

BRUCE L. MCDERMOTT 203.772.7787 DIRECT TELEPHONE 860.240.5723 DIRECT FACSIMILE BMCDERMOTT@MURTHALAW.COM

July 18, 2023

Melanie A. Bachman, Esq. Executive Director/Staff Attorney Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: Docket No. 516 – The United Illuminating Company Application for a Certificate of Environmental Compatibility and Public Need for the Fairfield to Congress Railroad Transmission Line 115-kV Rebuild Project

Dear Ms. Bachman:

On behalf of The United Illuminating Company (the "Company"), enclosed for filing with the Connecticut Siting Council ("Council") are the following:

- 1. The Company's responses to the Council's July 11, 2023 interrogatories (Set 2);
- 2. The Company's responses to BJ's Wholesale Club's July 11, 2023 interrogatories;
- 3. Affidavit of Brian Ragozzine relating to posting of hearing notice signs; and
- 4. The Company's pre-hearing submission.

An original and fifteen (15) copies of this filing will be hand delivered to the Council today.

Should the Council have any questions regarding this filing, please do not hesitate to contact me.

Very truly yours,

Bruce L. McDermott

Enclosure

Murtha Cullina LLP 265 Church Street New Haven, CT 06510 T 203.772.7700 F 203.772.7723

The United Illuminating Company Witness: Annette Potasz Docket No. 516 Page 1 of 1

Q-BWC-1: Has UI approached Feroleto Steel Co., Inc., the owner of record of certain real property located at 301 Scofield Avenue Extension, Fairfield, Connecticut, and discussed the placement of transmission poles, transmission lines and related infrastructure on the property?

A-BWC-1: UI has not approached Feroleto Steel Co. or any individual property owners regarding the placement of facilities and impacts to properties. Once the Siting Council has approved the project, UI and its agents begin the process of securing appropriate land rights.

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 1 of 2

Q-BWC-2: Explain UI's position for not placing the transmission poles, transmission lines and related infrastructure on Feroleto Steel Co., Inc.'s property.

A-BWC-2: When UI designs a transmission line and evaluates pole positioning along and adjacent to the railroad corridor, UI takes into account multiple items including the following:

- Separation of Ul's assets and Metro North's assets to the maximum extent possible.
 - In the current state of UI's assets, and in the majority of cases for Metro North's assets, anytime work (e.g., capital improvements, maintenance or emergency) is performed, outages on the lines must be taken impacting both UI and Metro North. Separating these assets to the maximum extent possible increases reliability and reduces the burden on the need for outages, cost, resources and schedule for both entities in serving the public.
- Evaluation of the surrounding built environment in terms of currently developed land and undeveloped land.
- Evaluation of conductor blowout and span lengths.
 - Ul's standard ROW width for most spans is a minimum of 25 feet from conductor. Once span lengths increase above 470 feet, the ROW width needs to become larger to ensure the full extent of conductor blowout under a 130 mph is kept with Ul's ROW limits.
- Evaluation of structure heights and spacing between conductors under various ice and wind conditions.
 - Due to the sag and swing of the individual conductors under various ice and wind conditions, once span lengths increase above 395 feet, phase spacing must increase over the typical spacing of 14 feet, resulting in taller poles and larger foundations.

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 2 of 2

In the case of Feroleto Steel's property, the entire lot is currently paved and has been paved prior to the start of the design of Ul's Fairfield to Congress Railroad Transmission Line 115-kv Rebuild Project. In an effort to not encumber the paved area, Ul plans to place Structure P725S north of the paved area resulting in this pole to have to support the Metro North owned signal wires. When locating P724S, Ul is utilizing an underdeveloped piece of land adjacent to the railroad corridor. This piece of land was used for an old railroad spur and is currently separated from the adjacent paved area by a fence to the east and bollards to the south and west. In terms of protecting their assets from vehicular traffic while being cognizant of the four bullets above, this location was selected to be the best in this tight corridor.

