

LEGEND


38 LINE:



38 STRUCTURE:



DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR

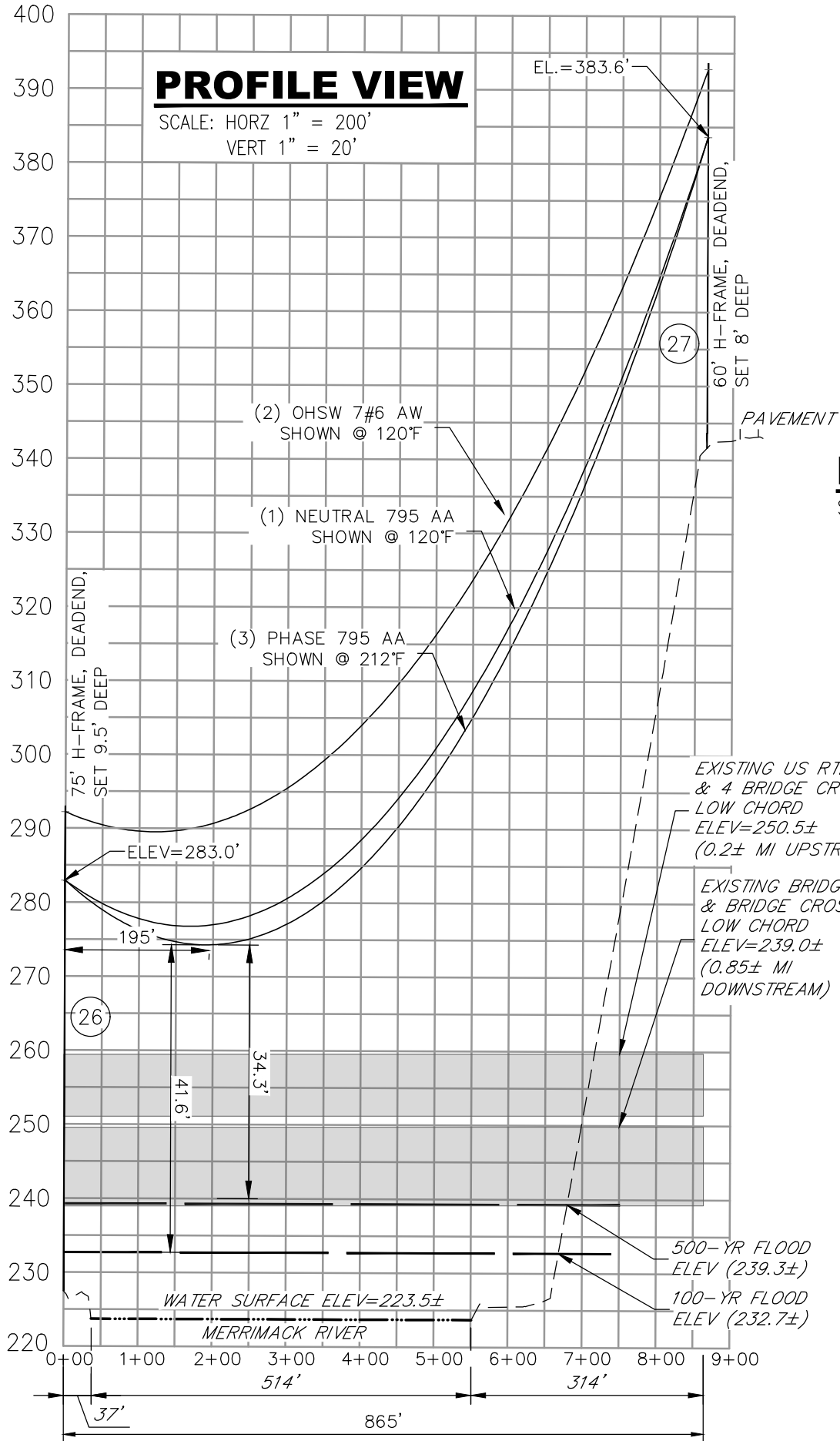


Unitil

38 LINE
MERRIMACK RIVER, PUBLIC WATER CROSSING
CONCORD, NEW HAMPSHIRE
EXHIBIT 1

SCALE: 1" = 1,000'
FILE: 96051-02 DOE PLANS - LINES 36 AND 38.DWG
IMAGE:

T	1
DRAWN	JT
ENGINEER	NG
CHECKED	NG
APPROVED	NG
DATE	5/5/2023
DRAWING NO.	



