Document in support of alternatives to Eversource's planned complete replacement and expansion of the 49 mile X-178 line:

In 1986 PSNH replaced the 1948 Beebe River to Streeter Pond tap section of the X-178 line with similar wood H-frame structures that were (according to PSNH) 5' taller, and wider. It stated that "structure height increases were kept to a minimum by designing the new line with a higher tension than PSNH normally utilizes for this type [of] construction, 7500 pound tension per phase at NESC heavy loading."

It also stated that "Completion of this project by June 1, 1986 will mean a minimum cost savings of 4.7 million dollars in the five year period between 1987 and 1991." PSNH did not say who would experience the cost savings, but <u>it</u> experienced cost savings by dumping most of the 1948 creosote and pentchlorophenol soaked poles on the easement in White Mountain National Forest, where they lay for 30 years, until Eversource's Northern Pass proposal caused local awareness of the vulnerability of the easement.

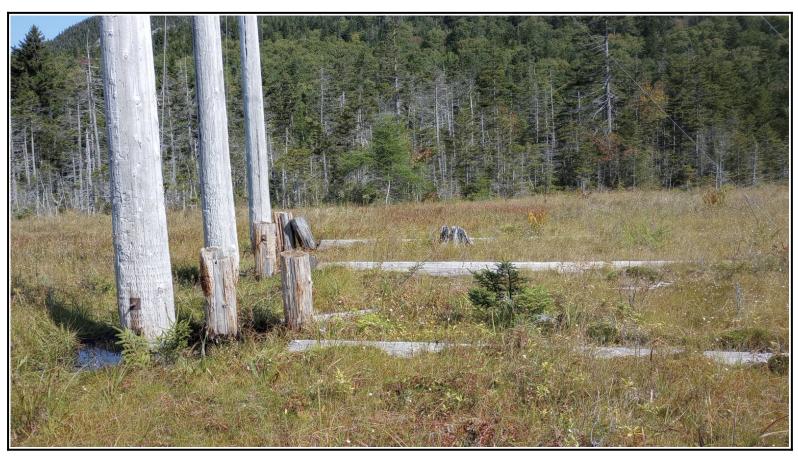
When Eversource finally agreed to removed the poles and hardware, it was clear that helicopters were the only means of access that did not have unacceptable impacts. It was also determined that the removal of many of the poles that were embedded in wetlands would cause unacceptable damages to the terrain.

Eversource now plans to construct a 16' wide permanent road through this sensitive area, create 100' x 100' graded and graveled permanent construction areas around each structure that is not in a wetland and augur 4' diameter holes for new metal poles. The equipment list for the proposed construction "may include, but is not limited to, the following (subject to change):

- i. heavy duty pickups, utility body trucks, and trailers
- ii. Log trucks and forwarders
- iii. Snow plows and sanders
- iv. All-Terrain Vehicles, Utility Task Vehicles, snowmobiles
- v. ARGO
- vi. Drill rigs and appurtenances
- vii. Vac trucks (vactors)
- viii. Cement mixers
- ix. Excavators, Vibratory rollers, Bulldozers, Front end loaders, Dump trucks, Skid steers

- x. Material handler equipment/telehandlers/forklifts
- xi. Flatbed/foundation truck and trailers
- xii. Bucket trucks (wheeled and tracked), Digger derricks (wheeled and tracked), Cranes (wheeled and tracked)
- xiii. Tow-behind Generators, compressors, puller equipment, and reel stands." (Eversource)

An area where poles were left, and where Eversource plans to bring in and use this machinery, is tangent structure 264:



(9/21/2023)

Structure 264:



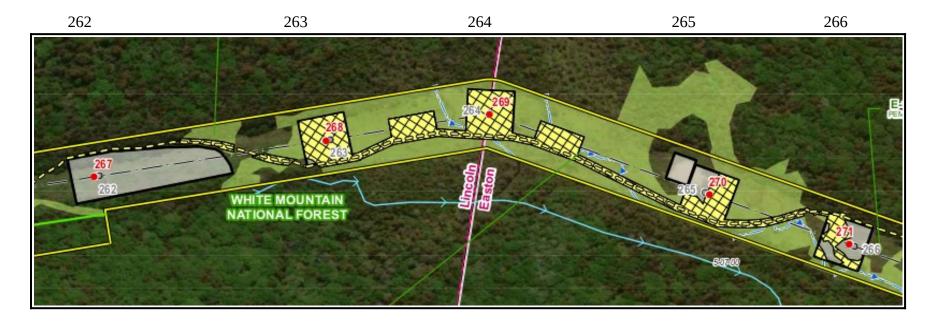
(9/21/2023) Inset: proposed metal structure. 2/18/24)

Structure 264:



(5/18/2014)

Eversource's plan in this area is to cut and fill the ridge to the east (no topo lines are provided, to show the final grading) to create a 300' x 100' flat work and laydown area, (grey area) extending from structure 262 to the wetlands. It plans to place hundreds of pounds of wetland matting around the structures and as roads (yellow hatched and dashed areas.) This is an area where Eversource has no easement, only a Special Use Permit that would have to be revised by the Supervisor of the White Mountain National Forest, to permit construction.