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst Page 1 of 2

Q-BWC-3: Describe the full scope of Ul's due diligence, investigatory efforts and overall position relative to the locating of transmission poles, transmission lines and related infrastructure on the real property known as 301 Scofield Avenue Extension, Fairfield, Connecticut.

A-BWC-3: When UI designs a transmission line and evaluates pole positioning along and adjacent to the CTDOT/MetroNorth railroad corridor, UI takes into account multiple items including the following:

- Separation of Ul's assets and Metro North's assets to the maximum extent possible.
- Evaluation of the surrounding built environment in terms of currently developed land and undeveloped land.
- Evaluation of conductor blowout and span lengths.
 - Ul's standard ROW width for most spans is a minimum of 25 feet from conductor. Once span lengths increase above 470 feet, the ROW width needs to become larger to ensure the full extent of conductor blowout under a 130 mph is kept with Ul's ROW limits.
- Evaluation of structure heights and spacing between conductors under various ice and wind conditions.
 - Due to the sag and swing of the individual conductors under various ice and wind conditions, once span lengths increase above 395 feet, phase spacing must increase over the typical spacing of 14 feet, resulting in taller poles and larger foundations.

In addition to the above design criteria when designing the construction of transmission line assets or a transmission line, UI also performs the following due diligence or investigatory survey(s) during the design process:

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst Page 2 of 2

- A property and geospatial survey
- An above and below grade utility survey
- Geotechnical assessment along with the environmental characterization of soil and groundwater conditions to evaluate the current below grade conditions
- Electromagnetic field measurement evaluation
- Survey of the Project area for the following environmental conditions,
 - Wetlands, watercourses, vernal pools and floodplains
 - Biological resources such as but not limited to vegetation, fisheries, wildlife and Federal and State listed species
 - Any direct and indirect impacts to Federally or State recognized historical places

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 1 of 1

Q-BWC-4: Describe Ul's rationale and preference for locating transmission poles,

transmission lines and related infrastructure on BWC's property relative to

surrounding properties.

A-BWC-4: UI has an obligation in designing and ultimately constructing transmission line infrastructure to mitigate impacts to the surrounding environment and maintain public safety. UI does not evaluate the proposed location of infrastructure differently from one property owner to another, unless the surrounding environment requires it be done.

When locating P724S, UI found underdeveloped land adjacent to the railroad corridor. This land was used for an old railroad spur and is currently separated from the adjacent paved area by a fence to the east and bollards to the south and west. In terms of protecting assets from vehicular traffic while being cognizant of the four factors in A-BWC-2, this location was selected to be the best location for the pole.

Based on the location of both P721ES and P724S, to keep pole heights and easement widths to a minimum, UI determined a need for a mid-span pole (P723S). Being cognizant of the existing parking lot on BWC's property, UI placed this pole on the track side of the parking lot. After further evaluation UI has determined that pole P723S can move only slightly closer to the tracks (no greater than 18 inches), based on built environment and design constraints, to a location where the entire foundation will be off the BWC property.

The United Illuminating Company Witness: Annette Potasz Docket No. 516 Page 1 of 1

Q-BWC-5: Has UI approached the Metropolitan Transportation Authority ("MTA") and discussed the placement of transmission poles, transmission lines and related infrastructure on the MTA's property?

A-BWC-5: Based on NESC and UI clearance requirements, the CTDOT owned corridor is too narrow to place transmission poles and lines solely on CDOT property.

The objective of the Project is not only to address an asset condition issue and resiliency need, but to also accommodate future maintenance support for both UI and MNR by separating the two owners' facilities.

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 1 of 2

Q-BWC-6: Please describe in detail UI's due diligence, investigatory efforts and overall position relative to locating transmission poles, transmission lines and related infrastructure on the adjacent property owned by the MTA.

