



DEVELOPMENT & MANAGEMENT PLAN

for the

MILVON TO WEST RIVER RAILROAD TRANSMISSION LINE 115-kV REBUILD PROJECT

**City of Milford, Town of Orange, City of West Haven, City of New Haven
New Haven County, Connecticut**

VOLUME 3

PROJECT-WIDE PLANS

(APPLICABLE TO ALL PROJECT WORK: TRANSMISSION LINE SEGMENTS 1-4)

April 2023

Prepared By:

THE UNITED ILLUMINATING COMPANY

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INTRODUCTION

The United Illuminating Company (UI or the Company) will construct the approximately 9.5-mile Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) in four separate segments. The four Project segments, presented in the sequence in which each will be constructed, are:

- Elmwest Substation to West River Substation
- Allings Crossing Substation to Elmwest Substation
- Milvon Substation to Woodmont Substation
- Woodmont Substation to Allings Crossing Substation

For each segment, UI will prepare a Development and Management (D&M) Plan consisting of two volumes (Volume 1 text and Volume 2 maps and drawings) that contain information specific to that segment.

This **Volume 3** includes UI's plans, procedures, and protocols (collectively, the Project-wide Plans) that apply to all four Project segments. The Project-Wide Plans are provided pursuant to the conditions of the Connecticut Siting Council's approval of the Project in Docket No. 508, State regulations applicable to the preparation of D&M Plans (Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies (RCSA), and UI's construction standards.

Volume 3 will be given to UI's construction contractors as part of the D&M Plan package for each transmission line segment.

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ATTACHMENT A

BONNET DECOMMISSIONING PLAN

(Per CSC Docket 508, Condition 2(a))

April 2023

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1. INTRODUCTION

For the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project), The United Illuminating Company (UI, the Company) will decommission and remove its existing 115-kilovolt (kV) transmission line infrastructure from the north and south railroad catenary support structures along the approximately 9.5-mile Connecticut Department of Transportation (CT DOT) / MetroNorth Railroad (MNR) corridor in the cities of Milford, West Haven, New Haven, and the Town of Orange – all in New Haven County, Connecticut.

The UI infrastructure that will be removed as part of the Project includes approximately 330 bonnets (UI-owned extensions on top of the CT DOT/MNR catenary support columns), as well as the 115-kV line conductors, optical ground wire [OPGW], and shield wire. Certain other existing UI transmission line infrastructure (e.g., lattice steel towers, monopoles) located along the CT DOT corridor also will be removed or modified as part of the Project.

This Bonnet Decommissioning Plan (BDP or Plan) presents UI's overall approach for removing its transmission line infrastructure (bonnets, conductors, OPGW, shield wire) from the railroad catenary support structures. The Plan describes the general construction sequence and procedures, as well as the coordination that will be required with CT DOT/MNR to assure that the work avoids or minimizes disruption to the rail system operation.

In addition, the Plan reflects UI's recent, proven experience, coordinating closely with CT DOT/MNR, in decommissioning and removing the same type of existing 115-kV transmission line infrastructure from the railroad catenary structures along approximately 6 miles of the CT DOT corridor, from UI's Congress Street Substation in the City of Bridgeport (Fairfield County) to Milvon Substation in the City of Milford (New Haven County).¹

¹The bonnet removal work was in conjunction with the following 115-kV rebuild projects: Milford 115-kV Transmission Line Upgrade Project (2015-2016); Housatonic River Crossing 115-kV Transmission Line Replacement Project (2015-2016); Bridgeport 115-kV Transmission Line Upgrade Project (2017-2018); and Stratford 115-kV Transmission Line Upgrade Project (2019-2021).

To rebuild the 115-kV transmission lines between Milvon and West River substations, UI will construct the Project in four separate segments, with the 115-kV lines along each segment rebuilt and placed into service prior to the initiation – in most cases - of extensive work on the next segment.² The four Project segments, presented in the sequence in which each will be constructed, are³:

- Elmwest Substation to West River Substation (1.29 miles);
- Allings Crossing Substation to Elmwest Substation (1.28 miles);
- Milvon Substation to Woodmont Substation (4.05 miles); and
- Woodmont Substation to Allings Crossing Substation (2.91 miles).

For each Project segment, the new (rebuilt) 115-kV lines will be installed, connected to the substations on either end of the segment, and placed into service. UI's existing 115-kV infrastructure generally will be de-energized and removed in conjunction with the construction and energization of the rebuilt transmission lines along each Project segment. The 115-kV line rebuild work will be sequenced such that service will be maintained to UI customers.

The segment-specific Development and Management (D&M) Plans provide the schedule for work on each Project section and identify the locations where UI's existing infrastructure will be removed. Each D&M Plan also identifies any locations where UI will leave certain bonnets in place to support the existing UI shield wire for future CT DOT use.⁴

Table 1-1 summarizes, by municipality, the existing UI transmission facilities that will be removed or modified as part of the Project. Figures 1-1 and 1-2 provide typical illustrations of the existing alignment of the UI bonnets and 115-kV lines on the railroad catenary structures.

² Some construction activities may overlap from segment-to-segment. For example, civil and foundation work may commence on the Milvon-Woodmont substation segment (the longest of the four segments) prior to the completion of the Allings Crossing to Elmwest substation segment.

³ The mileages provided are for the rebuilt 115-kV lines, which will be slightly longer than the existing transmission lines located on the railroad catenary structures between Elmwest and West River substations (1.25 miles) and between Allings Crossing and Elmwest substations (1.24 miles).

⁴ UI will transfer to CT DOT ownership of the shield wire, which would be used as lightning protection for the railroad's electrical facilities, and bonnets that will be left in place.

Table 1-1: List of Existing 115-kV Facilities to be Removed or Modified

Municipality	Length of Route (Approx. Miles)	Removal and Modification of Existing Facilities				
		Bonnets to be Removed from Catenary Support Structures (No.) ^a	Monopoles to be Removed (No.)	Monopoles to be Topped and Capped (No.) ^b	Lattice Towers to be Removed or Modified (No.) ^c	Other Structures to be Removed or Modified (No.) ^d
Milford	5.03	200	3	4	0	1
Orange	0.46	17	0	0	0	0
West Haven	3.86	111	2	2	7	5
New Haven	0.10	2	0	0	0	0
TOTAL	9.45	330	5	6	7	6

Notes (refer to the segment-specific D&M Plan Volume 2 maps for specific bonnet and structure removal locations):

- a) Number of catenary support columns on which the bonnets will be removed. Of these, an estimated 19 bonnets will be cut between 2 and 4 feet above the existing bonnet connection to support a shield wire to protect the MNR signal and feeder wires and an estimated nine bonnets are expected to remain to support the existing UI shield wire, the ownership of which will be transferred to CT DOT.
- b) Number of existing UI monopoles on which the top section will be removed, while the bottom section will remain to support the attached MNR signal wires.
- c) Two of the existing UI lattice towers will be removed in full and five will be modified (the tops of four of these towers will be removed, while the bottoms will remain to support the attached MNR shield wire and signal / feeder wires); one tower will be mostly removed with only the bottom section to remain to support the attached MNR communication and signal cables). Three existing lattice towers will remain.
- d) Two structures comprised of three steel W-flanges and two structures comprised of one steel W-flange will be removed outside Elmwest Substation. Most of the structure comprised of multiple steel W-flanges located outside Woodmont Substation will be removed; a portion to support the MNR electrical facilities will remain. The structure located outside Allings Crossing Substation on the south side of the railroad tracks will also be removed.

Figure 1-1: Representative View of Railroad Catenary Structure and UI Bonnets with 115-kV Lines

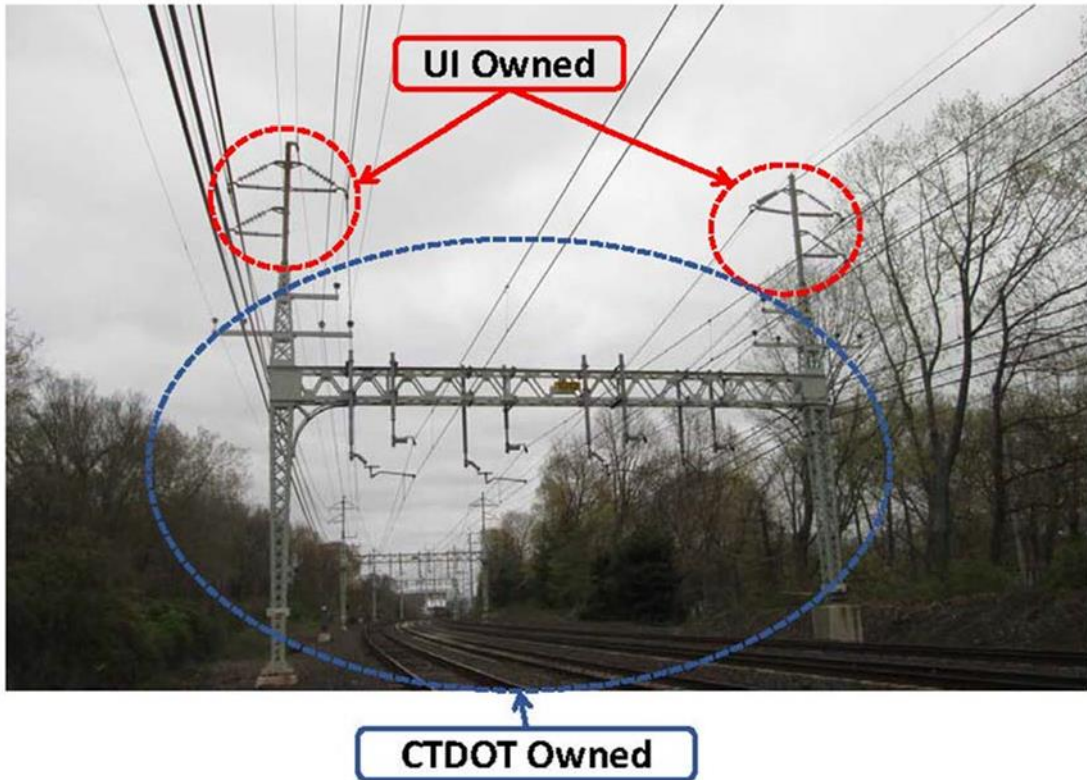
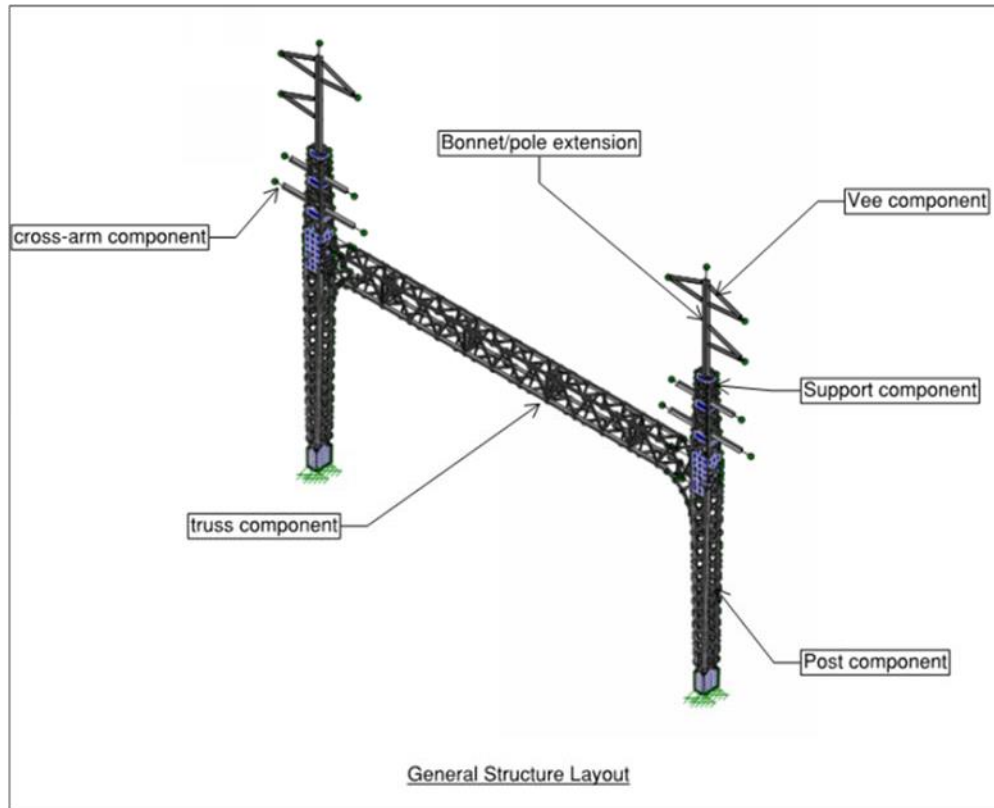


Figure 1-2: Schematic of Typical Railroad Catenary Structure with UI Bonnet/Pole Extensions



2. BONNET DECOMMISSIONING AND REMOVAL: GENERAL SEQUENCE/METHODS

UI will decommission and remove the existing 115-kV lines, shield wire, OPGW, and bonnets from the railroad catenary structures as part of the segment-by-segment Project construction. The contractor yards and staging areas established for the overall Project will be used to support this work.

Table 2-1 summarizes the general sequence of activities that will be performed to remove the existing UI infrastructure from the railroad catenary support columns.⁵ The following reviews the approach that UI will use to remove the existing 115-kV infrastructure, coordinating the work with the Project transmission line rebuild activities and with CT DOT/MNR, while minimizing potential conflicts with railroad operations.

2.1 Overall Approach

UI will use the same sequence of activities and methods to remove the wires and bonnets from both the northern and southern catenary structures. However, the timing of the work will vary, with the removal of the UI infrastructure from the northern catenary supports typically being performed in advance of the wire/bonnet removals from the southern catenary support structures.

Along each Project segment, UI's existing 115-kV facilities on the northern railroad catenary support columns will be removed in conjunction with the construction of the new double-circuit 115-kV lines north of the MNR tracks. The UI infrastructure on the northern catenary structures will be removed using mostly the same access roads and work pads installed for the construction of the new double-circuit monopoles. Four of UI's substations (Milvon, Woodmont, Elmwest, and West River) are located south of the MNR tracks, while Allings Crossing Substation is located to the north. Therefore, UI's existing 115-kV facilities on the southern railroad catenary support columns directly adjacent to the Milvon, Woodmont, Elmwest, and West River substations will be removed as necessary to facilitate the connections of the rebuilt lines into each substations. (Near Allings Crossing Substation, the UI infrastructure on the southern catenary structures will not interfere with the connection of the rebuilt 115-kV lines on the north side of the tracks to the substation.)

⁵ As noted in Table 1-1, UI also will modify or remove certain existing monopoles and lattice steel towers along the CT DOT corridor. The activities involved in this work will be similar to those required to remove the UI 115-kV lines and infrastructure facilities from the catenary structures.

Table 2-1: Typical Bonnet Removal Construction Sequence (by Transmission Line Segment)

TYPICAL PRE-CONSTRUCTION ACTIVITIES (BONNET REMOVAL FROM NORTH AND SOUTH CATENARY SUPPORT STRUCTURES)
<ul style="list-style-type: none"> • Survey and stake construction work areas (access roads, work pads), and the boundaries of CT DOT property and UI easement (where different)
<ul style="list-style-type: none"> • Confirm and re-flag environmental resource areas (e.g., wetlands, watercourses)
<ul style="list-style-type: none"> • Mark vegetation clearing limits
TYPICAL BONNET REMOVAL CONSTRUCTION ACTIVITIES
<ul style="list-style-type: none"> • Establish temporary erosion and sedimentation controls as needed
<ul style="list-style-type: none"> • Remove or mow vegetation from work areas, where necessary
<ul style="list-style-type: none"> • Install temporary matting in wetlands as needed; install temporary bridges to traverse small watercourses
<ul style="list-style-type: none"> • Establish or upgrade access roads to infrastructure removal sites (sites located on the north side of the railroad tracks or adjacent to Milvon, Woodmont, Allings Crossing, Elmwest, and West River substations).
<ul style="list-style-type: none"> • Create a level work pad at each infrastructure removal site (sites located on the north side of the railroad tracks or adjacent to Milvon, Woodmont, Elmwest, and West River Substations), and if necessary, at guard structure sites.
<ul style="list-style-type: none"> • Remove the existing 115-kV line facilities from the north side catenary structures (i.e., existing shield wire/OPGW,⁶ conductors, hardware, steel bonnets). Any existing monopoles, lattice towers, and w-flange structures that are no longer required on the north side of the railroad tracks will also be removed.
<ul style="list-style-type: none"> • Place the rebuilt northern 115-kV line in service (by segment)
<ul style="list-style-type: none"> • Remove the existing 115-kV line facilities (existing shield wires, conductors, hardware, steel poles) from the south side catenary structures adjacent to Milvon, Woodmont, Elmwest, and West River substations. Specifically, the infrastructure between the following bonnets/structures: existing monopole 887BS and B889S near Milvon Substation, B956S and B960S near Woodmont Substation, B1027S and B1031S near Elmwest Substation, and B1048S and B1050S near West River Substation.
<ul style="list-style-type: none"> • Place the rebuilt southern 115-kV lines in service (by segment).
<ul style="list-style-type: none"> • Remove the remaining existing 115-kV line facilities from the south side catenary structures (i.e., existing shield wire, conductors, hardware, steel bonnets). This activity will include establishing temporary construction access and work pads at the locations of the facilities to be removed. Existing access, upgrades to existing access, or new access roads will be required.
<ul style="list-style-type: none"> • Remove existing monopoles, lattice towers, and w-flange structures that are no longer required on the south side of the railroad tracks.
<ul style="list-style-type: none"> • Remove temporary construction access and work pads along with associated matting and bridges
<ul style="list-style-type: none"> • Perform final clean-up and restore/stabilize areas affected by construction to pre-construction conditions (e.g., by seeding and re-vegetating as needed).
<ul style="list-style-type: none"> • Maintain erosion and sedimentation controls until areas affected by construction are stabilized.

⁶ Before removing the existing OPGW on the Elmwest to West River, Allings Crossing to Elmwest, and Woodmont to Allings Crossing segments, UI will install a temporary all-dielectric self-supporting (ADSS) fiber, in an underbuilt configuration on the catenary structures (beneath the MNR signal, feeder, and communications wires). The temporary ADSS will be removed as part of final construction.

The majority of UI's existing 115-kV facilities located on the southern railroad catenary support structures (and other UI structures to be removed or modified south of the MNR tracks) generally will not interfere with the segment-by-segment construction and energization of the rebuilt lines on the new 115-kV double-circuit monopoles. Thus, along each Project segment, whereas the 115-kV lines on the south side of the railroad tracks will be de-energized in order to place the rebuilt lines into service, the removal of the wires and bonnets will be scheduled to maximize construction efficiencies and construction crew allocation. As a result, the removal of the UI infrastructure from the southern catenary support structures on one segment may be performed when civil and foundation work is occurring on an adjacent transmission line segment.

2.2 Access Roads and Work Pads for Bonnet Removals

Access will be required to reach each of the railroad catenary support columns on which UI's existing 115-kV facilities will be removed or modified. Work pads also will be needed at each of these locations to provide space for the equipment and activities needed to remove UI's existing 115-kV facilities and infrastructure.

At most of the catenary structure locations on the north side of railroad tracks, the work pads required for the removal of the existing UI facilities will generally be integrated into the work pads associated with the installation of the new monopoles, 115-kV conductors, and OPGW, which will be situated north of the tracks.

In comparison, the work pads required for the removal of the existing UI 115-kV facilities from the southern catenary structures will be smaller, commensurate with the space needed only to dismantle and remove the UI wires and bonnets. All construction access roads and work pads associated with the removal of the wires and bonnets from the southern catenary structures will be temporary. The size of each work pad will differ depending on the location, topography, and space available within or near the CT DOT corridor.

However, in general, each work pad required to support the removal of UI's infrastructure from the catenary support columns typically will be approximately 100 square feet (e.g., 40 feet by 60 feet, 50 feet by 50 feet). Work pad locations and sizes, along with access roads, are depicted on the Volume 2 maps provided for each segment-specific D&M Plan.

2.3 Wire and Bonnet Removal

The amount of time that construction crews will be at a specific work site on the south side of the tracks typically will be less than the time spent on the north side of the tracks.

In general, the conductors and OPGW/shield wire will be removed first, followed by the removal of the steel bonnets and other existing UI lattice steel towers or independent monopoles that will be dismantled or modified as part of the Project. The insulators and any associated hardware may either be removed after the wire removal and before the bonnet/other structure removal or as a unit with the bonnets/other structures.

Various methods may be used to remove the OPGW, shield wire, and conductors. The exact method used will be determined by the contractor. For example, the wires may be unclipped from the existing UI infrastructure and put in stringing blocks. Wire between multiple catenary structures (spans) would then be pulled out using ropes and a wire reel.

Alternatively, construction crews could set up equipment at two adjacent bonnets and then cut the wire, allowing the wire section between the two bonnets to be lowered to the ground and removed. The wire that remains on the other side of these bonnets may be temporarily tied off and attached to the base of the bonnet until removal activities are continued. If in good condition, existing wires may also be transferred to the new poles to be used as ropes to pull in the new OPGW and conductors in select areas as chosen by the contractor.

After all wires are removed, the insulators, hardware, and bonnets will be removed from the top of each catenary support column. The steel bonnet infrastructure will be dismantled by either unbolting or cutting the bolts at existing flange connections or cutting the bonnet support structure itself at the specified elevation.

Typically, this work will be performed using a combination of bucket trucks, lifts, cranes, and other typical construction equipment. However, the Project construction contractor may elect to perform some of this work via helicopter or by having construction personnel physically climb the catenary support column structures.

Figure 2-1 provides a typical cross-section view of the UI facilities that will be removed from each catenary structure. Figures 2-2 through 2-4 include photographs of the representative activities that UI recently performed to remove wires and bonnets from the MNR catenary structures along other portions of the CT DOT corridor.

2.4 Bonnets to Remain

As summarized in Table 1-1, 28 bonnets will remain – either in whole or in part – to support either a new shield wire for MNR or the existing UI shield wire. The specific locations where these bonnets will remain are identified on the segment D&M Plan Volume 2 maps. Because the 115-kV conductors, insulators, and attachment hardware will be removed from these bonnets, the access roads, work pads, and general wire/infrastructure removal activities described above will apply.

Of the 28 bonnets, 19 will be cut between 2 and 4 feet above the existing bonnet connection to the catenary structure. The top part of the bonnet will be dismantled and removed. The bottom part of the bonnet will remain to support a new shield wire to protect the MNR signal and feeder wires. Of these 19 bonnets:

- 10 (five on the north side and five on the south side of the tracks) are located in Milford on the Milvon to Woodmont segment, adjacent to Boston Post Road and Clark Street.
- Four (two on the north side and two on the south side of the tracks) are located on the Woodmont to Allings Crossing segment adjacent to Oxford Road (three are located in Milford; one is located in Orange).
- Five (three on the north side and two on the south side of the tracks) are located in West Haven on the Elmwest to West River segment, adjacent to 1st Avenue.

Nine bonnets (all located on the southern catenary support columns between 1st Avenue and the West River in West Haven, along the Elmwest to West River substation transmission line segment) will be left in place to support the existing UI shield wire, the ownership of which will be transferred to CT DOT for use as an MNR shield wire.

