1. 401-20W Eversource CUP Application

Large format PDF may take longer to download. Please allow some time to download.

Documents:

#### 401-20W PSNH POLE REPLACEMENT.PDF

2. 501-20 Subdivision Plans

Large format PDF file, please allow additional time to download.

Documents:

501-20 SUBDIVISION.PDF



February 24, 2020

Ref: 52663.00

Don Berube, Jr.
Planning Board Chairman
Bow Planning Board
10 Grandview Road
Bow, NH 03304

Re: Town of Bow Conditional Use Permit Application Q171 Line Structure Replacement, Bow, NH

Dear Mr. Berube:

On behalf of Public Service Company of New Hampshire d/b/a Eversource Energy (PSNH), VHB is submitting this Conditional Use Permit Application to the Town of Bow Planning Board for proposed utility maintenance on the existing Q171, 115 kV transmission line in Bow, NH. This Conditional Use Permit is being submitted in accordance with *Section 10.01* of the Town's Zoning Ordinance. A Conditional Use Permit is required for the proposed maintenance work to allow impacts to wetlands protected under the Wetlands Conservation District.

## **Project Description**

PSNH proposes to replace an existing 115 kV transmission structure on the Q171 line in Bow, Structure 12. The structure replacement location can be viewed on Figure 1. Structure 12 currently consists of three single wood poles that will be replaced with steel. Structure 12 is rated as having a severe defect and must be replaced in order for the transmission line to continue to function safely and reliably. Structure 12 will be replaced in the exact location of the existing pole because it is at an angle in the transmission line. The poles may need to be increased in height by several feet to meet current clearance requirements and prevent the need for future work at this location.

Ground disturbance will be required to establish access to and around structure 12 for replacement. The work pad around structure 12 on the Q171 line will be created via the placement of timber mats over an area of approximately 100-feet by 100-feet centered on Pole 12. Construction timber mats, also called swamp mats, typically have a dimension of 16 feet wide by 4 feet long and are used to create a safe and stable platform to stage construction equipment and crews. Refer to the Project Plans, attached, for more information.

Prior to accessing the project ROW with construction equipment, crews will install erosion and sediment control barriers in accordance with permitting plans and details, New Hampshire Department of Environmental Services (NHDES) conditions, and the *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* ('Utility BMP Manual,' March 2019), published by the New Hampshire Department of Natural and Cultural Resources (NHDNCR).

2 Bedford Farms Drive

Suite 200

Bedford, New Hampshire 03110

**P** 603.391.3900

**F** 603.518.7495



Selected best management practices (BMPs) may include straw wattles, silt fence, wood chip/compost berms/tubes and/or other approved BMPs.

Ground-based crews will approach structure 12 along the Q171 line utilizing the proposed access as indicated on the Project Permitting Plans. Once access is established, the new steel poles will be installed either through direct embedment or constructed on a caisson foundation. Traditional augering and installation procedures will be used. All excavated spoils will be spread within an upland area of the project ROW (outside of NHDES jurisdiction) or will be trucked off-site and properly disposed of.

Matting and other construction debris will be removed upon completion of the proposed work. Stabilization of the surrounding project area and restoration of disturbed areas will be completed as soon as possible. Minimal restoration is anticipated due to the limited impacts of the proposed work, and if natural re-colonization of wetlands within the project area does not occur during vegetative growth periods, an approved wetland seed mix will be placed on affected areas to promote re-growth. VHB will revisit the ROW during this time period to assure restoration.

### **Wetlands Description**

The replacement of structure 12 will take place within the Town of Bow Wetland Conservation District. Since the project involves temporary impacts to wetlands and will use existing ROW access roads, a NH Department of Environmental Services (NHDES) Statutory Permit by Notification (SPN) for utility maintenance will be filed for this project. No prime wetlands are located within the project area.

Wetlands along the project ROW were previously delineated to support past Eversource maintenance work. Previously delineated wetlands were field verified by VHB Senior Environmental Scientist, Kristopher Wilkes (NH CWS #288), on February 21, 2020. Wetland verification was performed in accordance with the procedures and standards outlined in the Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (January 2012). Wetland delineation also relied upon the Field Indicators for Identifying Hydric Soils in New England, Version 4.0, published by the New England Interstate Water Pollution Control Commission, and the Field Indicators for Identifying Hydric Soils in the United States, Version 8.1 (published by the Natural Resources Conservation Service). Dominant wetland vegetation was assessed using the Northcentral and Northeast Regional Wetland Plant List published by the U.S. Army Corps of Engineers. Wetlands were classified using the USFWS methodology Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979, revised 1985). Wetland functions and values were also assessed using the U.S. Army Corps of Engineers Highway Methodology Workbook Supplement (September 1999). Site observations and field data collected during wetland verification field work is further summarized below.