A-BWC-6: The overall design criteria and objective for the Project are as follows:

- Rebuild UI facilities based on an asset condition assessment of UI's facilities.
- Separation of UI's assets and Metro North's assets to the maximum extent possible to mitigate existing maintenance constraints.
- Limit, as much as possible, impacts to adjacent property owners by:
 - locating poles, to the extent possible, within the CTDOT corridor. This is the preference of the design.
 - Where the corridor becomes narrow and pole(s) cannot be placed with in the corridor, evaluation of the surrounding built environment in terms of currently developed land and undeveloped land was considered. The poles were then placed where they judged the least impactful to property owners while maintaining required clearances to other obstructions in the area.
- Evaluation of conductor blowout and span lengths.
 - UI's standard ROW width for most spans is a minimum of 25 feet from conductor. Once span lengths increase above 470 feet, the ROW width needs to become larger to ensure the full extent of conductor blowout under a 130 mph is kept with UI's ROW limits.
- Evaluation of structure heights and spacing between conductors under various ice and wind conditions.
 - Due to the sag and swing of the individual conductors under various ice and wind conditions, once span lengths increase above 395 feet, phase spacing must increase over the typical spacing of 14 feet, resulting in taller poles and larger foundations.
- Adherence to both Avangrid and industry mandated design standards (i.e. National Electric Safety Code (NESC), North American Electric Reliability Corporation (NERC)).

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst Page 2 of 2

The following due diligence activities were performed to aid in pole placement and the overall detailed engineering and design of the transmission line.

- A property and geospatial survey,
- An above and below grade utility survey,
- Geotechnical assessment along with the environmental characterization of soil and groundwater conditions to evaluate the current below grade conditions,
- Electromagnetic field measurement evaluation
- Survey of the Project area for the following environmental conditions
 - Wetlands, watercourses, vernal pools and floodplains,
 - Biological resources such as but not limited to vegetation, fisheries, wildlife and Federal and State listed species
 - Any direct and indirect impacts to Federally or State recognized historical places

The due diligence activities above, along with design objectives where the guidelines by which the Project was designed.

The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 1 of 1

Q-BWC-7: Please describe and provide BWC with cross-sections, including the

required clearances between the wires (horizontal and vertical) and other critical obstructions, to illustrate the relationship between the proposed locations of the transmission lines to the wires and fixed objects on the

MTA's property.

A-BWC-7: Please see Attachments BWC-7-1 and BWC-7-2.

The United Illuminating Company Witness: Annette Potasz Docket No. 516 Page 1 of 1

Q-BWC-8: Provide complete copies of the latest version of UI's proposed

maintenance easement and any other easements associated with the

above-referenced application.

A-BWC-8: See Attachment BWC-8-1.

The United Illuminating Company Witness: Matthew Parkhurst

Docket No. 516 Page 1 of 1

Q-BWC-9: With respect to UI's maintenance easement and any other easements

associated with the above-referenced application, please describe the extent to which the easements will impact BWC's loading dock operations

and the potential for disruptions to BWC's loading dock operations.

A-BWC-9: Work during construction activities will be coordinated between the UI Construction Manager and BWC to minimize interruption to BWM's loading docks. Advance notice will be provided prior to any work being

loading docks. Advance notice will be provided prior to any work being performed on site. Any future maintenance will have minimal impact on the BWM loading dock and will also be coordinated prior to any work

taking place.

Going forward, the easement will provide required access to the facilities during any capital improvements, routine maintenance, inspection and emergencies once they are installed. Any potential disruptions/impacts would be arranged in advance on a case by case basis.

The United Illuminating Company Witness: Matt Scully Docket No. 516 Page 1 of 1

Q-BWC-10: With respect to UI's maintenance easement and any other easements associated with the above-referenced application, please describe the manner, duration and time intervals in which UI vehicles, personnel, agents and machinery will be permitted and located in the easement area.