Figure 2-1: Cross-Section of UI Infrastructure to be Removed from a Typical Catenary Structure

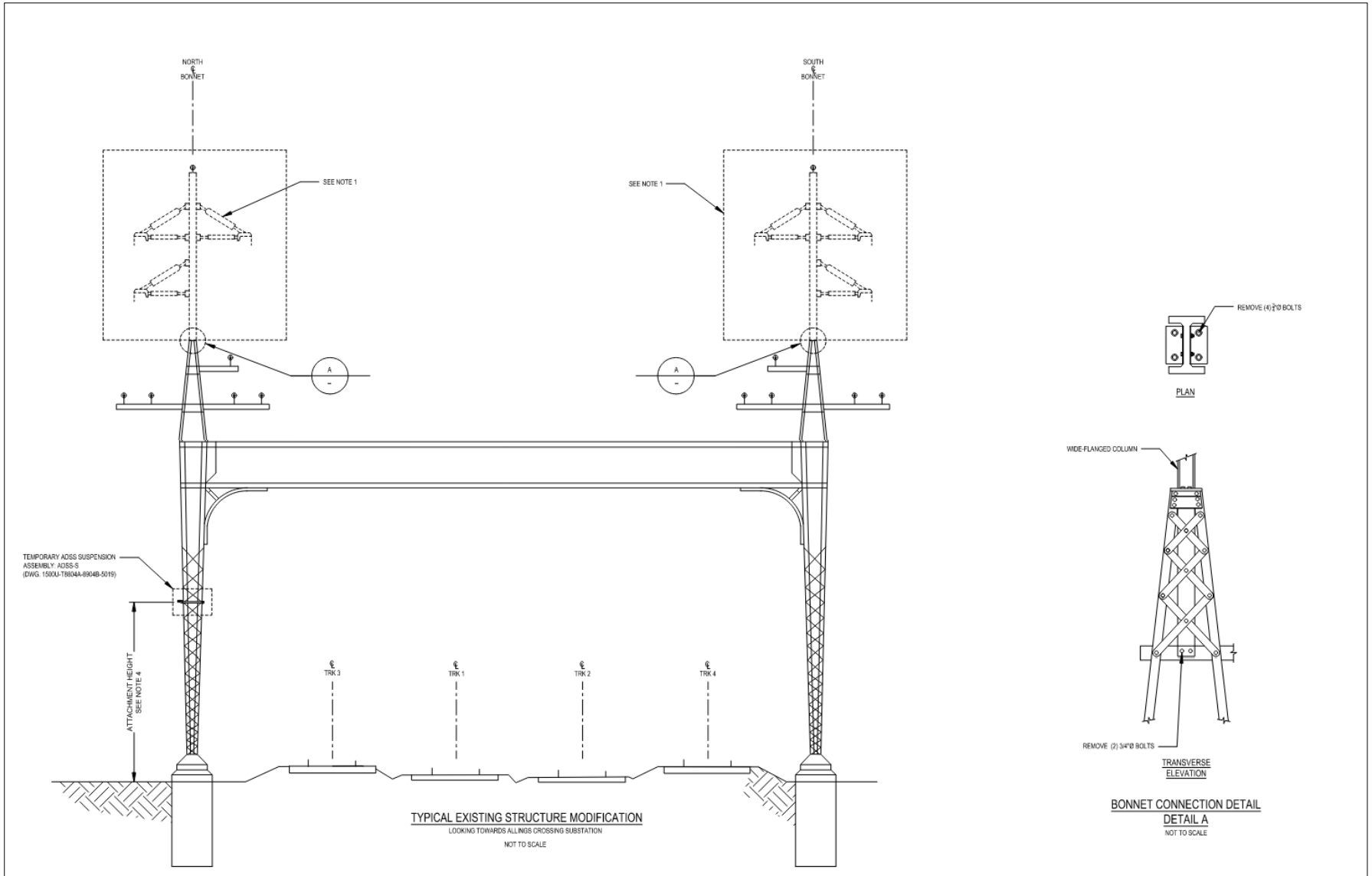


Figure 2-2: Removal of Conductor from Bonnet

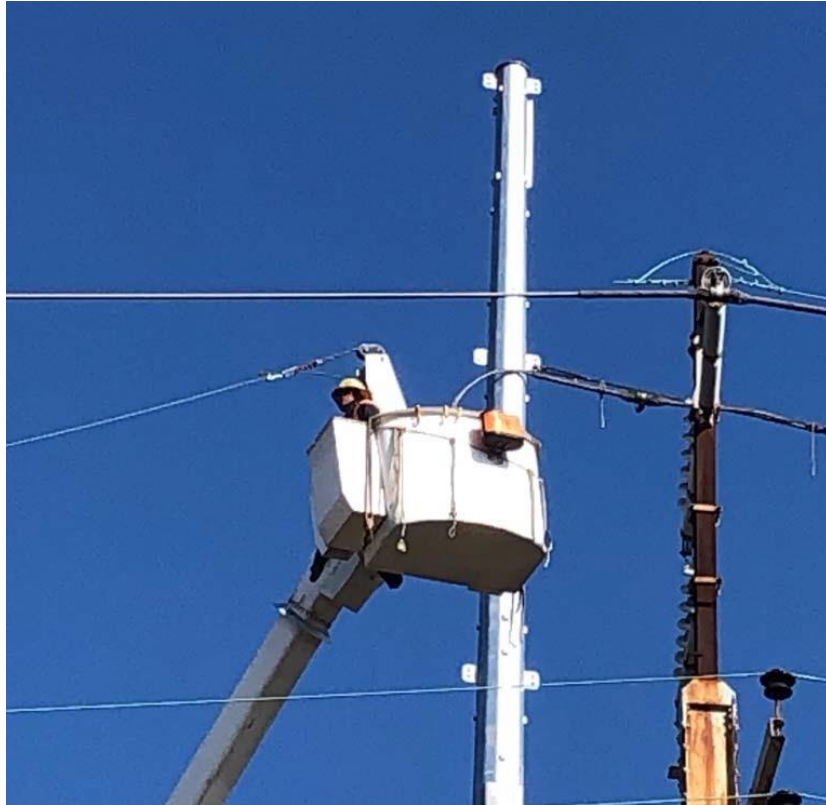


Figure 2-3: Wires Temporarily Tied Off on One Side at Base of Bonnet



Figure 2-4: Bonnet Removal from Catenary Structure

2.5 MNR Electric Feeder, Communications, and Signal Wires

In most locations, the MNR signal and feeder wires that are situated on the catenary structures will be left in place. The bonnet removal activities will not affect this railroad infrastructure, except that temporary outages on the MNR facilities will be required to safely remove the UI 115-kV infrastructure.

However, nine new monopoles (P912N adjacent to the Milford Train Station, P1022N, P1023N, and P1023AN, east of Saw Mill Road in West Haven, and P1039N, P1039EN, P1040N, P1041N, and P1042N, east of 1st Avenue in West Haven) will be set in-line with the existing catenary structure legs or with existing lattice towers. In these locations, the existing shield wire/OPGW and 115-kV conductors will be removed prior to installing the new monopole.

Depending on bonnet configuration, the existing bonnets (B912N, B1022N, B1023N, B1039N, and B1040N) will either be removed prior to or immediately following the setting of the new monopole. Immediately after the new monopole is installed, the MNR signal and feeder wires will be transferred

from the existing catenary structure or lattice tower to the new monopole. The existing lattice towers (B1023AN, TP1041EN, and TP1042WN) will then be removed following the transfer of the MNR signal and feeder wires.

2.6 Materials Management

UI anticipates that most of the existing infrastructure removed from the railroad catenary structures (e.g., steel bonnets, conductors, OPGW, shield wire) will be recycled. Materials that cannot be recycled will be disposed of at an appropriate off-site facility.

2.7 Restoration

After the removal of the UI transmission lines and infrastructure from the catenary structures, access roads and work pads will be restored (regraded, seeded or otherwise stabilized) in accordance with standard UI protocols. Restoration will generally proceed by Project segment. Temporary erosion and sedimentation controls will remain in place until the areas affected by construction are determined to be stabilized.

3. SCHEDULE

The construction activities required to remove the majority of the existing 115-kV facilities from the catenary support structures will involve MNR track and signal/feeder outages. As a result, UI anticipates that this work will be performed during non-standard construction shifts (e.g., during nighttime, on Sundays, etc.) that correspond to non-peak rail use periods.

However, between UI’s Milvon Substation and Old Gate Lane in Milford (Bonnet B936N), there are only three tracks, not four. In this location, the removal of the existing 115-kV facilities from the northern catenary support structures will only require signal/feeder outages and is expected to be performed during standard work times.

For each Project segment, the decommissioning and removal work will be closely coordinated with CT DOT/MNR. Table 3-1 summarizes UI’s anticipated schedule for the removal of the existing UI infrastructure from the southern catenary structures along each Project segment. The existing UI 115-kV transmission lines and infrastructure located on the northern catenary support columns will be removed in conjunction with the installation of the new double-circuit structures. Updates to these timelines will be provided, as appropriate, as part of the schedule for the construction of each transmission line segment, which will be provided in Volume 1 of each segment-specific D&M Plan.

Table 3-1: Anticipated Schedule for UI Facility Removal from Southern Catenary Structures

Transmission Line Construction Segment	Estimated Schedule for Removal of UI Infrastructure*
West River- Elmwest	Q2 2024
Elmwest – Allings Crossing	End of Q1 to Q2 2025
Milvon – Woodmont	Q2 and Q3 2026
Woodmont – Allings Crossing	End of Q3 2027 to Q1 2028

*Timelines may vary; refer to segment-specific Project schedules.

ATTACHMENT B

EROSION AND SEDIMENT CONTROL PLAN
(Per CSC Docket 508, Condition 2(d))

April 2023

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1. INTRODUCTION

The Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) will be located mostly within the Connecticut Department of Transportation (CT DOT) / MetroNorth Railroad (MNR) corridor in the cities of Milford, West Haven, New Haven, and the Town of Orange in southern New Haven County. Most of the railroad corridor is characterized by relatively level terrain and Urban-complex soils that have been altered by past land use development.

During the construction of the Project, The United Illuminating Company (UI or the Company) will install and maintain erosion and sedimentation control measures to avoid or minimize the potential for surface water runoff, erosion, and sedimentation to occur outside of active Project work areas. These measures will conform to applicable regulations concerning soil and erosion/sedimentation control and stormwater management, including the Connecticut Department of Energy and Environmental Protection's (CT DEEP) General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit), the *2002 Connecticut Guidelines for Sedimentation and Erosion Control* (as amended), the *2004 Stormwater Quality Manual*, and the provisions of the Project-specific Stormwater Pollution Control Plan (SWPCP).

UI's Project SWPCP, which covers all Project transmission line segments, incorporates erosion and sedimentation control measures, as appropriate to the Project, referenced in the *2002 Connecticut Guidelines* and the *2004 Stormwater Quality Manual*. In the Spring of 2023, UI submitted the Project SWPCP to CT DEEP for review and authorization, pursuant to the General Permit.

The SWPCP will be implemented by UI and its construction contractor(s) to avoid, minimize, or eliminate potential adverse environmental effects during transmission line construction, and will identify measures to reduce the likelihood of sediment migration from construction sites. After the completion of the 115-kV line work, the sites affected by Project activities will be restored and permanently stabilized. As a result, the operation of the rebuilt 115-kV lines will not result in long-term adverse direct or indirect effects to soils or stormwater management.

2. EROSION AND SEDIMENTATION CONTROL METHODS

Various Project construction activities will result in soil disturbance. Such activities include vegetation clearing with associated grubbing using mechanized equipment as required for access, grading for access roads and work pads, excavation for structure foundation, and general soil / spoils stockpiling. In addition, equipment movement on gravel roads could generate dust. During construction, UI will implement procedures to minimize the potential for soil erosion and sedimentation, as well as to limit the generation of fugitive dust. The objectives of these procedures will be to:

- Protect water resources (wetlands and waterbodies) during construction by preventing or minimizing the potential for the migration of sediment from work sites.
- Minimize the quantity and duration of soils exposed to potential erosion by installing appropriate erosion and sedimentation controls, removing soils from the Project area as appropriate (i.e., loading excavated soils directly into dump trucks for appropriate off-site disposal), stabilizing any soils that are temporarily stockpiled on Project work sites, and restoring work sites.
- Avoid or minimize both the generation of dust from construction vehicle movements on unpaved access roads and the tracking of dirt from Project work sites onto local paved roads.

The following summarizes UI's Erosion and Sediment Control Plan for the Project. Additional details are provided in the SWPCP. Applicable Project construction contractors will be given a copy of the SWPCP and will be required to certify that they have read, understand, and will comply with the SWPCP during Project construction.

2.1 Soil Management and Erosion Controls

UI will install and maintain both temporary and permanent erosion and sedimentation control measures, as appropriate, during Project construction. Permanent erosion and sedimentation control measures will be used as necessary along permanent access roads or in other areas, as required by site-specific conditions.

Temporary erosion and sedimentation controls may be installed before or after vegetation removal, depending on site-specific characteristics. More typically, such controls will be installed after vegetation removal, and will be deployed as needed around work site limits (e.g., access roads, work pads) in or near

wetlands, streams, and other sensitive environmental or land use resources, as well as along access roads and around work pads near slopes or water resources.

Temporary erosion and sedimentation controls typically will consist of straw bales, silt fence, straw wattles, coir logs, diversion swales, anti-tracking pads, temporary access matting, hay bale corrals for management of spoils or concrete washout areas, and/or erosion control blankets. Erosion control fabric will also be installed in catch basins, as needed. Erosion and sedimentation controls will be deployed in accordance with the SWPCP, the General Permit, the *2002 Connecticut Guidelines for Sedimentation and Erosion Control* (as amended), the *2004 Stormwater Quality Manual*, and UI's construction plans and specifications. Details regarding typical temporary erosion and sedimentation controls are provided in Volume 2 of the segment-specific D&M Plans and in the SWPCP.

The types of erosion controls used will be appropriate to the urban/suburban areas and environmental resources in the Project area. In addition, pursuant to the General Permit and the Project SWPCP, UI's qualified environmental inspector/monitor (refer to Attachment J of the Project-Wide D&M Plan) will routinely perform inspections to verify the effectiveness of the erosion and sedimentation controls. Based on the results of the inspections, UI may require the contractors to augment or modify erosion and sedimentation control methods during different construction phases.

Temporary erosion and sedimentation controls will be maintained, as necessary, throughout all phases of Project construction, until areas of disturbed soil are appropriately stabilized. (Refer to Section 2.4.)

Permanent erosion and sedimentation controls may include, among others, broad-based dips, water bars, rock swales, and plunge pools. Other permanent stabilization measures may include retaining walls, if necessary. UI will require the construction contractors to install appropriate permanent erosion and sedimentation controls, if necessary, to stabilize permanent access roads. Such permanent controls will be in accordance with the SWPCP specifications and Project plans.

2.2 Dust Control and Anti-Tracking Measures for Sediment Control

Fugitive dust may be generated from Project construction activities such as vegetation removal, construction vehicle and equipment movements on non-paved access roads and work pads, excavations for structure foundations, and regrading as needed for restoration. Dirt from unpaved access roads also may be tracked onto adjacent paved surfaces.

Crushed stone (or equivalent) anti-tracking pads will be installed on Project access roads at the intersection with paved public roads. These anti-tracking gravel areas will minimize the amount of dirt tracked onto local roads by construction vehicles and equipment. In addition, UI will require its construction contractors to regularly inspect and sweep paved road surfaces to remove excess accumulations of dirt that may be unavoidably tracked onto the roads despite the gravel anti-tracking pads.

To minimize the amount of dust generated by Project construction, standard dust minimization practices will be implemented. For example, access roads may be sprayed with water to minimize dust.

2.3 Dewatering

On-site dewatering may be required as a result of excavation activities related to the Project. Based on previous groundwater characterization, groundwater classified as “clean”, and that was not impacted during construction, may be dewatered from the excavation through an appropriate filter bag and discharged to upland areas, in a manner consistent with the segment specific D&M Plan map volumes and the SWPCP. Under no circumstances will the water be discharged into wetlands or watercourses. UI’s construction contractor will be responsible for inspecting sediment filtration measures on a daily basis, replacing such controls as necessary, and properly disposing of any sediment collected. Additional requirements for treatment and disposal of dewatering fluids may be necessary where Project groundwater has encountered cement and/or contains drilling additives, such as polymers or bentonite, from the installation of monopole foundations.

2.4 Restoration

As the final phase of the Project, areas disturbed by construction activities will be restored. Restoration will consist of the removal of construction materials (e.g., construction mats) and debris, as well as regrading, where necessary, and seeding / mulching or otherwise stabilizing (e.g., repaving, adding gravel).

The objective of the restoration effort will be to rehabilitate work sites to be consistent with adjacent areas and with the operation and maintenance of the rebuilt overhead 115-kV transmission lines. Wetland areas affected by construction will be either allowed to revegetate naturally, reseeded with temporary annual seed mix that will promote stabilization, or reseeded with wetland seed mixes in accordance with restoration plans approved for such use by CT DEEP and/or the U.S. Army Corps. of Engineers. Hay mulch will not be used in wetlands. With the approval of property owners and UI, certain areas deemed suitable will be restored with the application of pollinator seed mix for revegetation.

During Project restoration, temporary erosion and sedimentation controls will be maintained or reinstalled, as necessary. These controls will remain in place until the SWPCP inspector/monitor determines that final stabilization has been achieved. SWPCP inspections will continue for at least one full growing season or two subsequent seeding seasons (fall and spring) following site stabilization, as defined by the General Permit.⁷ Temporary erosion and sedimentation controls (e.g., silt fence, stakes) that are not otherwise biodegradable will be removed after Project work sites are deemed to be stabilized.

⁷ The growing season is defined as April-October, with seeding seasons within that time period consisting of April 1 to June 15 and August 15 to October 1. The growing season consists of both seeding seasons.

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ATTACHMENT C

VEGETATION CLEARING PLAN
(Per CSC Docket 508, Condition 2(g))

April 2023

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1. INTRODUCTION

The United Illuminating Company's (UI or the Company) Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) extends for approximately 9.5 miles within or adjacent to the Connecticut Department of Transportation (CT DOT) - owned MetroNorth Railroad (MNR) corridor. Along this long-established railroad corridor, the Project crosses urbanized portions of the cities of Milford, West Haven, New Haven, and the Town of Orange, all in southern New Haven County.

The CT DOT-owned corridor varies in width from 90 feet to 260 feet, but generally averages between 125 feet and 175 feet wide. Along the northern portion of the CT DOT corridor, where UI will align most of the rebuilt 115-kV line structures, the distance between the northern MNR catenary support column and the edge of the CT DOT property ranges from 5 to 145 feet, whereas the distance from the southernmost catenary support column to the edge of the CT DOT property varies from 10 to 105 feet.

To accommodate the rebuilt 115-kV lines where the CT DOT corridor narrows or due to construction constraints, UI will acquire approximately 17.7 acres of new permanent easements from landowners adjacent to the CT DOT corridor. An additional approximately 20 acres of temporary easements from landowners abutting the railroad corridor will be required for Project construction (e.g., temporary access roads, work pads).

For each of the Project transmission line segments, the D&M Plan Volume 2 maps identify the CT DOT property boundaries, MNR catenary structures, the UI permanent and temporary easements, and location of the rebuilt 115-kV lines.

Along the CT DOT corridor and in the adjacent areas of UI's permanent and temporary easements, vegetation is generally characteristic of urban / suburban areas in southern New England, consisting mostly of uplands with some areas of freshwater and tidal wetlands and watercourses. Within the CT DOT corridor, vegetation is generally sparse immediately adjacent to the MNR tracks and overall is dominated by non-native invasive species, as well as escaped ornamental vegetation associated with residential landscaping. Scattered areas of shrubs and mature trees characterize portions of the CT DOT property farther from the railroad tracks, as well as some areas where UI will acquire permanent or temporary easements outside the CT DOT property.

Trees, which are found in some areas along the boundaries of the CT DOT property, are primarily deciduous hardwoods common to Connecticut. Common tree species include oak (*Quercus var.*), red maple (*Acer rubrum*), black cherry (*Prunus serotina*), and quaking aspen (*Populus tremuloides*). Due to the historical development and maintenance activities within the railroad corridor, disturbed areas also include a complex of common introduced native and many invasive species, such as Autumn olive (*Elaeagnus umbellata*), Tree-of-Heaven (*Ailanthus altissima*), and Asiatic bittersweet (*Celastrus orbiculatus*).

This *Vegetation Clearing Plan* (Plan) describes the vegetation removal that will be performed as part of Project construction, including within the work areas (access roads, work pads, pulling pads) that will be required for the installation of the rebuilt 115-kV lines and the removal of the existing transmission line facilities from both the north and south railroad catenary structures. The Plan also describes the areas near the rebuilt 115-kV lines where vegetation must be removed to conform to UI and industry standards regarding the clearance between the transmission line conductors and tall-growing vegetation.

2. VEGETATION CLEARING REQUIREMENTS

For Project construction, vegetation removal will be required along all access roads and at work pads for new structures and for the removal of the existing 115-kV facilities from the railroad catenary structures. Such clearing will be required on CT DOT property, within UI's new permanent easement, and along permanent and temporary access roads. In addition, vegetation will be removed or trimmed as needed to maintain clearance from the new 115-kV conductors during the operation of the rebuilt transmission lines.

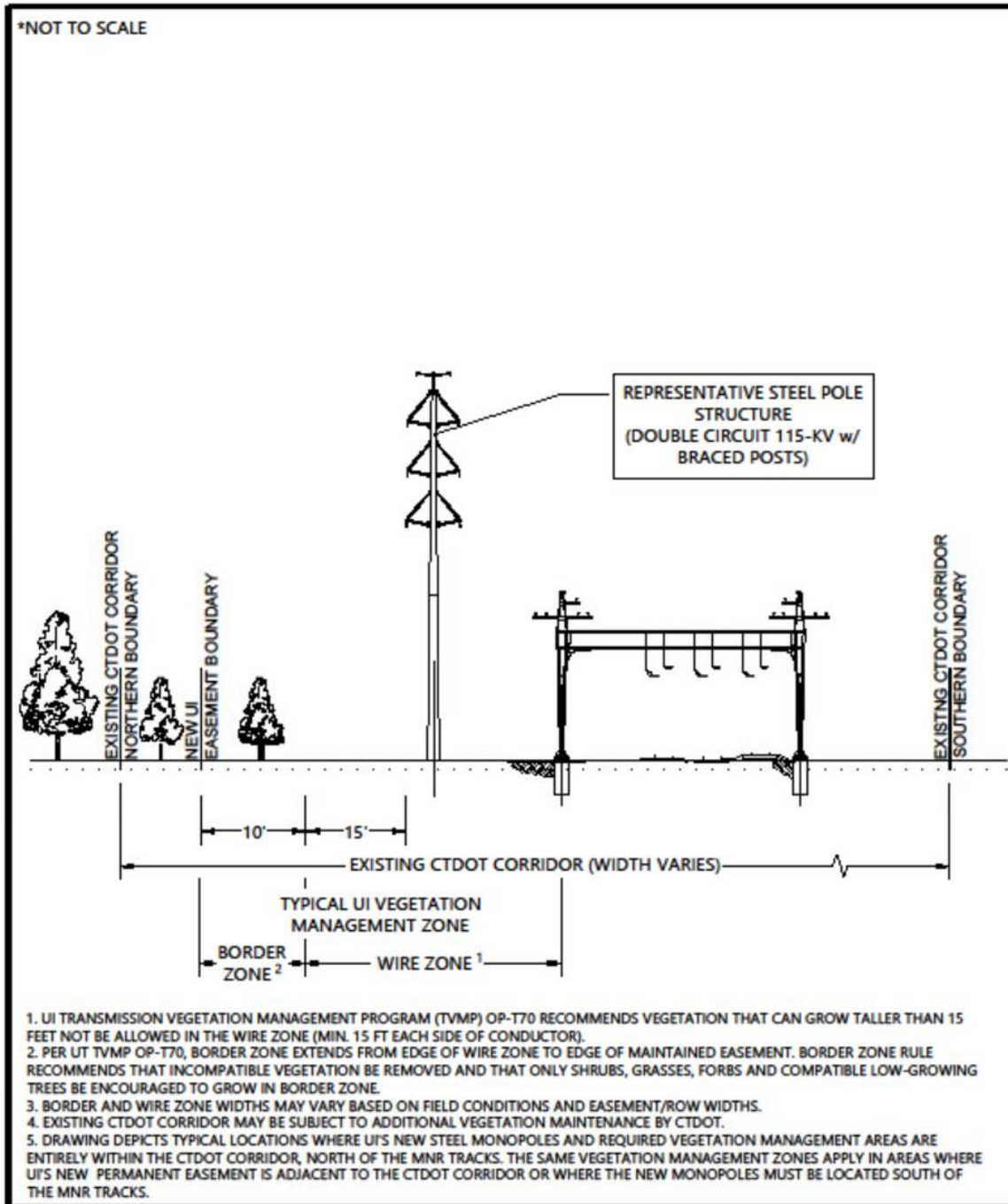
In some areas (such as where work pads and temporary access roads must be installed to remove the 115-kV lines from the top of the southern MNR catenary structures), vegetation will be removed as needed for Project construction. After the completion of Project work activities along the south side of the MNR tracks, the affected areas will be restored and allowed to revegetate to pre-construction conditions or in accordance with CT DOT or landowner agreements.

However, along the route of the rebuilt 115-kV transmission lines (located north of the MNR tracks), UI will manage vegetation near the lines to promote low-growing species consistent with the operation of the overhead transmission lines, pursuant to industry and UI standards for conductor clearance. Figure 2-1 illustrates the vegetation clearing/management zones in the vicinity of the rebuilt 115-kV lines.

For each of the Project's four transmission line segments, the Volume 2 D&M Plan maps identify the areas where trees will be removed. The maps also identify the locations of access roads and work pads, from which all types of vegetation (shrubs, herbaceous species) will be removed during Project construction.

As summarized in Table 2-1, approximately 27.7 acres of trees will be removed during Project construction. After the completion of Project work, approximately 6 acres of the 27.7 acres will be allowed to revegetate naturally, including with trees. The remaining approximately 21.6 acres of trees will be removed from Project areas that UI will permanently manage in low-growth plant species (e.g., shrubs, low-growing trees, herbaceous species), consistent with overhead transmission line operation and vegetation management. UI has designed the Project to minimize tree clearing such that only trees that present a realistic threat to the resiliency of the electric transmission system (post-construction) are removed.

Figure 2-1: Typical Vegetation Clearing and Management Zones





UI AVANGRID

Westwood
Surveying & Engineering

TYPICAL VEGETATION CLEARING AND MANAGEMENT ZONES

DATE: 03/27/2023

Table 2-1: Estimated Tree Removal, by Municipality

Municipality	Trees to be Removed for Construction Activities* (Acres)	Permanent Tree Removal** (Acres)
Milford	3.04	12.56
Orange	0.50	2.15
West Haven	2.58	6.89
New Haven	0	0.02
TOTAL	6.12	21.62

NOTES:

* Includes clearing necessary for Project construction, including temporary off-CT DOT corridor access roads and work pads, and clearing associated with Project activities on the south side of the railroad tracks (e.g., work pads and access roads required for the removal of the southern catenary structures). After the completion of Project construction, these areas will be allowed to revegetate naturally and trees will be allowed to become reestablished.