"November 3, 2015 – Activity today commenced just south of the Easton town line at Structure 264 and continued to Structure 257. Poles were not removed from Structures 251 – 256 as they were submerged in the peat of the bog, and we felt that removal would cause unacceptable adverse wetland impacts. Additionally, we felt it would be best to leave 3 poles within the wetland near Structure 264 because of adverse wetland impacts." Normandeau X-178 pole removal report.

Eversource asset condition project laydown area, wetland matting piled for storage, and road.



Eversource asset condition project road:

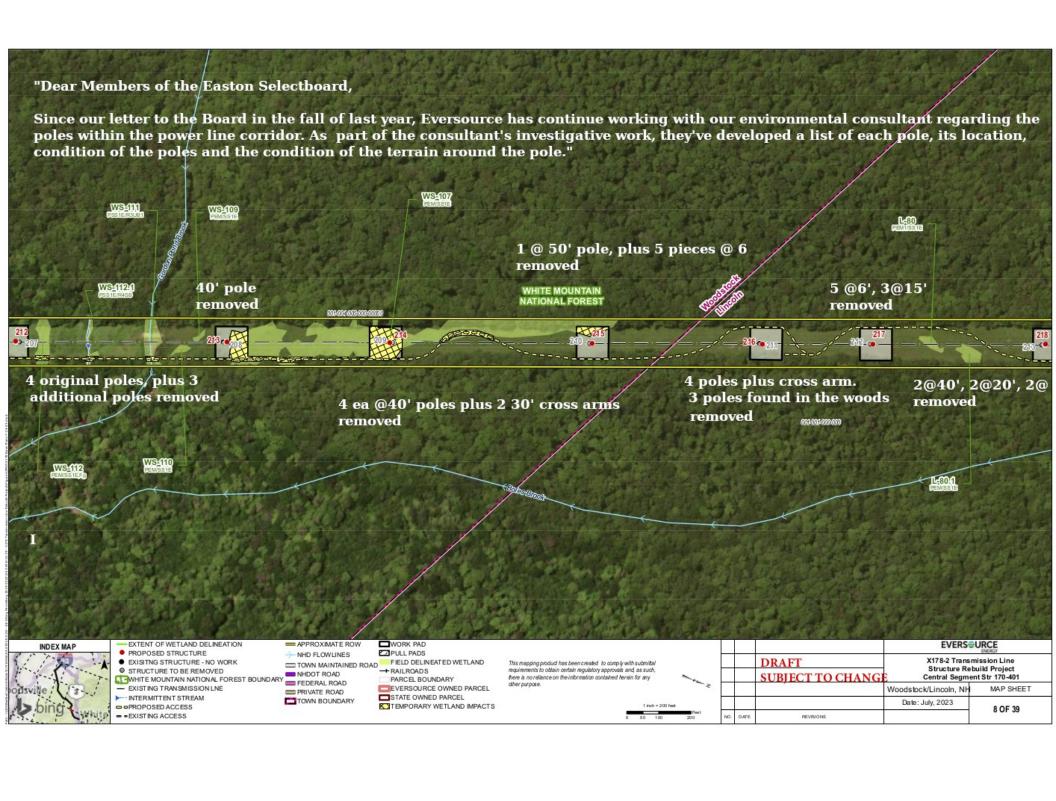


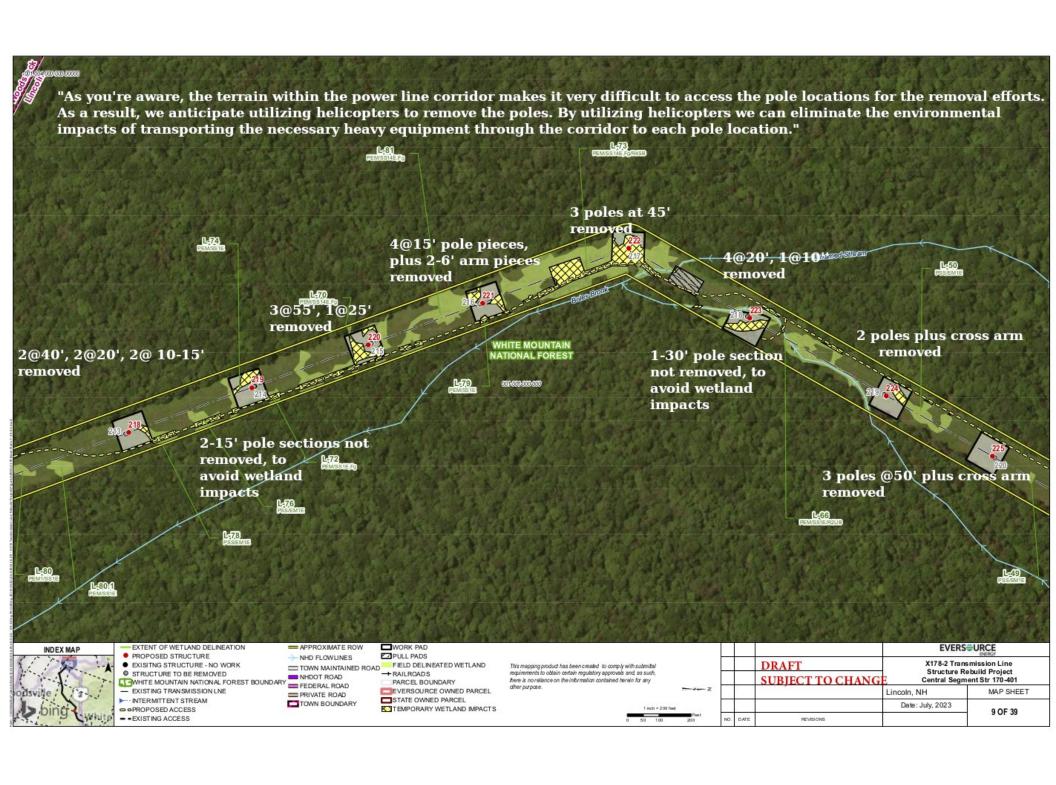
2/14/24

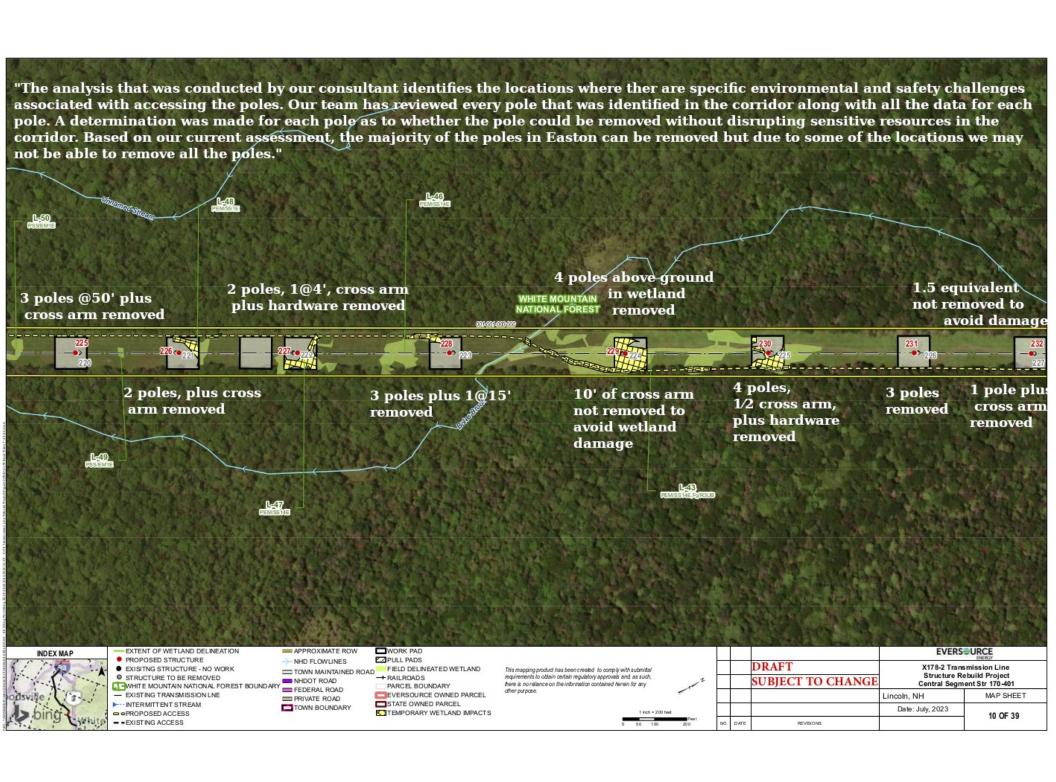
Maps below show existing structures 207-292 Sequence is from east to west 178 poles were removed, 51 were left in place. Eversource asset condition project wetland matting road and partially removed construction pad matting