A-BWC-10: Work during the Fairfield Congress Project construction phase will not be a continuous process, and will be spread out over several months. Work is anticipated to proceed as follows (timeframes are approximate and may vary depending on site and weather conditions):

Survey work – Support truck and equipment (approximately 2 days)

- Vegetation clearing boom trucks, wood chippers, pickup trucks (approximately 1 week)
- Site Preparation excavator and support vehicles (approximately 1 week)
- Foundation drilling Excavator size drill rig, dump truck, small loader (approximately 1 week)
- Existing conductor and pole removal Small crane, bucket trucks, pickup truck (approximately 2 days)
- Pole setting and dressing Crane, tractor trailer, bucket trucks, pickup trucks (approximately 3 days)
- Pulling in new conductors Bucket trucks, pickup trucks (approximately 2 days)
- Pole grounding/clean up Mini Excavator, pickup trucks (approximately 2 days)
- Restoration and site clean-up (as necessary) mini-excavator, backhoe, support vehicles (approximately 2 days)

Maintenance on these poles is limited to yearly visual inspections and uses drones for inspection.

Future vegetation maintenance along the transmission line occurs every four years. Maintenance work along this area should be minimal since all vegetation will be removed during construction but will involve the use of bucket trucks, wood chipper, and pickup trucks (approximately 2 days).

In the event of unforeseen circumstances, longer duration access times may be warranted and will be coordinated with BWC.

The United Illuminating Company Witness: Matthew Parkhurst

Docket No. 516 Page 1 of 1

Q-BWC-11: Describe the position and location of the second UI transmission pole on the west side of BWC's property in relation to BWC's proposed future gas

station development.

A-BWC-11: UI is not aware of the location of BWC's proposed future gas station

development as site plans have not been provided to UI.

The United Illuminating Company Witness: Matthew Parkhurst Docket No. 516 Page 1 of 2

Q-BWC-12: Provide documentation and UI's analysis of all alternative sites for the location of transmission poles, transmission lines and related infrastructure, the technical suitability of each alternative site and the data generated for each site.

- A-BWC-12: During the solution analysis phase of the Project, UI investigated several different alternatives:
 - Single circuit structures
 - Rebuilding the existing catenaries
 - Underground transmission lines
 - New transmission poles on one side and rebuilding one side of the catenary structures

Section 9 of the Application describes the different alternatives and their evaluation. Below are additional specifics for how pole locations are selected for a design:

When UI designs a transmission line and evaluates pole positioning along and adjacent to the railroad corridor, UI takes into account multiple items including the following:

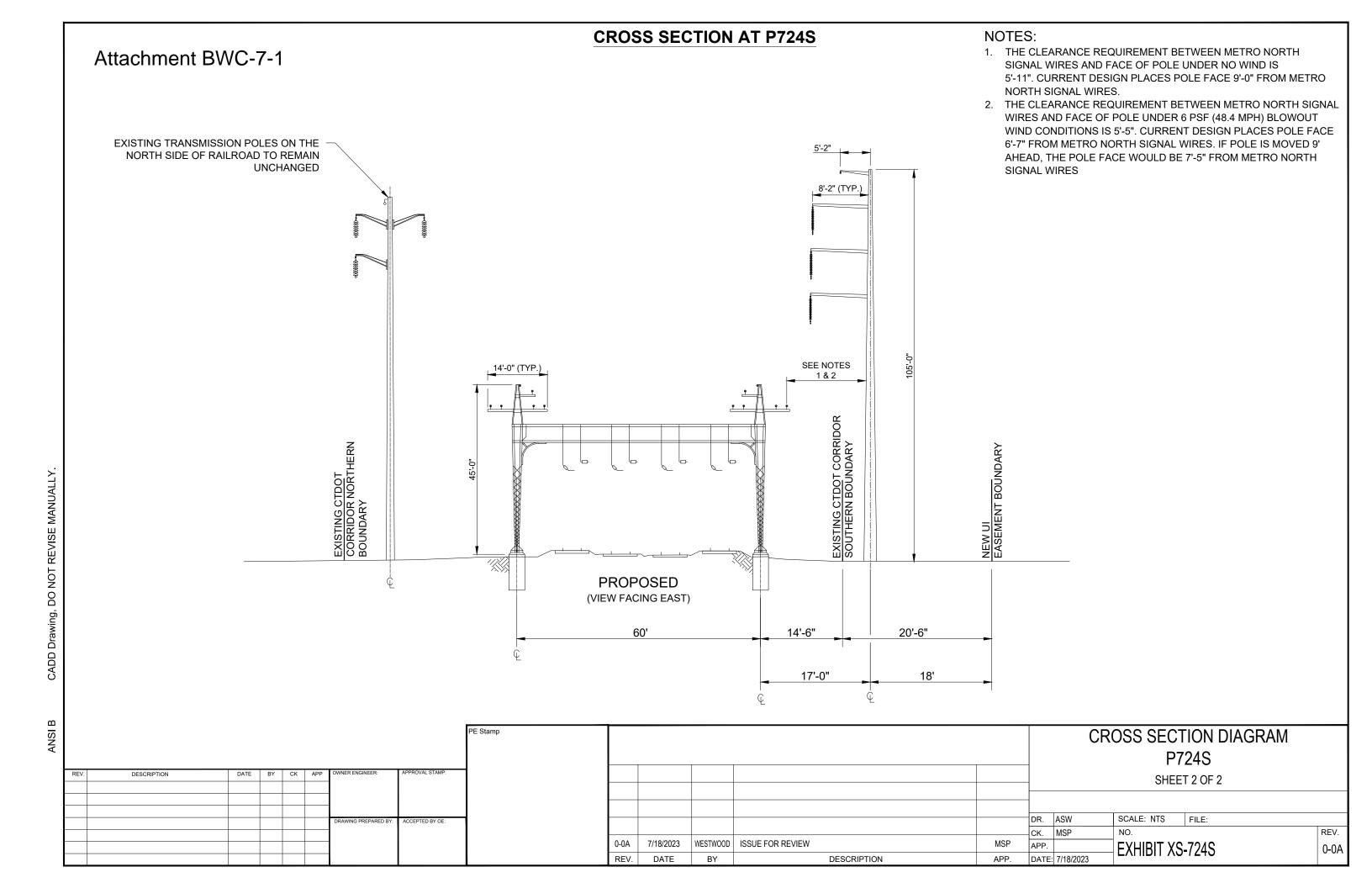
- Separation of Ul's assets and Metro North's assets to the maximum extent possible.
 - Both Ul's assets and Metro North's assets serve the public in terms of providing reliable electric service and providing an option of public transit in southwestern Connecticut/New York City metro area. Separating these assets to the maximum extent possible eases future maintenance on both of these critical systems.
- Design of transmission assets within the existing CTDOT railroad corridor limits, as much as possible. Because of the variable width of the corridor and clearance requirements, there are some locations where the poles are not able to fit solely within the existing corridor.
- Evaluation of the surrounding built environment in terms of currently developed land and undeveloped land.

