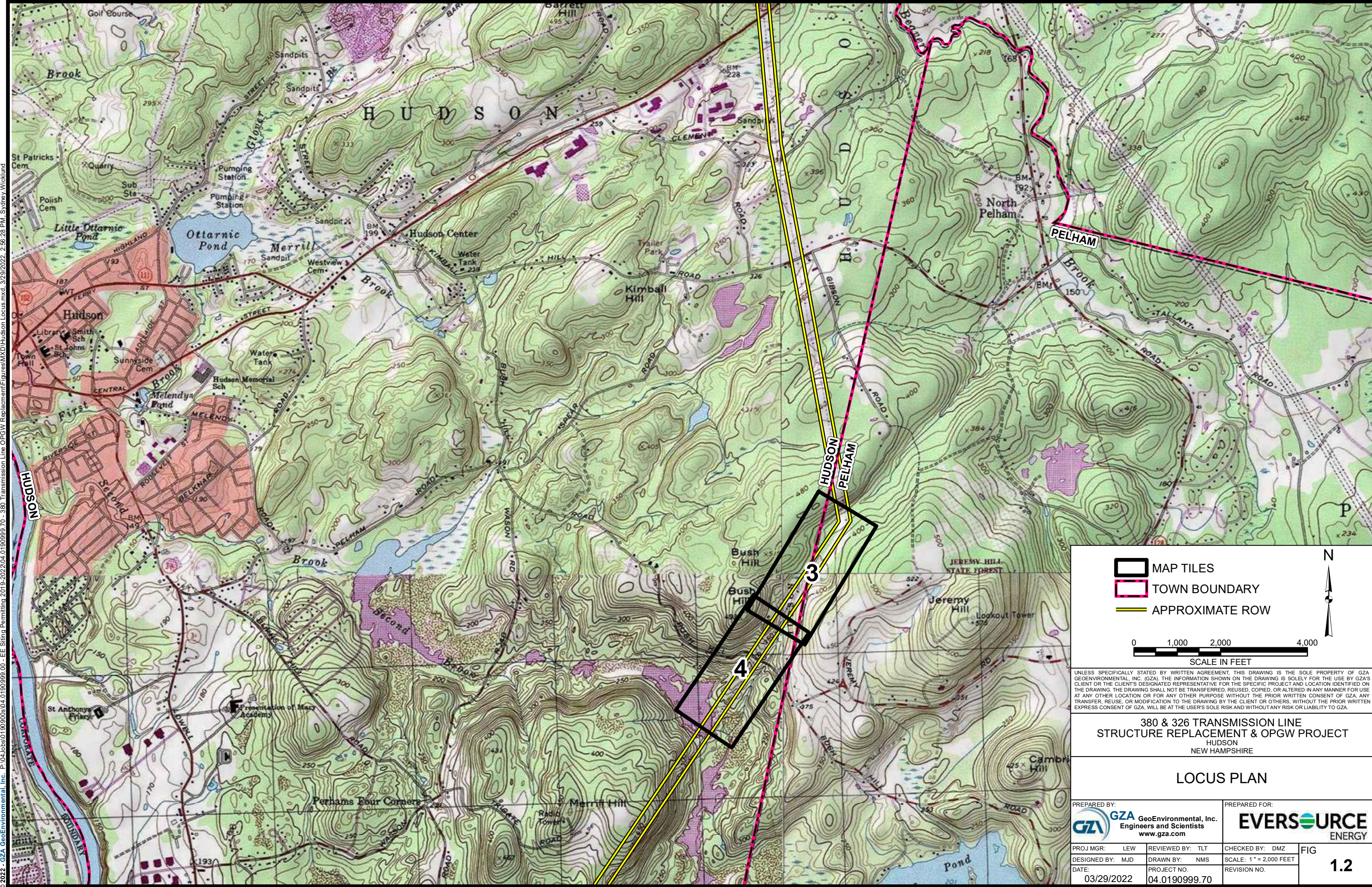
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**380 & 326 TRANSMISSION LINE
 STRUCTURE REPLACEMENT & OPGW PROJECT**
 HUDSON
 NEW HAMPSHIRE

LOCUS PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: EVERSOURCE ENERGY	
PROJ MGR: LEW	REVIEWED BY: TLT	CHECKED BY: DMZ	FIG
DESIGNED BY: MJD	DRAWN BY: NMS	SCALE: 1" = 2,000 FEET	1.1
DATE: 03/29/2022	PROJECT NO: 04.01909999.70	REVISION NO.	

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SCALE IN FEET

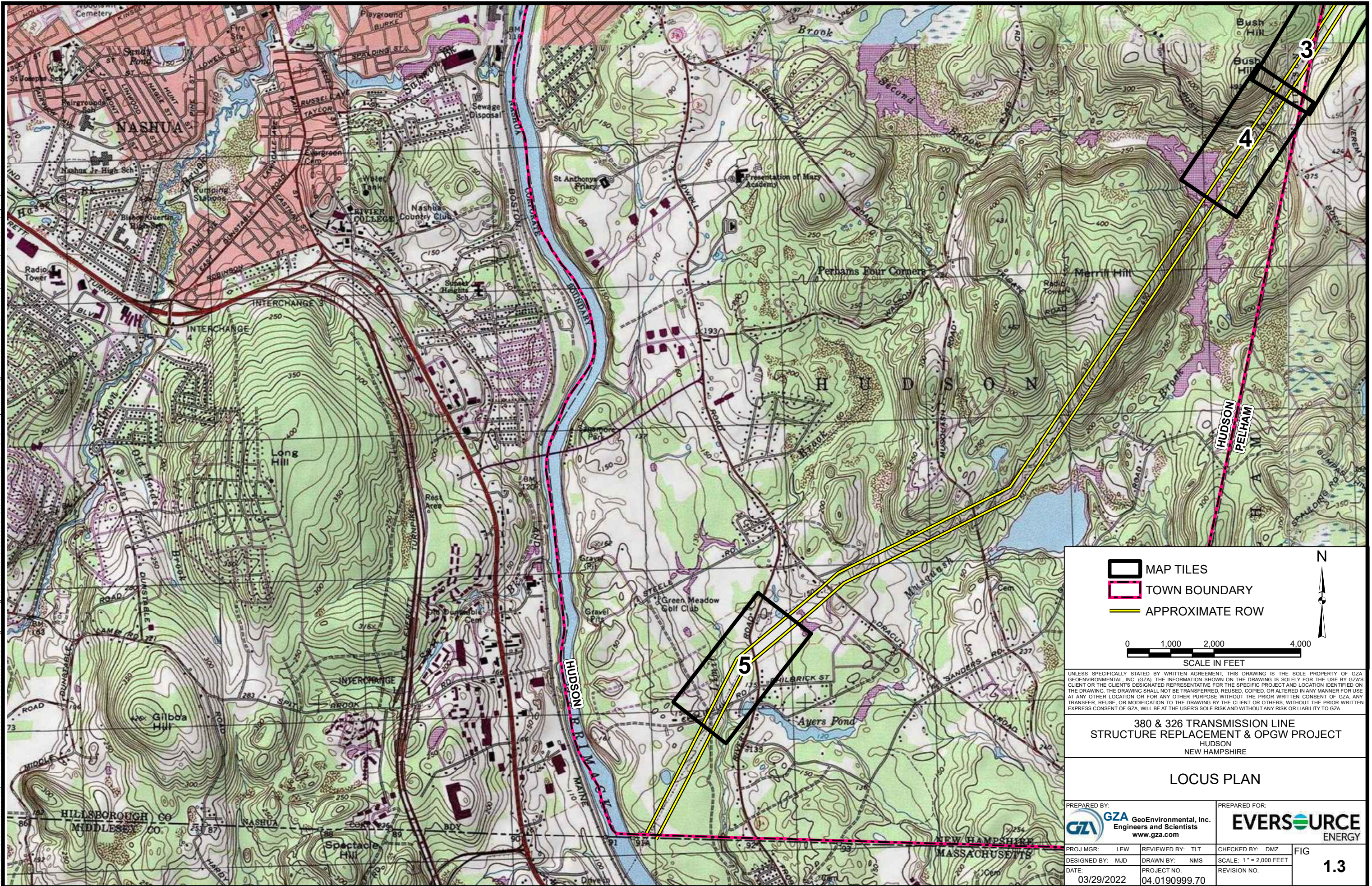
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