A single large Palustrine, Emergent, Persistent, Permanently Flooded (PEM1H) wetland exists adjacent to (west of) Pole 12 and the associated ROW access road. The wetland is not isolated within the ROW but extends west outside of the existing cleared/maintained ROW limits. Wetland vegetation includes narrow-leaf cattail (*Typha angustifolia*), leatherleaf (*Chamaedaphne calyculata*), white meadowsweet (*Spiraea alba*), reed canary grass (*Phalaris arundinacea*), woolgrass (*Scirpus cyperinus*), tall white aster (*Doellingeria umbellata*), dark green bulrush (*Scirpus atrovirens*), species of goldenrod (*Solidago* spp.), speckled alder



(Alnus incana), maleberry (Lyonia ligustrina), and steeplebush (Spiraea tomentosa). Invasive plant species observed include purple loosestrife (Lythrum salicaria). Wetland hydrological indicators observed include surface water, soil saturation, inundation visible on aerial imagery, and geomorphic position.

The principal functions of the wetland are floodflow alteration and groundwater recharge due to its large size and landscape position. The wetland's vegetative composition and ability to retain drainage from the surrounding developed area also contribute to its capacity to perform water quality and hydrologic functions such as sediment/toxicant retention and nutrient removal/retention/transformation. Lastly, the wetland's position within a linear corridor also contributes to its function to provide wildlife habitat.

#### **Proposed Impacts**

The proposed work requires temporary impact to wetland adjacent to structure 12 due to the establishment of a timber mat construction work pad required to complete the pole replacement. No increase in permanent impact is proposed within the wetland. The project has been carefully designed to avoid and minimize impacts to jurisdictional resource areas to the maximum extent practicable. The replacement of structure 12 will not involve impacts within the bed and/or banks of any stream or river and will not impact any areas identified as vernal pools.

Within the Town of Bow, the replacement of structure 12 along the Q171 line will require approximately **3,380 sq. ft.** of temporary wetland impacts for matting to access the pole replacement location and create a stable work platform. Wetland buffers or setbacks do not apply to the proposed project.

#### **Conditional Use Permit – Permissible Uses**

In accordance with the requirements for a Conditional Use Permit, the construction and maintenance of powerlines in the Wetlands Conservation District is an allowable use if the conditions found in *Sections 10.01 and 12.05* are met. Evidence that the proposed project meets these conditions is provided below.

#### Article 10.01

# A. The proposed activity or use is consistent with the purposes of the Wetland Conservation District.

The proposed project is part of PSNH's on-going maintenance program conducted to ensure reliable electric service for their customers. The PSNH 115 kV transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that the 115-kV system remain operational without interruption from preventable outages.

The proposed project is located within an existing transmission line ROW and is part of regular maintenance work that is conducted periodically along the transmission line to ensure the proper functioning of the lines. Since the project will improve the reliability of the transmission system, the project is essential to the productive use of the land that is not located within the Wetlands Conservation District.



B. The proposed activity minimizes the degradation to, or loss of wetlands and wetland buffers, and minimizes any adverse impact to the functions and values of wetlands and wetland buffers as determined by a wetlands evaluation in accordance with an established methodology such as The Highway Methodology Workbook Supplement (1999) of the US Army Corps of Engineers.

Construction crews will use public roads intersecting the project ROW and other established access points, where permission is granted, to enter the transmission corridor. Proposed access down the ROW will follow existing well-established ROW access roads that have been utilized by utility crews during prior maintenance work. Where existing wetland intersects the work pad required to replace structure 12, timber mats will be installed to create a safe and stable platform to stage crews and equipment within the wetlands and uplands. The use of swamp mats reduces the impact of staging/driving heavy equipment through saturated wetland soils by dispersing the equipment weight, preventing the formation of ruts, and preventing conditions that are conducive to soil erosion.

Prior to accessing the ROW, crews will install erosion control and sediment control barriers in accordance with the NHDES Utility BMP manual, and as dictated by site conditions. Selected BMPs may include silt sock, silt fence, wood chip/compost berms/tubes and/or other approved BMPs. Erosion controls will be inspected daily and maintained throughout the duration of the project and will not be removed until project work is complete, and the project area is stabilized in accordance with NHDES guidance.

