

STATE OF NEW HAMPSHIRE

Inter-Department Communication

NHPUC 18OCT17PM4:23

DATE: October 18, 2017
AT (OFFICE): NHPUC

FROM: Joseph Vercellotti, Utility Engineer, Safety Division

SUBJECT: DG 17-093 Petition of Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities for a License to Construct and Maintain a Natural Gas Pipeline beneath Beaver Brook in Pelham

TO: Debra Howland, Executive Director
Randy Knepper – Director of Safety Division
Steve Frink, Assistant Director of Gas Division
Paul Dexter, Staff Attorney

Commission Safety Division's review of the above petition consisted of the following elements:

- Petition contents, project overview and history
- Review of land ownership on each side of the river crossing.
- Review of CFR Part 192 requirements, as described in Puc 500 rules
- Review of public need and public impact, including applicability of other State regulations
- Conclusions and Recommendations

Petition Contents, Project Overview and History

On June 8, 2017, Liberty Utilities Corp (“Liberty”, or “the Company”) filed a petition, pursuant to RSA 371:17 and RSA 371:20, to construct and maintain a distribution gas main under and across public waters of Beaver Brook in Pelham, New Hampshire. The natural gas distribution main crossing will be part of Liberty's planned expansion into the Town of Pelham, New Hampshire. The planned route will cross beneath the public waters, where Willow Street crosses over Beaver Brook.

On October 18, 2017, Liberty filed a revised plan called “Proposed Horizontal Directional Drill Under Beaver Brook” for distribution system project work in the vicinity of the top of the Beaver Brook embankment in Pelham. Of interest to the petition and public waters license application in the instant docket, is an updated design and plan (see page 80 of the Shoreland Protection Application) which depicts the proposed horizontal directional drill (HDD) location for the installation of new gas main beneath and across Beaver Brook at the Willow Street bridge in Pelham. The updated design shows the length of the HDD crossing beneath Beaver Brook and adjacent wetlands will increase approximately 40.4 feet from the 624.1 feet shown in the original petition. Under the updated design the proposed crossing length has increased to approximately

664.5 feet which is not considered by Staff in this case to be a significant change and appears to have the proposed pipeline location within the Willow Street right-of-way.

Liberty does not currently serve customers in this new franchise area. The proposed new distribution system for the Town of Pelham will allow Liberty to provide potential new customers with natural gas service as a new energy supply alternative.

As part of its expansion into Pelham, Liberty is installing approximately 5 miles of natural gas distribution mains in Pelham, which extend from a new regulator gate station off of the Tennessee Gas Transmission Pipeline off Route 38 (Bridge Road), and extending west along Willow Street toward Route 111A and the Pelham municipal buildings. Liberty will be responsible for the construction performed by qualified contractors and will own, operate and maintain the pipeline after construction.

The distribution system installation requires Liberty to cross beneath the public waters of Beaver Brook in the vicinity of the Willow Street Bridge. At this crossing location Liberty plans to use HDD techniques to install the 8-inch diameter pipeline approximately 15 feet below the bottom of the brook. The proposed crossing location is shown on Staff Attachment 1. The HDD extends approximately 665 feet from the entry bore pit on the east side of the crossing, traveling along the north side of Willow Street, passing below Beaver Brook and the wetlands buffer, then reemerging on the west side of the crossing at an exit bore pit. In petition Item 8 Liberty asserts that the crossing will not disturb and wetlands and therefore, will not require a wetlands permit. Liberty has applied for, but has yet to obtain a Shoreland Protection Permit from the DES.

The petition indicates that the proposed public water crossing requires two easements. One easement is necessary at the eastern limit of the directional drill with the property owner of Tax Map 35, Lot 7-113. The remainder of the direction drill will be on property owned by the Pelham School District designated as Tax Map 28, Lot 7-136. The Company will have both easements in place prior to construction.

In response to a September 12, 2017 Staff data request, on September 19, 2017 Liberty provided the following information to supplement the petition:

- 1) Liberty indicated that the proposed pipe material to be installed under the river crossing as part of the directional bore consist of 664.5 linear feet (lf) of 8-inch dia. Grade PE 2708/2406 Medium Density Polyethylene (MDPE) (SDR 13.5) with a 0.639 inch wall thickness with a #10AWG 49 Strand 302S tracer wire.
- 2) A statement that the design Maximum Allowable Operating Pressure (MAOP) of the Pelham distribution system will be 60 pounds per square inch gauge (psig).
- 3) An updated design drawing from the Shoreland Protection Permit Application was provided as "Attachment A" to the petition.
- 4) Liberty provided an explanation that the main was initially sized the pipeline at the crossing to be a 6-inch diameter main. Engineering refined the final size to an 8-inch main as detailed load information and potential future capacity were recognized.
- 5) Liberty indicated the final design plan for the proposed pipeline crossing will be filed to the docket when it becomes available.