**380 & 326 TRANSMISSION LINE
 STRUCTURE REPLACEMENT & OPGW PROJECT**
 HUDSON
 NEW HAMPSHIRE

LOCUS PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: 	
PROJ MGR: LEW DESIGNED BY: MJD DATE: 03/29/2022	REVIEWED BY: TLT DRAWN BY: NMS PROJECT NO.: 04.01909999.70	CHECKED BY: DMZ SCALE: 1" = 2,000 FEET REVISION NO.	FIG 1.2

© 2022 - GZA GeoEnvironmental, Inc. P:\04.Jobs\01909999\00 - EE Siting Permitting\2019-2022\04.01909999.70 - 380 Transmission Line OPGW Replacement\Figures\MXD\Hudson Locus.mxd, 3/29/2022, 2:57:28 PM, Sydney Wicklund



MAP TILES
TOWN BOUNDARY
APPROXIMATE ROW

0 1,000 2,000 4,000
SCALE IN FEET

N

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

**380 & 326 TRANSMISSION LINE
STRUCTURE REPLACEMENT & OPGW PROJECT**
HUDSON
NEW HAMPSHIRE

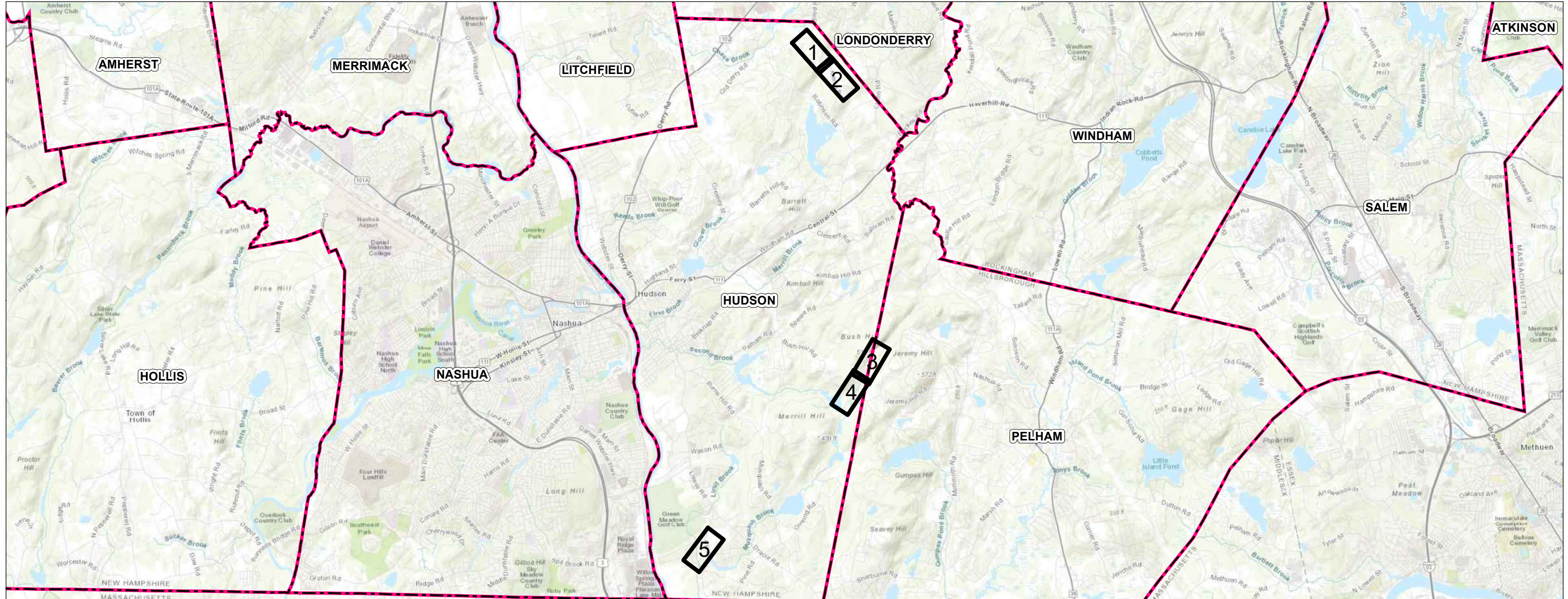
LOCUS PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com	PREPARED FOR: EVERSOURCE ENERGY		
PROJ MGR: LEW	REVIEWED BY: TLT	CHECKED BY: DMZ	FIG
DESIGNED BY: MJD	DRAWN BY: NMS	SCALE: 1" = 2,000 FEET	1.3
DATE: 03/29/2022	PROJECT NO: 04.01909999.70	REVISION NO:	

326 Transmission Line - Structure Replacement Project

HUDSON, NEW HAMPSHIRE
Conditional Use Permit Planset

Date: April 11, 2022



PREPARED FOR:

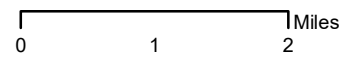


13 Legends Drive
Hooksett, NH 03106



Legend

TOWN BOUNDARY



INDEX OF FIGURES

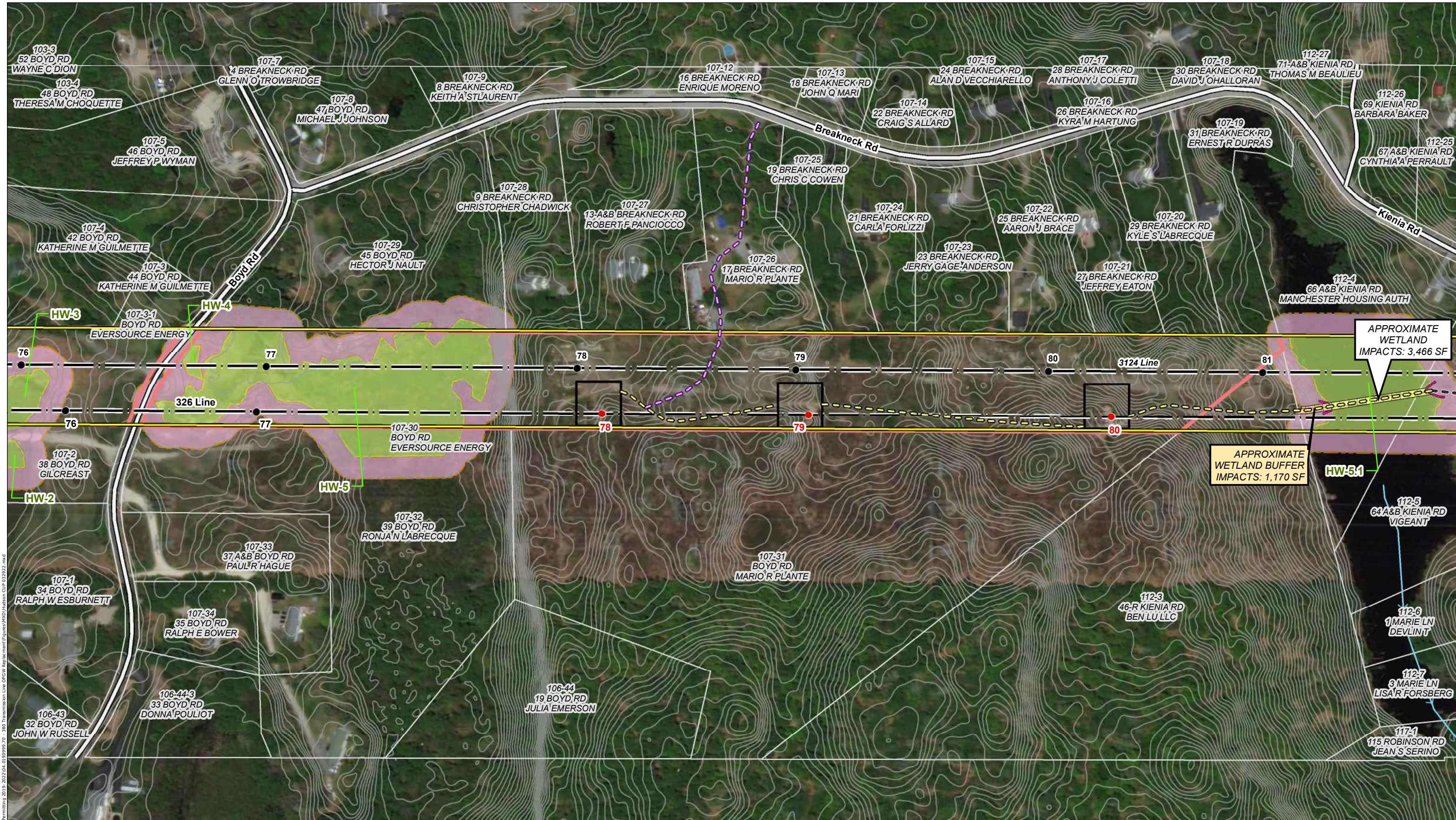
Title Sheet / Index Map
Map Sheet 1-5

NO.	DATE	REVISIONS

PREPARED BY:



GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com



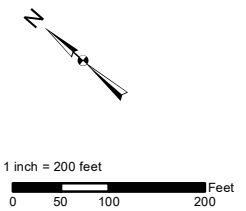
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INDEX MAP



- EXISTING STRUCTURE
- EXISTING STRUCTURE TO BE REMOVED
- EXISTING STRUCTURE TO BE REPLACED
- EXISTING ACCESS
- PRIMARY ACCESS
- OFF-ROW ACCESS
- APPROXIMATE ROW
- EXISTING TRANSMISSION LINE
- EXISTING ROADS
- NHDOT ROADS
- PULL PAD
- HUDSON WETLAND BUFFER IMPACTS
- WORK AREA
- TRENCH AREA
- RAILROAD
- EROSION AND SEDIMENT CONTROL
- CULVERT
- NHD FLOWLINE
- TOWN BOUNDARY
- PARCEL BOUNDARY
- EVERSOURCE OWNED PARCEL
- STATE OWNED PARCEL
- FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
- PRIME WETLANDS
- 2 FOOT CONTOUR
- WETLAND
- HUDSON WETLAND BUFFER
- TEMPORARY CONSTRUCTION MATTING

This mapping product has been created to comply with submittal requirements to obtain certain regulatory approvals and, as such, there is no reliance on the information contained herein for any other purpose.

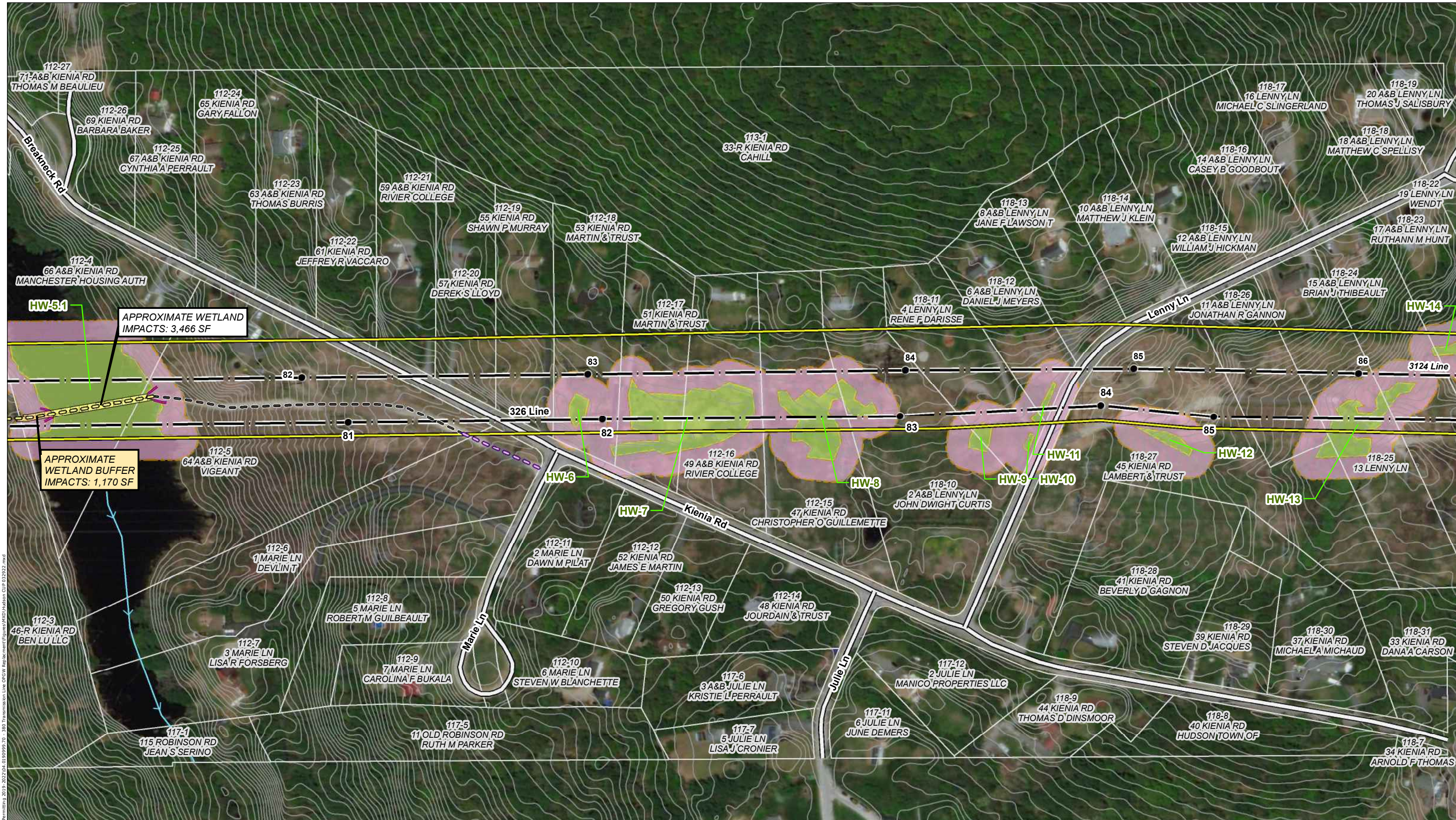


NO.	DATE	REVISIONS

EVERSOURCE ENERGY

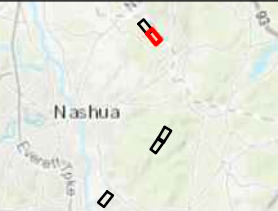
326 AND 380 LINE OPGW AND STRUCTURE REPLACEMENT

HUDSON	MAP SHEET
Date: April, 2022	
04.0190999.70	
1	



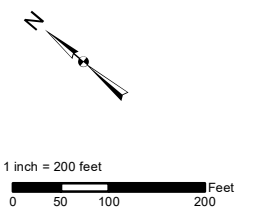
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INDEX MAP



- EXISTING STRUCTURE
- EXISTING STRUCTURE TO BE REMOVED
- EXISTING STRUCTURE TO BE REPLACED
- EXISTING ACCESS
- PRIMARY ACCESS
- OFF-ROW ACCESS
- APPROXIMATE ROW
- EXISTING TRANSMISSION LINE
- NHDOT ROADS
- PULL PAD
- HUDSON WETLAND BUFFER IMPACTS
- WORK AREA
- TRENCH AREA
- RAILROAD
- EROSION AND SEDIMENT CONTROL
- CULVERT
- NHD FLOWLINE
- TOWN BOUNDARY
- PARCEL BOUNDARY
- EVERSOURCE OWNED PARCEL
- STATE OWNED PARCEL
- FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
- PRIME WETLANDS
- 2 FOOT CONTOUR
- WETLAND
- HUDSON WETLAND BUFFER
- TEMPORARY CONSTRUCTION MATTING

This mapping product has been created to comply with submittal requirements to obtain certain regulatory approvals and, as such, there is no reliance on the information contained herein for any other purpose.

