



TOWN OF DURHAM
8 NEWMARKET RD
DURHAM, NH 03824-2898
603/868-8064
www.ci.durham.nh.us

RECEIVED
Town of Durham
JAN 20 2021
Planning, Assessing
and Zoning

APPLICATION FOR PERMITTED USE B.
in the Wetland Conservation Overlay District or the Shoreland Protection Overlay district

This form and all required information per Durham's Zoning Ordinance (Article XIII, Section 175-60. B. and/or Article XIV, Section 175-71. B.) must be filed with the Planning Department at least 14 days prior to the meeting of the Conservation Commission (but may be submitted later with an okay from the Town Planner if there is sufficient time to review the application). A recommendation from the Conservation Commission is required prior to final Planning Board action.

Property Location:

Street Address: PSNH Right-of-Way (ROW)/Easement

Tax Map #: 9 Lot #: 11, 6-1, 5, 2-4, and 2-2 Zoning District: R - rural

Owner(s):

Name: Public Service Company of NH (PSNH) d/b/a Eversource Energy c/o Jeni Menendez

Mailing Address: 13 Legends Drive, Hooksett, NH 03106

Phone: 603-634-2992 Email: jeni.menendez@eversource.com

Professional Preparing Plans:

Name of individual and company: Sherrie Trefry, VHB

Mailing Address: 2 Bedford Farms Drive (Suite 200), Bedford, NH 03110

Phone: 603-391-3951 Email: strefry@vhb.com

Proposed Activity: Eversource intends to replace various utility poles and copper wiring along their existing G128 and L175 Transmission Lines within their existing, cleared ROW and easements in Durham, NH. This is part of their ongoing maintenance program to ensure consistent and reliable service to their customers.

Please attach plans of the proposal and a written description of the project including a narrative addressing the three required criteria.

I certify that all of the information provided is true, to the best of my knowledge.

Signature of professional: Sherrie Trefry Date 1/17/21

If I am an agent for the owner, I certify that I am authorized to submit this application.

Signature of owner (or agent): Jeni Menendez Date 1/19/2021

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January 19, 2021

Ref: 52710.00 and 52711.00

Mr. Paul Rasmussen
Durham Planning Board Chair
8 Newmarket Road
Durham, NH 03824

Re: Town of Durham Application for Permitted Use B
G128 Copper Wire Retirement and L175 Pole Replacements, Durham, NH

Dear Mr. Rasmussen:

On behalf of Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource), VHB is submitting this Application for Permitted Use B in the Wetlands Conservation Overlay District to the Town of Durham Planning Board for proposed utility maintenance on the existing G128 and L175 transmission lines in Durham, NH. This Permitted Use Application is being submitted in accordance with *Article XIII, Section 175-60(B)(4)* of the Town's Zoning Ordinance, which includes "temporary crossings for the maintenance of utility pipes or lines or for other utility structures." An application is required for the proposed maintenance work to allow temporary impacts to wetlands and streams and wetland buffers protected under the Wetland Conservation Overlay District (detailed in *Article XIII* of the Zoning Ordinance).

Project Description

Eversource intends to replace five (5) poles on the G128 transmission line and nine (9) poles on the L175 transmission line in Durham. The proposed work on the G128 line is required to support the replacement of the existing copper static wire with optical grounding wire (OPGW). The replacement poles need to be replaced to support the increased weight from the OPGW. The proposed work on the L175 line is part of an asset condition replacement program that identifies structurally deficient poles during annual inspections. The G128 and L175 Transmission Lines share the same maintained right-of-way (ROW) corridor. The proposed work will occur within the existing, cleared transmission ROW and no additional widening of the ROW is proposed. Construction is anticipated to start in early 2021. The 14 poles to be replaced consist of wood that will be replaced with weathered steel to meet current industry standards and support the load of the new copper wiring. The poles will be installed within 10 feet of the original pole location. Generally, adjustments are made to pole locations to move poles out of wetland resources (as with G128 Structure 15) or for access during construction. Pole height increases along the L175 line are necessary to maintain minimum clearance safety standards and balance line sag. The proposed L175 height increases are detailed in **Table 1** below.

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Suite 200
Bedford, New Hampshire 03110
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Engineers | Scientists | Planners | Designers



Table 1: Existing and Proposed Utility Pole Heights

Transmission Line	Utility Pole Number	Existing Height	Proposed Height
L175	128	85	90
	129	85	90
	130	85	90
	131	90	95
	132	75	80
	133	75	80
	134	90	95
	135	95	95
	136	80	90

Project Need

The existing L175 poles are laminated wood poles that are showing signs of distress, requiring replacement. Similarly, the non-laminate wood poles on the G128 line also require replacement to support the weight of the OPGW. The proposed replacement work is part of Eversource’s on-going maintenance program conducted to ensure reliable electric service for their customers and improve communication on the transmission system.

