

PROJECT NARRATIVE

Eversource Energy (Eversource) owns and maintains the F139 electrical transmission line that passes through Concord, New Hampshire. Eversource has identified six structures that need to be replaced within the existing right-of-way (ROW) in Concord. The existing wooden structures need to be replaced due to age, cracking, leaning, and/or woodpecker damage and will be replaced with new, steel structures to provide a more reliable electrical infrastructure.

Construction access to the replacement structures will originate from existing public or private roads. Access routes will be established within the ROW to allow construction equipment to travel between structure locations. Erosion and sedimentation controls will be installed prior to ground disturbing activities. Controls will be installed upslope/adjacent to all aquatic resources where ground disturbance or exposed soils may occur in the nearby upland. The erosion control methods and materials will follow the *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetland and Waterbodies in New Hampshire* (Utility BMP Manual) published by the New Hampshire Department of Natural and Cultural Resources (March 2019). Work pads will be established around each replacement structure to create a relatively flat and uniform surface for equipment to perform the structure replacement work.

In upland areas, the work pads and access roads will be graded smooth and gravel material will be added as necessary to create stable work and travel surfaces. All wetland areas within work pad locations or crossed by access roads will be temporarily matted during construction. Streams crossed by access roads will be completely spanned with a mat bridge to avoid impacts to the bed and banks of the stream. Matting will result in minimal ground disturbance within wetlands. Any disturbed wetland areas will be restored following completion of the work and mat removal. All exposed soils on side slopes or adjacent to resources will be stabilized with seed and mulch.

The proposed utility structure replacements will include two replacements requiring portions of work pads within the wetland buffer area and one replacement requiring a work pad within a wetland, the Shoreland Protection (SP) District, and the Flood Hazard (FH) District. The structure locations, proposed work pads and access routes, and temporary wetland impacts proposed in Concord are shown on the site plans in Attachment D.

Construction Sequence

The general project construction sequence will be:

1. Installation of appropriate signage along public roads near construction entrances;
2. Installation of erosion control devices, as needed;
3. Placement of construction mats in wetlands for access roads and work pads;
4. Grading and improvements of upland access roads and work pads;
5. Stabilization (seed and mulch) of exposed soils on created side slopes;
6. Replacement of structures:
 - a. Drill new structure holes;
 - b. Install new poles and structure components;
 - c. Transfer electrical lines from old structure to new structure; and
 - d. Remove and haul away old structure.

7. Clean up excess/stockpiled material at work pads;
8. Smoothing/grading upland work pads and stabilizing and restoring with seed and mulch as necessary;
9. Removing construction mats from wetland areas and stabilizing/restoring disturbed wetland areas with weed-free straw mulch; and
10. Stabilization, restoration, and clean up all staging areas and entrance points.

Provided necessary permits are in place, work would occur 2019-2020 (between December and October). Entrances, access roads, and work pads will be created for the entire project area prior to structure replacement work. All new structure holes will likely be drilled prior to mobilization of structure replacement equipment (cranes, bucket trucks). Installing new poles and transferring wires will be completed prior to moving on to the next structure. Multiple structure replacement crews may be working in different areas to expedite the process. Removal of mats and restoration will occur as individual work areas are completed.

Wetland and Shoreland Protection District Impacts

Wetland boundaries were delineated in 2017 and reviewed by a New Hampshire Certified Wetland Scientist between September 23 and 25, 2019 in accordance with the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau Rules (Env-Wt 301), the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (2012). Wetland flags were located in the field with a Global Position System (GPS) unit with sub-meter accuracy.

Replacement of the six structures will temporarily impact approximately 0.30 acre (12,932 square feet) of wetland and 0.84 acre (32,503 square feet) of wetland buffer. The proposed project will also result in approximately 0.25 acre (10,716 square feet) of temporary impact to the SP District. These temporary impacts are required to replace the structures before they fail, thereby assuring uninterrupted and more reliable electrical service to the public. The proposed project is subject to a Conditional Use Permit under Articles 28-4-3 and 28-3-3 of the Concord Zoning Ordinance and meets the criteria for approval, as detailed below.