**Permanent tree removal refers to areas where trees will be cleared during construction (i.e., within CT DOT property and on UI's new UI permanent easement areas). After Project construction, UI will manage these areas in low- growing vegetative species that are compatible with the operation of the overhead 115-kV lines.

3. VEGETATION CLEARING METHODS

3.1 Survey and Marking

Prior to the commencement of construction along a Project segment, UI will perform surveys to mark the boundaries where vegetation will be cleared along the rebuilt 115-kV transmission line route, as well as along access roads. As necessary, UI environmental specialists also will clearly flag or otherwise demarcate the boundaries of sensitive environmental resources (e.g., wetlands, watercourses) and environmentally-sensitive species habitat. Project clearing crews will be required either to avoid such areas or to use low-impact clearing methods or other measures to minimize adverse effects associated with vegetation removal.

3.2 Vegetation Removal

The existing vegetation that must be removed for the Project consists of a mix of tall shrubs and mature trees,⁸ along with low-growing herbaceous species. Vegetation (all types) will be cleared and roots grubbed from access roads and work pads in upland areas (as needed).⁹ To install the rebuilt 115-kV lines (along the northern portion of the CT DOT property) and to remove the existing UI infrastructure (bonnets and conductors) from the north and south catenary structures, access roads and work pads (and thus vegetation clearing and grubbing) will be required both north and south of the MNR tracks. Further, danger or hazard trees outside the limits of clearing (on or off the CT DOT corridor or UI permanent easement areas) will be removed as necessary to protect the integrity of the new transmission lines.

Clearing will typically be accomplished using mechanical methods. Vegetation removal activities generally will require flatbed trucks, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for mechanical tree cutting, woodchippers, log trucks, and chip vans.

Clearing crews must be able to access areas where vegetation removal is required for construction and within the clearance zones of the rebuilt 115-kV conductors, as well as to reach danger and hazard trees (refer to Section 3.3). Thus, vegetation clearing crews will use access roads that also will be used for

⁸ Mature trees are defined herein to consist of tall-growing vegetation typically greater than 6 inches diameter breast height (dbh).

⁹ Stumps/roots will not be grubbed from wetlands except where permanent roads are required.

general Project construction, as well as additional “access routes” within the CT DOT corridor or UI permanent / temporary easements that will be required only to reach areas where vegetation must be removed.

The permanent and temporary access roads that will be used for Project construction are illustrated on the transmission line segment D&M Plan Volume 2 maps.

UI has coordinated with CT DOT regarding the vegetation clearing that will be required within the railroad corridor. UI also will consult with the owners of properties in those areas where permanent or temporary easements are obtained for the construction and operation/maintenance of the 115-kV lines, where vegetation removal also will be required.

Vegetation removal will be performed in accordance with UI procedures and – on CT DOT property – in accordance with CT DOT protocols, as follows:

- Vegetation clearing will be accomplished by conventional methods, using a combination of mowing, chain saws, hand labor, and mechanized equipment.
- Where practical, brush will be cut close to the ground, leaving root systems and stumps, to retain soil stability.
- Trees will be directionally felled to minimize impacts. Grubbing will be performed where necessary.
- Crews will use matting, comprised of timber or composite materials, to cross watercourses and to access wetland areas where vegetation clearing is required. Areas that require matting are illustrated on the transmission segment Volume 2 D&M Plan maps. The mats will be cleaned prior to use to avoid the spread of invasive wetland species (refer also to the Project *Wetland Invasive Species Control Plan* in Attachment F of this D&M Plan volume). Such temporary support will minimize rutting in wetlands and will be removed after the clearing activities are completed. Within wetlands and across streams, vegetation clearing crew “access routes” will be in accordance with all Project regulatory requirements.
- Cut vegetation will not be felled into watercourses.
- In wetlands, trees and brush will be cut flush with the ground surface and the stumps will be left in place unless removal is required for Project construction. All other cut vegetation will be removed from wetland areas.
- Low-impact clearing methods will be employed, as necessary, to protect water resources. Such methods may involve maximizing the use of uplands for clearing access routes, manually clearing vegetation, and taking into consideration weather and soil conditions when scheduling vegetation clearing (e.g., avoiding work during periods of heavy rainfall).

3.3 Timber and Brush Disposition

The clearing contractor will be responsible for properly stockpiling temporarily and disposing of any vegetative materials cut from the Project area. The following procedures will apply:

- Cut vegetation (brush and trees) will be temporarily stockpiled, if necessary, only in uplands.
- All vegetative materials cut on CT DOT property will be removed and disposed of properly, outside of the Project area.
- Trees and shrub vegetation cut on UI's permanent or temporary easements will be removed from the Project area, unless the property owner requests the wood or another disposition method.

Other than when wood is to be left for the landowner, UI will not dictate to the clearing contractor the means and methods for wood disposition. Typically, the clearing contractor can be expected to reduce waste, minimize clean-up costs, and maximize the value of the wood resources. The following methods may be used for timber disposition (specific disposition methods will be pursuant to CT DOT / MNR and other landowner agreements):

1. **Wood Requested by Landowners.** For landowners who request to retain timber wood that is cleared from an easement area on their property, treetops will be cut, chipped and removed or spread in upland areas, but the timber/firewood will be piled on the edge of the UI easement (on the landowner's property), outside of any environmentally sensitive areas and away from Project construction activities.
2. **Chipped on Project areas.** Brush, treetops, limbs, and other non-marketable timber and marginally marketable trees typically will be disposed of by chipping. Chips will not be left in piles and will only be spread within the CT DOT corridor or other Project areas to a depth not to exceed 3 inches; chips will not be spread in any NDDB species habitat areas. Otherwise, chips will be removed from Project work areas and transported to off-site locations for appropriate use.
3. **Removed for Forest Product Use.** The harvested trees or other wood materials (e.g., wood chips) may be transported off-site for productive use. Market demand, transportation costs, and quality of the wood materials will factor into the viability of this option.

3.4 Danger or Hazard Tree Removal

“Danger trees” or “hazard trees” are trees deemed to be a potential risk to the overhead 115-kV lines. A danger tree is a tree that, due to its location and height, could cause a flashover or damage to the structures or conductors, or violate the conductor zones, if it were to fall toward the transmission lines. A hazard tree is a tree that exhibits some type of defect or damage (e.g., weakness, broken limbs, decay, infestation) that increases the risk of it falling into the transmission lines.

Danger or hazard trees may be identified after the rebuilt lines are installed. Such danger or hazard trees may be situated on CT DOT property or on private property, outside of UI’s permanent easement. If danger or hazard trees located outside the CT DOT corridor or UI permanent easement must be removed or trimmed to maintain the reliability of the transmission system, UI will coordinate, as required, with the municipal tree warden or the affected property owner.

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ATTACHMENT D

RESTORATION PLAN
(Per CSC Docket 508, Condition 2(h))

April 2023

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1. INTRODUCTION

This Restoration Plan (Plan) for the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) describes the general procedures that The United Illuminating Company (UI or the Company) will implement to rehabilitate, restore, and stabilize areas affected by Project construction. The Plan also describes the typical methods that UI will use to manage the vegetation in the vicinity of the rebuilt 115-kV transmission lines, in conformance with UI and industry standards regarding clearance between tall-growing vegetation and overhead conductors.

The majority of Project construction areas will be located within the Connecticut Department of Transportation (CT DOT) - owned MetroNorth Railroad (MNR) corridor. Most of these areas will be restored to match pre-construction conditions or as otherwise defined in accordance with CT DOT requirements and CT DOT's agreement with UI. However, some permanent access roads will remain on CT DOT property, north of the MNR tracks, to provide access for UI operations and maintenance activities along the rebuilt 115-kV transmission lines.

Temporary Project work areas located outside of CT DOT property (i.e., access roads, work pads) also will be restored to approximate pre-construction conditions, or in accordance with landowner and UI agreements. Permanent access roads typically will be stabilized and will remain in place for UI's use during transmission line operation and maintenance. UI also will manage vegetation in the vicinity of the transmission lines (within 25 feet of the outer edge of the conductors) in low-growth species, pursuant to UI and industry standards.

For each of the Project's four construction segments, the Development and Management (D&M) Plan Volume 2 maps illustrate the locations of permanent and temporary access roads, work pads, and pull pads, as well as UI's permanent easements. Site stabilization and restoration activities also will conform to the methods identified in Project's Stormwater Pollution Control Plan, in accordance with the requirements of the Connecticut Department of Energy and Environmental Protection's (CT DEEP) *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (General Permit, December 2020).¹⁰

¹⁰The SWPCP is generally described in the Project-Wide D&M Plan, Attachment B.

Restoration will be performed by transmission line segment. Details regarding the schedule for the construction of each of the four segments, including the restoration timeframes, is provided in Volume 1 of each of the segment D&M Plans.

Pursuant to the SWPCP and UI's *On-site Environmental Monitoring and Inspection Plan*¹¹, monitoring will be performed to verify the effectiveness of site stabilization and restoration measures.

¹¹ The on-site environmental inspection and monitoring plan is presented in the Project-Wide D&M Plan, Attachment J.

2. RESTORATION PROCEDURES

2.1 Construction Cleanup and Site Rehabilitation

As the initial phase of cleanup and restoration, all temporary construction mats, as well as construction debris, signs, flagging, and fencing will be removed from Project work areas. These materials will be properly disposed of or otherwise reused or repurposed.

Areas affected by construction, including contractor laydown/material staging yards, will be re-graded (if necessary), restored, and stabilized, as practical, to approximate pre-construction conditions (e.g., seeded, graveled, repaved as necessary). Restoration/stabilization will be performed based on the characteristics of the area affected by construction and may include scarification, adding topsoil, reseeding, adding gravel, or repaving.

In areas subject to erosion, temporary erosion and sedimentation controls (installed and maintained during Project construction) will remain in place until permanent stabilization is achieved, pursuant to the requirements of the CT DEEP General Permit and the Project-specific SWPCP. UI's SWPCP inspector will verify final stabilization.

Regrading

Re-grading work, as needed, will consist of back-blading (or equivalent) to return areas affected by construction to approximate preconstruction contours, unless otherwise noted in UI's agreements with CT DOT or other landowners. Some areas (e.g., slopes, areas of rock excavation) affected by construction activities cannot be fully restored to their original contours. Such areas will be stabilized as warranted by site-specific conditions and per Project plans.

Wetland and Watercourse Restoration

All temporary work pads and access roads will be removed, including from tidal and inland wetlands. Temporary timber mat bridges used to provide construction access across small streams and drainage swales will similarly be removed.

With the exception of permanent road installation, regrading is not expected to be required in wetlands; however, minor grading will be performed if necessary to restore drainage patterns. Such grading will be

performed to retain in position the top layer of wetland topsoil and roots. Some gravel access roads established during Project construction in wetlands may remain in place permanently to facilitate future UI operations and maintenance activities. These permanent access roads, all north of the MNR tracks, would be pursuant to regulatory requirements (refer to the segment D&M Plans, Volume 2 maps).

Wetland areas affected by construction will be either allowed to revegetate naturally, reseeded with an appropriate temporary annual seed mix to promote stabilization, or reseeded with an approved wetland seed mix. No fertilizer, lime, or hay mulch will be used in wetlands. Straw mulch may be used in wetlands, if appropriate, consistent with CT DEEP and U.S. Army Corps of Engineers regulatory requirements.

Additional restoration methods for specific wetlands will be identified, as necessary, in the segment-specific D&M Plans. All restoration will be consistent with methods approved by CT DEEP.

Around wetlands, temporary erosion and sedimentation controls will be left in place and maintained until final stabilization is achieved.

In areas within the conductor clearance zones, wetland vegetation will be managed to promote low-growing wetland species consistent with the operation of the overhead 115-kV lines.

Upland Area Restoration

Materials used to construct most work pads and all temporary access roads in upland areas also will be removed, unless otherwise specified pursuant to UI's agreement with CT DOT or other landowners. Such materials will either be properly disposed of or otherwise re-purposed.

Some gravel access roads established during Project construction will remain in place permanently to facilitate future UI operations and maintenance activities. All such permanent access roads are located north of the MNR tracks (refer to the segment D&M Plans, Volume 2 maps). As part of the restoration process, these permanent access roads will be further stabilized or upgraded. Similarly, portions of gravel work pads in upland areas along the rebuilt 115-kV line route also may remain in place.

Supplemental erosion and sedimentation controls (e.g., erosion control blankets, mulch) will be used as appropriate based on site-specific conditions and the time-of-year in which final grading is performed. In some areas (e.g., slopes), permanent erosion and sedimentation controls, such as water diversion bars or crushed stone, may be installed as appropriate.

2.2 Reseeding to Promote Pollinator Habitat

In upland areas affected by Project construction, where appropriate, as part of the restoration and revegetation process, UI will use a seed mix (or mixes) designed to provide low-growing species that serve as habitat or food sources for pollinators (birds, bees, moths, butterflies, beetles, bats, etc.). In using pollinator seed mix(es), UI's objective is not only to revegetate areas disturbed by Project construction, but also to benefit the ecosystem in the Project area by creating pollinator habitat in areas where little to none exists currently.

The seed mix will include species that are compatible with the operation of the overhead 115-kV transmission lines, including the maintenance of required clearances between energized conductors and vegetation and all standards regarding minimum work distances for UI personnel working in proximity to the conductors.¹² Such species may include low-growing flowering species such as milkweed (which is the host plant for the Monarch butterfly), as well as grasses (e.g., little bluestem; which provide nesting habitat for pollinators).

Pollinator seed mixes will be used for revegetation in locations where the pollinator seeds are mostly likely to grow (based on general soil conditions) and where pollinator plants will be consistent with CT DOT / MNR and other landowner agreements. Pursuant to CT DOT / MNR's request, the pollinator seed mix will not be used in the vicinity of the catenary foundations along the railroad corridor.

Potential types and sources for pollinator seed mixes will be identified by UI's contractor and approved by UI. Such seed mixes will include pollinator plants common to Connecticut. The following web link provides a summary of pollinator plant seed mixes that may be appropriate for use in restoring certain areas affected by Project construction:

<https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/pollinators/Conference-2019/Sources-for-Pollinator-Plants.pdf>

The pollinator seed mix(es) will be applied as part of the restoration phase of the Project. The effectiveness of revegetation will be monitored by UI's on-site SWPCP inspector for up to one full growing season after stabilization is achieved (refer to Attachment J of this Volume for further information about the inspection program). If the pollinator seed mix does not germinate successfully or provide a sufficient ground cover

¹² Pursuant to Connecticut General Statutes Section 16-50hh.

to promote site stabilization, UI may reseed the affected areas either with additional pollinator species or with a different mix known to grow successfully on other UI transmission line easements.

After the sites disturbed by Project construction are deemed stable, UI does not propose additional pollinator plant seeding. The objective of the use of the pollinator seed mix is to promote species that will establish self-sustaining populations.

2.3 Verification of Final Restoration

Restoration typically will be deemed successful, based on the effectiveness of stabilization measures (such as vegetative cover) as defined in accordance with the SWPCP and CT DEEP General Permit. Based on the results of post-construction inspections of site stabilization, UI will determine the appropriate timeframe for removing temporary erosion controls. Refer to Appendix B (Erosion and Sediment Control Plan) and Appendix J (On-Site Environmental Inspection and Monitoring Plan) for further information.

3. LONG-TERM VEGETATION MANAGEMENT PROGRAM

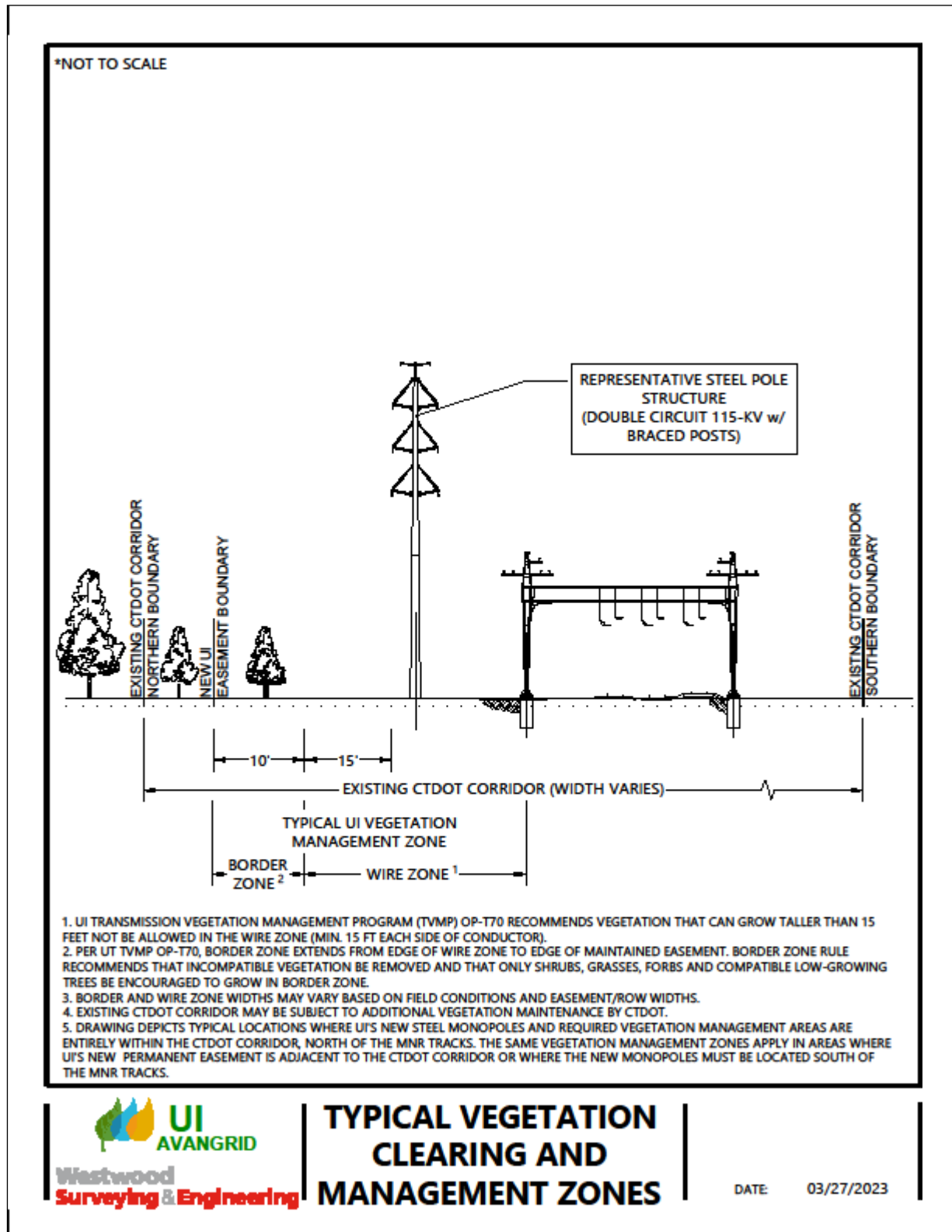
On its permanent easements and within CT DOT property near the rebuilt 115-kV lines, UI will promote the re-growth of desirable species by implementing vegetation management practices to control tall-growing trees, and where practicable, undesirable invasive species, thereby enabling native plants to dominate the areas near the transmission line route that are in compliance with clearance requirements for 115-kV circuits. These practices will be applied in uplands that are suitable for such vegetation management (e.g., areas that are not graveled, paved, or otherwise developed). In addition, on CT DOT property, vegetation management will be in accordance with any additional CT DOT requirements regarding the maintenance of rail safety.

UI will manage vegetation in the vicinity of the rebuilt 115-kV transmission lines (within 25 feet from the conductors at rest) in accordance with its “Transmission and Vegetation Management Operating Procedure”, as well as industry standards and practices, including:

- OSHA 29 Code of Federal Regulations 1910.269 Electric Power Generation, Transmission and Distribution
- ANSI Z133.3, “Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush Requirements”
- ANSI A300 Part 1, “Tree, Shrub, and other Woody Plant Maintenance – Standard Practices”
- ANSI A300 Part 7, “Integrated Vegetation Management, Electric Utility Rights-of-Way”
- NESC Rule 218

Figure 3-1 provides a general illustration of UI’s approach for low-growth vegetation management near the 115-kV lines. The types of acceptable low growth vegetation species that UI will allow in the vicinity of the rebuilt 115-kV transmission lines are listed in “Trees with short mature heights and selected shrubs suitable for planting near utilities”, published by the State of Connecticut Vegetation Management Task Force: refer to: https://portal.ct.gov/-/media/DEEP/forestry/VMTF/Final_Report/PartFivecpdf.pdf

Figure 3-1: Representative Illustration of Vegetation Management near 115-kV Lines



ATTACHMENT E

SPILL PREVENTION AND CONTROL PLAN
(Per CSC Docket 508, Condition 2(a))

April 2023

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ATTACHMENTS

E.1: Spill Report Form

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1. INTRODUCTION

1.1 Purpose of the Plan

The purpose of this Spill Prevention and Control Plan (SPCP) is to:

- Describe measures to minimize the potential for a spill of petroleum products or a hazardous or toxic substance; and
- Should a spill occur, to contain and control the release to minimize the effects.

During the construction of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project), The United Illuminating Company (“UI” or “the Company”) will require all construction contractors to adhere to the procedures presented in this SPCP, as well as to the Release Reporting Regulations as contained in the Regulations of Connecticut State Agencies §§22a-450-1 to 22a-450-6. The SPCP applies to all elements of the construction of the Project, including work sites and access roads, off-site access roads, and contractor yards/staging areas that are used to support the Project construction.

1.2 Materials Subject to this SPCP

The principal materials used during Project construction are petroleum products, such as fuels, lubricants, fluids, and related materials used for the operation of construction vehicles and equipment. Small amounts of other substances classified as hazardous materials or toxic also may be used during construction. UI will work with their contractor to minimize when possible the use of hazardous materials.

Each construction contractor will compile and maintain a list of the petroleum products and hazardous / toxic substances to be used in the performance of Project work, along with a Safety Data Sheet (SDS) for each such material. During construction, the SDSs will be available either on-site (e.g., at the construction contractor’s Project office trailer at the Project construction staging area/yard), in the contractor’s construction field office, or electronically. The list of products and associated SDSs will be made available to UI upon request. Due to the different types of petroleum products and other regulated materials typically used during construction, different handling and storage procedures may apply. Construction contractors are required to adhere to all manufacturers’ directions and warnings for products used during the Project.

1.3 Designation of Connecticut-Licensed Spill Response and Cleanup Contractor

Before the start of construction, each primary Project construction contractor must identify a licensed spill response contractor who can respond promptly, if required, during construction as detailed in Section 3.4 of this SPCP.

2. SPILL PREVENTION AND MANAGEMENT PRACTICES

Key measures to avoid or minimize the potential for spills during construction include training construction personnel in spill prevention techniques, properly maintaining construction equipment, keeping appropriate spill kits on equipment and/or at work sites, and effectively managing the storage and use of petroleum and hazardous/toxic substances. If a spill does occur, construction personnel will be trained in the techniques to promptly and properly contain, clean up, and report the spill or – in the event of a major release – to promptly contact the designated spill response and cleanup firm.

Spill Prevention Protocols. Project contractors will be required to implement procedures aimed at minimizing the potential for spills and for promptly responding to and reporting spills, should they occur.

Examples of such procedures are:

- a. Prior to construction, implement employee awareness / training regarding the handling of fuels and, as applicable, hazardous or toxic materials.
- b. Inspect, operate, and maintain equipment to minimize the potential for the accidental discharge or release of fuel, oil, or lubricants to the environment, including routine inspections of hydraulic lines, valves, and other hoses and promptly repairing any equipment leaks or faulty equipment.
- c. Inspect routinely and maintain in good condition all containers, valves, pipes, hoses, and other components of storage areas for fuels and lubricants.
- d. Perform refueling in uplands to minimize the potential for a release to the environment and sensitive resources. (If equipment refueling must unavoidably be performed on a work pad in a wetland – such as for foundation drilling equipment that cannot easily be moved to an upland, additional spill prevention precautions must be implemented.)
- e. Provide appropriately sized and provisioned spill containment kits to construction crews and replenish such supplies.
- f. Maintain stockpiles of spill cleanup materials at easily accessible locations.
- g. Conform to regulatory requirements and Project specifications regarding equipment operation, refueling, and the use of petroleum products near water resources.
- h. In the event of a spill, promptly respond and follow required reporting procedures.

Project contractors will also be responsible for providing portable toilets at construction sites. The construction contractor will be responsible for properly locating portable toilets in upland areas, away from any water resources, sensitive environmental resources, drainage systems, or other restricted areas, and for

arranging for routine cleaning and maintenance of these facilities to avoid or minimize the potential for a biohazard release to the environment.