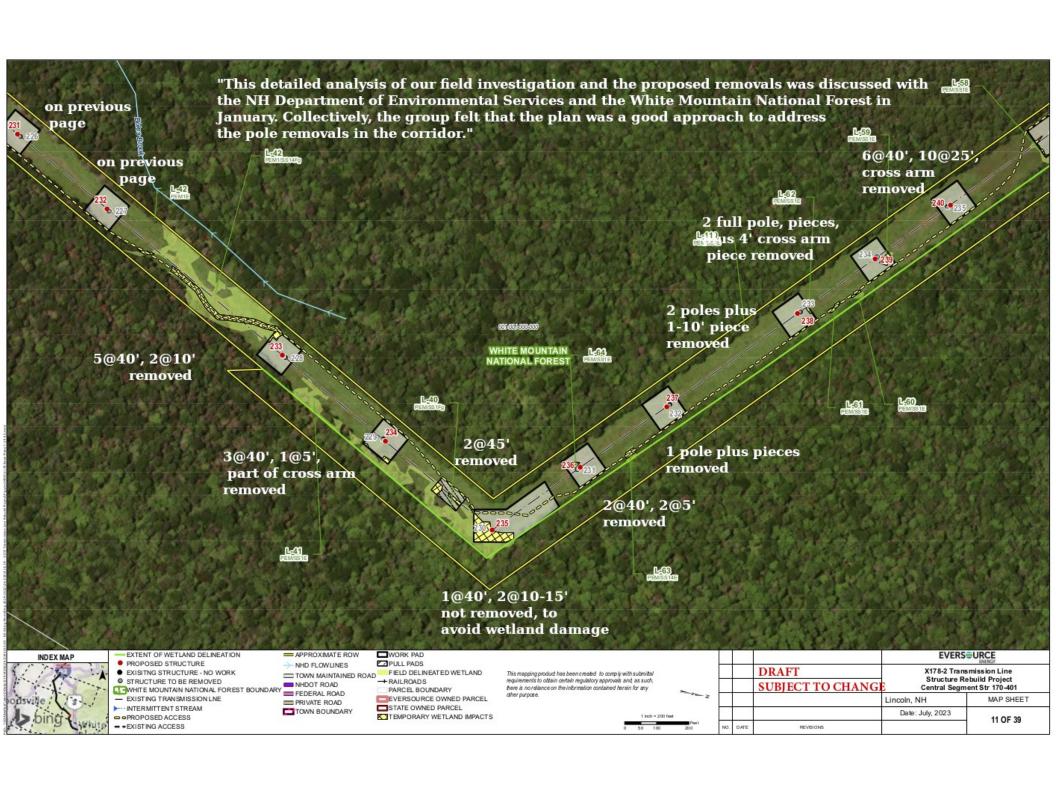


2/18/24

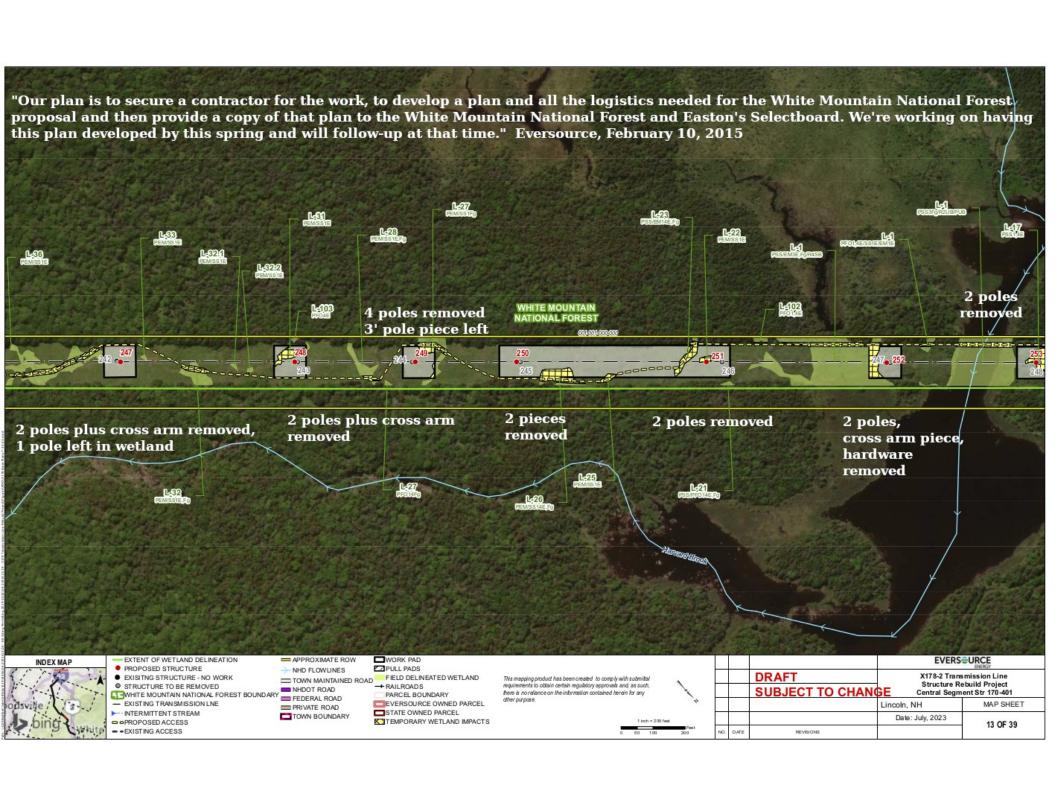


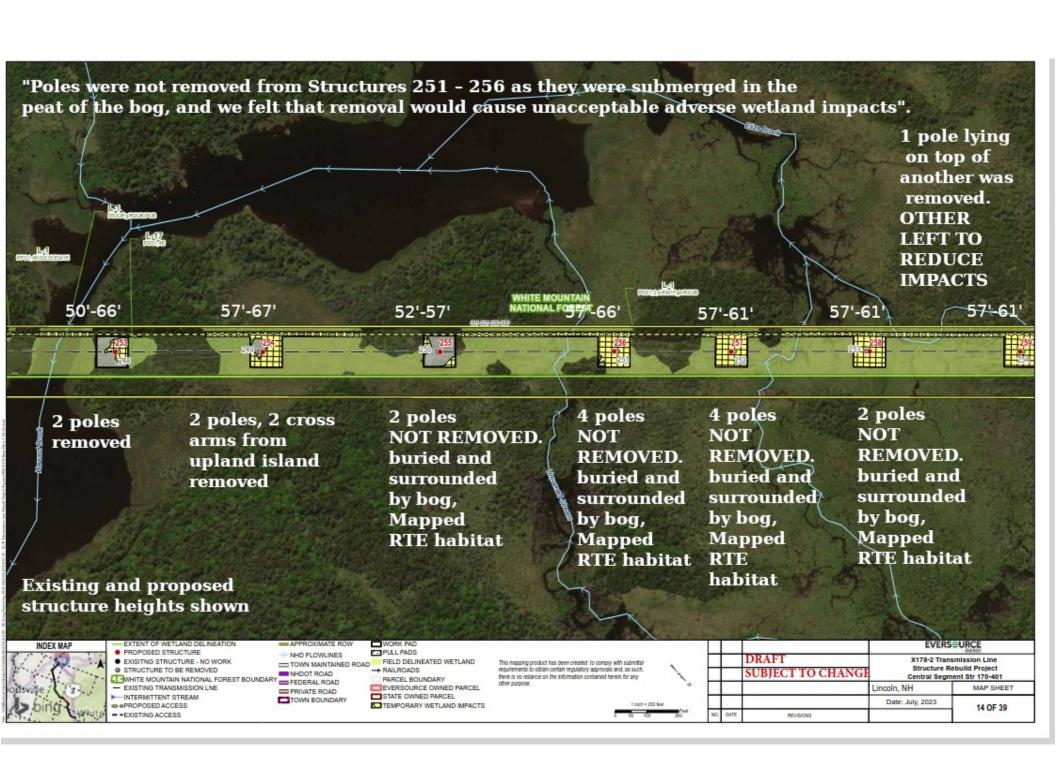


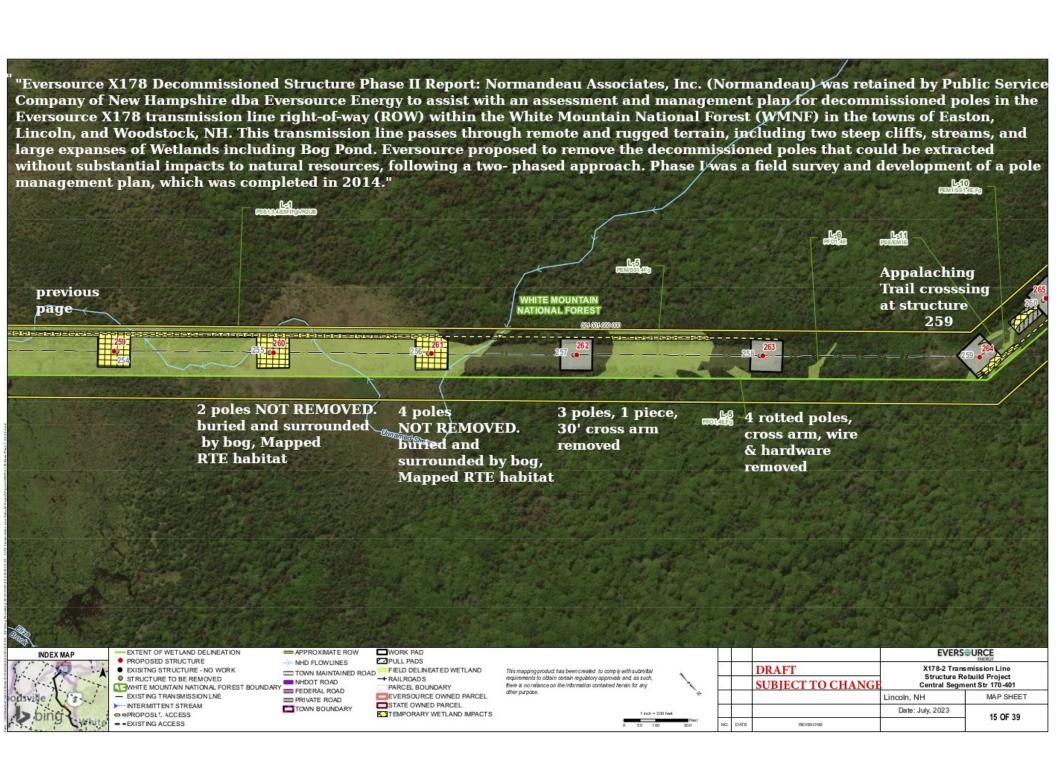


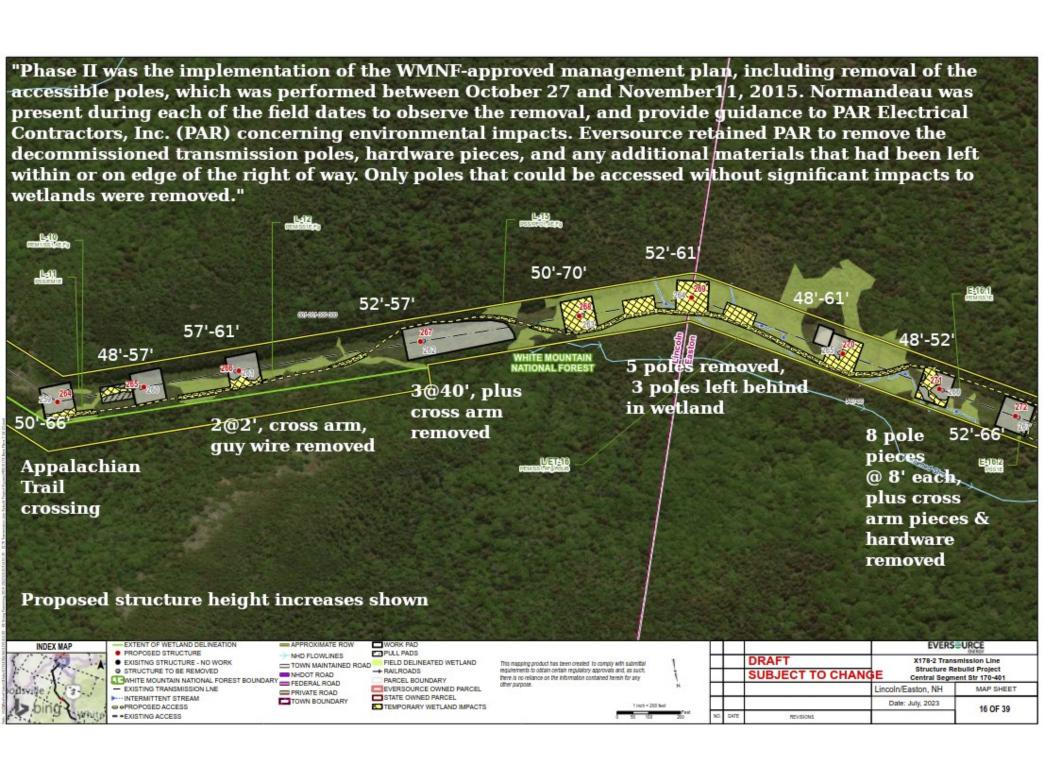


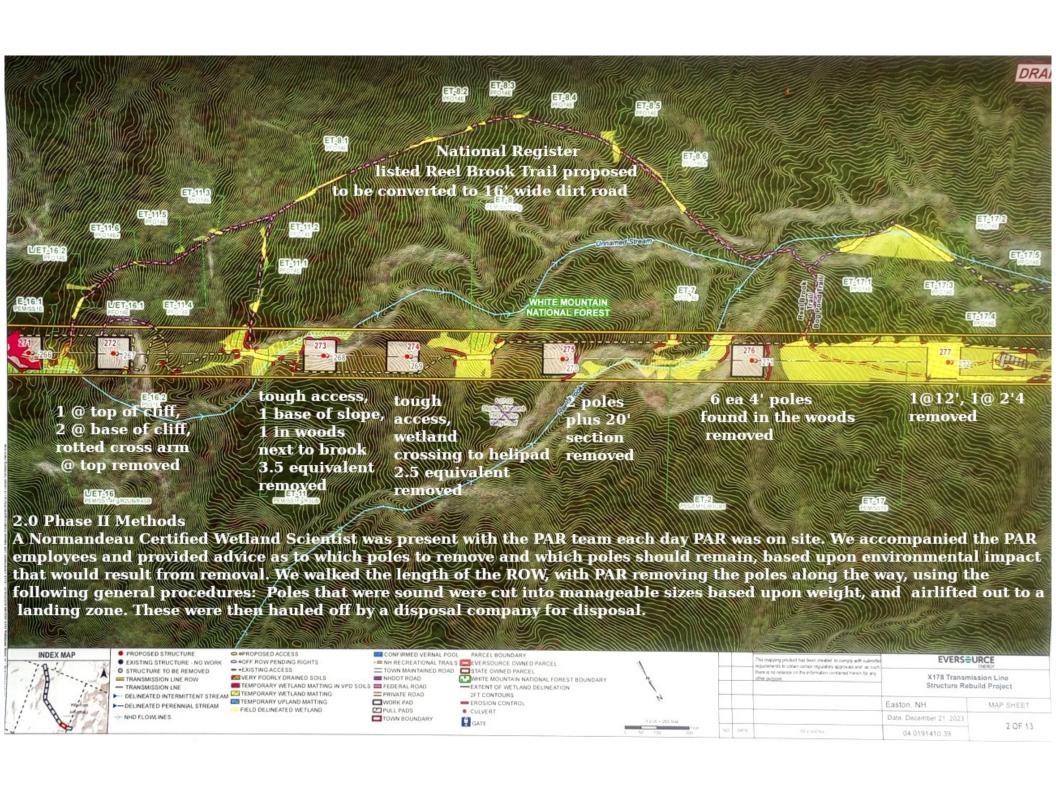
"The White Mountain National Forest has requested a proposal for the proposed pole removals. Our team is currently seeking to secure a contractor to perform the work. Once a