- 6) Liberty will file to the docket a copy of the Shoreland Protection Permit including Liberty and/or the Contractor agreeing to the permit conditions when it becomes available.
- 7) Liberty provided a copy of the town permit and is in the process of finalizing the necessary easements for the Beaver Brook crossing.

A. Land Ownership

Liberty is in the process of finalizing the necessary easements for the Beaver Brook crossing. Liberty will file the easements in the docket when they become available. Liberty has also represented that the proposed pipeline crossing will not interfere with public rights to use and enjoy Beaver Brook. Liberty indicated the pipeline will be constructed approximately 15 feet below the bed of the river and will be built so that pipeline integrity checks can be accomplished.

B. Review of safety requirements as described in Puc 500.

N.H. Code Admin. Rules Puc 506.01, Pipeline Safety Standards, provides that:

(a) All utilities shall comply with those pipeline safety regulations established by the United States Department of Transportation which are set forth in 49 C.F.R. Parts 191, 192, 193, 198 and 199, including future amendments thereto.

(b) Where Puc 500 or Puc 800 establishes more stringent requirements than those pipeline safety regulations adopted pursuant to (a) above, the more stringent requirement set forth in Puc 500 or Puc 800 shall apply.

Liberty's petition does not explicitly state that the administrative rules of Puc 500 will be met, but does provide engineering details that show overall compliance with CFR Part 192, which is referenced in Puc 506.01.

The Safety Division review of the petition and attachments submitted to date found the proposed crossings to be in conformance with the applicable requirements of Puc 500 and CFR Part 192.

C. Public Need and Public Impact

The Safety Division considers any impact to the public from this river crossing will be *de minimis*, as a result of the directional bore and the prescribed depth below the river bottom. Liberty has stated that the proposed distribution system construction is needed to expand natural gas service to the Town of Pelham.

D. Conclusions and Recommendations.

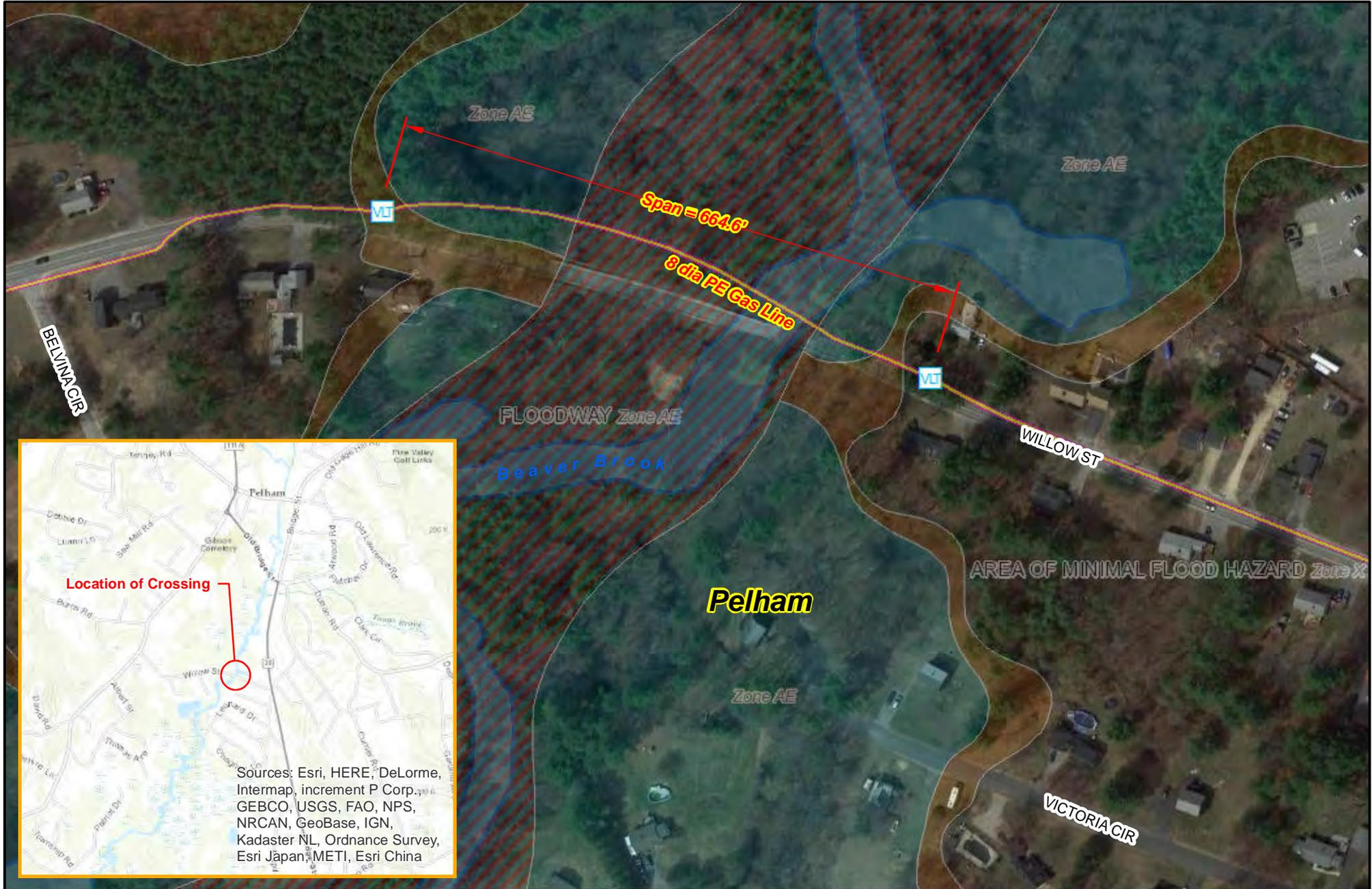
The Safety Division recommends approval of Liberty's petition under RSA 371:17 and RSA 371:20 with the following conditions:

- a. Staff recommends that the approval be limited to the Liberty natural gas pipeline under consideration in this docket.

- b. Liberty files the final design, easements, and the Shoreland Protection Permit in the docket when they become available.
- c. Liberty should construct, operate, and maintain the piping consistent with both Puc 506.02 and 49 CFR Part 192 requirements.
- d. Liberty should be directed to operate and maintain the crossing in conformance with the latest 49 CFR Part 192 amendments. Any and all future alterations to the crossing that may impact the public shall conform to the most current CFR Part 192 amendments in effect at the time of submittal of the alteration.
- e. Liberty should use above ground pipeline markers for identification of the pipeline with appropriate warning and company contact information along the project, including on each bank of the Beaver Brook crossing.

If these conditions are met, the Safety Division is of the opinion that the proposed natural gas pipeline crossings will meet all current safety standards, and safe ongoing operation is an inherent component of the RSA 371:20 public rights standard.

Beaver Brook - DG 17-093 Liberty Utilities Crossing

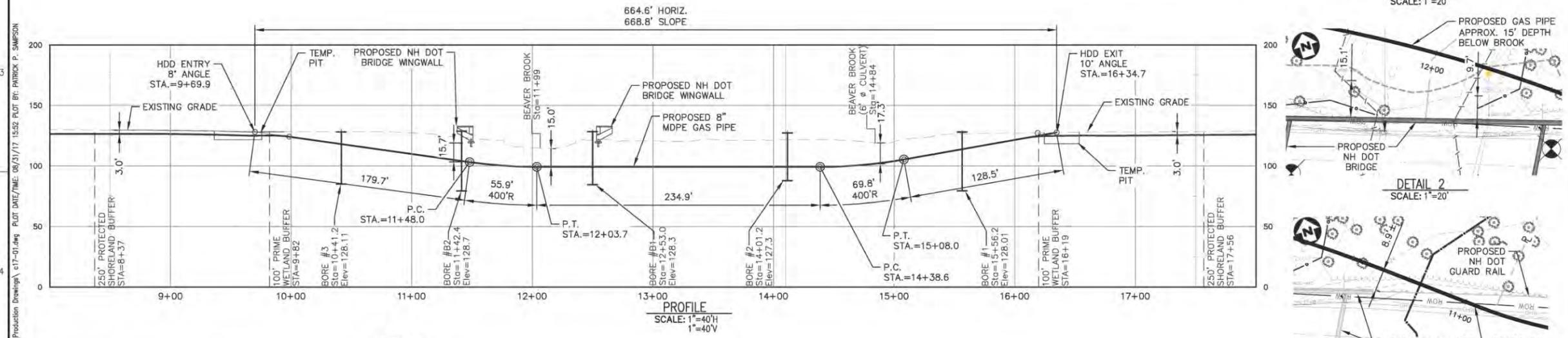
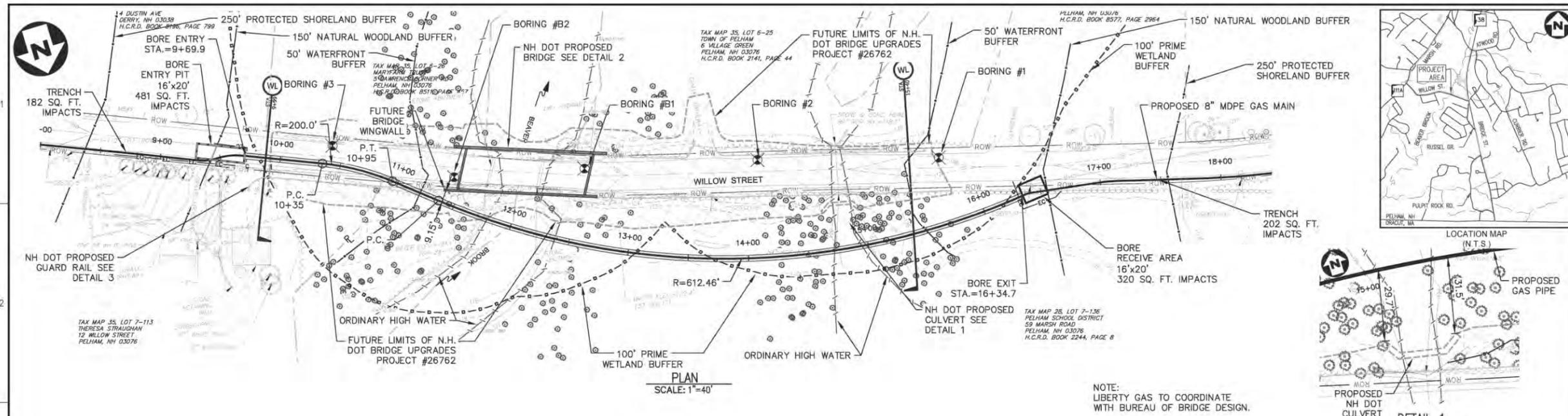