Fuel and Material Storage. Project construction contractors will be required to implement the following procedures when storing fuels and hazardous / toxic substances at Project sites. These procedures are intended to limit the potential for spills and to minimize the impact of releases that may accidentally occur:

- a. No bulk quantities of hazardous substances, toxic materials, or petroleum products will be stored, unless approved by UI, within 50 feet of any waterbody, wetland, water supply well, spring, drainage system, or other water resource. Such materials typically will be stored in upland areas.
- b. At Project staging and support sites, contractors will make efforts to store only enough products required to complete the job;
- c. Materials will be stored in a neat, orderly manner, in appropriate containers, and, where appropriate, under a roof or enclosure;
- d. Chemical and/or petroleum products will be kept in original containers with the original manufacturer's label. Fuels that need to be kept in portable containers will be stored in tightly sealed containers designed to hold such fuels and will be clearly labeled. Preferably, the containers will be stored in a covered truck or trailer that provides secondary containment for the products;
- e. Substances will not be mixed unless approved by the manufacturer;
- f. Whenever possible, all of a product will be used before disposing of the container;
- g. Manufacturer's recommendations for proper use and disposal of a product will be followed; and
- h. If surplus product must be disposed, the manufacturer's or state-recommended methods for proper disposal will be followed.

Any containment area for the storage of petroleum products will have a minimum capacity of 110% (1.1 times) the combined maximum volume of all containers within the containment area. The containment must have sufficient freeboard to accommodate the maximum precipitation from a 25-year, 24-hour storm event.

Storage areas will not have drains unless such drains lead to a containment area or vessel of sufficient size to contain and recover a full release of all stored products. A berm, or other suitable containment device, will be installed around any storage shed housing materials that are potentially hazardous to the environment. Bulk storage tanks having a capacity of more than 55 gallons will be provided with appropriately sized secondary containment.

After each rainfall, the contractor will inspect all containment areas for excess water:

- If no sheen is visible, the contractor can pump the collected water to the ground in a manner that does not cause scouring.
- If a sheen is present, liquids, sludge or solid with any sheen must be cleaned up, stored in an appropriate container and disposed of appropriately.

Equipment Refueling and Parking. During construction of the Project, UI anticipates that contractor vehicles and most construction equipment (e.g., dump trucks, water trucks) will be refueled at local gas stations. However, the contractor may store fuel supplies at the Project construction yard(s) and some equipment may be refueled there. In addition, certain large, less mobile equipment (such as drill rigs and cranes) will be refueled at Project work sites.

Contractors will implement the following measures when refueling equipment and when parking equipment on Project sites:

- a. Refueling equipment will be manned throughout the refueling operation.
- b. Spill kits will be on hand during all refueling operations.
- c. Equipment refueling will not be performed within 50 feet of any waterbody or wetland unless temporary containment is provided.
- d. During refueling, precautions will be taken to avoid or minimize the potential for an accidental spill. Appropriate spill kits / absorbent materials will be available at all refueling sites.
- e. Except for equipment that cannot be practically moved (e.g., cranes, drill rigs), construction equipment and vehicles will not typically be serviced or parked overnight on access roads or work pads within wetlands. If equipment must remain in a wetland overnight, secondary containment will be provided.

3. SPILL EQUIPMENT, RESPONSE, CONTROL, AND CLEANUP

3.1 Spill Containment and Cleanup Equipment

Contractors are required to provide appropriate spill containment and cleanup equipment for use as needed during Project construction. Table 3-1 lists the typical spill containment and cleanup materials to be kept on-site, as well as at contractor yards, during construction. In response to a spill, the contractor will use equipment and control/cleanup measures appropriate to contain and clean up the spilled material, taking into consideration the environmental characteristics of the area affected by the release.

Table 3-1: Typical Spill Containment and Cleanup Equipment and Supplies

For General Construction in Upland Areas:

- Sorbents (e.g., pillows, socks, and wipe sheets) for containment and pick-up of spilled liquids;
- Pre-packaged, self-contained spill kits containing a variety of sorbents for small to large release (e.g., kits that can be stored on equipment with the capacity of absorbing up to 5 gallons);
- Structures such as gutters, culverts, and dikes for immediate spill containment;
- Shovels, backhoes, etc., for excavating contaminated materials;
- Sumps and collection system; and
- Drums, barrels, and temporary storage bags to clean up and transport contaminated materials.

For General Construction in or Near Water Resource Areas:

All of the above (for upland sites) and the following:

- Oil containment booms and the related equipment needed for rapid deployment; and
- Equipment to remove petroleum-based products from water.

For Storage of Products and Equipment Refueling:

- Sorbent pads and/or mats, containment equipment, or equivalent protective measures (e.g., kiddie pools or basins to be placed on the ground beneath equipment before refueling or maintenance activities). (The quantity and capabilities of the mats will be sufficient to capture the largest foreseeable spill given workspace characteristics, crankcase size, and other fuel vessel capacities.)
- Dedicated sorbent / spill response kits or functional equivalent to be kept on major pieces of construction equipment (e.g., pumps, cranes, drill rigs, hydraulic lifts) that must be routinely refueled or maintained on Project sites because movement of such equipment to designated refueling or maintenance yards is impractical or inefficient.

3.2 Spill Response and Control

If a spill occurs, the immediate priority is to stop and contain the release. Project construction contractor(s) will take immediate action to minimize the impact of the spill (containment) and to implement appropriate cleanup action. Cleanup procedures will begin immediately after a release is contained. In the event of a spill, the contractor will typically take the following actions:

- Stop the spill at the source.
- If the spill impacts a water resource, contain the spill through the use of appropriately deployed containment materials (e.g., sorbent booms, absorbent pads, constructing dikes) and then collect the sorbent materials and skim off water surfaces with booms. Excavate any contaminated soil.
- If the spill occurs in an upland, excavate the contaminated soil.
- Properly store, handle, and dispose of waste materials, using the contractor's designated spill response firm as appropriate.
- Restore the areas affected by the spill (if necessary, post-cleanup samples will be taken and provided to UI to verify that the spilled material has been successfully removed).

3.3 Spill Notifications

3.3.1 Notifications to Federal, State, and Local Agencies

In Connecticut, a spill, as defined in Connecticut General Statutes (CGS) Section 22a-450, means the discharge, spillage, uncontrolled loss, seepage, or filtrations of oil or petroleum or chemical liquids or solid, liquid or gaseous products or hazardous waste that poses a potential threat to human health or the environment. **All such spills are reportable.**

Project construction contractors are responsible for reporting spills of any amount to CT DEEP. Spills must be reported immediately (24/7) to:

**CT DEEP Emergency Response and Spill Prevention Division
860-424-3338 or toll free at 866-337-7745 (866-DEP-SPIL)**

If the above numbers are unavailable for any reason, call 860-424-3333

When notifying CT DEEP, obtain the CT DEEP representative's badge number and record the Spill Identification Number assigned to the incident by CT DEEP. Provide the following information:

- Location of spill;
- Quantity and type of substance, material, or waste released;
- Date and cause of the incident;

- Name and address of the owner;
- Name and address of the person making the report, and their relationship to the owner.

In addition to the notification to CT DEEP, some spills may be reportable to the Federal government. An oil spill must be reported to the Federal government if the spill is to a navigable waterbody (in the Project area, only downstream portions of the Wepawaug and West River are considered navigable); water quality standards could be violated; the spill causes a sheen or discoloration; or the spill causes a sludge or emulsion. Spills of hazardous chemicals must also be reported to the Federal government, depending on the quantity of the material spilled and if the release could threaten human health.

The Federal reportable spill quantities for hazardous materials are listed in 40 CFR, Part 302.4 (refer to the table entitled "List of Hazardous Substances and Reportable Quantities")¹. Incidents that are required to be reported under the Federal Emergency Planning and Community Right-to-Know Act or other prevailing/applicable Federal law are reportable to:

- The State Emergency Response Commission (CT DEEP at 860-424-3338);
- The National Response Center at 800-424-8802; and,
- The local community emergency coordinator.

A report by the Project construction contractor to the local fire department is also recommended (911 throughout Connecticut).

3.3.2 Notification and Reporting to UI

In addition to notifying the CT DEEP, the construction contractor or other Project personnel who first observe a spill will, first, provide immediate verbal notification to UI². Within 24 hours of a spill, the construction contractor will prepare and submit to UI a *Spill Report Form* (refer to Attachment E.1). This form must include the following information regarding the spill, along with any relevant supporting information (such as maps) and representative photographs:

- Date, time, and location of the spill;
- The quantity and type of the substance, material, or waste spilled;
- Circumstances that caused the spill;
- List of water resources affected or potentially affected by the release (if applicable);

¹ Available online at: <http://www.gpo.gov/fdsys/pkg/CFR-2010-title40-vol27/pdf/CFR-2010-title40-vol27-sec302-4.pdf>

- Statement verifying whether a sheen is present;
- Size of the affected area;
- Estimate of the depth that the material has reached in water or in soil;
- Determination of whether the release has or will migrate off Project work areas;
- Determination of whether the release is under control;
- Status of the cleanup effort and a description of the methods used (or to be used) to clean up the release;
- Name(s), company affiliation(s), and address(es) of the personnel who identified the release;
- List of any soil and water samples taken;
- Names of contacts made to federal, state, and local agencies, as applicable, and time of report (include, at minimum, CT DEEP representative's badge number and the CT DEEP-assigned spill identification number); and
- Name, address, and company affiliation of the person who completed the *Spill Report Form*.

3.4 Spill Cleanup

The Project construction contractors, or the contractor's licensed spill response firm, will clean up all spills promptly using appropriate containment and cleanup measures. Small spills may be contained and cleaned up by Project construction crews using the on-site spill containment and cleanup materials. In such cases, all contaminated materials will be properly handled, contained, and transported in secure containment to a staging area for pick-up and ultimate disposal by the construction contractor's designated and pre-approved spill response firm.

In no case will spilled or contaminated materials (including waste oils) be buried or otherwise disposed of on Project sites.

If the Project construction contractor determines that a release cannot be adequately excavated and disposed of by its construction crews alone, the contractor will contact the designated, licensed spill response firm. Any such cleanup must be performed by a licensed spill response contractor, as required by CGS Section 22a-454. The Project construction contractor will work with the spill response contractor(s) and will verify that all excavated waste is handled correctly and transported to a licensed disposal facility.

3.5 Penalties for Non-Reporting

Any person who fails to report incidents as required by CGS Section 22a-450 may be fined by CT DEEP not more than \$1,000 and the employer of such person not more than \$5,000, except that any person who fails to make a report relating to the discharge, spillage, uncontrolled loss, seepage or filtration of gasoline shall be fined not more than \$5,000 and the employer of such person may be fined not more than \$10,000. Failure to report incidents, as required by the Project, can result in removal from the Project or termination.

ATTACHMENT E.1

Spill Report Form

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SPILL REPORT FORM UI MILVON-WEST RIVER REBUILD PROJECT

Date: _____ Time of Spill Occurrence: _____

Name/Address of the Owner: _____

Name/Title/Address of the Reporter: _____

Relationship to the Owner: _____

Regulatory Agencies Notified / Time & Date of Notification (use reverse side if needed; include CT DEEP representative badge number and CT DEEP-assigned spill identification number): _____

Location of Spill: Line List No. _____ Municipality _____ (New Haven County)

Nearest Public Road: _____ Nearest Transmission /MNR Catenary Structure No.: _____

Nearest Street Address or landmark: _____

Attachments (circle all that apply): map photographs other _____

Type of material spilled: _____

Quantity spilled (circle one): 10 gals. or less 10 - 1,000 gals. Over 1,000 gals.

Specify approximate amount spilled: _____

Circumstances causing spill: _____

Size of area affected by spill: _____ Estimate depth of spilled material on water or soil: _____

If spill is into water, is a sheen present? (circle one): YES NO

Does spill extend off Project work areas? (circle one): YES NO

Is the spill under control? (circle one): YES NO*

*If NO, is there a potential for the spill to leave the

CT DOT Property? UI ROW? Staging area? (circle one): YES NO

Has spill cleanup begun? (circle one): YES** NO

**If YES, what methods are being or will be used?: _____

Have soil and/or water samples been taken? (circle one) YES*** NO

***If YES, list sample types: _____

Print Name/Title of Reporter

Print Name/Title of Designated Project Representative

Signature of Reporter/Date

Signature of Designated Project Representative/Date

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ATTACHMENT F

WETLAND INVASIVE SPECIES CONTROL PLAN

(Per CSC Docket 508 Condition 2(j))

April 2023

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1. INTRODUCTION

This Wetland Invasive Species Control Plan (WISCP, Plan) describes the procedures that The United Illuminating Company (UI or the Company) will apply to avoid or minimize the potential for the spread of invasive plant species in wetlands affected by the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) construction activities. The Plan describes the methods that UI will require its Project construction contractors to follow when crossing or working in wetlands in the Project area, which extends for approximately 9.5 miles along the Connecticut Department of Transportation (CT DOT) / MetroNorth Railroad (MNR) corridor¹⁵ in the City of Milford, Town of Orange, City of West Haven, and City of New Haven, all in New Haven County.

The Plan applies to all Project construction activities, including both the installation of the new 115-kV double-circuit transmission line monopoles and the removal of UI's existing 115-kV infrastructure from the north and south railroad catenary support columns. However, because the Project extends through developed urban/suburban areas along the long-established CT DOT corridor, most of the wetlands along the Project route are already affected, to some degree, by wetland invasive species, as illustrated by Figure 1-1.



**Figure 1-1:
Representative View of
Invasive Wetland
Species (Phragmites)
along CT DOT Corridor in
West Haven**

¹⁵ CT DOT owns the corridor within which the MNR tracks are located.

As a result, the Plan focuses on minimizing the spread of invasive species in Project wetlands already characterized by such species and – in particular – implementing measures to avoid the introduction of invasive species into wetlands in which invasive species are not currently present.

As a result, whereas UI will require its construction contractors to comply with this Plan, for wetlands that extend beyond the boundaries of UI's Project work areas, attempts to control invasive species that are already well-established may prove unproductive and is not the intent of this Plan.

The wetland invasive species targeted in this Plan are derived from data maintained by the Connecticut Invasive Plant Working Group (CIPWG). CIPWG maintains a list of invasive and potentially invasive plant species (upland and wetland) as determined by the Connecticut Invasive Species Council in accordance with Connecticut General Statutes §22a-381a through §22a-381d.¹⁶

¹⁶ https://cipwg.uconn.edu/invasive_plant_list/

2. EXISTING WETLAND CHARACTERISTICS

As part of the Project planning process, UI conducted field delineations of wetlands in the Project area – that is, along the CT DOT corridor and within the areas where UI will acquire permanent or temporary easements. UI’s field investigations, which were performed between 2018 and 2022, delineated a total of 41 wetlands in the Project area. Detailed information regarding each wetland is included in UI’s Application (Volume 1A, Appendix B) to the CSC in Docket # 508.

UI has designed and planned the construction of the Project to avoid impacts to wetlands to the extent practical. As a result, Project construction activities (tree clearing, temporary or permanent access roads or work pads, new monopole foundations) will be required in only 25 of the 41 wetlands. Of these 25 wetlands, four are tidally-influenced and 21 are freshwater wetlands.

During the wetland delineations performed for the Project, 10 of the wetland invasive species listed by CIPWG were found in Project wetlands. Table 2-1 lists these invasive species, along with their wetland indicator status.

Table 2-1: Common Invasive Species Found in Project Wetlands

Common Name	Scientific Name	Wetland Indicator Status
Purple loosestrife*	<i>Lythrum salicaria L.</i>	FACW
Common reed*	<i>Phragmites australis</i>	FACW
Multiflora rose*	<i>Rosa multiflora</i>	FACU
Asiatic bittersweet	<i>Celastrus orbiculatus</i>	UPL
Japanese barberry*	<i>Berberis thunbergii</i>	FACU
Tatarian honeysuckle*	<i>Lonicera tatarica</i>	FACU
Reed canary grass*	<i>Phalaris arundinacea L.</i>	FACW
Japanese knotweed	<i>Polygonum cuspidatum</i>	FACU
Japanese honeysuckle*	<i>Lonicera japonica</i>	FACU
Common wormwood	<i>Artemisia vulgaris L.</i>	UPL

NOTES:

FACW: Usually occur in wetlands (probability: 67-99%), but occasionally found in non-wetlands FAC: Equally likely to be found in wetlands or non-wetlands.

FACU: Usually occur in non-wetlands (probability: 67-99%), but occasionally found in wetlands (probability: 1-33%)

UPL: Occur in wetlands in another region, but almost always occur (probability: >99%) under natural conditions, in non-wetlands in this region. If a species does not occur in wetlands in any region, it is not listed.

*Per the CIPWG, indicates that some commercially-available cultivars of the species may not be invasive. For the purposes of this Plan, all species in Table 2-1 are considered invasive.

Table 2-2 lists the wetlands in which Project construction activities will occur and identifies whether or not each presently contains invasive wetland species. As this table shows, of the 25 wetlands in which construction activities will occur, 18 are characterized by invasive species.

Table 2-2: Wetlands Affected by Construction Activities and Presence of Wetland Invasive Species

Shading = Tidal Wetland

Wetland No.*	Existing Presence of Invasive Wetland Species (Y/N)	Type of Planned Construction Activity in Wetlands		
		Access Roads	Work Pads/Structure Foundations	Wetland Vegetation Clearing
Milford				
Wetland M-W2	N	-	X	-
Wetland M-W4	Y	-	X	X
Wetland M-W6	Y	-	X	X
Tidal Wetland M-TW1	N	-	X	X
Tidal Wetland M-TW2	Y	-	-	X
Tidal Wetland M-TW3	N	X	X	X
Wetland M-W8	Y	X	X	X
Wetland M-W9	Y	X	X**	X
Wetland M-W10	Y	-	X	X
Wetland M-W12	N	-	-	X
Wetland M-W13	Y	X	X**	X
Wetland M-W14	Y	-	X	X
Wetland M-W16	N	X	X	-
Wetland M-W17	Y	-	X	X
Orange				
Wetland O-W1	Y	X	-	X
West Haven				
Wetland WH-W1	N	X	X**	X
Wetland WH-W2	Y	X	X**	X
Wetland WH-W3	N	X	X**	X
Wetland WH-W4	Y	-	X	-
Wetland WH-W5	Y	-	X	-
Wetland WH-W10	Y	-	-	X
Wetland WH-W11	Y	X	-	-
Wetland WH-W12	Y	X	X	X
Wetland WH-W13	Y	X	X**	X
Tidal Wetland WH-TW1	Y	-	X	-

* Initial letter in wetland designation refers to municipality in which the wetland is located; M=Milford, O=Orange; WH=West Haven. The Project will not affect any wetlands in the City of New Haven.

** Indicates work pad and monopole to be located in wetland.

3. AVOIDANCE AND MINIMIZATION MEASURES

UI will require its Project construction contractors to implement measures to control the spread of invasive wetland plants, particularly during the installation of temporary construction mats along construction access roads and at work pads. The main objectives will be to perform construction activities to minimize the spread of invasive plant species within wetlands or from wetland-to-wetland along the Project route, and to restore wetlands affected by the Project promptly to limit the potential for invasive species to colonize disturbed soils.

To achieve these goals, both pre-construction phase planning and construction-phase measures will be implemented, including construction best management practices (BMPs) for work in wetlands containing invasive plants. These measures are discussed in the following subsections.

3.1 Pre-Construction Measures

The invasive species control measures included in this Plan will be incorporated into Project construction contracts. In contractor kick-off meetings prior to work activities, UI will emphasize these requirements. The construction contractors will be responsible for implementing the invasive species BMPs in all work performed in and around wetland areas.

3.2 General Construction Measures

During construction, UI will reinforce to Project construction personnel the importance of adherence to this Plan. Contractors will be given copies of this Plan and the segment-specific Development and Management (D&M) Plans, each of which includes aerial-based maps that identify wetlands. In addition, UI's environmental inspector/monitor will perform site inspections during construction to verify the contractors' compliance with the invasive species control BMPs.

Wetland invasive species control efforts will be important throughout Project construction. However, particular focus will be on construction activities that involve work directly in wetlands and thus will have the greatest potential for construction equipment or materials to come into contact with invasive species. These activities include:

- Clearing vegetation;
- Installing and removing construction (timber) mats used for temporary access roads and work pads;

- Moving equipment and vehicles through areas containing invasive species, such as for the installation, maintenance, and final removal of temporary soil erosion and sedimentation controls;
- Installing (drilling) new monopole structures in certain wetlands (refer to Table 2-2); and
- Restoring wetland areas affected by construction.

Other construction activities (e.g., foundation work in uplands, structure installation, conductor and wire stringing, removal of existing UI bonnets and other infrastructure from the railroad catenary) typically will not require work outside of pre-established access roads and work pads. As a result, the equipment and vehicles involved in these activities are not expected to come into contact with wetland soils or plant materials.

3.3 BMPs for Wetland Invasive Species Control

To avoid or minimize the potential for spreading wetland invasive plant species during Project construction, UI will require construction contractors to implement the procedures described below, as appropriate to the construction activity being performed:

- a. All construction equipment, vehicles, and materials (including timber – or equivalent - construction mats) must be clean and free of excess soil, debris, and vegetation before being mobilized to Project contractor/laydown yards and to work sites along the transmission line route.
- b. Timber (or equivalent) construction mats will be installed at locations where Project work in wetlands is required. Prior to initial deployment, as well as before removing mats for relocation to other work sites, all timber (or equivalent) construction mats must be cleaned and demonstrably free of debris/invasive plant material.
- c. To minimize the potential for spreading invasive plant species from wetland-to-wetland along the Project route, any equipment working in or traversing a wetland containing invasive plant species will be cleaned, as necessary, prior to relocating to another work site. Equipment that traverses exclusively on timber matting will be inspected prior to being relocated and may be excluded from this requirement, at UI's discretion. Cleaning of vehicles and other equipment (including the equipment tracks and tires) will involve removal of visible dirt, debris and vegetation through the use of brooms, shovels, and, if needed, compressed air. Equipment cleaning, if required, will be performed only in uplands; cleaning in or near waterways or wetlands is prohibited.
- d. Timber (or equivalent) construction mats deployed in wetlands to provide access or support at work pads will be periodically swept (with the removed material placed in upland areas).
- e. After construction mats are installed in wetlands (i.e., for access roads, work pads), all Project construction vehicles and equipment will travel only on the designated access roads/work pads, thereby avoiding any direct contact with wetland plant materials.

- f. Mats used in wetlands containing invasive species will be cleaned prior to relocation to other work areas or wetlands. Mat cleaning may involve dropping mats one on top of another to shake loose any sediment and debris and then sweeping or brushing the mats to remove loose soil and any plant material. Compressed air also may be used. Based on field conditions at the time of construction, other methods for mat cleaning may be implemented by the Project contractors, after approved by UI. Mat cleaning will be performed in upland areas.
- g. Soils excavated during structure foundation work in wetlands will be stockpiled separately on each work pad (to the extent that there is sufficient workspace) or in an adjacent upland and contained within staked straw bales, silt fence, or other approved soil erosion and sedimentation control device(s).
- h. As part of wetland restoration, all construction mats will be removed and affected areas will be promptly restored in accordance with the Project Stormwater Pollution Control Plan (SWPCP), any Project-specific permit requirements issued by the Connecticut Department of Energy and Environmental Protection and U.S. Army Corps of Engineers, and procedures specified in the segment-specific D&M Plans.

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ATTACHMENT G

POST-CONSTRUCTION ELECTRIC & MAGNETIC FIELD MONITORING PLAN

(Per CSC Docket 508, Condition 2(o))

April 2023

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1. INTRODUCTION AND PURPOSE

Pursuant to Condition 2(o) of the Connecticut Siting Council’s (CSC, Council) August 18, 2022 Decision and Order in Docket No. 508, The United Illuminating Company (UI, the Company) has developed and will implement this post-construction electric and magnetic field (EMF) Monitoring Plan (Plan) for the Milvon-West River Railroad Transmission Line 115-kV Rebuild Project (the Project).

The Plan was prepared by Exponent, a company with specialized expertise in such evaluations. Exponent conducted pre-construction EMF measurements of UI’s 115-kilovolt (kV) transmission lines located along the Connecticut Department of Transportation (CT DOT) Metro-North Railroad (MNR) corridor between Milvon and West River substations, calculated and modeled anticipated EMF levels associated with the rebuilt 115-kV lines (either within the CT DOT corridor or adjacent to the CT DOT corridor on new permanent easement¹⁷ acquired by UI for the Project), and will perform the field measurements and calculations of the in-service rebuilt 115-kV lines as described in this Plan.

2. SUMMARY OF PREVIOUS EMF MEASUREMENTS AND MODELING

Detailed information regarding the pre-Project EMF measurements and calculations of post-Project EMF levels are included in Appendix E of UI’s Application to the CSC for a Certificate of Environmental Compatibility and Public Need (Docket 508), hereafter the Exponent EMF Modeling Report. In summary, to assess EMF from existing sources under pre-Project conditions, Exponent took measurements of the existing UI transmission lines and other sources of EMF along the CT DOT railroad corridor. The purpose of these measurements was to characterize existing EMF levels along the existing transmission lines and adjacent areas.