contractor has been assigned they will provide the logistical details needed by the White Mountain National Forest with regard to how the poles will actually be removed via helicopter. Eversource will also need to seek an outage on the transmission line to determine when this work can take place. It's anticipated that the outage would be late 2015." WHITE MOUNTAIN NATIONAL FOREST previous 20' pole 10' of cross arm 2 poles in pieces removed removed removed WORK PAD **EVERS**URCE EXTENT OF WETLAND DELINEATION INDEX MAP APPROXIMATE ROW PROPOSED STRUCTURE PULL PADS - NHD FLOWLINES DRAFT X178-2 Transmission Line EXISITNG STRUCTURE - NO WORK FIELD DELINEATED WETLAND This mapping product has been created to comply with submittal TOWN MAINTAINED ROAD Structure Rebuild Project STRUCTURE TO BE REMOVED + RAILROADS requirements to obtain certain regulatory approvals and, as such, NHDOT ROAD SUBJECT TO CHANGE Central Segment Str 170-401 there is no reliance on the information contained herein for any WHITE MOUNTAIN NATIONAL FOREST BOUNDARY PARCEL BOUNDARY FEDERAL ROAD ather purpose - EXISTING TRANSMISSION LNE EVERSOURCE OWNED PARCEL Lincoln, NH MAP SHEET PRIVATE ROAD --- INTERMITTENT STREAM STATE OWNED PARCEL TOWN BOUNDARY Date: July, 2023 TEMPORARY WETLAND IMPACTS O PROPOSED ACCESS 12 OF 39 - EXISTING ACCESS NO. DATE REVISIONS