Legend	
	1% Annual Chance Flood Hazard
	0.2% Annual Chance Flood Hazard
	Vault
	Regulatory Floodway
	Future Conditions 1% Annual Chance Flood Hazard
	Special Floodway
	Area with Reduced Risk Due to Levee
	Gas Main
	Area of Undetermined Flood Hazard



Prepared by:
NH Public Utilities Commission
Safety Division - GIS Section





NOTES:
 WETLANDS WERE DELINEATED BY NORMANDEAU ASSOCIATES, INC. BETWEEN APRIL 21 AND MAY 1, 2017. THE WETLAND DELINEATIONS WERE COMPLETED IN ACCORDANCE WITH THE CRITERIA DESCRIBED IN THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL TECHNICAL REPORT Y-87-1 (JANUARY, 1987) AND THE REGIONAL SUPPLEMENT FOR THE NORTH-CENTRAL AND NORTHEAST REGION (JANUARY, 2012) AND MEET THE CRITERIA FOR WETLAND DELINEATION IN ACCORDANCE WITH THE NH DES ADMINISTRATIVE RULES ENV-WT 301.01.



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NOTE:
 1. BORES NEED TO BE DETAILED WITH SOIL INFORMATION, PROPERTY OWNER ASSESSMENTS IN PROGRESS AND HD DRILLER NEEDS TO REVIEW AND COMMENT.
 2. CONTRACTOR WILL BE RESPONSIBLE TO MEET ALL NH DOT BMP REQUIREMENTS IN PLACEMENT OF EROSION CONTROLS.

LEGEND: (ENVIRONMENTAL)
 - - - APPROXIMATED EDGE OF WET/WATER
 - - - STREAM ORDINARY HIGH WATER
 - - - WETLAND BUFFER
 - - - WETLAND DELINEATION LINE
 - - - WETLAND FLAGGING

FOR PERMIT

BY	DATE	ISSUED FOR	DESIGN APPROVAL	REVISIONS	DESCRIPTION	DESIGN APPROVAL
PPS	08/28/2017	ISSUED FOR SHORELAND PERMIT				
CTM	07/12/2017	ISSUED FOR DOT PERMIT				
PPS	07/26/2017	ISSUED FOR DOT PERMIT				
CTM	07/26/2017	ISSUED FOR DOT PERMIT				



LIBERTY UTILITIES
 PELHAM GAS EXPANSION
 15 BUTTRICK ROAD
 LONDONDERRY NH 03053

PROJ NO : LIBE17012.00
 BY : PPS
 CHKD : CTM
 DATE : 5/1/2017
 PROJECT MANAGER
 ENGINEERING SUPERVISOR

TITLE: Civil - Misc
 PROPOSED HORIZONTAL DIRECTIONAL DRILL UNDER BEAVER BROOK
 DWG NO : 21
 SCALE : AS NOTED
 SHT : 17
 REV. F

SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

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Docket #: 17-093-1 Printed: October 18, 2017

FILING INSTRUCTIONS:

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:
- DEBRA A HOWLAND
EXECUTIVE DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429
- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.
- c) Serve a written copy on each person on the service list not able to receive electronic mail.