Due to the timing of the project and measures being taken to minimize impacts, it is anticipated that minimal restoration will be needed and that natural re-colonization of impacted portions of the wetland adjacent to structure 12 will occur during summer vegetative growth periods. VHB will revisit the ROW during this time period to confirm vegetative regrowth. If necessary, an approved wetland seed mix outlined in NHDES guidance manuals, such as New England Wet-Mix or New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites or equivalent/readily available seed mixes), will be applied to any areas where cover is slow to develop. Additionally, straw or weed-free hay will be applied in conjunction with seed.

The proposed work represents maintenance of existing electrical utility assets within an existing established electric transmission line corridor. The replacement of structure 12 will occur over a short duration with minimal temporary wetland edge impacts associated with the placement of timber matting to construct a work pad to safely stage line crews and construction equipment. The project does not represent any new, permanent and/or significant impacts to wetlands that could have a potential impact on the effectiveness of the associated wetland to provide the identified functions and values.



- C. The proposed activity minimizes the environmental impact to abutting or downstream property and/or hydrologically connected water and/or wetland resources. Construction crews will implement erosion and sediment controls along the ROW and at the pole replacement location, ensuring that impacts to abutting or downstream properties are not anticipated. The areas of disturbance will be monitored routinely by an environmental monitor during construction.
- D. The proposed activity or use cannot practicably be located otherwise on the site to eliminate or reduce the impact to the Wetland or Surface Water and/or its buffer area, provided however, this condition shall not apply to impoundments for the purpose of creating a water body for wildlife.

The pole to be replaced is located at an angle in the transmission line and, therefore, cannot be relocated. The replacement will be in the current location and will not encroach any further towards the wetland. Access to the pole proposed to be replaced was chosen to avoid wetland areas to the maximum extent possible. Access around the pole is required to stage equipment around the pole to conduct the construction.

E. Federal and/or state permit(s) have been received for the proposed activity in accordance with N.H. Administrative Rules Env-Wt 100-900, the Federal Section 404 Permit.

VHB has developed a permitting plan set to support NHDES SPN and municipal application filings that will identify work areas, structure replacements, access routes, natural and cultural resources, and impact areas. Plans will also include topographic and parcel boundary information if it is publicly available. Plans will be stamped by a NH Certified Wetland Scientist. Maps use Eversource standardized GIS symbiology.

F. Where applicable, proof of compliance with all other state and/or federal regulations has been received.

The town will receive copies of the NHDES SPN.

#### Article 12.05

A. The use is specifically authorized by Article 5, Section 5.11 <u>Table of Use Regulations</u> as a conditional use.

The use resulting from this project complies with the Table of Use Regulations set forth in Section 5.11 of Bow's Zoning Ordinance.



B. If completed as proposed by the applicant, the development in its proposed location will comply with all requirements of this Article, and with the specific conditions or standards established in this ordinance for the particular use.

If completed as proposed, the project will comply with all requirements of this Article. In addition, the applicant will adhere to any project specific conditions applied by the municipal boards during the approval process for the particular use.

C. The use will not materially endanger the public health or safety.

Work on the Q171 line will be limited to the existing ROW and will not endanger the public health or safety. Work sites are posted and indicate restricted access. Work sites are secured at the end of each day such that equipment is locked, holes are covered, and hazards are adequately mitigated.

D. The use will be compatible with the neighborhood and with adjoining or abutting uses in the area in which it is to be located.

This project will be compatible with a use as an electric transmission line ROW.

- E. The use will not have a substantial adverse impact on highway or pedestrian safety.

  Construction crews will use public roads intersecting the project ROW and other established access points to enter the transmission corridor. However, all of the work will occur within the ROW, located away from any area with adverse impacts on highway or pedestrian safety.
- F. The use will not have a substantial adverse impact on the natural resources of the town. Proposed accessways within the ROW follow existing access as much as possible in order to limit the amount of disturbance to the surrounding area. VHB will submit an online DataCheck request with the New Hampshire Heritage Bureau (NHNHB) to identify known populations of state-listed threatened or endangered species within the vicinity of the project ROW. Based on feedback provided by NHNHB, VHB will conduct additional coordination with NHNHB and the New Hampshire Fish and Game Department (NHF&G) to confirm appropriate minimization and avoidance protocols to complete this project.
- G. The use will be adequately serviced by necessary public utilities and community facilities and services of a sufficient capacity to ensure the proper operation of the proposed use, and will not necessitate excessive public expenditures to provide sufficient additional capacity or services.