Minimization Measures

Temporary wetland impacts will be minimized following the Utility BMP Manual. This includes:

- Using wooden construction mats to support machinery in wetlands;
- Revegetating temporary impacts to wetlands and their 50-foot vegetated buffers;
- Smoothing rutted areas, seeding as required, and mulching with weed-free straw;
- Using erosion and sediment controls as needed where ground disturbing activities could impact adjacent wetland areas;
- Requiring contractors to follow practices outlined in the BMP manual to help prevent the spread of invasive species;
- Conducting weekly inspections to monitor compliance with minimization measures and providing any site restoration recommendations as needed.

Post-Construction Monitoring

A series of post-construction monitoring visits in the project area will be performed to document that disturbed areas are properly stabilized and vegetation is beginning to regrow. Site restoration will be considered successful when there is at least 85% cover by native, non-invasive herbaceous plant species within the restored portions of ROW, including any restored wetland areas. This does not include gravel work pads or gravel access roads that existed before or were created during construction.

Compliance with Zoning Ordinance

The proposed disturbance of the wetland buffer meets the following conditions described in Article 28-4-3(d) of the Zoning Ordinance.

1. *The disturbance to the buffer is necessary to the establishment of an allowable principal or accessory use on the buildable land area of the lot.*

The project site is an existing transmission line ROW. The proposed work is necessary to maintain reliability of the existing F139 transmission line. Temporary impacts to wetlands and wetland buffers will be restored following completion of the work and mat removal to maintain the functions and values of wetlands and their buffers.

2. *The proposed disturbance to the buffer cannot practicably be located otherwise on the lot to eliminate or reduce the impact to the buffer and represents the minimum extent of disturbance necessary to achieve the reasonable use of those portions of the lot consisting of buildable land.*

The six replacement structures must be located on the alignment of the existing transmission line and must be located within the existing ROW. Impacts were avoided and minimized to the greatest extent practicable by locating access roads and work pads outside of wetland boundaries and wetland buffers, where possible.

3. *The proposed disturbance to the buffer minimizes the environmental impact to the abutting wetland, and to downstream property and hydrologically connected water and wetland resources.*

The project does not propose any impacts to abutting wetlands or to downstream properties and hydrologically connected water and wetland resources. The project is designed to maintain the existing transmission line and replace existing infrastructure. Temporary construction matting will be used for access roads and work pads within wetlands to reduce impacts to wetlands and wetland buffers. Thus, normal groundwater and groundwater recharge should not be affected by the proposed project. Additionally, appropriate siltation prevention measures will be implemented during construction and post-construction to prevent erosion, siltation, and turbidity. The erosion control methods and materials will follow the Utility BMP Manual. Perimeter controls (silt fence, straw bales, straw wattles, etc.) will be used as a primary BMP. If necessary, other BMPs including stone check dams and dewatering basins will be used to control and treat stormwater and prevent runoff to abutting or downstream properties. As mentioned above, existing wetland and wetland buffer functions will not be impacted as a result of the proposed project.

4. *Where applicable, wetland permit(s) have been received or are obtained from the NHDES and USACE.*

A Utility Maintenance Notification (UMN) form and supporting materials have been submitted to the NHDES in accordance with RSA 482-A and Env-Wt 506.01(a)(14). The proposed project does not require a permit from the USACE. The UMN package is included in Attachment I.

5. *Where applicable, permits or proof of compliance with all other state and/or federal regulations have been received or are obtained.*

No work will be completed prior to the issuance of all applicable permits. Two applications for a temporary driveway permit have been submitted to the New Hampshire Department of Transportation and are included in Attachment I. The UMN package submitted to the NHDES and the City of Franklin is also provided in Attachment I.