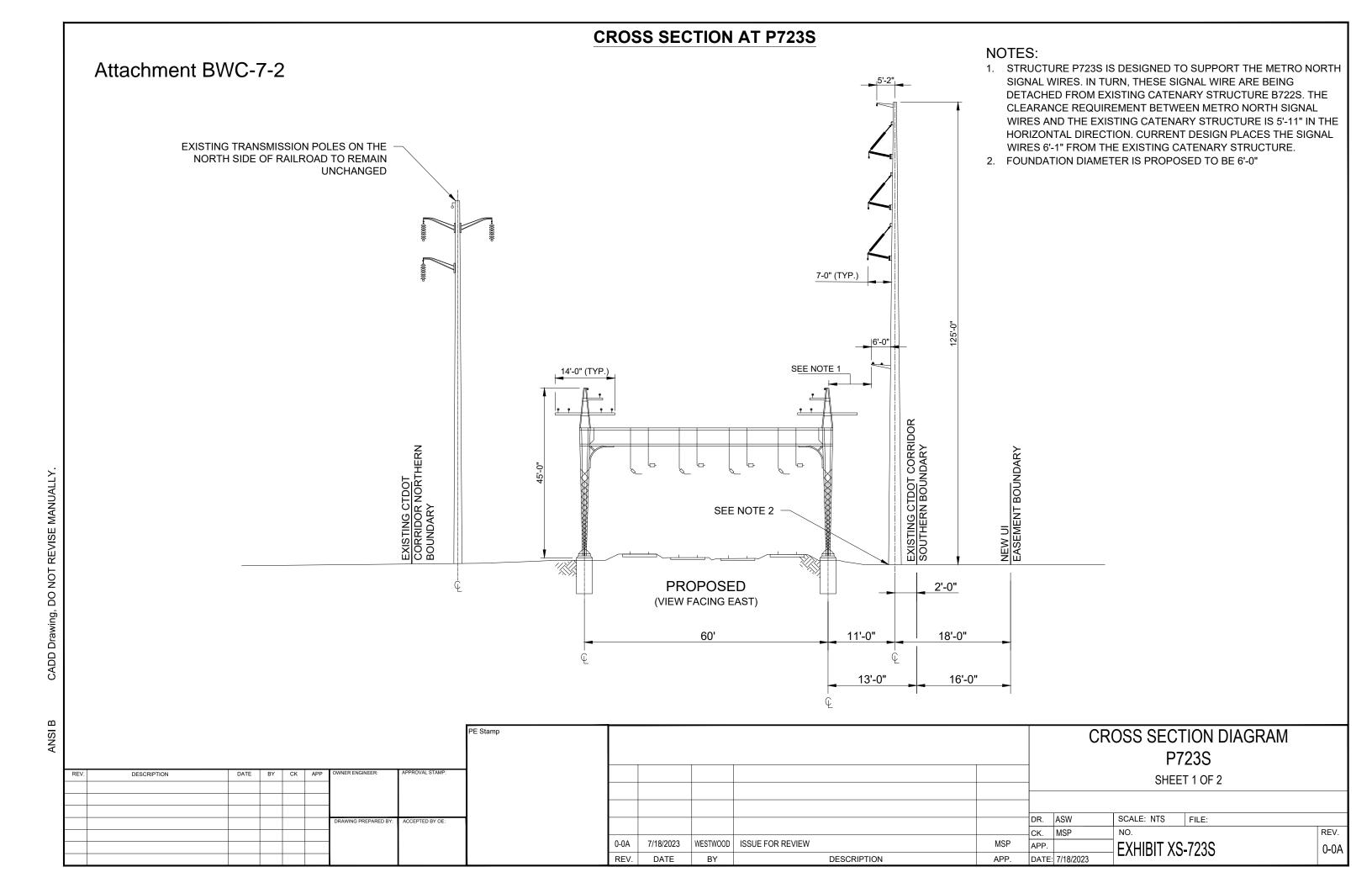
The United Illuminating Company Docket No. 516

Witness: Matthew Parkhurst

Page 2 of 2

- Evaluation of conductor blowout and span lengths.
 - Ul's standard ROW width for most spans is a minimum of 25 feet from conductor. Once span lengths increase above 470 feet, the ROW width needs to become larger to ensure the full extent of conductor blowout under a 130 mph is kept with Ul's ROW limits for public safety and reliable operation of the transmission lines.
- Evaluation of structure heights and spacing between conductors under various ice and wind conditions.
 - Due to the sag and swing of the individual conductors under various ice and wind conditions, once span lengths increase above 395 feet, phase spacing must increase over the typical spacing of 14 feet, resulting in taller poles and larger foundations.