The proposed project is maintenance of an existing transmission line and does not require public utilities or community services.

#### **Property Ownership and Abutters**

All proposed work will occur within the limits of an existing electric utility ROW that is either owned in fee or maintained as easement by PSNH. All owners of parcels where impacts to the Wetlands Conservation District are to occur, as well as owners of parcels who abut or are located across the street from these



properties will be notified of the proposed project in accordance with the Town of Bow's Conditional Use Permit application process. The list of owners and abutters and the associated tax maps are attached.

Please do not hesitate to contact me if you have any questions at (603) 391-3951 or strefry@vhb.com.

Sincerely,

Sherrie Trefry, CSS

Director of Energy and Environmental Services

cc: Jeni Menendez, PSNH

Shenie Trefry

Attachments:

Town of Bow Conditional Use Permit Application Figure 1 – Bow Project Permitting Plans Abutters List & Bow Tax Map

Revised February 2018

## TOWN OF BOW PLANNING BOARD

# CONDITIONAL USE PERMIT APPLICATION WETLAND PROTECTION ORDINANCE Article 10.01 of the Town of Bow Zoning Ordinance

To the Applicant:

This constitutes the application form for a Conditional Use Permit for purposes identified in Article 10.01 E of the Zoning Ordinance.

Once completed, the application, together with the required fee, must be submitted to the agent of the Planning Board by 3:00 PM at least three (3) weeks prior to the next regular meeting of the Planning Board and at least ten (10) days prior to the next meeting of the Conservation Commission.

The Planning Board shall refer the application to the Conservation Commission for review and comment prior to the public hearing on the application. Please contact the Conservation Commission to schedule an appointment to discuss the proposal.

A final application which is not complete may be rejected by the Planning Board at a regular meeting. To be complete an application must include:

1. \_X\_ One (1) copy of the completed application form 2. X One (1) paper copy of a sketch plan of the proposal, with wetlands delineated by certified soils scientist or wetlands scientist. (If not concurrently submitted with a Site Plan Review or Subdivision Application.) 3. X One (1) copy of any construction plans 4. \_X\_ One PDF file of the plan set (via e-mail) 5. <u>X</u> A narrative which addresses the criteria of Articles 10.01F and 12.05 of the Zoning Ordinance (attached) 6. <u>X</u> Complete and accurate abutters list (including any PE/LLS/CSS/CWS whose seal appears on the plan) 7. X The appropriate filing fee (Additional fees may apply if submitted with Site Plan Review or Subdivision application) \$ 400 Application Fee (\$400) \$\_\_\_300 Plus per Abutter (\$20) \$\_\_50\_\_ Plus \$50 per 1,000 SF of Wetland Impact greater than 3,000 SF (buffers not included)  $_{\$}$  Total (Not including any other applications)

10 Grandview Road

## TOWN OF BOW PLANNING BOARD WETLAND PROTECTION CONDITIONAL USE PERMIT APPLICATION

(603) 223-3970

Bow, NH 03304 mtaylor@bownh.gov	fax (603) 225-2982
	FOR OFFICE USE ONLY
Owner(s): Public Service Company of NH	
c/o Jeni Menendez	Application #
Address: 13 Legends Drive	Date Received://
Hooksett, NH	Fee Paid \$
Daytime Telephone # ( <u>603</u> ) <u>634</u> - <u>2992</u>	Check #
Applicant: Public Service Company of NH	Received By:
Address: 13 Legends Drive	
Hooksett, NH	E-mail address for contact
Daytime Telephone # ( <u>603</u> ) <u>634</u> - <u>2992</u>	person:
1. Block # <u>200</u> Lot(s) <u>B2</u>	
2. Street Address for parcel: Route 3A	
3. Property located in the Business Development	Zoning District.
4. Land is in open space (current use):	YES _X NO
5. Date of most recent timbering operation	:
6. Purpose for which the Conditional Use P	ermit is sought:
Maintenance of utility right or way easement, including power lines. Requ	uesting a Conditional Use Permit to
temporarily impact wetlands for access to replace one transmission line po	ole on the Q171 line within an existing ROW.
The applicant agrees that he/she is famili Ordinance of the Town of Bow and in submit complied with the requirements of the Ordi	ting this application has
Jeni Menendez	2/24/2020
Property Owner(s) or Applicant's Signature with Certification	Date