The proposed disturbance of buffers in the SP District meets the following conditions described in Article 28-3-3(f)(2) of the Zoning Ordinance.

1. *The proposed disturbance to the buffer represents the minimum extent of disturbance necessary to achieve the reasonable use of, or provide access to, land outside of the buffer area.*

One replacement structure is located within the SP District adjacent to Burnham Brook. During design, impacts were avoided and minimized to the greatest extent practicable by minimizing the length of the access road within the SP District. Additionally, temporary construction matting will be used for the access road and the entire work pad within the SP District. Buffer areas within the SP District that are temporarily impacted by the project will be seeded, mulched, and stabilized following construction to protect surface waters of Concord.

2. *The proposed disturbance to the buffer minimizes the environmental impact to the adjacent surface waters.*

The project is designed to maintain the existing transmission line and replace existing infrastructure. The project does not propose any permanent impacts to adjacent surface waters. Burnham Brook occurs within the proposed project area and will need to be crossed to replace one structure. However, Burnham Brook will be completely spanned with a temporary mat bridge to avoid impacts to the bed and banks of the stream and to minimize impacts on the associated SP District. Additionally, appropriate siltation prevention measures will be implemented during construction and post-construction to prevent erosion, siltation, and turbidity. The erosion control methods and materials will follow the Utility BMP Manual. Perimeter controls (silt fence, straw bales, straw wattles, etc.) will be used as a primary BMP. If necessary, other BMPs including stone check dams and dewatering basins will be used to control and treat stormwater and prevent runoff to abutting or downstream properties.

3. *The proposed disturbance to the buffer cannot practicably be located otherwise to eliminate or reduce the impact to the buffer and the adjacent surface waters.*

The project site is an existing transmission line ROW. The proposed work is necessary to maintain reliability of the existing F139 transmission line. The one replacement structure requiring disturbance within the buffer of the SP District must be located on the alignment of the existing transmission line and must be located within the existing ROW. Impacts were avoided and minimized to the greatest extent practicable by minimizing the length of the access road within the SP District, as described above.

4. *In the case of an application for a conditional use permit for a water dependent use or structure, a permit from NHDES in accordance with RSA 482-A, Fill and Dredge in Wetlands, has been received.*

The proposed project does not constitute a water dependent use or structure; however, a Utility Maintenance Notification (UMN) form and supporting materials have been submitted to the NHDES in accordance with RSA 482-A and Env-Wt 506.01(a)(14). The UMN package is included in Attachment I.

5. *Where applicable, permits or proof of compliance with all other state and/or federal regulations have been received.*

No work will be completed prior to the issuance of all applicable permits. Two applications for temporary driveway permits have been submitted to the New Hampshire Department of Transportation and are included in Attachment I.

One structure replacement is proposed in the FH District. The proposed use in the FH District is exempt from Conditional Use Permit requirements, as described in Article 28-3-2(e)(4) of the Zoning Ordinance.

In accordance with the Concord Zoning Ordinance Article 28-9(b)(4), a Conditional Use Permit may be approved by the Planning Board based on the following information and testimony:

1. *The use is specifically authorized in this ordinance as a conditional use.*

Eversource proposes to complete the following utility structure replacements: two replacements will require portions of work pads within the wetland buffer area, and one replacement will require a work pad within a wetland, the SP District, and the FH District. The proposed project is necessary to maintain reliability of the existing F139 transmission line. Temporary impacts to wetlands, wetland buffers, and buffers in the SP District will be restored upon completion of the project.

Installing replacement utility structures is authorized as a conditional use per the City of Concord Zoning Ordinance. Pursuant to Article 28-4-3(d), "The Planning Board may grant a conditional use permit allowing the disturbance of a buffer in conjunction with construction or installation of roads, utilities, and drainage improvements...." Additionally, pursuant to Article 28-3-3(f), "The Planning Board may grant a conditional use permit allowing the disturbance of buffers in conjunction with the construction or installation of the following: a. Roads, bridges, and utilities which will cross a river or watercourse...." Lastly, pursuant to Article 28-3-2(e)(4), "Upon presentation to the Code Administrator of a copy of a permit from the New Hampshire Department of Environmental Service (NHDES), the construction within the floodway of dams; hydroelectric facilities; public water supply, sewage treatment, and stormwater drainage facilities; and other public utilities and appurtenances, shall be exempt from the requirements for a conditional use permit."