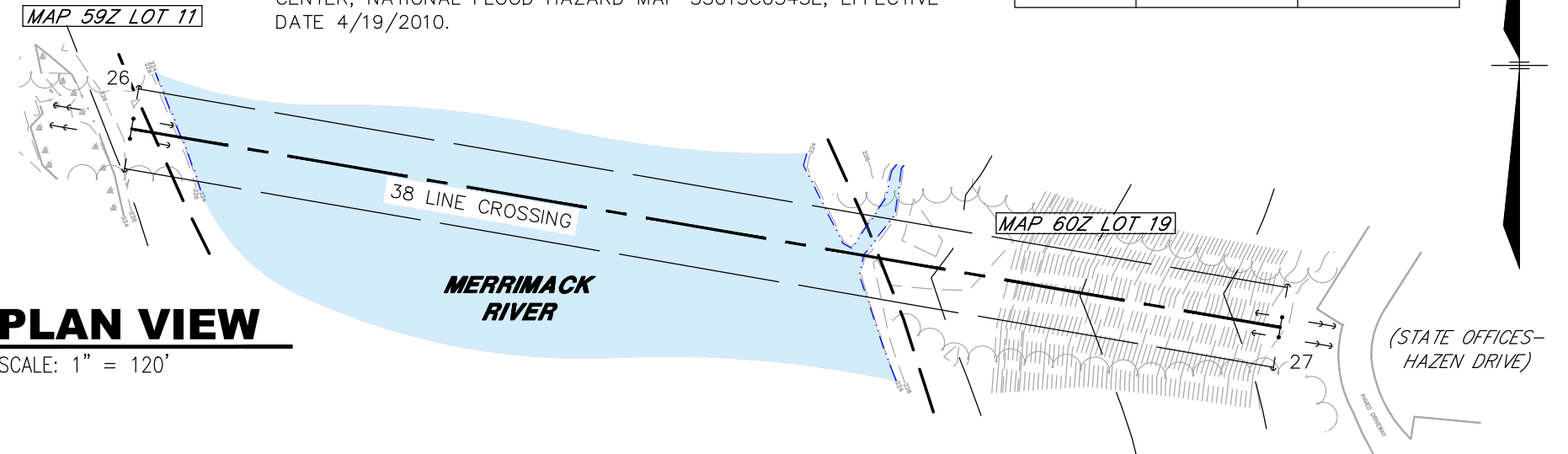
NOTES

1. MINIMUM AND MAXIMUM SAG CALCULATIONS PROVIDED BY UNITIL.
2. EXISTING INFORMATION PROVIDED BY FIELD SURVEY CONDUCTED BY TF BERNIER, INC. IN SEPTEMBER 2019.
3. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
4. ZONE AE FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD MAP 33013C0343E, EFFECTIVE DATE 4/19/2010.

MAP 59Z LOT 11

PLAN VIEW

SCALE: 1" = 120'



STRUCTURE LOCATION

STRUCTURE	LONGITUDE	LATITUDE
26	W71°31'21.1"	N43°13'02.3"
27	W71°31'09.6"	N43°13'01.2"

NESSC VERTICAL CLEARANCE (FT) FROM TABLE 232-1

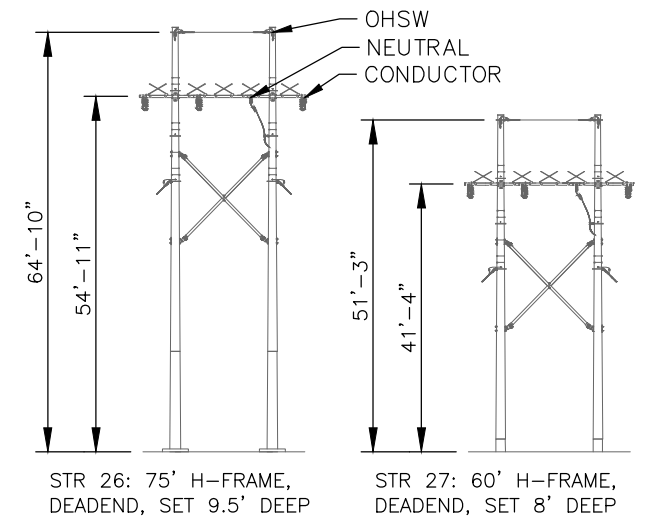
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	PHASE TO PHASE NOMINAL LINE VOLTAGE (KV)	
	NEUTRAL	34.5
WATER AREAS SUITABLE FOR SAILBOATING INCLUDING LAKES, PONDS, RESERVOIRS, TIDAL WATERS, RIVERS, STREAMS, AND CANALS WITH AN UNOBSTRUCTED SURFACE AREA OF LESS THAN 20 AC	17.5'	20.5'

*EXISTING UPSTREAM US RTE 202 & 4 BRIDGE HAS A LOW CHORD ELEVATION OF 250.5±, LIMITING UPSTREAM VERTICAL CLEARANCE TO 11'± AT THE 500-YR FLOOD