#### Abutters List for Q171 Line Maintenance

Parcel Number	Property Address	Owner Name	Co-Owner Name	Owner Address	Owner Address 2	Owner City	Owner State	Owner Zip
40-2-146	767 RIVER ROAD	BEAUCHESNE DANIEL A +	LEIGHTON PATRICIA L	767 RIVER ROAD		BOW	NH	03304
40-2-164	1403 ROUTE 3-A	CREDIT WAREHOUSE REALTY LLC	C/O KAMIN REALTY COMPANY	490 SOUTH HIGHLAND AVENUE		PITTSBURG	PA	15206
40-2-164-C	29 DUNKLEE ROAD	164C DUNKLEE LLC	C/O K & M CHAPMAN	58 JAY DRIVE		DUNBARTON	NH	03046
40-2-169	1407 ROUTE 3-A	DUFRESNE MARK + SUSAN		1421 ROUTE 3-A		BOW	NH	03304
40-2-170	1421 ROUTE 3-A	DUFRESNE MARK + SUSAN		1421 ROUTE 3-A		BOW	NH	03304
40-2-172	758 RIVER ROAD	OSBORNE PETER J + JANICE C		PO BOX 217		PITTSFIELD	NH	03263
40-2-200-B	67 RYAN ROAD	GSP MERRIMACK LLC		2200 ATLANTIC ST	SUITE 800	STAMFORD	СТ	06902
40-2-200-B1	722 RIVER ROAD	PUBLIC SERVICE CO OF NH	DBA EVERSOURCE ENERGY	PO BOX 270		HARTFORD	СТ	06141-0270
40-2-200-C	1420 ROUTE 3-A	PUBLIC SERVICE CO OF NH	DBA EVERSOURCE ENERGY	PO BOX 270		HARTFORD	СТ	06141-0270
40-2-92	1426 ROUTE 3-A	PROPERTIES INC	TAX ACCOUNTING	PO BOX 330		MANCHESTER	NH	03105
45-2-147	1601 ROUTE 3-A	CONTINENTAL PAVING INC		1 CONTINENTAL DRIVE		LONDONDERRY	NH	03053
45-2-173	652 RIVER ROAD	COASTAL BOW PROPERTIES LLC		660 RIVER ROAD		BOW	NH	03304
40-2-141-B1	1474 ROUTE 3-A	1474 BOW, LLC		61 SILVA LN		DRACUT	MA	01826
AGENT/CWS		VHB C/O KRISTOPHER WILKES		2 BEDFORD FARMS DRIVE	SUITE 200	BEDFORD	NH	03110
APPLICANT/ OWNER		PUBLIC SERVICE CO OF NH C/O JENI MENENDEZ	DBA EVERSOURCE ENERGY	13 LEGENDS DRIVE		HOOKSETT	NH	03106

**Existing Structure** 

-- • Existing Access

Overhead Eversource LineExisting Right-of-Way (ROW)