Field levels were measured at a height of approximately 3.28 feet (ft) (1 meter [m]) above ground using instruments meeting IEEE Standard 1308-1994¹⁸ for obtaining accurate field measurements at power line frequencies and calibrated by EMDEX, LLC, using methods like those described in IEEE Standard 644-

¹⁷ For the purposes of this Plan, the areas where UI obtained new permanent easement for the rebuilt lines are referred to as either “the permanent easement” or “right-of-way” (ROW). In most locations, UI’s rebuilt 115-kV lines are situated within the CT DOT railroad property; UI and CT DOT have an agreement regarding this colocation. In such areas, the locations of the UI transmission lines are referred to as “within the CT DOT corridor”.

¹⁸ Institute of Electrical and Electronics Engineers (IEEE). IEEE Recommended Practice for Instrumentation: Specifications for Magnetic Flux Density and Electric Field Strength Meters - 10 Hz to 3 kHz. (IEEE Std. 1308-1994, Reaffirmed 2010). New York: IEEE, 1994.

2019.¹⁹ The measurements were taken and reported as the root mean square value of the field in accordance with IEEE Standard C95.3.1-2021²⁰ and IEEE Standard 644-2019. EMF measurements were obtained within the CT DOT railroad corridor (as close to the edges of the railroad tracks as could be safely measured) and at or near the boundaries of adjacent properties.

Measured magnetic-field levels within the CT DOT corridor averaged between 20 and 23 mG. Measured electric-field levels within the CT DOT railroad corridor varied between approximately 0.2 and 0.3 kV/m with a maximum measured level of 0.5 kV/m. EMF measurements in other areas within approximately 300 ft (91 m) of the CT DOT corridor were generally lower, consistent with the rapid decrease in EMF levels with distance. The average measured magnetic field in these areas (outside the CT DOT corridor) varied from approximately 0.2 mG to 8.7 mG, and all electric-field levels were generally less than 0.1 kV/m.

Exponent also modeled the EMF levels for the existing and proposed configurations of the 115-kV lines, assuming peak and peak daily average loading in 2021 and projected peak and peak daily average load anticipated after the Project is scheduled to be completed in 2028.

3. POST-CONSTRUCTION EMF MONITORING LOCATIONS

Two types of measurements are proposed in this plan “verification” and “profile” measurements. The verification measurements are proposed to demonstrate the efficacy of the modeling approach used in permitting. The profile measurements are proposed to document the rate of decrease in magnetic-field level moving away from the CT DOT corridor.

As shown in Figure 1 of the Exponent EMF Modeling Report (and associated discussion) the physical configurations of the transmission lines in all three models evaluated in the Application (XS-A, XS-B and XS-C) were the same. The difference among the three modeling cross sections was variable spacing between the proposed monopole, the existing catenary structures and the distance to the edge of the CT DOT corridor and/or new UI easement boundary as well as different loading levels (Exponent EMF Modeling Report, Attachment A). Since the configuration of the transmission lines is the same throughout

¹⁹ IEEE Standard Procedures for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines (IEEE Std. P644, New York: IEEE, 2019).

²⁰ IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz to 300 GHz. (IEEE Std. C95.3-2021) New York: IEEE, 2021.

the route, verification can be performed at a single representative location and be applicable to other locations as well..

The construction of the transmission lines on the CT DOT corridor significantly limits the availability of measurement locations suitable for verification-type measurements. The first limitation are the electric cables supported by the catenary structures of the CT DOT corridor, which are confounding sources of EMF. The second limitation is the difficulty in safely performing EMF measurements crossing over an active railway. The location of verification measurements is therefore limited to road crossings where there is access to the right-of-way beneath and to either side of the lines without the necessity to cross onto the railroad tracks. Of the limited options, the best location for these measurements was identified to be the bridge at 409 Woodmont Road because, although not perpendicular to the 115-kV lines and closer to the substation would be preferred, the confounding factors of adjacent distribution lines and other conductive objects were reduced to the extent possible.

In addition to the verification measurement, the profile measurements are proposed to document the rate of decrease in magnetic-field level moving away from the CT DOT corridor. The goal of providing a measurement of the decrease in magnetic field levels with distance away from the CT DOT corridor limits some of the difficulties associated with the verification measurement. Thus, profile measurements are proposed to be taken at five representative locations, starting as close to the CT DOT corridor as possible and proceeding perpendicularly away from the lines. These profile measurements are proposed to cover at least one location between each of the substations that are part of the Project as well as a variety of neighborhoods. Because the new transmission line structures are primarily located on the north side of the railroad tracks these profile measurements also are proposed to be located mostly on the north side of the railroad tracks.

Proposed measurement locations along the Project route were selected either within the CT DOT corridor or on UI permanent easements. These locations are summarized in Table 3-1. During the performance of the actual measurements, these locations may vary slightly in response to site-specific conditions. However, the actual measurement locations are expected to remain representative of the general portions of the Project route identified in Table 3-1.

Attachment G.1 provides aerial photograph views of each of the five monitoring locations in relation to the rebuilt 115-kV transmission lines and CT DOT corridor.

Table 3-1: EMF Monitoring Locations for the Project

EMF Monitoring Site No.	Municipality	Location Type	Location
1	Milford, CT	Model Verification	409 Woodmont Road
2	Milford, CT	Profile	East of 33 Railroad Avenue
3	Milford, CT	Profile	40 Railroad Avenue
4	Milford, CT	Profile	Heenan Drive and McQuillan Drive
5	West Haven, CT	Profile	East of 30 Railroad Avenue
6	West Haven, CT	Profile	North Union Avenue & Bishop Street

4. MEASUREMENT METHODS AND INSTRUMENTATION

The Company will record all electric and magnetic field measurements at a height of approximately one meter (3.28 feet) above ground in accordance with the industry standard protocol for taking measurements near power lines (IEEE Std. 644-2019).

The resultant magnetic field will be measured with a 3-axis, recording digital meter (EMDEX II) and attached to a survey wheel to simultaneously measure magnetic-field magnitude distance. Electric fields will be measured with an E-Probe attachment accessory to the EMDEX II meter. This accessory enables the EMDEX II to make single-axis measurements of the electric field. In addition, at each measurement site, the Company will place an additional magnetic-field meter (EMDEX LITE) at ground level as close to the center of the transmission line structure centerline and set to continuously record fluctuations in the magnetic field that were due to changes in current flow on the lines above. The data from this sensor will be used to evaluate if there is a large change in loading during the time that measurements are taken. The time and date of the field measurements will be noted so that the loading on each of the lines at the time of field measurements can be matched. Both the EMDEX II magnetic field meter and the E-probe accessory meet the IEEE instrumentation standard for obtaining valid and accurate field measurements at power line frequencies (IEEE Std. 1308-1994).

4.1 Model Verification Measurements

At the verification measurement site, the Company will photograph the conditions of the CT DOT corridor and transmission lines and lay a long measuring tape on the ground beneath the lines to identify the

horizontal location of the overhead line conductors. The vertical height of each conductor will be measured and recorded. Since the crossing of Woodmont road over the CT DOT corridor is not perpendicular, the angle of the measurement path to the transmission lines will be noted and measurement distances will be adjusted accordingly. Magnetic-field measurements will be recorded at intervals of approximately 1 to 3 feet using the measurement system of the EMDEX II and survey wheel, while electric-field measurements will be performed at 5- to 25-foot intervals with a minimum of five measurement locations performed in the immediate vicinity of each transmission line in accordance with IEEE Standard 644-2019.²¹

The Company will use the recorded conductor position and height of each transmission line obtained during measurements, as well as voltage and loading information provided by the SCADA system to develop an “as-measured model” to represent the operation of the lines at the site. This as-measured model also will include information from the Application, such as the phasing configuration and conductor type and checked against ‘as built’ design drawings. This as-measured model will be used to assess the match between the measured EMF levels and a model constructed using the same input parameters as those present at the location and time of measurements. The EMF levels for models will be calculated using the computer algorithms developed by the Bonneville Power Administration, which also were used for the modeling of EMF levels in the Application.²²

4.2 Profile Measurements

At the profile measurement locations, the Company will photograph the conditions of the CT DOT corridor and surrounding area moving away from the CT DOT corridor. A survey wheel will be used in conjunction with the magnetic field EMDEX II meter to simultaneously measure magnetic-field level and distance from and document the rate of decrease in magnetic-field levels with distance from the CT DOT corridor. No modeling is proposed for these sites.

5. REPORTING

Within 12 months of the Project in-service date (that is, the energization of all the rebuilt 115-kV lines between Milvon Substation and West River Substation), UI will provide to the Council a report on the EMF measurements described above in Section 4 of this protocol, along with the as-measured model comparisons to predicted values post construction.

²¹ At locations far from the transmission lines, the distance between successive electric-field measurements may be larger (approximately 25). Nearer to the transmission lines, the distance between successive measurement locations will be smaller (approximately 5 to 10 feet).

²² Bonneville Power Administration (BPA). Corona and Field Effects Computer Program. Portland, OR: Bonneville Power Administration (BPA), 1991.

The report also will include aerial photographs from GoogleEarth™ to mark each measurement location. For each magnetic field measurement, the coincident transmission line currents, as recorded by the CONVEX SCADA system, will be noted and reported.

ATTACHMENT G.1

AERIAL VIEWS OF EMF MONITORING LOCATIONS

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Figure 1 – Proposed EMF Verification Measurement at the Woodmont Road Overpass (Milford)



Figure 2 – Proposed EMF Profile Measurement East of 33 Railroad Avenue (Milford)



Figure 3 – Proposed EMF Profile Measurement at 40 Railroad Road (Milford)

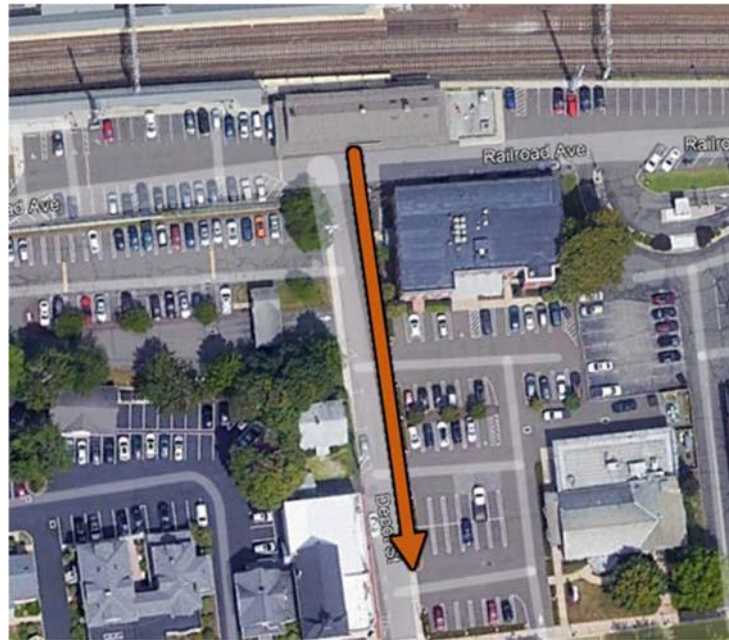


Figure 4 – Proposed EMF Profile Measurement at the Intersection of Heenan Drive and McCullian Drive (Milford)



Figure 5 – Proposed EMF Profile Measurement East of 30 Railroad Avenue (West Haven)



Figure 6 – Proposed EMF Profile Measurement at the Intersection of North Union Avenue and Bishop Street (West Haven)



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ATTACHMENT H

SNOW REMOVAL AND DE-ICING METHODS

April 2023

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ATTACHMENT H.1 CT DEEP Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots

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1. INTRODUCTION

1.1 Applicability

The construction of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) will be performed in four segments, over an anticipated five-year period. As a result, The United Illuminating Company (UI, the Company) acknowledges that construction activities will require work during the winter, when periods of snow and ice will occur. The removal of ice and snow from work sites, including access roads, work pads, and the staging area/contractor yards, will be critical to allow construction activities to proceed safely. However, snow removal and de-icing must be performed to protect the environment, in accordance with regulatory requirements.

This document presents the procedures that will apply during construction when snow or ice must be removed from Project work sites. The procedures:

- (a) Define responsibility for snow removal and disposal (Section 1.2);
- (b) Describe the typical methods for removing snow and ice from work sites safely and in conformance with environmental requirements (Section 2); and
- (c) Identify protocols for the removal of snow accumulations to appropriate disposal sites, if needed (Section 3).

In addition, snow removal and disposal activities must be in accordance with the applicable provisions of the Connecticut Department of Energy and Environmental Protection's (CT DEEP's) Best Management Practices (BMPs) for disposal of snow accumulations from roadways and parking lots. The CT DEEP BMPs are included in Attachment H.1 and also can be found on the CT DEEP website at: www.ct.gov/deep/snowremoval. Under most circumstances, snow and ice are expected to be removed in accordance with the typical procedures described in Section 2. However, if winter weather conditions result in large snowfall amounts, snow accumulated and removed from Project work sites and access roads may have to be transported to designated disposal sites; in such cases, the procedures identified in Section 3 will be followed.

1.2 Responsibility

The Project construction contractor(s) will be responsible for implementing these snow removal and de-icing procedures. Each construction contractor must identify and/or review designated snow disposal locations with UI, prior to use, to verify conformance to this plan. Any proposed deviations from these procedures must be justified by the contractor and will require UI's advance approval.

2. SNOW AND ICE REMOVAL FROM WORK SITES

The following procedures apply to the removal of snow and ice from Project work sites:

1. Snow may be removed by plowing (blading) and windrowing, or snow blowing, depending on the amount and type of snow, the area that must be cleared, and the site location.
2. Snow may be bladed level (rather than removed) along access roads to improve driving conditions. If appropriate, this technique also may be used at work pads and staging areas.
3. When removing or blading snow from access roads or work pads, contractors will attempt to avoid plowing up topsoil, subsoil, or gravel.
4. Any erosion and sedimentation controls damaged during the snow removal process will be repaired or replaced as soon as practical, taking into consideration snow depth and frozen ground. (Note: Winter weather conditions may preclude the re-establishment of damaged erosion and sedimentation controls until a thaw occurs or until spring.)
5. Sand, salt, sand/salt mix, or Calcium Magnesium Acetate (CMA) may be applied for traction and de-icing along all access roads, on work pads, and at staging areas / contractor yards. CMA will be applied according to product specifications.
6. Where timber mats (or equivalent) are placed in and around wetlands (that is along access roads or as part of work pads), used to span small streams, or in other environmentally sensitive areas:
 - Project construction contractors will use the minimum amount of sand, salt, sand/salt mix, or CMA necessary to melt ice and to maintain safe working conditions.
 - When snowfall amounts exceed 4 inches, to clear snow from timber mats (or equivalent), the construction contractors will push or blow clean snow off the mats, down to approximately 3 inches. This clean snow will be windrowed along either side of the mated area (work pad or access road). The bottom 3 inches of snow, which is likely to be mixed with sand, salt, or dirt from general construction activities, will either be carefully plowed into a small stockpile on the mats or loaded into a truck or equivalent for removal from the timber mats and transported to an upland area.
 - When snowfall amounts are less than approximately 4 inches, all snow will be either carefully plowed into a small stockpile and contained on the mats or scraped off the timber mats and moved to upland areas.
 - The sand/dirt that may be left after the small stockpiles of snow melt on the construction mats will be swept and disposed of properly.

During extreme weather events, this protocol may be amended as needed to address immediate worker safety issues or to prevent significant damage to property.

3. SNOW ACCUMULATION DISPOSAL AREAS

3.1 General

Snow will typically be plowed from access roads, work pads, and other work sites pursuant to the procedures described in Section 2. However, in some cases, accumulated snow may need to be removed from work sites (using front-end loaders, trucks, or equivalent equipment) and transported to snow accumulation areas for disposal.

Such snow accumulation disposal areas must be located in uplands or on other Project staging and support sites. UI must approve, in advance, the use of any site for accumulated snow disposal. With the pre-approval of UI and the property owner, accumulated snow may be stockpiled on flat, paved, or graveled parking areas, provided the conditions of these procedures are otherwise met.

Accumulated snow will NOT be disposed of in the following areas*:

- 1. In any water resources (e.g., wetlands, ponds, watercourses, ditches, swales). ***
- 2. On top of stormwater catch basins or in stormwater drainage swales or ditches. ***
- 3. On private property immediately adjacent to a residential area without the prior approval of the property owner.**

**unless authorized by government officials*

Snow accumulations placed on pervious surfaces must be located to allow snow melt water to infiltrate into the soil, without causing sedimentation into water resources. Any access road or work pad materials that are inadvertently mixed with the snow accumulations must be collected and removed from the Project area, when possible, after snow melt in the spring.

Snow stored on asphalt or concrete must not be piled on top of manholes or catch basins.

3.2 Typical Snow Accumulation Disposal Areas

Snow accumulation sites typically will be located near Project access roads, on CT DOT property or along UI's permanent easement, at least 50 feet from water resources, in non-environmentally sensitive areas, and/or in Project-approved designated staging areas.

If accumulated snow must be disposed of in other locations (e.g., municipally-approved snow disposal sites), UI's Project construction contractor must obtain and provide documentation to UI of all applicable approvals and any conditions relating to the use of the disposal site(s).

3.3 Snow Disposal Options when Identified Accumulation Areas are Fully Utilized

Depending on snowfall amounts, it is possible that all snow accumulation disposal areas adjacent to Project work pads and access roads in uplands could be fully utilized and that additional accumulation sites or other snow disposal options will need to be considered. Under such circumstances, Project contractors must coordinate with UI to define the most appropriate option.

New snow accumulation sites must be pre-approved by UI and will likely require prior coordination with and/or approval from private landowners or municipal authorities.

ATTACHMENT H.1

Connecticut Department of Energy and Environmental Protection

Best Management Practice for Disposal of Snow Accumulations from Roadways and Parking Lots

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Connecticut Department of Energy & Environmental Protection

Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots

Purpose: These guidelines have been developed to clarify DEEP recommendations to state and municipal officials, and others regarding the removal and disposal of snow accumulations from roadways and parking lots. For purposes of this guidance snow accumulations refers to snow banks and snow piles that are removed by front-end loader or by loading on trucks for disposal. This guidance does not apply to normal snow plowing operations that must, inevitably, discharge some snow into wetlands and watercourses.

Implementation: While following these guidelines does not constitute a permit or authorization, the Department recognizes there is a considerable need for flexibility in implementation of this policy, particularly in emergency situations. There is no intent to interfere with snow plowing operations. Where trucking and snow dumping operations are undertaken the Department recommends these guidelines be followed.

Problem: Current road maintenance activities include removal of snow accumulations from bridges, roads and parking areas for the purpose of providing more space for subsequent snow storms and for ease of travel and parking. Sometimes this snow is moved by truck or with a front-end loader and deposited directly into surface waters of the state including streams, wetlands and Long Island Sound. This practice is not recommended due to the presence of dirt, salt, litter and other debris, which are routinely mixed in the accumulated snow.

Under normal conditions of snowmelt, the majority of these contaminants remains on or next to the paved surface or may be captured in stormwater catch basins. These contaminants can then be swept from streets and bridges or vacuumed from catch basin sumps. However, when accumulated snow is collected and dumped into surface waters, this mixture of snow, sand and debris may smother aquatic life in the bottom of streams and rivers and degrade the aesthetics of the surface water with silt plumes and litter. Large quantities of snow (and the sand and debris) may also cause blockage of storm drainage systems, resulting in increased chance for localized flooding.

Recommended Management Practice: Snow accumulations removed from roadways, bridges, and parking lots should be placed in upland areas only, where sand and other debris will remain after snowmelt for later removal. Care must be exercised not to deposit snow in the following areas:

- freshwater or tidal wetlands or in areas immediately adjacent to such areas where sand and debris may be flushed during rainstorms;
- on top of storm drain catch basins;
- in storm drainage swales;
- on stream or river banks which slope toward the water, where sand and debris can get into the watercourse; and
- in areas immediately adjacent (within at least 100 feet) of private or public drinking water well supplies (due to the possible presence of road salt).

For Governmental Entities: In normal winter conditions, governmental entities should follow the recommended management practices outlined above. In extraordinary winter conditions, the commissioner may, upon public notification, offer governmental entities the flexibility of limited in-water disposal. When such flexibility is offered, governmental entities who have determined that extraordinary circumstances exist where all upland, land-based disposal options have been fully exhausted (i.e., disposal capacity is not available) and snow needs to be removed to meet public safety demands (i.e., clear access ways for police, emergency medical and fire responders), may use certain waterways for snow disposal in accordance with the following conditions:

- Upland storage and disposal of snow (i.e., athletic fields, parks and other flat, open-field sites) and other snow management methods (i.e., snow melting equipment) must be the first alternatives explored and exhausted. Environmentally sensitive areas must be avoided;

- This guidance applies only to snow and ice which is not visibly contaminated with material other than salt and sand from road clearing activities;
- For coastal communities, preference should be given to snow disposal in salt water where available;
- Disposal in rivers or streams must be limited to those water bodies that have adequate flow and mixing and are not prone to ice jams;
- The disposal must occur only in open water in areas that will not interfere with navigation;
- Disposal must be conducted in a manner so as to prevent ice dam formation or damage to bridges, docks or other structures;
- Disposal in ponds and lakes is discouraged;
- There shall be no disposal in coastal or freshwater wetlands, eelgrass beds, vegetated shallows, vernal pools, shellfish beds mudflats, public water supply reservoirs and their tributaries, or other areas designated as being environmentally sensitive;
- The activity must comply with local laws and requirements;
- Precautions must be taken to avoid shoreline or stream bank damage or erosion from truck/equipment activity; and
- Governmental entities must notify the Department by email (address email to dahlia.gordon@ct.gov) prior to disposing of snow and ice in waterways or, if advance notification is not possible, then the Department must be contacted as soon as possible after snow disposal has begun.

Notification: Notification can be made by addressing an email to Kevin Sowa at: dahlia.gordon@ct.gov. The notification must include the following: (1) the name of the governmental entity making the notification; (2) contact information for the governmental entity including name, email address and phone number; (3) the street address where the snow disposal activity will occur; (4) the name of the waterbody where the snow will be disposed; (5) the estimated quantity of snow to be disposed; (6) the dates during which the disposal activity will occur; and (7) a statement that the governmental entity has exhausted all disposal alternatives and snow management methods and will make best efforts to adhere to these snow disposal guidelines.

Information: For further information please call the Water Permitting and Enforcement Division Engineer of the Day at 860-424-3025.

Updated February 2020

ATTACHMENT I

SPECIES PROTECTION PLAN
(Per CSC Docket 508, Condition 2(n))

April 2023

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Milvon to West River Railroad Transmission Line 115-kV Rebuild Project

Species Protection Plan (Issued March 2023)

1. EXECUTIVE SUMMARY

The Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project) proposed by The United Illuminating Company (UI) features construction along an approximate 9.5-mile stretch along the existing railroad corridor from Milford to New Haven, Connecticut. To ensure the appropriate protection of the surrounding environment, UI has conducted ongoing correspondence with the Connecticut Department of Energy and Environmental Protection (CT DEEP), the United States Army Corps of Engineers (USACE), the Connecticut Siting Council (CSC), and various protected species specialists with the proper credentials familiar with the Project area. With these coordination efforts, UI has received the latest Natural Diversity Database (NDDDB) Determination No. 202209567, previous NDDDB Determination No. 202073487, United States Department of the Interior Fish and Wildlife Service Official Species Lists in coordination with the USACE, and Project approval through CSC Docket No. 508.

The following Species Protection Plan (SPP) lists the sensitive species that exhibit potential to be within the Project location and best management practices (BMPs) and recommendations that were identified by CT DEEP, USACE, and the Project species specialists. The SPP is intended for use by the Project contractor(s), who will be responsible for implementing the BMPs, the Project Environmental Inspector(s), who will inspect and report on the BMPs, and the Project Species Protection Specialist(s) who will oversee the construction. Overall construction schedule restrictions, by species are summarized here:

Species	Construction Time Restriction
Plants	No structure replacements mid-July through October at Indian River or West River
Parker's pipewort Saltmarsh Bulrush	
Reptiles & Amphibians	None, if BMPs are followed (BMPs vary during species active and inactive seasons)
Eastern Box Turtle Northern Leopard Frog Northern Diamondback Terrapin	
Birds	
Seaside Sparrow Saltmarsh Sharp-tailed Sparrow Osprey Bald Eagle	April through August at Indian River if sparrow nest identified. May through July w/in 300' if active Osprey nest is identified unless waiver from DEEP obtained. No activity w/in 660' if active Bald Eagle nest is identified

Species	Construction Time Restriction
Mammals	Limit clearing of trees ≥ 3 " dbh from June - July
Northern Long-eared Bat	

Milvon to West River Railroad Transmission Line 115-kV Rebuild Project

Species Protection Plan

2. INTRODUCTION

This SPP provides the BMPs to be followed during all phases of Project Construction based on UI's CT DEEP NDDDB Determination No. 202209567, received February 8, 2023, and previous NDDDB Determination No. 202073487, received December 27, 2020, and additional ongoing correspondence with CT DEEP, USACE, CSC, and various biologists/experts familiar with the Project area.

Please note that the information included in the CT DEEP NDDDB Determination and this SPP are derived from CT DEEP NDDDB maps that represent approximate locations of endangered, threatened, and special concern species and significant natural communities in Connecticut. The locations of species and natural communities depicted on the NDDDB maps are based on data collected over the years by CT DEEP staff, scientists, conservation groups, and landowners. In some cases, an occurrence represents a location derived from literature, museum records, and specimens.