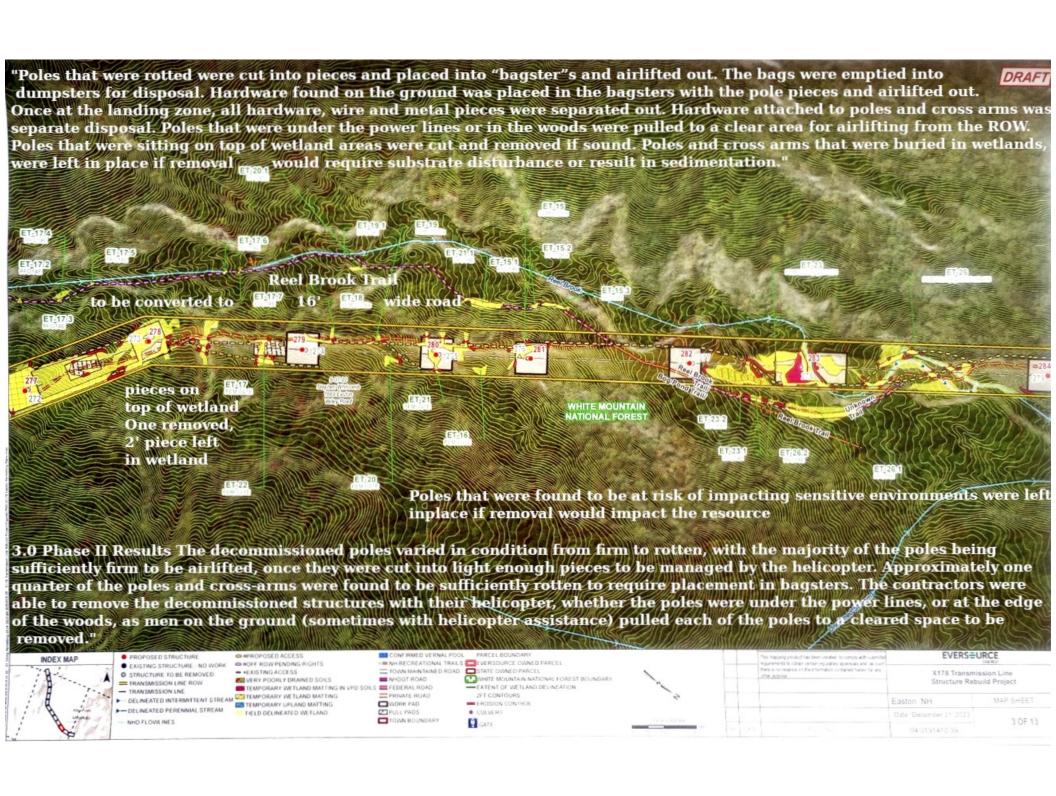












"No temporary matting of wetlands was needed as no on-ground equipment was used. No wetland impacts were noted during the operation. Poles that were submerged in and surrounded by large wetlands, or were otherwise impractical to access without causing wetland impact, were identified as requiring significant wetland and environmental impact and left in place. This included all poles submerged in wetlands, including poles embedded in Bog Pond. Poles in upland areas surrounded by Bog Pond were removed, as the contractor flew the crew into the isolated spots, and after cutting the poles, removed the poles and the crew by helicopter.

During Phase I, ten poles were initially targeted for removal with ground equipment, as no wetlands would need to be crossed (5 each in Woodstock and Easton). Due to the nature of PAR's Phase II operation, however, these were removed by helicopter, as it was the most convenient way to accomplish removal.

Wetland impacts were minimized by use of the helicopter. Ground vehicles and local trails were not utilized so wetland crossings with equipment were not necessary. The crews were flown in and out at the end of each day. On a couple of windy and rainy days, the crew was not able to work (or had shortened days) because the elevation due to inclement weather at higher elevation."

WHITE MOUNTAIN NATIONAL FOREST