2. *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.*

The proposed project will replace six existing utility structures in an existing and maintained transmission line ROW. The purpose of the project is to ensure public health and safety by maintaining the integrity of the utility line to provide for current as well as future projected electricity demands. Specific conditions and standards established for disturbance to wetland buffers and buffers within the SP District have been addressed above.

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

The proposed project is specifically designed to enhance reliability of the transmission line and thereby ensure public health and safety. The transmission line directly serves the needs of the public by providing electric transmission. The replacement of old utility structures will serve to protect public safety by maintaining the integrity of the transmission line.

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

As an existing transmission line, the project is compatible with adjoining neighborhoods and uses. As part of the project, final site restoration will involve seeding and mulching temporary access roads within the ROW.

5. *The use will not have an adverse effect on highway or pedestrian safety.*

During construction activities, flaggers/traffic control will be used, as needed, to ensure highway and pedestrian safety.

6. *The use will not have an adverse effect on the natural, environmental, and historic resources of the City.*

To avoid adverse impacts on natural resources of the City of Concord, project access roads have been sited to avoid wetlands, wetland buffers, the SP district to the greatest extent feasible. Project access roads will be located within the existing ROW to minimize new disturbance. Temporary construction matting will be used to minimize temporary impacts to wetlands, wetland buffers, and the SP District. Matting will be temporarily placed in wetlands and wetland buffers to provide access needed to conduct the structure replacements. One work pad will also require matting in a wetland and the SP District. All proposed impacts will be temporary and affected areas will be seeded, mulched, and stabilized following construction. As a result, the proposed project will not have a substantial adverse impact to natural resources of the City.

7. *The use will be adequately serviced by necessary public utilities and by 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 facilities and services with sufficient additional capacity.*

The proposed project is an existing use and does not necessitate excessive public expenditures. The project maintains an existing utility line and does not increase the need for fire, police, or school services.



Photograph 1. F139 and V182 ROW facing northeast from F139 proposed replacement Structure 169 looking towards F139 proposed replacement Structure 170. Taken 11/15/19.



Photograph 2. F139 and V182 ROW near Structure 170 facing northeast. Taken 11/15/19.



Photograph 3. F139 proposed replacement Structure 170 and eastern shoulder of Sanborn Road facing southeast. Taken 11/15/19.



Photograph 4. V182 and F139 ROW facing southeast from Sanborn Road. Taken 11/15/19.



Photograph 5. ROW facing southeast with recently replaced F139 Structure 175 in foreground and proposed replacement Structure 174 in background. Taken 11/15/19.



Photograph 6. F139 proposed replacement Structure 174 from ROW facing northeast. Taken 11/15/19.



Photograph 7. F139 proposed replacement Structure 174 in foreground facing northwest. Taken 11/15/19.



Photograph 8. F139 proposed replacement Structure 177 from Mountain Road facing south.
Taken 11/15/19.



Photograph 9. F139 proposed replacement Structure 177 from ROW on the east side of Mountain Road facing west. Taken 11/15/19.



Photograph 10. F139 proposed replacement Structure 178 from ROW facing west. Taken 11/15/19.



Photograph 11. F139 proposed replacement Structure 178 from ROW on the west side of Mountain Road facing southeast. Taken 11/15/19.



Photograph 12. F139 and V182 ROW facing northwest from area adjacent to F139 Structure 178. Taken 11/15/19.



Photograph 13. F139 proposed replacement Structure 179 from ROW facing west. Taken 11/15/19.