In addition to NDDDB identified species, UI performed an Osprey Consultation with the CT DEEP Bureau of Natural Resources Wildlife Division, osprey, bald eagle, and sparrow surveys, and botanical surveys. These identification and delineation processes guide the necessary measures that will be taken to protect and avoid adverse impacts to these species and will continue to be conducted as necessary throughout the duration of the Project.


In conjunction with the identified physical BMPs to be implemented, UI has retained various biological professionals during the Project planning phase and will utilize environmental inspectors and the experts onsite as necessary in areas of listed species habitat throughout the Project construction.

The SPP includes sections for Plants, Reptiles & Amphibians, Birds, and Mammals, and describes the species, approximate locations/habitats along the Project corridor, specific timeframes when the species are active or in bloom, BMPs, and photos for field identification. **Attachment I.1** provides a table listing, by species, seasonal construction restrictions in identified species habitats. To ensure the appropriate protection of reptiles and amphibians along the Project, herpetological related plans that identify the location of exclusionary fencing and that were produced by a herpetologist are attached. In the event a listed species is found in the Project area during construction, it will be immediately reported to UI's

representative (typically the Environmental Inspector(s), Species Protection Specialist(s), and/or construction manager) and the applicable CT DEEP NDDB form will be completed and submitted to the agency to supplement its database. Copies of these forms are provided as an attachment.

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PLANTS

 **Parker's Pipewort**

 **Saltmarsh Bulrush**

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State Endangered Parker’s Pipewort

Species	Habitat	Approximate Location on Project Corridor
Parker’s pipewort (<i>Eriocaulon parkeri</i>)	Muddy tidal shores of coastal estuaries	Indian River, Milford & West River, West Haven (not identified during botanical surveys)



Species	Blooming Season	Optimal Construction Season
Parker’s pipewort (<i>Eriocaulon parkeri</i>)	Late July through September	October through June

BMPs

- 🌱 All structure replacements outside of blooming season.
- 🌱 Temporary construction matting to access structure replacements.
- 🌱 No additional gravel or wood chips should be placed within the right-of-way; remove all wood chips and slash created.
- 🌱 Any Parker's pipewort identified must be immediately reported to UI's representative, who will coordinate with the Protected Species Specialist(s) for appropriate response actions, and to submit a Rare Plant Survey Form (see **Attachment I.3**) to CT DEEP as soon as possible.

State Special Concern Saltmarsh Bulrush

Species	Habitat	Approximate Location on Project Corridor
Saltmarsh bulrush (<i>Bolboschoenus novae-angliae</i>)	Brackish tidal marshes	Indian River, Milford & West River, West Haven (not identified during botanical surveys)






Species	Blooming Season	Optimal Construction Season
Saltmarsh bulrush (<i>Bolboschoenus novae-angliae</i>)	Mid July through October	November through June

BMPs

- 🌱 All structure replacements outside of blooming season.
- 🌱 Temporary construction matting to access structure replacements.
- 🌱 No additional gravel or wood chips should be placed within the right-of-way; remove all wood chips and slash created.
- 🌱 Any Saltmarsh bulrush identified must be immediately reported to UI's representative, who will coordinate with the Protected Species Specialist(s) for appropriate response actions, and to submit a Rare Plant Survey Form (see **Attachment I.3**) to CT DEEP as soon as possible.

REPTILES AND AMPHIBIANS

-  **Eastern Box Turtle**
-  **Northern Leopard Frog**
-  **Northern Diamondback Terrapin**

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General Notes

These general notes were provided by a herpetologist to ensure the appropriate protection of the listed reptiles and amphibians that exhibit potential to be within the Project location and include additional detail on isolation measures, contractor education, and reporting methods.

Although no habitat or current records for the northern or Atlantic coast leopard frogs occur within the Project area, protection measures have been included in this SPP and will be implemented in the appropriate locations along the Project corridor. These measures have been included to ensure the outmost confidence in the protection of listed species, and because the measures will provide protection of the various other species that may be encountered in the area.

1. Isolation Measures:

- a. Exclusionary fencing shall be installed prior to any construction activities, including equipment staging, tree-clearing, or ground disturbance, as depicted in the attached herpetological related plans (**Attachment I.2**). As construction progresses, the exclusionary fence may be modified/scaled back to encompass only active work areas thus, optimizing species range. When modifying the exclusionary fencing, UI will coordinate with the Project Protected Species Specialist for appropriate location.
- b. In circumstances where openings in the exclusionary fencing is necessary for accessibility, the fencing shall be closed with temporary silt fencing backed with hay bales or a plywood barrier at the completion of each day.
- c. The fencing must consist of non-reinforced conventional erosion control woven fabric, installed approximately six inches below surface grade and staked at seven to ten-foot intervals using four-foot oak stakes or an approved equivalent. In areas where the silt fence cannot be buried, the fencing should be placed with the buried flap facing the construction area and covered with six inches of crushed stone. The Contractor shall be responsible for daily inspections; a qualified Protected Species Specialist with the proper credentials shall conduct weekly inspections.
- d. No equipment, vehicles, or construction materials shall be stored outside of the exclusionary fencing.
- e. All exclusionary fencing, not being utilized for sediment and erosion control, shall be remove immediately upon the completion of construction.

2. Contractor Education:

- a. Prior to site work, the contractor shall attend a pre-construction meeting with a qualified Protected Species Specialist with the proper credentials consisting of an introductory meeting providing photos of herpetofauna that may be encountered along the site.
 - b. The education session shall also focus on means to discriminate between the species of concern and other native species.
 - c. The Contractor shall be provided with the contact information for the Project Protected Species Specialist, for immediate reporting following listed species encounters.
3. Reporting:
- a. The Project Protected Species Specialist will submit the necessary reports to CT DEEP.

State Special Concern Eastern Box Turtle

Species	Habitat	Approximate Location on Project Corridor
Eastern box turtle (Terrapene carolina carolina)	Well-drained forest bottomlands and open deciduous forests	BMPs to be used as depicted in the attached Exclusionary Fencing Plans



Species	Active Period	Optimal Construction Season
Eastern box turtle (Terrapene carolina carolina)	April through September	October through March

BMPs – (General)

- 🌿 Exclusionary fence to be installed along the perimeter of the work area to provide a barrier to the species (minimum 20” tall; inspected and maintained; no plastic or netted fencing allowed). Openings in the exclusionary fencing used for workday accessibility shall be closed with temporary fencing backed with hay bales or a plywood barrier at the completion of each day. Where the fence cannot be buried, it shall be placed with the buried flap facing the construction area and covered with six inches of crushed stone.
- 🌿 Crushed stone should be avoided as much as possible, with temporary mats utilized instead. No wood chips should be placed within the right-of-way; remove all wood chips and slash created.
- 🌿 All field personnel will receive training prior to construction.
- 🌿 Any Eastern box turtle identified must be removed from the active work site and immediately reported to UI’s representative, who will coordinate with the Protected Species Specialist(s) for appropriate response actions, and to submit a Special Animal Survey Form (see **Attachment I.4**) to CT DEEP as soon as possible.
- 🌿 No heavy equipment outside of exclusionary fencing.
- 🌿 Minimize ground disturbance and hand felling trees along forest edges; felling trees adjacent to watercourses away from the watercourse.

BMPs – (Active Period)

- 🌿 A Protected Species Specialist with the proper credentials must be available to ensure BMPs; Contractor to search work area each morning prior to construction activities.
- 🌿 All staging areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed to removed individuals and exclude them from reentry.
- 🌿 Special precautions to avoid degradation of any wetland habitats.

State Special Concern Northern & Atlantic Coast Leopard Frog

Species	Habitat	Approximate Location on Project Corridor
<p>Northern leopard frog <i>(Rana pipiens)</i></p>	<p>Open, grassy habitats along rivers, wetlands, ponds, and lakes</p>	<p>Locally extirpated; utilize below BMPs adjacent to West River</p>



Species	Active Period	Optimal Construction Season
<p>Northern leopard frog <i>(Rana pipiens)</i></p>	<p>Late March through Mid-October</p>	<p>October through February</p>

BMPs

- 🌱 All field personnel will receive training prior to construction.
- 🌱 Exclusionary fence to be installed along the perimeter of the work area to provide a barrier to the species (minimum 20” tall; inspected and maintained; no plastic or netted fencing allowed). Openings in the exclusionary fencing used for workday accessibility shall be closed with temporary fencing backed with hay bales or a plywood barrier at the completion of each day. Where the fence cannot be buried, it shall be placed with the buried flap facing the construction area and covered with six inches of crushed stone.
- 🌱 Temporary construction matting utilized.
- 🌱 No new gravel or hard surface should be placed in any floodplain or alluvial marsh in typical habitat.
- 🌱 Any Northern leopard frog identified must be immediately reported to UI’s representative, who will coordinate with the Protected Species Specialist(s) for appropriate response actions, and to submit a Special Animal Survey Form (see **Attachment I.4**) to CT DEEP as soon as possible.

State Special Concern Northern Diamondback Terrapin

Species	Habitat	Approximate Location on Project Corridor
Northern diamondback terrapin (<i>Malaclemys t. terrpain</i>)	Salt marshes, salt or brackish waters, mud flats, shallow bays, coves, and tidal estuaries	Gulf Pond and Indian River, as depicted in the attached Exclusionary Fencing Plans



Species	Active Period	Optimal Construction Season
Northern diamondback terrapin (<i>Malaclemys t. terrpain</i>)	April through October	November through March





BMPs – (General)

- 🌿 Exclusionary fence to be installed along the perimeter of the work area to provide a barrier to the species (minimum 20” tall; inspected and maintained; no plastic or netted fencing allowed). Openings in the exclusionary fencing used for workday accessibility shall be closed with temporary fencing backed with hay bales or a plywood barrier at the completion of each day. Where the fence cannot be buried, it shall be placed with the buried flap facing the construction area and covered with six inches of crushed stone.
- 🌿 All field personnel will receive training prior to construction.
- 🌿 Any Northern diamondback terrapin identified must be removed from the work site, but not from the immediate area, and immediately reported to UI’s representative, who will coordinate with the Protected Species Specialist(s) for appropriate response actions, and to submit a Special Animal Survey Form (see **Attachment I.4**) to CT DEEP as soon as possible.

BMPs – (Active Period)

- 🌿 A Protected Species Specialist with the proper credentials must be available to ensure BMPs; Contractor to search work area each morning prior to construction activities.
- 🌿 Ground disturbance in the area of Indian River, Milford shall be during the inactive period.
- 🌿 No vehicles or machinery outside of exclusionary fencing.
- 🌿 Special precautions to avoid harm to basking or foraging individuals shall be taken for any work conducted in the early morning and evening hours.

BIRDS

-  **Seaside Sparrow**
-  **Saltmarsh Sharp-tailed Sparrow**
-  **Osprey**
-  **Bald Eagle (not present in Project area at this time)**

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State Threatened Seaside Sparrow

Species	Habitat	Approximate Location on Project Corridor
Seaside sparrow (<i>Ammodramus maritimus</i>)	Salt marsh complexes	Indian River, Milford



Species	Active Period	Optimal Construction Season
Seaside sparrow (<i>Ammodramus maritimus</i>)	May through August	September through April

BMPs – (General)

- 🌿 Any Seaside Sparrow identified must be immediately reported to UI's representative who will coordinate with the Protected Species Specialist(s) for appropriate response actions.
- 🌿 Schedule work during inactive period in Indian River Project area.

BMPs – (Active Period)

- 🌿 A protected species specialists with the proper credentials is to conduct nest surveys prior to construction activities if work is to occur between May 1st and August 31st; submit report to DEEP NDDB within 14 days of the survey.
- 🌿 No new excessive noise between April 15th and August 15th.
- 🌿 If a nest is identified, work shall halt until after August 31st.



State Special Concern Saltmarsh Sharp-tailed Sparrow

Species	Habitat	Approximate Location on Project Corridor
Saltmarsh sharp-tailed sparrow (<i>Ammodramus caudacutus</i>)	Salt marsh complexes	Indian River, Milford






Species	Active Period	Optimal Construction Season
Saltmarsh sharp-tailed sparrow (<i>Ammodramus caudacutus</i>)	May through August	September through April

BMPs – (General)

-  Any Saltmarsh Sharp-tailed Sparrow identified must be immediately reported to UI's representative who will coordinate with the Protected Species Specialist(s) for appropriate response actions.
-  Schedule work during inactive period in Indian River Project area.

BMPs – (Active Period)

-  A Protected Species Specialist to conduct nest surveys prior to construction activities if work is to occur between May 1st and August 31st; submit report to CT DEEP NDDB within fourteen days of the survey.
-  No new excessive noise between April 15th and August 15th.
-  If a nest is identified, work shall halt until after August 31st.




Osprey

Species	Habitat	Approximate Location on Project Corridor
Osprey (Pandion haliaetus)	Tall trees or snags near lakes, rivers, and coastal areas	Possible along Project Corridor



Species	Active Period	Optimal Construction Season
Osprey (Pandion haliaetus)	March through August	September through February

BMPs

-  Any Osprey identified must be immediately reported to UI's representative who will coordinate with the Protected Species Specialist(s) for appropriate response actions.
-  Conduct nest surveys prior to construction and Osprey breeding season; dismantle inactive existing nests that are on UI or CT DOT/MNR structures prior to the bird's returning to the area and during inactive nest season.
-  All work shall halt within 300-feet if an active nest is identified between May 1st and July 31st unless a waiver is obtained from CT DEEP.

MAMMALS

Northern Long-eared Bat

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Northern Long-eared Bat

Species	Habitat	Approximate Location on Project Corridor
<p>Northern long-eared bat (<i>Myotis septentrionalis</i>)</p>	<p>Trees, snags, caves, mines (hibernacula)</p>	<p>Possible along Project corridor, although no known hibernacula is present west of New Haven</p>



Species	Active Periods	Optimal Clearing Period
<p>Northern long-eared bat (<i>Myotis septentrionalis</i>)</p>	<p>Active: April through October Pup: June through July</p>	<p>November through March August through May</p>

Based on the current, March 21, 2023 US Fish and Wildlife Service (USFWS) Interim Consultation Framework* for the Northern Long-eared Bat, the Project area does not intersect an area where the species is likely to occur. Therefore, a "No Effect" determination is currently assumed for the Project activities. Note that BMPs related to the Northern Long-eared Bat are subject to change based on the final USFWS determination of effect for this species.

BMPs

- 👉 Any Northern Long-eared Bat identified must be immediately reported to UI's representative who will coordinate with the Protected Species Specialist(s) for appropriate response actions.

**The final guidance for this species is currently under evaluation by USFWS. Under the current Interim Consultation Framework, the Project appears to have "no effect." However, should the regulatory requirements change UI will re-evaluate its Project against the requirements.*

ATTACHMENT I.1
PROJECT CONSTRUCTION
SPECIES TIMEFRAMES TABLE

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CONFIDENTIAL

FILED ALONG WITH A MOTION FOR A PROTECTIVE ORDER

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ATTACHMENT I.2
HERPETOLOGICAL EXCLUSIONARY FENCING
PLANS

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CONFIDENTIAL

FILED ALONG WITH A MOTION FOR A PROTECTIVE ORDER

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ATTACHMENT I.3
CT DEEP NDDB
RARE PLANT SURVEY FORM

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OFFICE USE ONLY		EO#:
SNAME:	SITE:	SURVEY DATE:
	TOWN:	ENTERED BY:

- New record
 Update

RARE PLANT SURVEY FORM

Natural Diversity Data Base
Connecticut Department of Environmental Protection
79 Elm Street, 6th Floor
Hartford, CT 06106-5127

*Please complete this form to the best of your ability.
Submit survey forms, maps, and all supporting documents to the address above.*

*SPECIES SCIENTIFIC NAME:	Element Occurrence (EO) # (if known):
----------------------------------	--

REPORTER INFORMATION	
Name(s):	
Address:	Telephone No:
	E-mail address:

SURVEY/SITE INFORMATION	
Site Name:	Survey Date(s):
Town(s):	County:
Directions to plant population, including best parking and access points. Please attach a map with boundaries drawn around observed plant populations (or surveyed area if plants not found).	
GPS Coordinates	Method Used to Determine Coordinates:
Latitude N	<input type="checkbox"/> GPS Unit GPS Make/Model:
Longitude W	<input type="checkbox"/> Mapping Software Software:
Coordinate system (NAD83 preferred):	<input type="checkbox"/> Online Maps Online site:

POPULATION DATA

Population Size	
Actual No. Observed	
Estimated No./Range	

What was counted?
(e.g. stems, clumps, floating masses, etc.)

Population Area	
Length (units)	
Width (units)	
Area (units)	

Evidence of disease, predation or injury? Yes No Explain:

Phenology			
	% In leaf		% Mature fruit
	% In flower bud		% Seed dispersing
	% In flower		% Dormant
	% Immature fruit		% Senescent

Age Structure	
	% Seedlings
	% Immature
	% Mature (established)
	% Senescent
	Age structure unknown

Vigor	
<input type="checkbox"/>	Very feeble
<input type="checkbox"/>	Feeble
<input type="checkbox"/>	Normal
<input type="checkbox"/>	Vigorous
<input type="checkbox"/>	Exceptionally vigorous

Comments on above:

HABITAT

Aspect		Slope	Light	Topographic Position	Moisture
<input type="checkbox"/> N	<input type="checkbox"/> NE	<input type="checkbox"/> 0-3%	<input type="checkbox"/> Open	<input type="checkbox"/> Crest	<input type="checkbox"/> Permanently Inundated
<input type="checkbox"/> E	<input type="checkbox"/> NW	<input type="checkbox"/> 3-8%	<input type="checkbox"/> Partial	<input type="checkbox"/> Upper Slope	<input type="checkbox"/> Seasonally Inundated/Exposed
<input type="checkbox"/> S	<input type="checkbox"/> SE	<input type="checkbox"/> 8-15%	<input type="checkbox"/> Filtered	<input type="checkbox"/> Mid-Slope	<input type="checkbox"/> Tidally Inundated/Exposed
<input type="checkbox"/> W	<input type="checkbox"/> SW	<input type="checkbox"/> 15-35%	<input type="checkbox"/> Shade	<input type="checkbox"/> Lower-Slope	<input type="checkbox"/> Saturated (Hydric)
<input type="checkbox"/> Flat		<input type="checkbox"/> 35% - vertical		<input type="checkbox"/> Bottom	<input type="checkbox"/> Moist (Mesic)
	° retrue N	Measured (° or %):		Other:	<input type="checkbox"/> Dry-Mesic
	° remag N	Horizontal shape (as for next item):			<input type="checkbox"/> Dry-Xeric
		Vertical shape (ie. Convex, concave, straight, variable):			Other:

Elevation: to feet meters

Soil/substrate name/description(give source):

Estimated # of acres of potential habitat in the immediate area: _____

Evidence of disturbance: fire logging disease insect damage windthrow invasives

Comments:

Associated natural/plant communities:

Associated plant species (separated strata, e.g. tree, shrub, herb layers):

IDENTIFICATION

Photograph taken?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Photo ID:
Specimen taken*	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, provide: Collector: Repository: Collection #:
Identification problems?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Explain:

*DEP Scientific Collection Permit is needed to collect specimens

CONSERVATION

Owner info:

Owner aware of EO? Yes No Unknown Owner protecting EO? Yes No Unknown

Threats to EO:

Conservation/
management needs:

Research needs:

SUPPORTING DOCUMENTS (please attach)

- Sketch map (showing finer detail than topo or aerial photo)
- Aerial photo map
- Topographic map (available at <http://www.econmap.com/magic/> OR <http://ctecoappl.uconn.edu/advancedviewer/>)
- Cross section of topography/habitat (include scale, direction, element position, description, and sub-occurrence ID[s], if needed)
- Photos Slides Field notes Route of survey map

ATTACHMENT I.4
CT DEEP NDDB
SPECIAL ANIMAL SURVEY FORM

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Natural Diversity Database

Special Animal Survey Form

This form is to be used to report a personal field sighting of an Endangered, Threatened, or Special Concern animal species tracked by the CT Natural Diversity Database (www.ct.gov/deep/endangeredspecies). Please provide a map indicating where the animal was observed and a photograph to confirm the identification of the animal. Only verifiable reports will be added to the database. For migratory species, breeding locations or concentration area records are preferred.

Species Name : _____	
Date of Observation	(month/day/year): _____ Time of Observation: _____
Name of Observer (s): _____	
Affiliation: _____	
Address: _____	
Telephone: _____	E-mail Address: _____
Location Information: In addition to the information below, please attach a map indicating the precise location where the species was observed. Be sure to include and label other landmarks to aid in identifying the site location. There is space below to draw a detailed sketch of the site.	
Town: _____	
Site Name: _____	Approx. Acres of Potential Habitat: _____
Directions to Site: Include parking options and best site access points.	
Coordinates (Optional) WGS84, Decimal Degrees	
(Using CTECO Simple Map Viewer , Search for site and zoom to a scale where desired features are clearly visible, use +XY tool and click on site to get coordinates)	
Lat: N _____	Long: W _____
Source of Coords (GPS or other map source): _____	
Property Ownership: If known, please provide landowner name, address, and phone number.	

Detailed Site Sketch:

Population Information:

Number of Individuals Observed/Estimated:

Include sex and age class if known _____

Has this species been observed on site previously? _____

Nature of Observation:

<input type="checkbox"/> Sight	<input type="checkbox"/> Capture*/Release+	<input type="checkbox"/> Dead
<input type="checkbox"/> Specimen Collected+	Repository:	
<input type="checkbox"/> Photograph Taken	<input type="checkbox"/> Other (Specify)	

*Method of Capture (net, pit-fall trap, hand collected, dip net/seine, trap, etc.): _____

+[DEEP Scientific Collection Permit](#) is needed for capture, marking, salvage, release or disturbance of animals.

Biology/Behavior:

Evidence of Reproduction: _____

Feeding _____

Other Behavior _____

Habitat/Site Description: (topography, plant communities, associated species, current land use)
Disturbance and Threats: (describe any potential threats to the population or habitat)
Conservation/Management Needs:

Please send the completed form to: CT Department of Energy & Environmental Protection, Natural Diversity Database-Wildlife Division, 79 Elm Street, 6th Floor, Hartford, CT 06106. Or email: deep.nddbrequest@ct.gov

ATTACHMENT J

**ON-SITE ENVIRONMENTAL INSPECTION AND
MONITORING PLAN**
(Per CSC Docket 508, Condition 2(k))

April 2023

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1. INTRODUCTION

This On-Site Environmental Inspection and Monitoring Plan (Plan) presents The United Illuminating Company's (UI or the Company) approach for conducting field inspections and verifying environmental compliance, in accordance with applicable State and Federal requirements, during all phases of the construction of the Milvon-West River Railroad 115-kV Transmission Line Rebuild Project (Project). The Project, which will be located within or adjacent to the Connecticut Department of Transportation (CT DOT) MetroNorth Railroad (MNR) corridor in the City of Milford, Town of Orange, and cities of West Haven and New Haven (all in New Haven County, Connecticut), will include the installation of new double-circuit 115-kilovolt (kV) monopoles north of the MNR tracks, as well as the removal of UI's existing 115-kV infrastructure from both the north and south railroad catenary support columns.

The Project will be constructed in four separate segments, over multiple years. These Project segments are:

- Elmwest Substation to West River Substation;
- Elmwest Substation to Allings Crossing Substation;
- Milvon Substation to Woodmont Substation; and
- Woodmont Substation to Allings Crossing Substation.

Along each segment, the new (rebuilt) 115-kV lines will be installed, connected to the substations on either end, and placed into service, typically before major construction activities commence on the next segment.²³ UI's existing 115-kV infrastructure (bonnets, conductors, shield wire, optical groundwire [OPGW]) on the railroad catenary structures will be removed, along with any existing connections to the substations.

²³ Some construction activities may overlap from segment-to-segment. For example, civil and foundation work may commence on the Milvon-Woodmont substation segment (the longest of the four segments) prior to the completion of the Allings Crossing to Elmwest substation segment. Likewise, work to remove bonnets from the southern catenary structures along one Project segment may be performed while civil work is ongoing on the next segment. Restoration along each Project segment will be performed as the final phase of construction and will continue after the rebuilt 115-kV lines on each segment are energized.

Construction, which will entail activities both the north and south of the MNR tracks, will involve vegetation removal from work areas, grading as required to create access roads and work pads, drilling for structure foundations, conductor and OPGW stringing, and restoration. In some areas, work will be required within wetlands and across watercourses.

The construction of the Project must comply with various Federal and State environmental regulatory approvals and plans, including:

- The Development and Management (D&M) Plans prepared by UI in accordance with the conditions of the Connecticut Siting Council (CSC, Council) approval of the Project in Docket No. 508.
- The Project-specific Stormwater Pollution Control Plan (SWPCP) developed pursuant to the Connecticut Department of Energy and Environmental Protection (CT DEEP) *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (General Permit).
- Water resource permits received from the Connecticut Department of Energy and Environmental Protection (CT DEEP) and the U.S. Army Corps of Engineers (USACE), including measures for the avoidance or minimization of impacts to watercourses and wetlands.
- Plans for the protection of Federal- and State-listed threatened, endangered, or special concern species.