Erosion Control Barrier

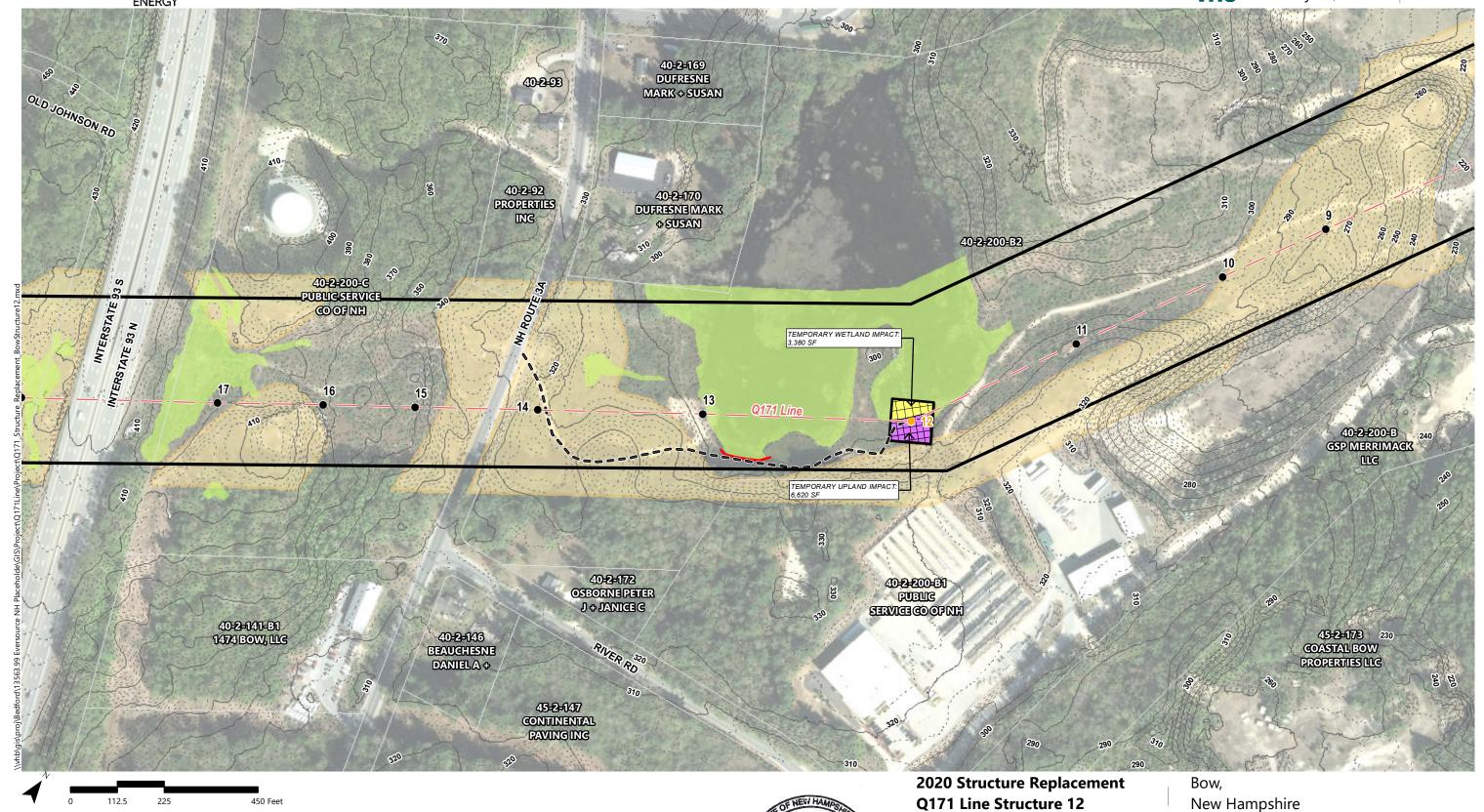
Work Pad (100' x 100')

Phase 1A Area

Field Delineated Wetland

Temporary Upland Construction Matting

Existing Structure to be Replaced Temporary Construction Matting



---- 2' Contour

—— 10' Contour

**Project Plans** 

#### **TEST PIT DATA:**

TP #12 MARCH 19, 2020

DEPTH TO LEDGE: N/A
EST SHWT: 24"
OBSERVED WATER TABLE: N/A
PERC RATE LESS THAN 8 MIN INCH AT 24"

0-8" 10 YR 2/2 LOAM,

8-14" 10 YR 7/8 FINE SILTY SANDY LOAM, LOOSE GRANULAR

14-30" 10YR Y 8/3 SLIGHTLY LOAMY SILTY SAND TIGHT GRANULAR

30-60" 10YR 8/8 SILTY SAND. TIGHT GRANULAR

#### TEST PIT DATA:

TP #12-1 MARCH 19, 2020

DEPTH TO LEDGE: N/A EST SHWT: 24"

OBSERVED WATER TABLE: N/A

PERC RATE LESS THAN 8 MIN INCH AT 24"

0-5" 10 YR 2/2 LOAM AND FOREST LOAM,

5-10" 10 YR 7/6 FINE SILTY SANDY LOAM, LOOSE GRANULAR

10-22" 10YR 8/6 LOAMY SILTY SAND LOOSE GRANULAR

22-34" 10YR 7/4 SILTY SAND. TIGHT GRANULAR

34-60" 2.5Y 7/4 SILTY SAND. TIGHT GRANULAR

MARCH 19, 2020

HAMPS HAMPS Designer of

Subsurface Disposal

Systems

TEST PIT LOGS

MAP 2 BLOCK 4 LOT 12

CLINTON ST. & BRANCH LONDONDERRY TP

PREPARED BY

J.E. BELANGER LAND SURVEYING P.L.L.C.

61 OLD HOPKINTON ROAD TEL. (603)774-3601

DUNBARTON NH 03046