Project Execution

Prior to construction, and in accordance with **Article XIII, Section 175-60(B) Criteria a**, Eversource contractors will install erosion control and sediment control barriers in accordance with permitting plans, the 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). Selected BMPs may include silt sock, silt fence, or wood chip/compost berms/tubes. Wetland and stream resources, previously delineated by environmental consultants working for Eversource, will be verified by VHB and reflagged to assist crews prior to the start of construction. Construction crews will utilize existing established access (where present) within the limits of the ROW corridor off Madbury Road in Madbury and Lee Road in Lee to reach the poles targeted for replacement while avoiding the perennial stream channel between G128 Structures 14 and 15.

Construction crews will utilize timber matting to gain access across two wetlands within the vicinity of the proposed work - one between L175 Structures 130 and 131 and the other is located south of G128 Structure 12. Timber mats will also be set up around the base of the poles if the work pad around the pole intersects wetlands, as with Structures 12 and 15 on the G128 line and Structures 131, 134, and 135 on the L175 line. The timber mats provide a stable work area to stage crews and equipment. The use of timber mats is a routine practice that reduces the impact of heavy equipment on saturated wetland soils by dispersing the equipment weight, preventing the formation of ruts, and minimizing soil erosion.

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. Construction laydown areas used to store materials and equipment along the project ROW will be in upland areas. Contingent upon permit approval, work is proposed to commence in early 2021.

Erosion controls will be inspected daily by the crews and weekly by an environmental monitor to ensure that the BMPs are maintained throughout the duration of the project. Matting and other construction debris will be removed upon completion of the proposed work. Erosion controls will not be removed until project work is complete, and the project area is stabilized in accordance with NHDES guidance. Due to the use of timber mats, it is anticipated that minimal restoration within the ROW will be needed and that natural vegetative re-colonization of impacted areas will occur during summer vegetative growth periods. VHB will revisit the ROW during this time period to confirm vegetative regrowth. If necessary, an approved upland and/or wetland seed mix outlined in NHDES guidance manuals, 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. This proposed restoration of all disturbed areas complies with **Article XIII, Section 175-60(B) Criteria b.**

The proposed pole replacement requires temporary impact to wetlands for access to the poles and for the establishment of work pads to stage construction equipment and work crews. No permanent wetland or stream impact is proposed. The project has been carefully designed following a site visit to avoid and minimize impacts to jurisdictional resource areas to the maximum extent practicable, in accordance with **Article XIII, Section 175-60(B) Criteria c.**

Within the Town of Durham, approximately **23,997 sq. ft.** of temporary wetland impacts is required for the placement of timber matting. Access will also result in approximately **47,337 sq. ft.** temporary wetland buffer impact. All work will be completed in accordance with the Best Management Practices for Utility Maintenance in New Hampshire (Utility BMPs).

NH Department of Environmental Services Notification

In accordance with NH RSA 482-A:3, XV, routine utility maintenance work is exempt from the standard wetland permitting process at the state level. However, Eversource is required to submit a Utility Maintenance Statutory Permit-by-Notification (SPN) to NHDES to cover the temporary wetland impacts associated with use of timber matting within wetlands required to complete the replacement work on the G128 and L175 lines. VHB is currently assisting Eversource with this filing. As part of the NHDES SPN process, The Town of Durham will receive a copy of this filing.

Wetland Verification

A portion of the proposed project will take place within the Town of Durham's Wetland Conservation Overlay District. The District includes all areas identified as wetland or vernal pool, as defined in *Article II, Section 175-7* of the Zoning Ordinance. Under *Section 175-59*, the provisions of *Article XIII* apply to all wetlands and adjacent buffers except isolated, non-tidal wetlands with a contiguous surface area of less than 3,000 square feet that are not vernal pools and are not associated with any surface water, natural drainage way, or other wetland and are not associated with currently functioning and maintained, non-abandoned, manmade ditches, swales, basins, and/or ponds. A 100-foot wetland buffer does apply to jurisdictional wetlands within the proposed project area, according to *Section 175-59(A)(2)(d)*, as the project is located in a Zone R (rural).



Wetlands within the G128/L175 ROW were previously delineated in support of past Eversource maintenance work. Previously delineated wetlands will be field verified and reflagged by VHB Environmental Scientists prior to construction to assist crews. Wetland verification was performed in accordance with the procedures and standards outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the 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 the United States, Version 8.2*, published by the Natural Resource Conservation Service and the *Field Indicators for Identifying Hydric Soils in New England, Version 4.0*, published by the New England Interstate Water Pollution Control Commission in April 2019. Dominant wetland vegetation was assessed using the *2018 National Wetland Plant List* published by the U.S. Army Corps of Engineers. Lastly, wetlands were classified using the USFWS methodology in the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979, revised 1985).

The proposed project will not negatively impact the existing wetlands. Some temporal loss of wetland function as wildlife habitat is expected during construction. However, use of timber mats reduces the timeframe of impact by minimizing impact to the root structure of the plants so that revegetation happens faster.

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

Sincerely,

A handwritten signature in cursive script that reads "Sherrie Trefry".

Sherrie Trefry, CSS
Director of Energy and Environmental Services

cc: Jeni Menendez, Eversource

Attachments:

Town of Durham Application for Permitted Use B Form
Project Plans