UI's approach for maintaining compliance with these environmental requirements will involve a combination of field inspections, contractor coordination/awareness training, and regular Project meetings at which environmental compliance will be a primary consideration. UI will provide copies of all Project regulatory requirements to its construction contractors.

The Project-wide D&M Plan, including the environmental inspection and monitoring approach presented in this Plan, will apply to construction activities on all four Project segments. Environmental resource locations and impact avoidance and mitigation measures applicable to a particular portion of the Project area will be provided in the segment-specific D&M Plans.

2. ENVIRONMENTAL INSPECTION AND MONITORING

To verify that the Project construction²⁴ is performed in conformance with the environmental requirements, UI will perform the on-site inspections with the appropriately trained environmental staff. The purpose of the on-site inspections will be to confirm that the Project is developed in accordance with both State and Federal environmental regulatory requirements, including the Project-wide and segment-specific D&M Plans. UI also will retain a Protected Species Specialist, who will perform monitoring and contractor awareness training to assure that construction activities in the habitats of listed species are in accordance with all agency requirements and Company commitments.

2.1 Environmental Inspector/Monitor Responsibilities

The environmental inspector/monitor will be responsible for confirming compliance with the CSC conditions (Project-wide and segment-specific D&M Plans), UI commitments and standard protocols, and Federal and State environmental requirements. The environmental inspector/monitor will:

- Conduct field inspections at least weekly or potentially more often, depending on the Project construction activities and compliance with State or Federal permit obligations. The field inspections will be targeted to monitor conformance to the D&M Plans, as well as Project approvals from the USACE, Connecticut State Historic Preservation Office (SHPO), and CT DEEP. Environmental areas that will be covered in the inspections include vegetation removal, water resources (wetlands, watercourses), dewatering, soil erosion and sedimentation controls, threatened/endangered species avoidance/mitigation, wetland invasive species control, spill prevention/control, air quality/dust suppression, noise, materials and waste management, and site restoration.
- Prior to the start of construction provide, as necessary, special awareness training for construction contractor personnel regarding conformance to special environmental plans, such as endangered/threatened species impact avoidance.
- Coordinate closely with UI environmental and Project management, as well as with UI's construction manager and the contractors.

²⁴Construction includes all Project tasks related to the installation of the rebuilt 115-kV lines and the removal of the existing 115-kV facilities, extending through site stabilization and restoration.

- Attend, as necessary, regular Project construction meetings and provide input regarding environmental inspection results and pro-actively work with the construction team to identify any environmental resource areas of concern based on contractor “look ahead” schedules.
- Provide guidance to the construction contractors, as needed, regarding environmental impact avoidance methods.
- Prepare field monitoring reports, consistent with State and Federal permit approvals, in a standard format, describing and photo-documenting the areas inspected. The reports will be provided to the UI Project Manager and construction supervisor. Any issues of potential concern (e.g., erosion and sediment controls that require maintenance) will be conveyed to the UI construction manager and construction contractor at the time of the field inspection, thereby allowing for a prompt resolution.

UI’s environmental inspector/monitor also may serve as the inspector for the Project’s SWPCP. In addition, during construction in potential habitat areas of sensitive species, UI will retain a Protected Species Specialist, who will be responsible for assuring that Project construction activities do not adversely affect the listed species identified by Federal and State agencies as occurring in the Project area. The Protected Species Specialist will coordinate with UI’s environmental inspector/monitor and construction manager and will provide awareness training to Project contractor personnel regarding the listed species and the requirements for avoiding impacts to each species.

The SWPCP inspector will meet the criteria and experience as specified for a the Qualified Environmental Professional pursuant to the Connecticut Department of Energy and Environmental Protection (CT DEEP) *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (General Permit). The SWPCP inspector will specifically monitor conformance to the SWPCP, principally erosion and sedimentation control measures, water resource protection, and site stabilization; however, the areas covered by the SWPCP inspections overlap with those covered by the D&M Plan monitoring.

Among other activities as specified in the General Permit and the SWPCP, the SWPCP inspector will:

- Perform an initial inspection within 30 days of the commencement of construction activities and at least three times within the first 90 days of construction to confirm compliance with the General Permit and proper implementation of control measures designated in the SWPCP.
- Conduct routine inspections of Project sites pursuant to the SWPCP checklist.

- Perform inspections after heavy rain events, as defined in the General Permit and the schedule presented in the Project SWPCP.
- Convey any issues regarding soil erosion and sedimentation controls promptly to the UI construction manager.
- Coordinate with the UI construction manager and contractors, as necessary, to assess whether additional or different types of erosion/sedimentation controls are needed in particular areas.
- Document the results of the routine and rain event inspections on standard SWPCP inspection forms.
- Inspect site stabilization and restoration, coordinating with UI and the construction contractors to determine when temporary erosion and sedimentation controls must be maintained until stabilization is achieved and when such controls can be removed thereafter.
- Maintain SWPCP records, including contractor certifications regarding the review of the SWPCP and a Record of Revision documenting changes to the SWPCP subsequent to approval by CT DEEP. SWPCP will be maintained by UI for five years following the completion of construction, as required by the General Permit.
- Perform a post-construction inspection once all post-construction stormwater measures have been installed in a Project segment in accordance with the General Permit. The post-construction inspection shall be conducted by a “Qualified Soil Erosion and Sediment Control Professional” as defined in the General Permit.
- Perform a final stabilization inspection once final stabilization has been achieved for at least one full growing season (April through October) or two consecutive seeding seasons (April 1 through June 15 and August 15 through October 1) in a Project segment. The Site will be inspected by a qualified inspector to confirm that the stabilization is maintained, as defined in the General Permit. After the inspector determines that all the Project segments have been stabilized, UI will submit a Notice of Termination to CT DEEP to close out the General Permit for the Project.

UI’s environmental group will maintain copies of all monitoring and SWPCP and other inspection forms. These forms will be available upon request.

2.2 Protected Species Specialist Responsibilities

Based on UI’s consultations with CT DEEP, Federal and State-listed species or their habitats are known to occur along certain portions of the Project. The Protected Species Specialist will focus on such areas, coordinating with the environmental inspector/monitor and UI’s environmental group, prior to and during construction as needed.²⁵ Primary responsibilities may include the following:

²⁵ The segment-specific D&M Plans generically identify known or potential areas of listed species habitat in the Project area. Specific information regarding these species is not provided in order to protect each species.

- Conduct, prior to the start of construction on a Project segment, requested surveys of Project work areas to assess the presence/absence of protected species or critical habitat for such species.
- Provide, as part of construction kick-off meetings for each Project segment, contractor awareness briefings to educate contractors on species of concern that may be present in the vicinity of work areas, as well as the protocols to be followed in the event that protected species are encountered during construction.
- Perform, for each Project segment, an initial inspection (or “sweep”) of work areas where listed species may be present.
- Conduct or supervise daily sweeps, as appropriate, of critical habitat prior to the start of daily Project construction activities in such areas.
- Coordinate with the construction contractors, such as during daily tailboards or other meetings, to emphasize the locations of protected species habitats and required protection measures in relation to upcoming Project work and to verify that Project personnel are fully cognizant of and adhere to the species protection requirements.
- Prepare and provide to UI reports regarding protected species monitoring or observations.

All Project personnel will be advised to promptly report any observations of listed species to UI. In addition, UI will submit to the CT DEEP Natural Diversity Database Program any observations of endangered, threatened, or special concern species, following standard CT DEEP reporting protocol.

2.3 Environmental Monitoring/Inspection Work Hours

Environmental monitoring/inspection activities may be performed outside of standard construction work hours. For example, SWPCP inspections must be performed, as required pursuant to the SWPCP and General Permit, after heavy rain events and thus may occur on Sundays. Similarly, environmental monitors/inspectors or the Protected Species Specialist may need to be on site in advance of construction crews to perform field sweeps to check for State-listed species.

However, apart from the use of vehicles to travel to inspection sites, these monitoring/inspection activities will not generate noise.

3. ENVIRONMENTAL COMPLIANCE AWARENESS AND COORDINATION

UI will require Project personnel, including UI's field supervisory staff and construction contractors, to be aware of the environmental requirements governing the construction of the Project.

UI will provide its field staff and the Project construction contractors with copies of the Project-wide D&M Plan (applicable to all Project segments), CSC decision documents, other Federal and State regulatory approvals and plans, and UI specifications. Construction contractors and UI field staff also will be given copies of the D&M Plan, including maps and plans, specific to the Project segment in which their work will be performed.

During initial Project meetings with the contractors' supervisory personnel, UI will emphasize that whereas the contractors' will be directly responsible for constructing the Project in conformance to all environmental requirements, the UI field team will work closely with the contractors to identify sensitive environmental resource areas and to pro-actively take measures to avoid environmental compliance issues. Project contractor supervisors will then make the rest of their teams aware of and trained in the environmental requirements of the Project.

UI anticipates that various methods will be used to pro-actively plan and sequence construction in order to maintain conformance with the environmental requirements. These methods may include, but not be limited to:

- Regular Project meetings (expected to be weekly, or as needed), organized by UI and attended by construction contractor managers and key UI field staff, to review work progress and to discuss the upcoming construction tasks. During these meetings, UI's environmental personnel will identify key environmental resources and plans relevant to the upcoming work and will emphasize the measures that the contractor will be required to implement in such areas, pursuant to the Project environmental requirements.
- Daily pre-work briefings, held by the construction contractor for its field crews, to review the construction tasks planned for the day and at which key environmental issues will be discussed.
- Tailboards, held at work sites by construction contractor crew supervisors, to review specific crew tasks and to discuss key issues relevant to the work, including safety and environmental compliance.

UI's environmental inspector/monitor and Protected Species Specialist will be available to attend these meetings and also may hold separate meetings to review specific environmental requirements with field crews, as appropriate to the Project work.

ATTACHMENT K

PROCEDURES FOR UNANTICIPATED DISCOVERIES OF ARCHAEOLOGICAL RESOURCES & HUMAN REMAINS

April 2023

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1. INTRODUCTION

As part of the planning and design process for the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project), The United Illuminating Company (UI or the Company) conducted an archaeological assessment of the Project corridor and viewshed analyses of historic structures and districts in the Project vicinity that are listed on the National and State Registers of Historic Places (NRHP, SRHP) or identified as Local Historic Districts. UI also consulted with the State Historic Preservation Office (SHPO) and the City of Milford (within which the historic districts and structures near the Project are located). As a result of those analyses and consultations, UI determined, and the SHPO concurred, that:

- The Project will result in indirect visual effects to standing historic structures and historic districts listed on the NRHP and SRHP, all of which are in Milford. To offset these indirect visual effects (which consist of alterations of the viewshed of the historic structures and districts through installation of the new monopoles), UI will coordinate with the SHPO and the City of Milford to implement a cultural resource mitigation effort that will enhance the knowledge of cultural resources in Milford. The cultural resource mitigation effort is not linked to nor will it be affected by the Project construction.
- With respect to potential archaeological resources, Project construction activities will be located in areas that have been modified by previous land uses, including the installation of the Metro-North Railroad (MNR) within the Connecticut Department of Transportation (CT DOT) corridor and nearby industrial, commercial, residential, and road developments. As a result, the potential for encountering as yet undiscovered, intact archaeological resources during Project construction activities, such as grading and structure foundation excavation, is considered to be low.

Despite the results of the previously completed investigations and the comments by the SHPO, UI understands that the unanticipated discovery of archaeological deposits is possible during construction and formulated this Unanticipated Discoveries Plan (UDP, Plan).

UI is committed to the avoidance and protection of cultural resources, in this case potential archaeological deposits, and as such will follow all Federal and State regulations and guidelines regarding the treatment of unanticipated finds of archaeological deposits (if any) during Project construction. UI also will adhere to Federal and State requirements regarding the treatment of human remains, should any be encountered during Project construction.

Applicable Federal and State guidelines and regulations include:

- Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470f) (see <https://www.gsa.gov/real-estate/historic-preservation/historic-preservation-policy-tools/legislation-policy-and-reports/section-106-national-historic-preservation-act-of-1966>);
- Secretary of the Interior's Standards for Archeology and Historic Preservation (48 CFR 44716-42) (see https://www.nps.gov/history/local-law/arch_stnds_0.htm);
- Advisory Council on Historic Preservation (ACHP): *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects* (see <https://www.achp.gov/digital-library-section-106-landing/achp-policy-statement-regarding-treatment-burial-sites-human>), and
- 2012 Connecticut General Statutes, Title 10 - Education and Culture, Chapter 184a Native American Cultures. Policy Concerning Archaeological Investigations, Section 10-388 - Human Burials.

This Plan summarizes the procedures that UI will require its contractors to follow during Project construction as they relate to unanticipated finds (if any) of archaeological deposits or human remains.

2. ARCHAEOLOGICAL RESOURCES: BASIC AWARENESS

UI will provide this Plan to all Project construction contractor supervisory personnel, who will be responsible for ensuring that all construction crews are fully aware of the varied materials that may constitute an archaeological resource. UI will also work collaboratively with Project contractors' supervisory personnel to educate and train their staff in the recognition of archaeological resources prior to construction of the Project. In addition, Project contractor supervisors will be responsible for briefing construction crews about the potential for unanticipated finds of archaeological resources prior to construction at any location in the Project corridor.

In general, archaeological cultural resources may date from the precontact era (i.e., representative of Native American inhabitation prior to the arrival of Europeans in New England) or the historical period (i.e., relating to post-European colonization). Historical archaeological materials typically are more than 50 years old.

Examples of precontact era artifacts that survive in Connecticut's acidic soils include chipped stone projectile points (arrowheads), stone tool production debris, ground stone tools, and pottery sherds. Examples of historical period archaeological materials may include ceramic sherds, window glass shards, bottles, buttons and other personal items, fasteners, metal objects, and architectural debris, etc. These may be related to small domestic sites, commercial facilities, and/or industrial scale operations.

The Project area may also contain examples of various types of animal remains, ranging from domesticated fauna (cows, pigs, horses, chickens, goats), to wild species (birds, deer, small mammals), to examples of fish and shellfish. These items may date from either the precontact or historical periods.

In addition to examples of precontact and historic period artifacts, as well as animal remains, it is possible that other types of archaeological remains may be identified during construction. These may include examples of archaeological "features" dating from either the precontact or historical periods.

Precontact era features may take the form of shell middens (also known as refuse heaps), hearths (campfires), storage pits, or small caches of artifacts. Precontact features are not always easy to detect, as they are most often recognized by specific soil discolorations.

Prior to the start of construction on a transmission line segment, UI will provide training to construction personnel in the identification of precontact features.

In contrast, historical features are more easily identified and consist of items such as brick foundations or walkways, stone foundations, cisterns, etc. These are usually large objects that are easily detected if encountered during construction.

3. UNANTICIPATED CULTURAL RESOURCE DISCOVERY PROTOCOLS

Because it is possible that unanticipated finds of archaeological deposits may be made during Project construction, the following protocols will apply if potential archaeological materials are identified:

1. Construction activities will **STOP** at the location where the materials were discovered.
2. UI's construction contractor will cordon off the area in the immediate vicinity of the find locations to keep personnel out of the area.
3. The contractors will not remove, disturb, or damage, the materials.
4. The contractor will immediately notify UI's construction manager, identifying the work site at which the find was made.
5. UI's construction manager will contact the appropriate UI environmental representative or UI's Project environmental inspector/monitor and UI Project Management, who will arrange for UI's on-call cultural resources consultant to review the information regarding unanticipated discovery, as required, to confirm the potential presence of cultural materials and, if applicable, their possible significance.
6. The on-call cultural resources consultant will perform an on-site inspection of the site of the unanticipated discovery.
 - a. If the field review determines that the archaeological materials are potentially significant, the consultant and UI will coordinate with the SHPO regarding the appropriate methods for removing, documenting, or preserving the artifacts. Construction at the site where the significant cultural materials were discovered will not resume until (i) a treatment plan is prepared and implemented (for example, the significant archaeological deposits are removed for off-site curation); and (ii) UI issues a notice for the contractor to recommence work.
 - b. If the field review determines that the unanticipated discovery is not a potentially significant archaeological deposit, the cultural resource consultant will notify UI. UI then will inform the construction contractor to resume work at the site.

4. PROTOCOLS FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

It is unlikely that human remains in unmarked burials will be encountered during Project construction.²⁶ However, this section presents the procedures that UI will implement if potential human remains are nonetheless found during Project activities. These procedures incorporate elements of and are consistent with 36 CFR § 800.13, the Advisory Council on Historic Preservation's *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects*, as well as with the provisions of the 2012 Connecticut General Statutes, Title 10 - Education and Culture, Chapter 184a Native American Cultures. Policy Concerning Archaeological Investigations, Section 10-388 - Human Burials.

Any burial sites, human remains, or funerary objects encountered during Project construction will be treated with dignity and respect. UI will require its contractors to adhere to the following procedures if human remains are discovered during Project construction:

- 1) The person who identifies human remains during construction will immediately stop work at the site of the discovery and then notify the UI construction manager of the unanticipated discovery;
- 2) Following the stoppage of work, UI will instruct the Project contractor to cordon off the location so that it is protected from impacts, to cover the remains, and to take measures to ensure that the location is secure from outsider entrance. The contractor also will be instructed that no additional work can be completed in the area until the unanticipated discovery has been treated appropriately;
- 3) Project personnel will treat all human remains with dignity and respect at all times. Further, any artifacts associated with the remains will be left undisturbed and in-situ. Under no circumstances will Project personnel handle or remove any skeletal remains or associated materials.
- 4) UI (or its designated cultural resource consultant) will immediately notify the Connecticut State Archaeologist, the SHPO, the local police, and Medical Examiner's Office of the unanticipated discovery of human remains, as well as, if necessary, the pertinent Tribal Historic Preservation Offices (THPOs), as appropriate. The Connecticut State Archaeologist will consult with the Connecticut's federally-recognized THPOs if the identified remains are determined by the State Archaeologist to be Native American. Table 4-1 provides a list of these contacts.

²⁶ A portion of the Project in Milford is aligned near the Milford Cemetery. However, UI coordinated with cemetery representatives and designed the Project such that no new monopoles will be located on the cemetery property.

- 5) UI will permit local law enforcement and a representative of the Medical Examiner’s Office to access the location of the human remains and inspect the remains to determine if they are part of a crime.
- 6) If the human remains are determined to represent a crime scene, local law enforcement will assume jurisdiction over the location and will be permitted whatever time/access is necessary to investigate and process the location before Project construction at the site proceeds.
- 7) Construction at the discovery site will not recommence until agency consultations are completed and, if necessary, a treatment plan (e.g., disinterment / re-internment, avoidance) is developed and implemented.

Table 4-1: Points of Contact (if necessary)

Connecticut Office of the Chief Medical Examiner 11 Shuttle Road Farmington, Connecticut 06032 (860) 679-3980	Connecticut SHPO 450 Columbus Boulevard, Suite 5 Hartford, Connecticut 06103 (860) 500-2360
Milford Town Police Department 430 Boston Post Road Milford, Connecticut 06460 (203) 878-6551	Orange Town Police Station 314 Lambert Road Orange, Connecticut 06477 (203) 891-2130
West Haven Police Department 200 Saw Mill Road West Haven, Connecticut 06516 (203) 937-3900	New Haven Police Station 1 Union Avenue New Haven, Connecticut 06519 (203) 946-6316
Mohegan Tribe of Connecticut Indians Tribal Historic Preservation Office Mohegan Community & Government Center 13 Crow Hill Road Uncasville, Connecticut 06382 1-800-664-3426	Mashantucket Pequot Tribal Nation Tribal Historic Preservation Office 110 Pequot Trail Mashantucket, Connecticut 06338 (860) 396-7575

ATTACHMENT L

MATERIALS MANAGEMENT PLAN

April 2023

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1. INTRODUCTION

The United Illuminating Company (UI or the Company) recognizes that during the construction of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project (Project), the effective management of excess soil, spoil, solids, groundwater, and old transmission infrastructure materials will be a key consideration. UI will require its Project construction contractors to comply with this Materials Management Plan (Plan), which describes practices for proper materials handling, storage, transportation to appropriate disposal sites, and/or reuse or recycling, as well as other, more detailed specifications that UI will include in Project contractual documents.

Excess soil, spoil, rock, and groundwater will result from Project construction activities such as grading for the installation of access roads and work pads and excavations for structure foundations. These or other construction activities also may uncover materials (such as spoils, old railroad ties, concrete, etc.) that will require on-site management or off-site management, recycling or disposal. In addition, dismantling and removing UI's existing transmission line facilities from the Connecticut Department of Transportation (CT DOT) / MetroNorth Railroad (MNR) corridor will result in various materials that will require recycling, or proper off-site disposal. Such materials will include:

- The bonnets, conductors, and shield wires that will be removed from the tops of the existing railroad catenary structures;
- The other existing UI transmission facilities (e.g., existing monopoles and lattice steel towers that will be modified or removed as part of the Project).
- Wood poles that are located along portions of the CT DOT corridor, north of the MNR tracks. These wood poles supported railroad communication wires that were decommissioned many years ago. The poles have been abandoned in place and must be removed to provide space for the installation of UI's rebuilt 115-kV lines.

This Plan summarizes the analyses that UI conducted to assess soil and groundwater conditions in the Project area and reviews the procedures that Project construction contractors must follow regarding the handling of excess soil, spoil, solids, and groundwater encountered during or generated by Project construction. The Plan also includes requirements for handling, recycling, or otherwise disposing of other Project materials, such as the components of the 115-kV facilities that will be removed from the catenary structures.

Project construction contractors must comply with these practices and, as applicable, the Connecticut Department of Energy and Environmental Protection (CT DEEP) Remediation Standard Regulations (RSRs), the U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), and the conditions of Project permits from the CT DEEP. Soil and groundwater management practices also must comply with the CT DEEP General Permit and UI's Project-specific Stormwater Pollution Control Plan (SWPCP).

2. PRE-CONSTRUCTION SOIL AND GROUNDWATER STUDIES

As part of the Project planning and design process, UI performed geotechnical borings and took samples of the soils and groundwater (where encountered) at Project work sites. UI commissioned laboratory analyses of the samples to characterize soils and groundwater for the presence/absence of contaminants. To date, UI has sampled and received analytical results related to soil and groundwater at the majority of the monopole locations, with remaining borings to be completed during Project construction.

The Project is not subject to CT DEEP remedial programs. However, UI will use State and Federal criteria, such as the CT DEEP RSRs, as guidance during the materials management activities for the Project. The guidance RSR criteria for soil that apply to the Project are the Industrial/Commercial Direct Exposure Criteria (ICDEC) and the Pollutant Mobility Criteria (PMC) for both GA areas (GA PMC) and GB areas (GB PMC), as dictated by the groundwater classification of the specific Project area.²⁷

The CT DEEP RSR criteria used to evaluate groundwater data include the Groundwater Protection Criteria (GWPC) and the Surface Water Protection Criteria (SWPC). Additional numerical criteria required by any CT DEEP wastewater discharge permits will also be used to evaluate the dewatered groundwater as it relates to determining appropriate handling and disposal procedures.

The analyses found that, in certain portions of the Project area, both soils and groundwater contain contaminants at concentrations above the CT DEEP RSR criteria. These contaminants include extractable total petroleum hydrocarbons, semi-volatile organic compounds, and/or heavy metals (arsenic and lead).

Based on the analytical results, UI grouped areas along the Project route into soils and groundwater categories, which form the basis for defining the appropriate handling and disposal methods for these

²⁷ Per CT DEEP, areas of groundwater classified as GA refer to existing private and potential public or private supplies of water suitable for drinking without treatment; baseflow for hydraulically connected surface water bodies. The GB classification refers to groundwater that is presumed not suitable for human consumption without treatment; industrial process water and cooling waters; baseflow for hydraulically connected surface water bodies. (Note: In the Project area, groundwater does not serve as a potable water supply; instead, potable water is provided by the South Central Connecticut Regional Water Authority.)

materials during construction. This information will be provided to Project contractors as part of the construction specifications. These categories are summarized in Table 2-1.

Table 2-1: Soil and Groundwater Categories Identified along the Project Route

Soils

1. **Clean Soil:** Soil in which the analytical constituents are not detected above laboratory reporting limits or that the concentrations of the detected constituents are indicative of background conditions.
2. **Polluted Soil:** Soil that contains detected contaminants of concern above background concentrations, but below the RSR soil standards. Background conditions are defined as naturally occurring constituents that have been detected at similar concentrations throughout the Project.
3. **Contaminated Soil:** Soils that contain detected contaminants of concern at concentrations above the RSR soil criteria.
4. **Potentially Hazardous Soil:** Soils that have been yielded in exceedance of the RCRA hazardous soil standards, possibly meeting the definition of hazardous waste. Based on the soil data collected to date, no potentially hazardous soil has been identified at the Project; remaining monopole locations will be sampled during Project construction.

Groundwater

1. **Treatment Not Required:** Groundwater that may contain detected contaminants of concern at concentrations above background levels but below the CT RSR criteria for groundwater and any additional criteria associated with required wastewater permits.
2. **Containment, Treatment, and/or Disposal Required:** Groundwater that contains contaminants of concern at concentrations above the RSR criteria and/or additional criteria associated with required wastewater permits.