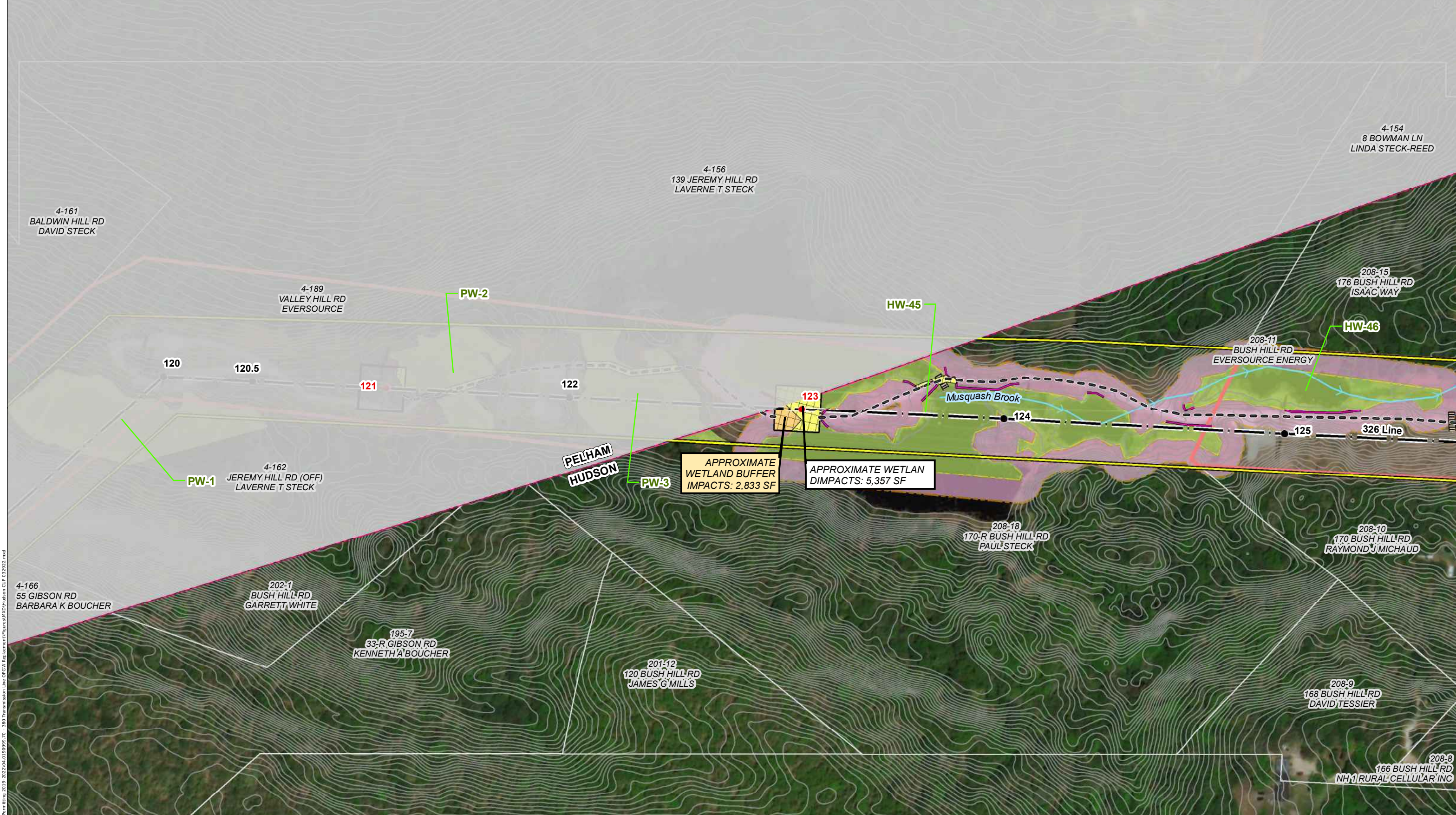


NO.	DATE	REVISIONS

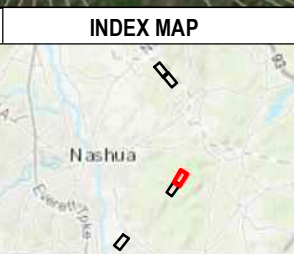
EVERSOURCE ENERGY

326 AND 380 LINE OPGW AND STRUCTURE REPLACEMENT

HUDSON	MAP SHEET
Date: April, 2022	2
04.0190999.70	

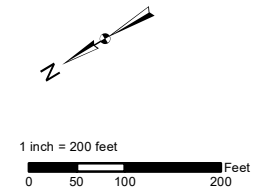


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- EXISTING STRUCTURE
- EXISTING STRUCTURE TO BE REMOVED
- EXISTING STRUCTURE TO BE REPLACED
- EXISTING ACCESS
- PRIMARY ACCESS
- OFF-ROW ACCESS
- APPROXIMATE ROW
- EXISTING TRANSMISSION LINE
- NH DOT ROADS
- PULL PAD
- HUDSON WETLAND BUFFER IMPACTS
- WORK AREA
- TRENCH AREA
- RAILROAD
- EROSION AND SEDIMENT CONTROL
- CULVERT
- NHD FLOWLINE
- TOWN BOUNDARY
- PARCEL BOUNDARY
- EVERSOURCE OWNED PARCEL
- STATE OWNED PARCEL
- FLOODPLAIN WETLAND ADJACENT TO T3+ WATERCOURSE
- PRIME WETLANDS
- 2 FOOT CONTOUR
- WETLAND
- HUDSON WETLAND BUFFER
- TEMPORARY CONSTRUCTION MATTING

This mapping product has been created to comply with submittal requirements to obtain certain regulatory approvals and, as such, there is no reliance on the information contained herein for any other purpose.