*EXISTING DOWNSTREAM BRIDGE STREET BRIDGE HAS A LOW CHORD ELEVATION OF 239.0±, LIMITING UPSTREAM VERTICAL CLEARANCE TO 1'± AT THE 500-YR FLOOD

CABLE SCHEDULE

NEW WIRE	# OF CABLES	TYPE	DIA (IN.)	WEIGHT/1000 FT	CABLE STRENGTH (LBS.)	DESIGN TENSION @ NESSC HEAVY, INITIAL (LBS.)
OHSW	2	7 NO 6 ALUMOWELD	0.486	416	22,730	4,000
CONDUCTOR	3	795 KCMIL 37/0 AAC	1.026	746	13,900	6,000
NEUTRAL	1	795 KCMIL 37/0 AAC	1.026	746	13,900	6,000



STRUCTURE DETAIL

SCALE: NTS



38 LINE
MERRIMACK RIVER, PUBLIC WATER CROSSING
CONCORD, NEW HAMPSHIRE
EXHIBIT 2

T	1
DRAWN	JT
ENGINEER	NG
CHECKED	NG
APPROVED	NG
DATE	5/26/2023

DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR

LICENSE

WHEREAS, the Public Utilities Commission of The State of New Hampshire by its Order No. 10,497, dated February 1, 1972, has found that the granting by The State of New Hampshire of a license to Concord Electric Company, a New Hampshire corporation ("Company"), to construct and maintain an electric transmission line across the Merrimack River and certain lands owned by The State of New Hampshire in Concord, in Merrimack County, upon certain terms and conditions hereinafter set forth, will be consistent with the public interest and will not substantially affect the public rights in such River and lands;

WHEREAS, Company and the State Department of Public Works and Highways have agreed upon a course and width of a right of way for such line, and also on the terms and conditions hereinafter set forth;

NOW THEREFORE, The State of New Hampshire ("The State") does hereby grant to Company a license to construct and maintain, operate, patrol, build and rebuild a pole line with crossarms and subsurface lines, facilities and other appurtenances for the transmission of electric energy and intelligence (herein called said "pole line") on and along the course hereinafter described, crossing the Merrimack River and through certain lands owned by The State lying between the western boundary of land of The State at or near said River and the eastern boundary of land of the State at East Side Drive in said Concord.

The approximate course of said pole line is bounded and described as follows:

Beginning at a point on said westerly boundary line, said point being eleven hundred eighty (1180) feet, more or less, southerly of Station 66 + 05, more or less, as shown on a plan by The State of New Hampshire Highway Department of the proposed East-West Highway marked "Preliminary Plans, dated June 19, 1967, Concord P-4809, Sheet 1 of 6," thence S 67° E four hundred thirty-five (435) feet, more or less, to a point; thence S 35° E three hundred forty (340) feet, more or less, to a point; thence S 87° E four hundred ten (410) feet, more or less, to a point; thence N 34° E three hundred forty (340) feet, more or less, to a point; thence N 87° 15' E five hundred fifty (550) feet, more or less, to a point; thence N 72° 15' E four hundred (400) feet, more or less, to a point; thence N 59° 20' E thirteen hundred ninety (1390) feet, more or less, to a point; thence N 68° E two hundred thirty six (236) feet, more or less, to a point of intersection of two courses; thence, one course, continuing N 72° E one hundred ten (110) feet, more or less to said easterly boundary line at said East Side Drive; and the other course continuing from said point of intersection N 46° 30' E one hundred sixty-five (165) feet, more or less, to said easterly boundary line at said East Side Drive. All bearings and distances are approximate as shown on a Plan by Concord Electric Company, Drawings C-3-1137 and C-3-1137A, dated August 31, 1971 (revised March 8, 1972) and March 8, 1972 respectively.

This license shall include the right to clear and keep cleared all trees and other inflammable material, and to remove all structures or obstructions which are now or may hereafter endanger or interfere with the maintenance and operation of said pole line; the right to remove from the premises of The State in the vicinity thereof such trees or parts of trees as in the judgment of Company may interfere with or endanger said lines or their maintenance or operation; and the right to pass and repass over the remaining lands of The State in the exercise of the rights herein granted.

Company shall not pay to The State any sum for said license.

Company shall file a copy of this license with the Registry of Deeds for Merrimack County.

IN WITNESS WHEREOF, The Department of Public Works and Highways has hereunto and to a duplicate hereof set its hand and seal this 29th day of March, 1972.