3. MATERIALS MANAGEMENT DURING CONSTRUCTION

The pre-construction study results were used to identify areas along the Project transmission line route where special soils or groundwater management techniques are required and to develop soil and groundwater management strategies for contractor implementation during construction. Proper management of soil and groundwater will avoid or minimize the potential for environmental impacts during construction and for the public or workers to be exposed to any contaminants. Similarly, construction contractors will be required to properly handle, temporarily store, and transport for off-site disposal or recycling the materials from the removal of UI's existing transmission line infrastructure and the abandoned MNR wood poles, as well as any other waste materials that may be encountered during the Project construction process.

The following subsections present UI's overall approach for materials management during Project construction. Additional, site-specific information regarding the management of soils, groundwater, and other materials will be provided, as necessary, in the Project's segment-specific Development and Management (D&M) Plans. UI will also include more detailed specifications for materials management in Project contractual documents.

3.1 Soils Management

UI will manage any soil to be reused in accordance with the Connecticut RSRs. Based on the results of the Project-specific studies, UI anticipates that most excavated materials will be transported for disposal or management at an approved off-site location.

However, the category of soil at each work site will determine the applicable soil management approach. In certain cases, and pending UI approval, soil categorized as clean or polluted may be reused onsite at the location where generated. Otherwise, all other categorized soil encountered during Project construction will be transported to pre-determined and approved, licensed off-site management or disposal facilities.

Off-site disposal facilities will be identified based on the soil designation from the pre-construction or any additional soil characterization. The handling, manifesting, transport, and ultimate disposal of the soil material will be in accordance with the regulatory requirements governing the soil characteristics.

Soil (if any) that will be temporarily stockpiled at work sites will be contained within appropriate erosion and sediment controls (e.g., straw bales, silt fence) and may be covered with poly/plastic. In areas where the characterization studies indicate that soil may be re-spread over work sites as part of restoration, stockpiles may be reseeded for additional temporary stabilization, depending on site-specific conditions.

3.2 Groundwater Management

Management methods for groundwater dewatered during the Project may include, but will not be limited to:

- The use of vacuum trucks to remove water from excavation sites and then transport it off-site, for management at an approved facility;
- Temporary storage at Project work sites in fractionization (frac) tanks²⁸ prior to off-site disposal;
- Discharge to temporary discharge basins, constructed of hay bales and sediment filter bags (or equivalent), and then via infiltration to upland areas along the Project route; and/or
- Discharge to sanitary sewers and/or surface waters, with treatment, if required.

All dewatering activities will be conducted in accordance with applicable local and/or State permitting requirements. Direct discharge to wetlands or watercourses is prohibited, unless appropriately permitted.

Residual silt/sediment collected at the bottom of any frac tanks will be disposed off-site at an appropriately designated disposal facility or spread back on the ground surface in the vicinity from which it was generated based on the soil characterization for the specific work site where the dewatering was performed.

²⁸ Depending on site-specific conditions (e.g., the amount of groundwater encountered), frac tanks may be positioned at Project work sites (e.g., along access roads / work pads), where groundwater can be pumped directly into the frac tank or staged at Project contractor laydown yards. Vacuum trucks will be used to remove groundwater from work excavations and transport it to the frac tanks, if staged at the contractor yard(s).

3.3 Other Materials

Other excess or waste materials generated by or encountered during construction also will be managed in accordance with applicable regulations and UI standards. Such materials will include the components of the existing UI infrastructure to be removed or modified along the CT DOT corridor (refer to the Bonnet Decommissioning Plan), the legacy railroad wood poles that are abandoned along portions of the north side of the MNR tracks, solid wastes found during Project construction (e.g., railroad ties, concrete), and miscellaneous solid waste generated during construction (e.g., concrete spoils, packaging materials, wrapping, pallets).

4. MATERIALS MANAGEMENT OVERSIGHT

During Project construction, UI will assign an environmental scientist or field engineer, working under the supervision of a Licensed Environmental Professional and reporting to UI, as warranted, to perform oversight inspections of the construction contractors' implementation of the practices defined in this Plan. Oversight activities, among others, will include the review of on-site materials management, soil reuse, soil and groundwater quantity tracking at the approved off-site disposal, and recycling facilities and metals/materials management.

ATTACHMENT M

NOTICES AND REPORTS TO THE COUNCIL

(Per CSC Docket 508, Condition 2, 5, 6, 7 and 9, as well as Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies)

April 2023

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1. INTRODUCTION

This attachment lists the notices and reports that are required pursuant to Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies (RCSA) and Conditions 2, 5, 6, 7, and 9 of the Connecticut Siting Council (CSC, Council) Decision and Order in Docket No. 508 for the Milvon-West River Railroad Transmission 115-kV Rebuild Project (Project). The attachment also identifies the circumstances under which changes to the Project Development and Management (D&M) Plans require notification to and approval of the CSC prior to implementation.

2. NOTICES AND REPORTS TO THE COUNCIL

Pursuant to Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies (RCSA) and Conditions 2, 5, 6, 7, and 9 of the Connecticut Siting Council (CSC, Council) Decision and Order in Docket No. 508 for the Milvon-West River Railroad Transmission 115-kV Rebuild Project (Project), The United Illuminating Company (UI, the Company) will provide the notifications identified below, as applicable, to the Council.

- a) ***Advance Written Notice Prior to the Commencement of Construction Activities*** – Pursuant to Condition 9 of the Docket No. 508 Decision and Order, UI will provide the CSC with **written advance notice two weeks before the commencement of Project construction.**
- b) ***Results of Further Consultations with the State Historic Preservation Office (SHPO) and/or the City of Milford***– Pursuant to Condition No. 2(e) of the Council’s Decision and Order in Docket No. 508, UI will provide to the Council the results of any further consultations with either the SHPO or the City regarding historic resources.
- c) ***Notice of the Location and Size of Staging Areas*** – Pursuant to RSCA Section 16-50j-62(a), UI will provide, for the CSC’s approval, written notice of the location and size of all areas to be accessed or used for Project staging that are not otherwise identified in the D&M Plan for each of the Project segments.
- d) ***Quarterly Progress Report*** – Pursuant to Condition 9 of the Decision and Order in Docket No. 508, UI will provide to the CSC a quarterly construction progress report.
- e) ***Written Notice of Completion of Construction and Commencement of Project Operation*** – Pursuant to Condition 9 of the CSC Decision and Order for the Project, UI will provide the Council with written notice of:
 - (1) The completion of Project construction activities; and
 - (2) The commencement of Project operation.

- f) ***Final Report*** – Pursuant to RSCA Section 16-50j-62(c)(1-5), within 180 days after completion of all Project construction and site rehabilitation, UI will provide the CSC with a final report that will identify the following:
- 1 All agreements with abutters or other property owners regarding special maintenance precautions.
 - 2 Significant changes to the D&M Plan that were required because of property rights or underlying and adjoining owners or for other reasons.
 - 3 The location of construction materials that have been left in place, including but not limited to, culverts, erosion control structures along watercourses and steep slopes, and corduroy roads in regulated wetlands.
 - 4 The location of areas where special plantings and reseeding have been performed.
 - 5 The actual construction cost of the facility, including but not limited to the following costs:
 - a. Clearing and access;
 - b. Construction of the facility and associated equipment;
 - c. Rehabilitation; and
 - d. Property acquisition for the site or access to the site.
- g) ***Year-After Report*** - Pursuant to Condition 5 of the Decision and Order in Docket No. 508, within three months after the conclusion of the first year of operation of all Project facilities, UI will provide to the Council an operating report that includes information relevant to the overall condition, safety, reliability, and operation of the transmission lines.

3. MODIFICATIONS TO THE D&M PLANS

Pursuant to RSCA Section 16-50j-62(b)(2), the Council must approve any significant changes to the Project D&M Plans. No significant changes to the D&M Plans will be implemented without Council approval.

Accordingly, if any significant changes to the D&M Plans are required, UI will submit advance written notice (letter, e-mail) of such proposed changes to the CSC. If advance written notice is impractical, verbal notice will be provided to the CSC immediately, followed up by written notice not less than 48 hours after the verbal notice. Significant D&M Plan changes, as defined in the RSCA, may include but not be limited to modifications to Project construction plans such as:

- The location of a wetland or watercourse crossing.

- The location of an accessway or structure in a regulated wetland or watercourse area.
- The construction or placement of any temporary structures or equipment.
- Transmission line structure type or location including, but not limited to, towers, guy wires, associated equipment, or other structures.
- Use of additional mitigation measures or elimination of mitigation measures.

Pursuant to RCSA Section 16-50j-61(d), notice of a filing of changes to the D&M Plan that require Council approval will be provided to the service list and the property owner of record, if applicable, at the time that the filing is made with the Council.

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ATTACHMENT N

**MILVON-WEST RIVER PROJECT TEAM
CONTACT INFORMATION**

April 2023

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The United Illuminating Company (UI or the Company) will construct the Milvon-West River Railroad 115-kV Transmission Line Rebuild Project (Project) in four segments:

- Elmwest Substation to West River Substation.
- Elmwest Substation to Allings Crossing Substation.
- Milvon Substation to Woodmont Substation.
- Woodmont Substation to Allings Crossing Substation.

UI will award separate construction contracts for each segment. For each segment, after contract award but prior to the commencement of the transmission line construction, UI will provide the Connecticut Siting Council with contact information for the prime construction contractor, consisting of the name of the firm, name of primary contact, corporate address, telephone number, and e-mail.

However, all Project construction will be managed by UI, with assistance from UI's engineering and environmental contractors. This core team will be involved in the construction of all Project segments. UI supervisory personnel will monitor construction activities, including adherence to engineering, safety and environmental requirements, and will manage other contractors involved in monitoring construction activities, including inspections pursuant to the Project's Stormwater Pollution Control Plan.

Table 1-1 identifies and lists the contact information for key Project management personnel.

Table 1-1: Corporate Contact Information for Key Project Personnel

Name/Organization	Role	Telephone	e-mail	Corporate Address
UI				
Paul Kenline	Project Manger	(716) 870-0044 (cell)	pkenline@uinet.com	100 Marsh Hill Road Orange, CT 06477
Aziz Choudhery	Lead Engineer	(203) 640-0701 (cell)	achoudhery@uinet.com	
Correne Auer	Permitting / Compliance	(860) 558-6947 (cell)	cauer@uinet.com	
Matt Scully	Construction	(203) 214-8660 (cell) (203) 926-4857 (office)	matthew.scully@uinet.com	
Westwood (Engineering/Design)				
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ATTACHMENT O

D&M PLAN DIRECTORY
AND
CROSS-REFERENCES TO CSC CONDITIONS IN
DOCKET NO. 508

April 2023

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Table 1-1: D&M Plan Directory (Pursuant to RCSA Section 16-50j-60)

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
16-50j-60	Requirements for a D&M Plan	
(a)	<p>Purpose. The Council may require the preparation of full or partial D&M Plans for proposed energy facilities, modifications to existing energy facilities, or where the preparation of such a plan would help significantly in balancing the need for adequate and reliable utility services at the lowest reasonable cost to consumers with the need to protect the environment and the ecology of the state.</p>	This D&M Plan applies to the replacement of the Milvon to West River 115-kV overhead transmission lines and associated substation upgrades.
(b)	<p>When required. A partial or full D&M plan shall be prepared in accordance with this regulation and shall include the information described in RCSA Sections 16-50j-61 to 16-50j-62, inclusive, for any proposed energy facility for which the Council issues a certificate of environmental compatibility and public need, except where the Council provides otherwise at the time it issues the certificate. Relevant information in the Council’s record may be referenced.</p>	This D&M Plan includes all information applicable to the installation of the rebuilt 115-kV transmission lines, removal of the existing 115-kV facilities from the railroad catenary structures, and associated line connections to the Milvon, Woodmont, Allings Crossing, Elmwest, and West River substations.
(c)	<p>Procedure for preparation. The D&M plan shall be prepared by the certificate holder or the owner or operator of the proposed facility or modification to an existing facility. The preparer may consult with the staff of the Council to prepare the D&M plan.</p>	This D&M Plan was prepared by UI.
(d)	<p>Timing of plan. The D&M plan shall be submitted to the Council in one or more sections, and the Council shall approve, modify, or disapprove each section of the plan not later than 60 days after receipt of it. If the Council does not act to approve, modify or disapprove the plan or a section thereof within 60 days after receipt of it, the plan shall be deemed approved. Except as otherwise authorized by the Council, no clearing or construction shall begin prior to approval of applicable sections of the D&M plan by the Council.</p>	<p>UI is submitting four separate D&M Plans for the Milvon to West River Project, pursuant to the scheduled Project construction. Accordingly, UI is submitting separate D&M Plans for the following Project segments:</p> <ul style="list-style-type: none"> • Elmwest Substation to West River Substation. • Elmwest Substation to Allings Crossing Substation. • Milvon Substation to Woodmont Substation . • Woodmont Substation to Allings Crossing Substation. <p>Volume 1 of each D&M Plan includes descriptive information. Volume 2 includes segment-specific maps, cross-sections, and other details. Volume 3 is a Project-Wide D&M Plan that contains plans and procedures applicable to all four segments. Volume 3 is being filed with the first D&M Plan and will be incorporated by reference in all the three other D&M Plans.</p>
16-50j-61	Elements of D&M Plan	
(a)	<p>Key Map. 1”=2,000’ USGS topographic map</p>	D&M Plan segments, Volume 2
(b)	<p>Plan Drawings. 1”=40’ or larger, and supporting documents, which shall contain the following information:</p>	Maps and cross-sections are included in Volume 2.

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
1.	Edges of the proposed site and any existing site contiguous to or crossing the site, portions of the site owned by the company in fee, and the identity of property owners of record of the portions of the site not owned by the company in fee	Volume 2.
2.	Public roads and public land crossings or adjoining the site	Volume 2
3.	Location of 50' contours along the site	Volume 2
4.	Probable location, type, and height of the proposed facility and components including each new transmission structure, position of guys, description of foundations, and locations of any utility or other structures to remain on the site or to be removed	Volume 2, maps and cross-sections.
5.	Probable points of access to the site, and the route and likely nature of accessways, including alternatives	Volume 2 maps
6.	Edges of existing and proposed clearing areas, the type of proposed clearing along each part of the site, and the location and species identification of vegetation that would remain for aesthetic and wildlife value	Volume 1, Volume 2
7.	Identification of sensitive areas and conditions within and adjoining the site, including but not limited to:	
A.	Wetland and watercourse areas regulated under C.G.S. Chapter 440 and any locations where construction may create drainage problems	Volume 1, Volume 2 maps
B.	Areas of high erosion potential	Volume 1, Volume 2 maps
C.	Critical habitats or areas identified as having rare, endangered, or threatened, or special concern plant or animal species listed by the state or federal government	Volume 1, Volume 2 maps
D.	Location of known underground utilities or resources to be crossed (electric lines, fuel lines, drainage systems and natural or artificial public or private water resources)	Volume 2
E.	Residences or businesses within or adjoining the site that may be disrupted during construction	Volume 2
F.	Significant environmental, historic and ecological features (significantly large or old trees, buildings, monuments, stone walls or features of local interest)	Volume 1, Volume 2
(c)	Supplemental Information	
1.	Plans (if any) to salvage marketable timber, restore habitat and maintain snag trees within or adjoining the site	Volume 1, Volume 2, Volume 3, Attachment C, Vegetation Clearing Plan
2.	All construction and rehabilitation procedures with reasonable mitigation that shall be taken to protect areas and conditions identified in 7(b), above, including but not limited to:	
A.	Construction techniques at wetland and watercourse crossings	Volume 1, Section 3.5.2; Section 3.7; Section 3.8; Volume 2, maps and Detail Sheets
B.	S&E control and rehabilitation procedures, consistent with the CT Guidelines for Soil Erosion and Sediment Control, as updated and amended for areas of high erosion potential	Volume 1, Volume 2, Volume 3, Attachment B, Erosion and Sedimentation Control Plan
C.	Precautions and all reasonable mitigation measures to be taken in areas within or adjoining the site to minimize any adverse impacts of such actions or modifications endangered, threatened, or special concern plant or animal species listed by federal or state agencies and critical habitats that are in compliance with federal and state recommended standards and guidelines, as amended	Volume 1,; Volume
D.	Plans for modification and rehabilitation of surface, drainage, and other hydrologic features	Volume 1, Volume 2

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
3.	Plans for the method and type of vegetation clearing and maintenance to be used within or adjacent to the site	Volume I, Volume 3, Attachment C, Vegetation Clearing Plan
4.	Location of public recreation areas or activities known to exist or being proposed in or adjacent to the site, together with copies of agreements between the company and public agencies authorizing the public recreation use of the site to the extent of the company's rights thereto	Volume 2
5.	Plans for ultimate disposal of excess excavated material, stump removal, and periodic maintenance of the site	Volume I, Volume 3, Attachment L, Materials Management Plan I
6.	Locations of areas where blasting is anticipated	None
7.	Rehabilitation plans, including but not limited to reseeding and topsoil restoration	Volume I, Volume 3, Attachment D, Restoration Plan
8.	Contact information for the personnel of the contractor assigned to the project	Volume 1, by segment: to be provided after transmission line contract award, prior to commencement of construction. Refer to Volume 3, Attachment N for contact information for key UI personnel
9.	Such site-specific information as the CSC may require	
(d)	Notice A copy, or notice of the filing, of the D&M Plan, or a copy, or notice of the filing of any changes to the D&M Plan, or any section thereof, shall be provided to the service list and the property owner of record, if applicable, at the same time the plan, or any section thereof, is submitted to the CSC	Volume 3, Attachment M
(e)	Changes to the Plan The CSC may order changes to the D&M plan, including but not limited to vegetative screening, paint color, or fence design at any time during the preparation of the plan	Volume 3, Attachment M
16-50j-62	Supplemental Reporting Requirements	
(a)	Site Testing and Staging Areas. The certificate holder, or facility owner or operator, shall provide the CSC with written notice of the location and size of all areas to be accessed or used for site testing or staging areas. If such an area is to be used prior to approval of the D&M plan, the CSC may approve such use on terms as it deems appropriate.	Volume 1, Volume 2
(b)	Notice.	
1.	The certificate holder, or facility owner or operator, shall provide the CSC, in writing with a minimum of two weeks advance notice of the beginning of: A. Clearing and access work in each successive portion of the site, and B. Facility construction in that same portion	Volume 3, Attachment M
2.	The certificate holder, or facility owner or operator, shall provide the CSC with advance written notice whenever a significant change of the approved D&M plan is necessary. If advance written notice is impractical, verbal notice shall be provided to the CSC immediately and shall be followed by written notice not later than 48 hours after the verbal notice. Significant changes to the approved D&M plan shall include, but not be limited to, the following: A. The location of wetland or watercourse crossing B. The location of an accessway or structure in a regulated wetland or watercourse area C. The construction or placement of any temporary structures or equipment	Volume 3, Attachment M

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
	D. A change in structure type or location including, but not limited to, towers, guy wires, associated equipment or other facility structures E. Utilization of additional mitigation measures, or elimination of mitigation measures. The CSC or its designee shall promptly review the changes and shall approve, modify, or disapprove the changes in accordance with subsection (d) of Section 16-50j-60 of the RCSA	
3.	The certificate holder, or facility owner or operator, shall provide the CSC with a monthly construction progress report or a construction progress report at intervals determined by the CSC or its designee, indicating changes and deviations from the approved D&M Plan. The CSC may approve changes and deviations, request corrections, or require mitigation measures.	Volume 3, Attachment M
4.	The certificate holder, or facility owner or operator, shall provide the CSC with written notice of completion of construction and site rehabilitation.	Volume 3, Attachment LM
(c)	Final Report The certificate holder, facility owner or operator, shall provide the CSC with a final report for the facility not later than 180 days after completion of all site construction and site rehabilitation. The report shall identify:	Volume 3, Attachment M
1.	All agreements with abutters or other property owners regarding special maintenance precautions	
2.	Significant changes of the D&M plan that were required because of property rights of underlying and adjoining owners for other reasons	
3.	The location of construction materials which have been left in place including, but not limited to, culverts, erosion control structures along watercourses and steep slopes, and corduroy roads in regulated wetlands	
4.	The location of areas where special planting and reseeding have been done	
5.	The actual construction cost of the facility, including but not limited to the following costs: A. Clearing and access B. Construction of the facility and associated equipment C. Rehabilitation; and D. Property acquisition for the site or access to the site	
(d)	Protective Order The certificate holder, or facility owner or operator, may file a motion for protective order pertaining to commercial or financial information related to the site or access to the site.	N/A

**Table 1-2
D&M Plan Directory of Docket No. 508 Decision and Order and Opinion Requirements**

CSC Condition Number	Decision and Order	D&M Plan (Section Reference, as Applicable)
(1)	The Certificate Holder shall construct the proposed transmission line along the proposed route utilizing the Option J Configuration and perform related Project improvements, as proposed, subject to modifications during final site design and approval of the Development and Management (D&M Plan) for the Project.	D&M Plans, Volumes 1 and 2 (by transmission line segment), Volume-3, Project-wide plans and information. (Refer to D&M Plan for Milvon to Woodmont, Segment 3 for Option J Configuration information.)
(2)	<p>The Certificate Holder shall prepare a D&M Plan for this Project. The D&M Plan shall be in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be provided to the service list and submitted to and approved by the Council prior to the commencement of facility construction and shall include:</p> <p>a. Detailed site plans depicting final transmission line structure heights and identification of locations for access roads, structure foundations, equipment laydown areas, material staging areas, field office trailers, sanitary facilities, and parking;</p> <p>b. Detailed site plans for equipment installation/modifications at Milvon, Woodmont, Allings Crossing, Elmwest, and West River substations;</p> <p>c. Decommissioning plan for bonnets;</p> <p>d. An erosion and sediment control plan, consistent with the 2002 <i>Connecticut Guideline for Soil Erosion and Sediment Control</i> as amended;</p> <p>e. Results of any further consultations with the SHPO and/or the City of Milford regarding historic resources;</p>	<p>D&M Plans, Volumes 1 and 2 (by transmission line segment), Volume-3, Project-wide plans and information.</p> <p>Volume 2 maps</p> <p>Volume 2 maps</p> <p>Volume 3, Attachment A</p> <p>Volume 1 and 2 (by transmission line segment); Volume 3, Attachment B</p> <p>Provided to the Council separately.</p>
	<p>f. Identification of wetland and watercourse resources, related temporary construction impacts and methods to reduce such impacts;</p> <p>g. Vegetative clearing plan;</p> <p>h. Restoration plan of disturbed areas, including incorporation of areas for pollinator habitat consistent with C.G.S. §16-50hh, if feasible;</p> <p>i. A spill prevention and countermeasures plan;</p> <p>j. Wetland invasive species control plan;</p> <p>k. Provisions for on-site environmental inspection and monitoring of the ROW and substations during construction;</p> <p>l. A schedule of construction hours;</p> <p>m. A blasting plan, if necessary;</p>	<p>Volumes 1, Volume 2</p> <p>Volumes 1 and 2, Volume 3, Attachment C</p> <p>Volumes 1 and 2 (refer to maps); Volume 3, Attachment D</p> <p>Volume 3, Attachment E</p> <p>Volume 3, Attachment F</p> <p>Volume 3, Attachment J</p> <p>Volume 1, Section 4 (by transmission line segment)</p> <p>N/A Project will not require blasting</p>

CSC Condition Number	Decision and Order	D&M Plan (Section Reference, as Applicable)
	n. Plans to comply with DEEP Natural Diversity Database recommendations to reduce impacts to state-listed endangered, threatened, and special concern species; and o. EMF Monitoring Plan.	Volumes 1 and 2 (by transmission line segment) Volume 3, Attachment G
(3)	The Certificate Holder shall obtain necessary permits from the United States Army Corps of Engineers and the Connecticut Department of Energy and Environmental Protection prior to the commencement of construction, in areas where said permits are required.	Volume 1, Section 5.4; Volume 3 maps and Detail Sheet
(4)	The Certificate Holder shall comply with all future electric and magnetic field standards promulgated by State or federal regulatory agencies. Upon the establishment of any new standards, the facilities granted in this Decision and Order shall be brought into compliance with such standards.	Agreed
(5)	The Certificate Holder shall provide to the Council an operating report within three months after the conclusion of the first year of operation of all facilities herein with information relevant to the overall condition, safety, reliability, and operation of the new transmission line.	Volume 3, Attachment M
(6)	Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within five years after all appeals to this Decision and Order have been resolved. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as practical.	Volume 3, Attachment M
(7)	Any request for extension of the time period referred to in Condition 6 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be service on all parties and intervenors, as listed in the service list, the Cities of West Haven, Milford and New Haven, and the Town of Orange.	Agree
(8)	This Certificate may be surrendered by the Certificate Holder upon written notification to the Council.	Agree
(9)	The Certificate Holder shall comply with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies and submit quarterly construction progress reports. The Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.	Volume 3, Attachment L
(10)	The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under CGS §16-50v.	Agree
(11)	This Certificate may be transferred in accordance with CGS §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under CGS §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide to the Council a written agreement as to the entity responsible for any quarterly assessment charges under CGS §16-50v(b)2 that may be associated with this facility.	N/A