NO.	DATE	REVISIONS

EVERSOURCE ENERGY

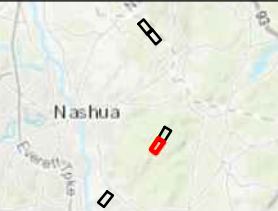
326 AND 380 LINE OPGW AND STRUCTURE REPLACEMENT

HUDSON/PELHAM	MAP SHEET
Date: April, 2022	3
04.0190999.70	



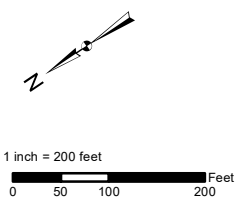
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INDEX MAP



- EXISTING STRUCTURE
- EXISTING STRUCTURE TO BE REMOVED
- EXISTING STRUCTURE TO BE REPLACED
- EXISTING ACCESS
- PRIMARY ACCESS
- OFF-ROW ACCESS
- APPROXIMATE ROW
- EXISTING TRANSMISSION LINE
- NH DOT ROADS
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- WORK AREA
- TRENCH AREA
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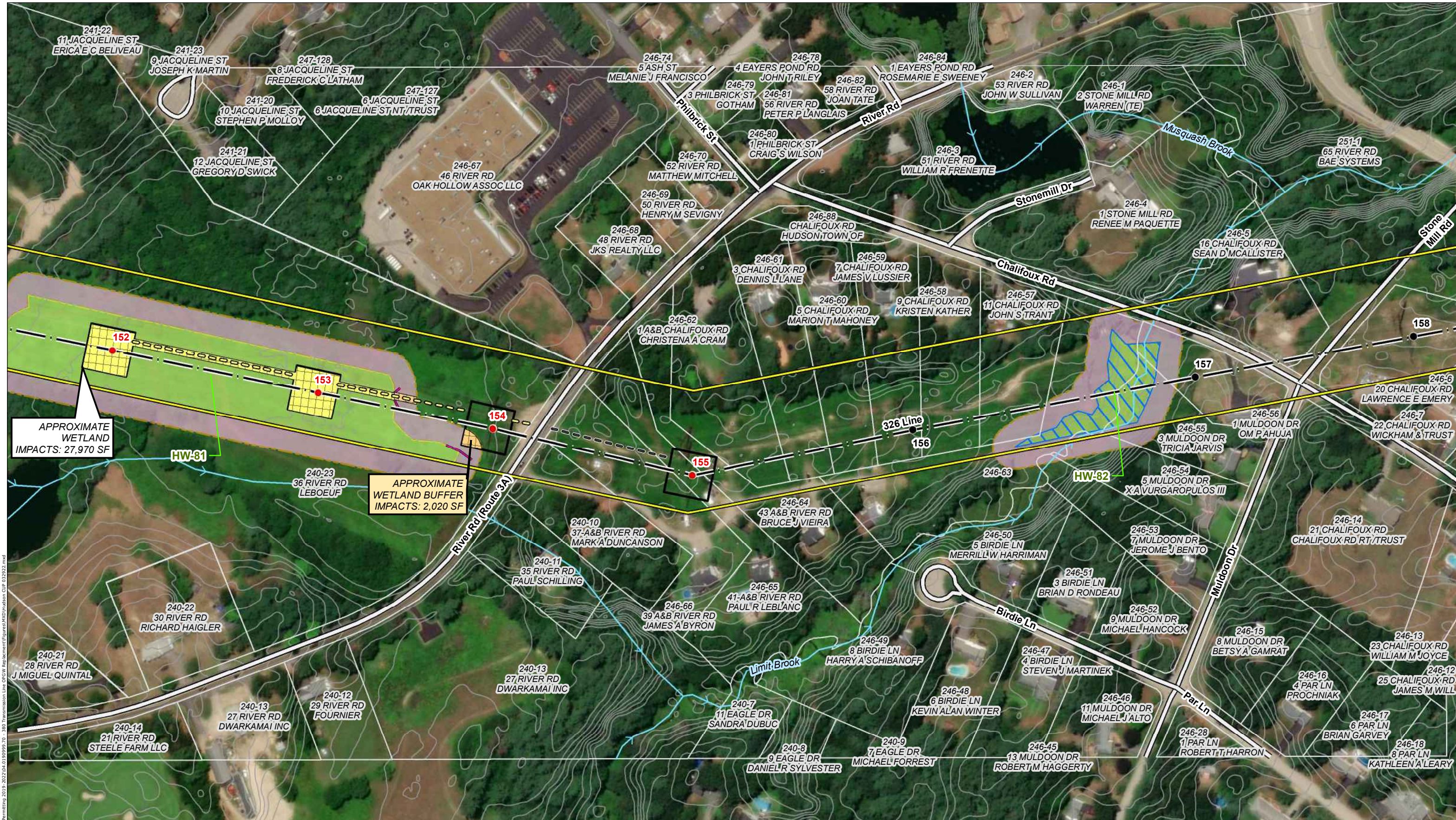


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EVERSOURCE ENERGY

326 AND 380 LINE OPG AND STRUCTURE REPLACEMENT

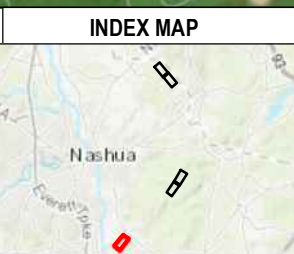
HUDSON	MAP SHEET
Date: April, 2022	
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APPROXIMATE WETLAND IMPACTS: 27,970 SF

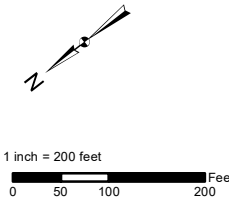
APPROXIMATE WETLAND BUFFER IMPACTS: 2,020 SF

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- EXISTING STRUCTURE
- EXISTING STRUCTURE TO BE REMOVED
- EXISTING STRUCTURE TO BE REPLACED
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NO.	DATE	REVISIONS

EVERSOURCE ENERGY

326 AND 380 LINE OPGW AND STRUCTURE REPLACEMENT

HUDSON	MAP SHEET
Date: April, 2022	5
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© 2022 - GZA GeoEnvironmental, Inc. P:\04.Jobs\0190999\04.0190999\00 - EE Siting Permitting 2019-2022\04.0190999.70 - 380 Transmission Line OPGW Replacement\Figures\MXD\380 OPGW 2021 Notesheet 1 10-7.mxd, 2/18/2022, 1:15:44 PM, conor.madison

CONSTRUCTION SEQUENCE:

1. WETLAND BOUNDARIES TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED, AS NECESSARY, AND CONSISTENT WITH THE NHDES MARCH 2019 BMP MANUAL FOR UTILITY MAINTENANCE.
3. WETLAND IMPACTS ASSOCIATED WITH WETLAND CROSSINGS ARE REQUIRED FOR ACCESS BETWEEN STRUCTURES WITHIN THE RIGHT OF WAY.
4. ADEQUATE PRECAUTION SHALL BE EXERCISED TO AVOID SPILLAGE OF FUEL OILS, CHEMICALS, OR SIMILAR SUBSTANCES; NO FUELS, LUBRICANTS, CHEMICALS OR SIMILAR SUBSTANCES SHALL BE STORED BENEATH TREES OR IN THE VICINITY OF ANY WETLANDS, RIVER, STREAM OR OTHER BODY OF WATER; OR IN THE VICINITY OF NATURAL OR MAN-MADE CHANNELS LEADING THERETO. NO POWER EQUIPMENT SHALL BE STORED, MAINTAINED, OR FUELED IN ANY AREA ADJACENT TO A WETLAND, RIVER, STREAM OR OTHER BODY OF WATER.
5. REMOVE COMPLETELY ALL CONTAMINATION FROM ANY SPILLAGE OF CHEMICALS OR PETROLEUM PRODUCT WITH COMPLETE REHABILITATION OF THE AFFECTED AREA.
6. ACCESS ROUTES HAVE BEEN SELECTED TO PREVENT DEGRADATION OF THE RIGHT-OF-WAY AND MINIMIZE ENVIRONMENTAL IMPACT. OPERATIONS SHALL BE CONFINED TO THE SPECIFIED ACCESS ROUTES WITHIN THE PROPOSED WETLAND IMPACT AREA. ACCESS ROUTES SHALL NOT EXCEED A 16 FOOT-WIDTH.
7. IMPACT TO VEGETATION WITHIN WETLANDS WILL BE LIMITED TO THE EXTENT NECESSARY TO PLACE THE SWAMP MATS WHERE REQUIRED.
8. LOW GROWING VARIETIES OF VEGETATION ADJACENT TO WETLANDS SHALL BE PRESERVED TO THE EXTENT POSSIBLE. STUMPS AND ROCKS SHALL NOT BE REMOVED, AND THERE SHALL BE NO EXCAVATIONS, FILLS OR GRADING DONE ADJACENT TO WETLANDS, UNLESS MINOR EXCAVATIONS IS NEEDED FOR ACCESS.
9. TIMBER MATS AND PERIMETER CONTROLS WILL BE USED ALONG ACCESS ROUTES AND WORK PADS WITHIN WETLAND AREAS. THESE MATS ARE CONSTRUCTED OF HEAVY TIMBERS OR COMPOSITE MATERIAL, BOLTED TOGETHER, AND ARE PLACED END-TO-END IN THE WETLAND TO SUPPORT HEAVY EQUIPMENT. ALL SWAMP MATS SHALL BE PLACED AND REMOVED SO AS NOT TO CAUSE ANY RUTS, CHANNELS OR DEPRESSIONS, OR OTHERWISE CAUSE ANY UNDUE DISTURBANCE TO WETLANDS.
10. IF TIMBER MAT BMP IS NOT SUFFICIENT DUE TO HIGH WATER, ADDITIONAL BMP'S MAY INCLUDE THE PLACEMENT OF GEOTEXTILE FABRIC, 3"-4" STONE, AND GRAVEL TO PROVIDE A SUITABLE ROAD BED. A TEMPORARY CULVERT MAY BE REQUIRED IN AREAS OF HIGH FLOW TO MAINTAIN HYDROLOGIC CONNECTIVITY. ALL MATERIAL WILL BE REMOVED FROM JURISDICTIONAL AREAS AFTER CONSTRUCTION COMPLETION.
11. NO MATERIAL SHALL BE PLACED IN ANY LOCATION OR IN ANY MANNER SO AS TO IMPAIR SURFACE WATER FLOW INTO, THROUGH OR OUT OF ANY WETLAND AREA. NO INSTALLATION SHALL CREATE AN IMPOUNDMENT THAT WILL IMPEDE THE FLOW OF WATER OR CAUSE FLOODING.
12. NO MATERIAL SHALL BE TAKEN FROM THE WETLANDS AREA EXCEPT THAT WHICH MUST NECESSARILY BE REMOVED FOR THE STRUCTURE OR FOUNDATION PLACEMENT OR STABILIZATION. ALL EXCESS MATERIAL TAKEN FROM THE WETLAND WILL BE REMOVED FROM THE SITE.
13. ANY PROPOSED SUPPORT FILLS SHALL BE CLEAN GRAVEL AND STONE, FREE OF WASTE METAL PRODUCTS, ORGANIC MATERIALS AND SIMILAR DEBRIS AND SHALL NOT EXCEED THE AMOUNT PERMITTED. THIS ALLOWABLE FILL IS THE ONLY FILL THAT MAY REMAIN IN THE WETLAND AFTER CONSTRUCTION. ALL CUT AND FILLS SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
14. INSTALL NEW POLES IN THE LOCATIONS DESIGNATED ON THE PERMITTING PLANS.
15. CABLE INSTALLATION WILL BE PERFORMED IN A MANNER SO AS TO AVOID, OR LIMIT TO THE MAXIMUM EXTENT POSSIBLE, TRAVERSING WETLANDS WITH HEAVY EQUIPMENT. IN SOME CASES, A HELICOPTER MAY BE USED DURING THE INSTALLATION TO MINIMIZE IMPACTS.
16. REMOVAL OF THE OLD POLE WILL OCCUR ONCE THE CABLE HAS BEEN INSTALLED ON THE NEW STRUCTURE. THE OLD STRUCTURES WILL BE REMOVED FROM THE SITE. POLES WILL BE CUT AT THE GROUND SURFACE. FOOTINGS WILL BE ABANDONED IN PLACE TO MINIMIZE IMPACTS.
17. ALL TIMBER MATS, MATERIAL, AND DEBRIS WILL BE REMOVED FROM THE WORK AREA UPON THE COMPLETION OF CONSTRUCTION.
18. UPLAND DISTURBED AREAS SHALL BE RESTORED AND STABILIZED UPON COMPLETION OF CONSTRUCTION. WORK PAD RESTORATION SHOULD INCLUDE REDUCING THE WORK PAD TO A 30 BY 60 FOOT AREA, AND REDUCING SLOPES TO A MAXIMUM OF 25%. STOCKPILED MATERIAL SHOULD BE SPREAD TO REDUCE ANY UNNECESSARY SLOPES. GRAVEL WORK PADS AND SLOPES SHOULD BE SCARIFIED TO A MINIMUM OF 3" BEFORE SPREADING TOPSOIL/LOAM.
19. ALL TEMPORARY WETLAND IMPACTS WILL BE RE-GRADED TO ORIGINAL CONTOURS FOLLOWING CONSTRUCTION. NEW ENGLAND EROSION CONTROL/RESTORATION MIX, AVAILABLE THROUGH NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA 01002, 413-548-8000, OR EQUIVALENT SEED MIX SHALL BE APPLIED IN WETLAND AREAS THAT ARE NOT INUNDATED, AS NECESSARY.
20. MULCH USED FOR STABILIZATION SHALL CONSIST OF SEEDLESS STRAW.
21. SEDIMENT AND EROSION CONTROL MEASURES WILL BE EVALUATED AND REMOVED IF NECESSARY UPON THE COMPLETION OF CONSTRUCTION.
22. COMMERCIAL LOAM WILL NOT BE USED AS PART OF RESTORATION. ONLY IN-SITU TOPSOIL WILL BE USED TO RESTORE DISTURBED AREAS.
23. WHERE OPTIMAL TURTLE BREEDING AREAS OVERLAP WITH DISTURBANCE (AS DETERMINED BY AN ENVIRONMENTAL MONITOR), MINERAL SOILS WILL BE SCARIFIED TO ALLEVIATE COMPACTION AND BECOME MORE SUITED FOR TURTLE BREEDING.
24. NATURALLY VEGETATED LOCAL WETLAND BUFFER AREAS OUTSIDE OF EXISTING TRAILS MUST BE RESTORED UPON COMPLETION OF WORK.

WINTER CONSTRUCTION NOTES

1. PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND MULCH, AND INSTALLATION OF EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
2. DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE TEMPORARILY STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL (NHDOT 304.3).

GENERAL NOTES:

- OWNER: EVERSOURCE ENERGY
13 LEGENDS DRIVE
HOOKSETT, NH 03106
1. BASE PLAN PROVIDED BY EVERSOURCE ENERGY. EVERSOURCE ENERGY PROVIDED THE WETLAND DATA. EVERSOURCE ENERGY PROVIDED THE UTILITY DESIGN.
 2. JURISDICTIONAL WETLANDS WERE DELINEATED BY NORMANDEAU IN 2016, IN ACCORDANCE WITH THE 1987 U.S. ARMY CORPS OF ENGINEERS' "WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1." AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION," JANUARY 2012. WETLANDS WILL BE REVIEWED BY GZA GEOENVIRONMENTAL, INC. PRIOR TO START OF WORK.
 3. NORMANDEAU EVALUATED WETLANDS AS POTENTIAL VERNAL POOLS IN 2016 IN ACCORDANCE WITH "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE," 1997, NEW HAMPSHIRE FISH AND GAME DEPARTMENT, NONGAME AND ENDANGERED WILDLIFE PROGRAM.
 4. NORMANDEAU COMPLETED WETLANDS FUNCTION AND VALUES ASSESSMENT IN 2016 IN ACCORDANCE WITH THE ACOE'S "HIGHWAY METHODOLOGY WORKBOOK SUPPLEMENT," SEPTEMBER 1999.
 5. SITE PLAN IS FOR PERMITTING PURPOSES ONLY AND DOES NOT REPRESENT A PROPERTY BOUNDARY SURVEY.
 6. THE PROJECT WILL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
 7. IN ACCORANCE WITH ENV-WQ 1505.02, THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A MINIMUM 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED
 - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL HAS BEEN INSTALLED
 - OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 8. IN THE EVENT THAT A RARE OR THREATENED SPECIES IS OBSERVED, THE NEW HAMPSHIRE FISH AND GAME AND NEW HAMPSHIRE NATURAL HERITAGE BUREAU WILL BE NOTIFIED. TURTLE NESTING SEASON EXTENDS FROM LATE MAY THROUGH THE BEGINNING OF JULY. IF WOOD, BLANDING'S OR SPOTTED TURTLES ARE FOUND LAYING EGGS IN THE WORK AREA, CONTACT MELISSA DOPERALSKI AT 603-271-1738 OR JOSH MEGYESY AT 603-271-1125 FOR FURTHER INSTRUCTIONS. OBSERVATIONS OF NORTHERN BLACK RACER SNAKES SEEN IN ANY AREA FROM THE END OF SEPTEMBER THROUGH THE MONTH OF APRIL MUST BE IMMEDIATELY REPORTED TO THE NHFG DEPARTMENT (BRENDAN CLIFFORD AT 603-271-0463 OR MELISSA DOPERALSKI AT 603-271-1738). IF NORTHERN BLACK RACER IS FOUND IN A WORK AREA FROM NOVEMBER THROUGH THE MONTH OF APRIL, WORK SHALL IMMEDIATELY CEASE AND THE OBSERVATION MUST BE REPORTED TO THE NHFG (BRENDAN CLIFFORD OR MELISSA DOPERALSKI).


EROSION CONTROL NOTES:

1. INSTALLATION OF EROSION CONTROL GRINDINGS AND/OR SILT FENCES SHALL BE COMPLETE PRIOR TO THE START OF WORK IN ANY GIVEN AREA. EROSION CONTROLS SHALL BE USED DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VEGETATION COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER .25" OR GREATER RAINFALL EVENTS.
2. AS REQUIRED, CONSTRUCT TEMPORARY BERMS, SILTATION FENCES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION & SEDIMENTATION OF WETLANDS.
3. THE WORK AREA SHALL BE GRADED AND OTHERWISE SHAPED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS OF THE WORK AREA. EROSION CONTROL GRINDINGS WILL BE NECESSARY TO ACCOMPLISH THIS END.
4. ANY STRIPPED TOPSOIL SHALL BE STOCKPILED, WITHOUT COMPACTION, AND STABILIZED WITH BMPS.
5. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS, PLANT ANNUAL RYEGRASS PRIOR TO OCTOBER 15TH.
6. EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
7. EROSION CONTROL MATTING, IF REQUIRED, WILL CONSIST OF JUTE MATTING. MATTING WITH WELDED PLASTIC OR 'BIODEGRADABLE PLASTIC' NETTING OR THREAD WILL BE AVOIDED TO LIMIT UNINTENTIONAL MORTALITY TO SNAKES.

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

326 TRANSMISSION LINE STRUCTURE REPLACEMENT & OPGW PROJECT
PELHAM, NEW HAMPSHIRE

NOTES

PREPARED BY:  GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: EVSOURCE ENERGY	
PROJ MGR: LEW	REVIEWED BY: TLT	CHECKED BY: DMZ	SHEET S1
DESIGNED BY: MJD	DRAWN BY: MJD	SCALE:	
DATE: 02/18/2022	PROJECT NO: 04.0190999.70	REVISION NO.	

Best Management Practices (BMP's) for Straw wattles

Definition and purpose:

Straw wattles are burlap rolls filled with straw that trap sediment and interrupt water flow by reducing slope lengths.

Applications:

- * Along erodible or unstabilized slopes
- * Spread overland waterflow
- * Trap sediment
- * Around storm drain inlets to slow water and settle out sediment

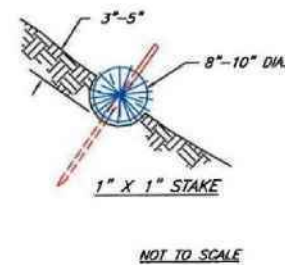
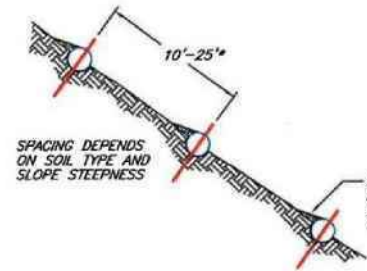
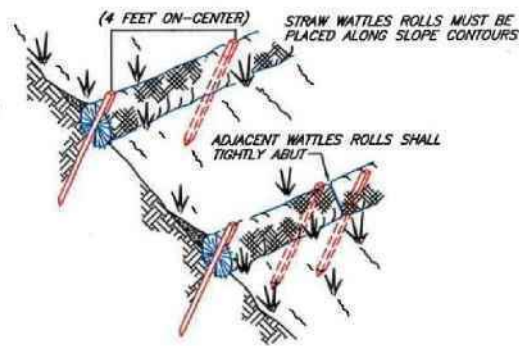
* Overlap ends approximately 6 inches

Installation:

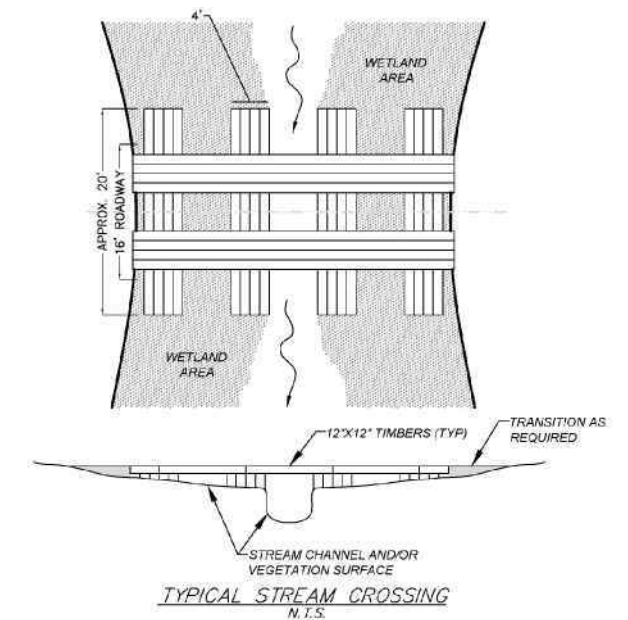
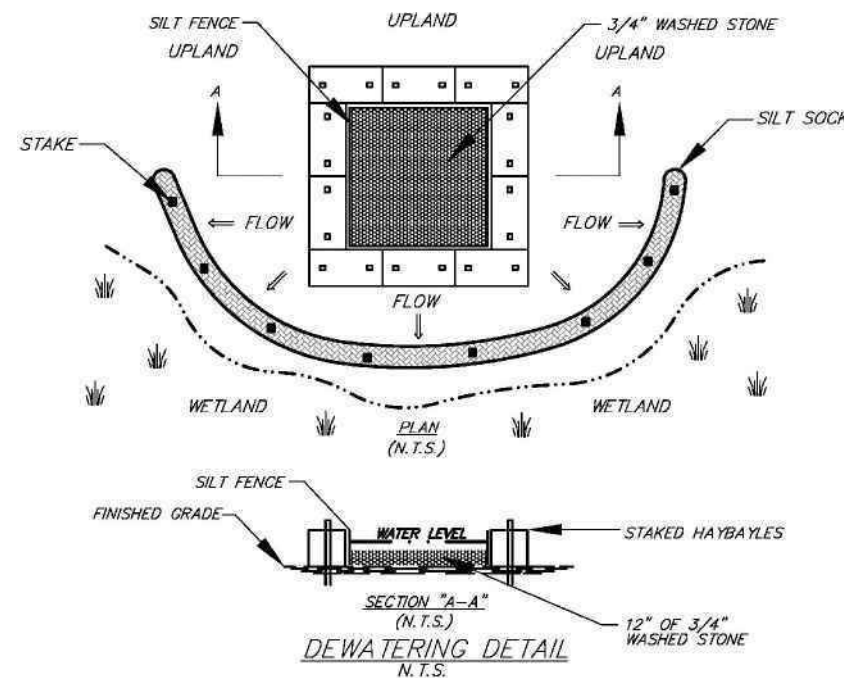
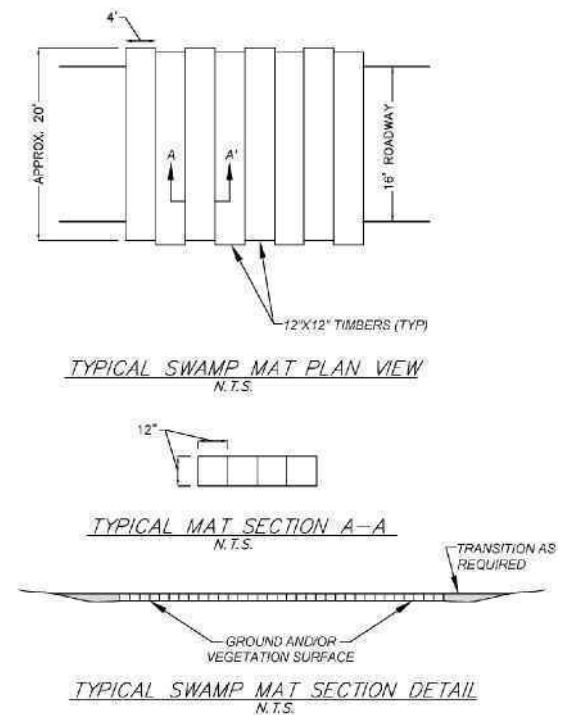
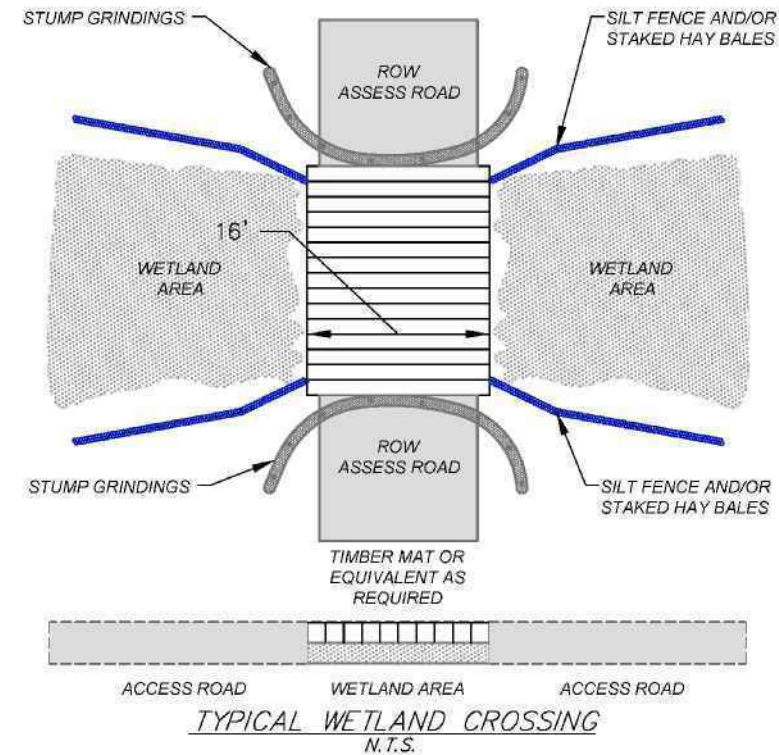
Straw wattles are installed parallel to slope contours and perpendicular to sheet flow.

Spacing* - Dependent on slope length, soil steepness and soil type (general range 10 - 25').

Trenching - 2"-5" inch trench
Stacking - at each end and four foot on center (i.e. 25 foot wattle uses 6 stacks)

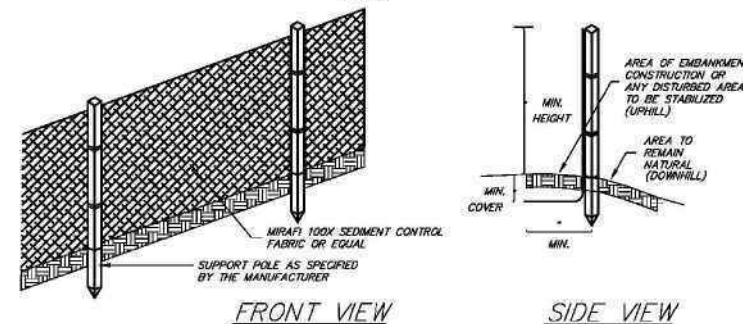


SEDIMENT, ORGANIC MATTER, AND NATIVE SEEDS ARE CAPTURED BEHIND THE WATTLE ROWS.



NOTES (SILT FENCE)

1. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES.
2. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.
3. POSTS SHALL BE PLACED AT A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE OF THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS
5. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
7. FABRIC BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
8. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST ONCE DAILY DURING PROLONGED RAINFALL AND ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
10. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
11. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.



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326 TRANSMISSION LINE STRUCTURE REPLACEMENT & OPGW PROJECT
PELHAM, NEW HAMPSHIRE

DETAILS

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: EVERSOURCE ENERGY	
PROJ MGR: LEW	REVIEWED BY: TLT	CHECKED BY: DMZ	SHEET 2
DESIGNED BY: MJD	DRAWN BY: MJD	SCALE: NTS	
DATE: 02/18/2022	PROJECT NO: 04.0190999.70	REVISION NO.	

REGULATION AMENDMENT

RA #01-22 DRIVEWAY SETBACKS

STAFF REPORT

May 18, 2022

PURPOSE: Lots in the Town Residential (TR) zone are typically smaller (min: 10,000 sf) than other zones that range from 30,000 sf to 2 acres. Accordingly, these lots are more constrained. As the Board has seen over the past few years and in observing existing conditions, a 5-foot side yard setback might be more appropriate than 15-feet.

PROPOSED AMENDMENT:

CURRENT:

§193-10

H. DRIVEWAYS are not permitted in side or rear setback areas, unless a shared ACCESS is required by the PLANNING BOARD.

PROPOSED ADDITION IN BOLD:

§193-10

H. **Side and rear setback areas for accessory buildings shall apply to DRIVEWAYS** ~~are not permitted in side or rear setback areas,~~ unless a shared ACCESS is required by the PLANNING BOARD.

What are the setbacks for accessory buildings? In TR it is 5-feet. In all other zones, it defaults to the Principal Building Setback. See note 3 on “Accessory Building setback” from the Table of Minimum Dimensional Requirements:

“Applies to all sheds, pools and other accessory structures or features items requiring a building permit. Garages must adhere to Principal Building Setbacks. In zones where no dimensions are listed, Principal Building Setbacks apply.”

DRAFT MOTIONS

PUBLIC HEARING:

I move to adopt the amendment to Section 193-10.H of the Driveway Regulations to allow setbacks for driveways to coincide with setbacks for accessory buildings, date certain,

_____.

Motion by: _____ Second: _____ Carried/Failed: _____