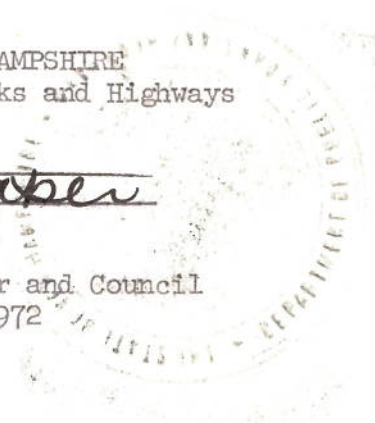
Signed, sealed and delivered in the presence of

Antonio C. [Signature]

THE STATE OF NEW HAMPSHIRE
Department of Public Works and Highways

by *R. H. Whitaker*
Commissioner

as authorized by Governor and Council
on March 15, 1972



THE STATE OF NEW HAMPSHIRE

County of Merrimack, S.S.

The foregoing instrument was acknowledged before me this 29th day of March, 1972, by R. H. Whitaker, Commissioner.

Robert H. [Signature]

XXXXXXXXXXXXXXXXXXXX
Notary Public



My comm. expires 9/17/74

LINE 38 - # 26

CROSSING # 20

INFORMATION

CROSSING: Body Of Water is : Merrimack River - Concord

POLES: CEC. # 26,26A,26B, Map # Transm. C-3-1138

From: CEC #26,A,B TEL.: no CATV no Fire no

To: CEC #27,A,B TEL.: no CATV no Fire no

Size/CI #26-Remarks Installed 1972, Joint no

Size/CI #27-Remarks Installed 1972, Joint no

CONDUCTORS: Electric

Primary: 3-336.4 ACSR, Sec'dy: no, Neut: 2-052 AWH

Voltage: Primary 34.5 Kv., Secondary -

PUC: Docket # D-E6154, Order # 10497, Item -, Date 02/01/72

CLEARANCES: (Above Mean Water Level)

Primary Elec.: 39 Ft., Neutral: 45 Ft., Secdy.: - Ft.

Annual High Water above mean is 6 Ft.

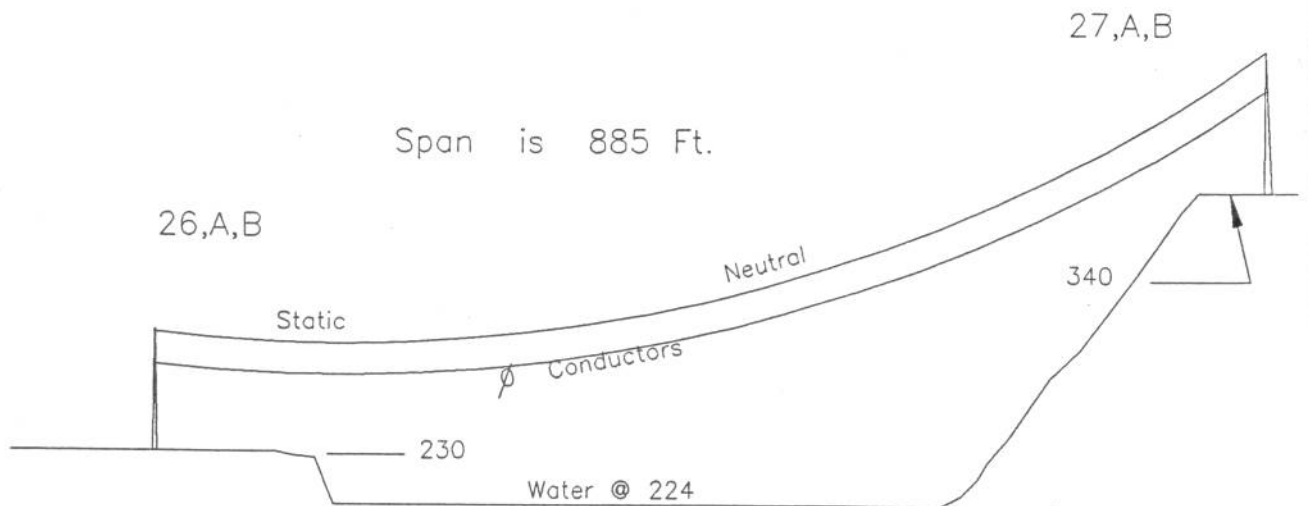
NESC Min. Clearance to \emptyset 28.5 Ft, To Neutral 25.5 Ft.

NESC. Refr.: Nature of Surface: 232-1 #7b = 28.5 Ft.

REMARKS #26/45', 26A/40', 26B/45'-# 27/50', 27A/45', 27B/50'

Reference also to CECO Deed # 1476

CROSSING PROFILE



View of Crossing is Looking North

Not To Scale

DWG. DATE 04/28/92	WATER CROSSINGS	CONCORD ELECTRIC COMPANY, CONCORD, N.H. 03301	R.A.S.
INSP. 06/02/92			
ENG'G.			
REV. DATE			