ATTACHMENT A1 FORM OF EASEMENT (ENTITY)

LL ______ After recording please return to:
The United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477-3629
Energy Land Management

For Use with Entity

EASEMENT

KNOW ALL PEOPLE BY THESE PRESENTS, that **INSERT NAME OF ENTITY** (corporation, LLC, partnership, etc.) having an office or place of business at [insert street address], in the Town of _____ in the State of _____ (hereinafter called "Grantor"), for valuable consideration received to its full satisfaction from THE UNITED ILLUMINATING COMPANY (hereinafter called "UI" or "Grantee"), a corporation organized and existing under the laws of the State of Connecticut and having its principal place of business in the Town of Orange, County of New Haven in the State of Connecticut, does hereby give, grant, bargain, sell and confirm unto Grantee, and unto its successors and assigns, forever, the right, privilege, and authority to construct, reconstruct, erect, install, maintain, inspect, control, repair, expand, remove, replace, relocate and operate poles, towers, circuits, lines, cables (including fiber optic and communication cables), wires, filaments, crossarms, guy wires, anchors, monuments, guy stubs and related structures and equipment, and conductors, antennas, and other structures used for the conducting and the transmission and distribution of electric current, energy, intelligence, wireless signals, light and communication of any character and any other appurtenances as Grantee may from time to time require (hereinafter collectively called the "Facilities"), upon, along, across, over and under certain property (hereinafter called the "Easement Area") which Easement Area is more particularly described in Exhibit A and shown as "Utility Easement in favor of United Illuminating" on a drawing entitled "Map Showing Easement Area Granted to The United Illuminating Company [insert street address] Town of ______, County of ______ State of Connecticut," Dated _____, Scale 1" = ____', Sheet No. EA-____ (the "Drawing"), a copy of which will be filed with the Town Clerk and is attached as **Exhibit B** hereto and made a part hereof. The Easement Area is situated within that certain piece or parcel of land located at [insert street address], Connecticut (the "Property"), and more particularly bounded and described on **Exhibit C** attached hereto and made a part hereof.

[Also included in this Easement is the right of temporary use and entry upon, across and over that area of land on the Property more particularly described and shown on the Drawing(s) as "Temporary Workspace Area," to be used during construction and installation of the Facilities. Grantee's right of use and entry with respect to the Temporary Workspace Area shall expire twelve (12) months after completion of construction, and in no event shall said use and entry rights be effective after thirty-six (36) months after the execution date of this instrument.]

Together with the right (a) to conduct, distribute and transmit electricity, energy, intelligence, light, wireless signals and/or communications of any character and to provide the service or services relating to said right(s) by means of the Facilities; (b) to enter upon, travel and transport materials and equipment over and upon the Easement Area, Temporary Workspace Area and the Property; (c) of reasonable access over and across the Property and other adjoining land of Grantor to the Easement Area; and (d) if necessary or convenient in connection therewith, to grade, excavate, fill or otherwise improve the Easement Area, all in the exercise of said right, privilege and authority.

Grantee, by its acceptance hereof, agrees, for itself and its successors and assigns, that upon completion of any construction, installation, maintenance, inspection, repair, removal or replacement of its Facilities that significantly disturbs the surface of any portion of the Easement Area, such disturbed surface area shall be restored by Grantee to its former condition to the extent reasonably practicable, given the presence of the Facilities. Such restoration, however, will not include the replacement or other restoration of such trees, parts of trees (including limbs and branches), underbrush, roots, flowers or other growth as may be removed at any time pursuant to the rights herein granted.

Grantee reserves the right, at any time and from time to time, to (i) trim and keep trimmed, cut, take down and remove any or all trees, parts of trees (including limbs and branches), underbrush, roots, flowers or other growth: (A) within the Easement Area, (B) on the Property and any other adjoining land of Grantor and in each case which may interfere with the exercise of any of the rights and /or easements herein granted, or (C) which may create a hazard; (ii) control the growth of such trees, parts of trees (including limbs and branches), underbrush, roots, flowers and other growth, in each case by the use of mechanical means, chemicals or otherwise, and the right, but not the obligation to dispose of all wood cut; and (iii) remove any structures (including, but not limited to, sheds, garages, and other installations), improvements, retaining walls, above or below ground swimming pools, decks, rocks, and other obstructions within or projecting into the Easement Area, in each case without payment therefor; provided, however, that notwithstanding the foregoing, Grantor shall have the right to maintain, but not increase the height (as determined based on the grade of the Property as of the date of this instrument) of, in the Easement Area, but if it is or otherwise structurally modify, the existing substantially damaged or destroyed and Grantor fails to rebuild or restore the same (subject to such height limitation) within eighteen (18) months from the date of such substantial change or destruction, then Grantor shall not be allowed to rebuild or replace it in the Easement Area.

The easements and other rights granted herein to use and occupy the Easement Area shall include all surface and air rights thereover, and such subsurface rights as may be necessary to install and maintain the Facilities.

If any part of the land within the limits of the Easement Area is now or may hereafter become a public street or a highway or a part thereof, permission, as provided in the General Statutes of Connecticut relating to adjoining land owners, is hereby given to Grantee, and its successors and assigns, to use that part for the purposes and in the manner above described.

No cessation of use or operation of all or any portion of said easements or rights or of the Easement Area by Grantee shall be deemed an abandonment thereof resulting in the termination of any aspect of the easements and/or right or of the Easement Area, unless the holder of same at the time of such cessation of use or operation releases, in a written instrument in recordable form, its rights in such easements and right or in the Easement Area.

The easements and other rights granted herein to use and occupy the Easement Area shall include all surface and air rights thereover, and such subsurface rights as may be necessary to install and maintain the Facilities.

Grantor agrees, for itself and its successors and assigns, that each and every part of the Facilities shall be and remain the sole and exclusive personal property of UI.

Grantor further agrees, for itself and its successors and assigns, that neither Grantor, nor any servant, agent, employee or contractor of Grantor, its successors or assigns, shall have any ownership in,

and/or right of attachment or other access to, each and every part of the Facilities without the prior written consent of UI.

Grantor further agrees, for itself and its successors and assigns, that neither Grantor, nor any servant, agent, employee or contractor of Grantor, its successors or assigns, shall either erect any structure or equipment, or plant any tree or shrub in a location, or change the grade of, excavate, fill or flood the Easement Area or adjoining land in a manner that, in the sole judgment of Grantee, will interfere with or endanger the operation or maintenance of any of the Facilities or Grantee's right of access to the same. In no event shall (x) any area within a fifteen (15) foot radius around any Facilities of Grantee be excavated or removed; or (y) any other land within the Easement Area or adjoining land be excavated or removed if such excavation or removal would endanger any Facilities or would interfere with the proposed use of such areas for the erection, construction and maintenance of any Facilities.

Grantor further agrees, for itself and its successors and assigns, that if any work in connection with any improvement now or hereafter situated on the Property might be liable to cause damage to or otherwise adversely affect any of the Facilities, then no such work shall be commenced by Grantor, nor any servant, agent, employee or contractor of Grantor, its successors or assigns, unless and until Grantee shall have been given prior written notice of the same and given an opportunity to take such measures as it deems necessary to provide protection for the Facilities.

Whenever the context of this instrument shall so require, but not when this instrument indicates otherwise, the masculine gender shall be deemed to refer to and include the feminine and neuter, and the singular shall refer to and include the plural. The easements and other rights granted herein are intended to be permanent rights and easements for the benefit of Grantee, its successors and assigns, and are to be fully apportionable and fully assignable or transferable, all or in part, without the need of any consent of the Grantor or Grantor's successors and assigns.

TO HAVE AND TO HOLD the above-granted rights, privilege and authority unto Grantee, and unto its successors and assigns forever, to its and their own proper use and behoof.

[Signature Page Follows]

IN WITNESS WHEREOF, Grantor has cau of, 20	used this instrument to be executed as of the day
Signed, sealed and delivered in the presence of:	
FIRST WITNESS	GRANTOR [INSERT NAME OF ENTITY]
Signature:	
Print Name:	
	By:
	Its:
SECOND WITNESS	
Signature:	
Print Name:	
STATE OF	
	er and sealer of the foregoing instrument, and who
acknowledged the same to be the free act and deed and deed as such thereof, before	of said, and their free act
In witness whereof, I hereunto set my hand	and official seal.
	(seal)
	Print Name:
	Commissioner of the Superior Court/
	Notary Public
	My Commission Expires: