

**Cross-Section Configurations 1-8**

Cross Section	Miles	ROW Configuration	Structure Configuration – Number & Type	Typical Height (feet)	Magnetic Field at S/E Edge of ROW in mG	Magnetic Field at N/W Edge of ROW in mG
1  (Scovill Rock S/S to Chestnut Junction)	2.5	Existing	(2) 345-kV H-Frames	80	32.6	33.8
		Low Magnetic Field Design	(2) 345-kV H-Frames (1) 345-kV Delta (no statutory facilities near N/W edge of ROW)	85	6.2	28.8
2  (Oxbow Junction to Beseck S/S)	7.0	Existing	(2) 115-kV H-Frames	57	9.2	13.9
		Low Magnetic Field Design	(1) 345/115-kV Composite Monopole (customized structure height and placement by two neighborhoods)	135	17.6	12.2
3  (Black Pond Junction to East Meriden S/S)	1.4	Existing	(1) 345-kV Monopole	130	12.2	4.7
		Low Magnetic Field Design	(3) 345-kV Monopoles with 35'-40' shift of all structures to the east for 3 spans at north end of ROW by condominiums	130	> 5.9 (but no adjacent development)	< 12.9
4  (East Meriden S/S to Beseck S/S)	1.4	Existing	(1) 115-kV H-Frame (1) 345/115-kV Composite Monopole	57 130	6.1	11.9
		Proposed in Application	(2) 345/115-kV Composite Monopoles and 1 345-kV Monopole	130	5.3	11.5

Docket 272  
Appendix B  
Page 2

Cross Section	Miles	ROW Configuration	Structure Configuration – Number & Type	Typical Height (feet)	Magnetic Field at S/E Edge of ROW in mG	Magnetic Field at N/W Edge of ROW in mG
5 (Besock S/S to East Wallingford Junction)	5.9	Existing	(1) 345-kV H-Frame	90	5.2	24.7
		Low Magnetic Field Design	(1) 345-kV H-Frame (1) 345-kV Delta Monopole Low EMF design is not necessary in Traditions Golf Course	90 108	4.2	21.2
6 East (East Wallingford Junction to North Haven Junction)	1.4	Existing	(1) 115-kV H-Frame	57	0.2	1.2
		Low Magnetic Field Design	(1) 345-/115-kV Composite Monopole	135	4.5	9.4
6 West (North Haven Junction to Wallingford Junction)	0.6	Existing	(1) 115-kV H-Frame	57	0.3	2.4
		Proposed in Application	(1) 345/115-kV Composite Monopole (industrial area; no statutory facilities)	105	5.1	12.4

Cross Section	Miles	ROW Configuration	Structure Configuration – Number & Type	Typical Height (feet)	Magnetic Field at S/E Edge of ROW in mG	Magnetic Field at N/W Edge of ROW in mG
7  (Wallingford Junction to the Cheshire Town Line)	2.4	Existing	(1) Double Circuit Lattice	90	0.4	4.4
		Proposed in Application	(1) 115-kV Double Circuit Lattice (1) 345-kV Delta Monopole (surrounding area forested)	90 108	11.9	10.2
7B  (Cheshire Town Line to Cook Hill Junction)	0.4	Existing	(1) 115-kV Double Circuit Lattice	90	0.4	4.4
		Proposed in Application	(1) 345/115-kV Composite Monopole offset in ROW (1) 115-kV circuit underground in streets (area of Old Farms Road Neighborhood)	130	6.2	17.9
8A  (Cook Hill Junction to Hamden Town Line)	0.4	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	6.2	2.8
		Low Magnetic Field Design	(1) 345-kV Split-Phase (1) 115-kV (relocated 1610 line) (1) 115-kV circuit underground in streets (relocated 1640 line)	105 80	1.8	6.0

Docket 272  
Appendix B  
Page 4

Cross Section	Miles	ROW Configuration	Structure Configuration – Number & Type	Typical Height (feet)	Magnetic Field at S/E Edge of ROW in mG	Magnetic Field at N/W Edge of ROW in mG
8 North (Cheshire/ Hamden Town Line to Glen Lake Junction)	7.1	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	4.7	2.6
		Proposed in Application	(1) 115-kV Double Circuit Monopole (1) 345-kV Delta Monopole (bordered by SCCRWA land)	80 85	8.7	15.7
8 Middle (Glen Lake Junction to CL&P property on Clark Rd.)	1.7	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	6.2	2.8
		Proposed in Application	(1) 115-kV Double Circuit Monopole (1) 345-kV Delta Monopole (no statutory facilities)	80 85	8.7	15.7
8 Middle (CL&P property on Clark Rd. to Pease Road Junction, including JCC)	1.2	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	6.2	2.8
		Low Magnetic Field Design	(1) 115-kV Double Circuit Monopole (1) 345-kV Split-Phase Monopole (JCC property included)	80 105	2.7	5.8

Cross Section	Miles	ROW Configuration	Structure Configuration – Number & Type	Typical Height (feet)	Magnetic Field at S/E Edge of ROW in mG	Magnetic Field at N/W Edge of ROW in mG
8 South (Pease Road Junction through B’Nai/Ezra to Rt. 15 in Wood-bridge)	2.0	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	3.9	1.6
		Low Magnetic Field Design	(1) 115-kV Double Circuit Monopole (1) 345-kV Split-Phase Monopole (B’Nai Jacob/Ezra Academy property included)	80 105	1.7	5.9
8 South (from Rt. 15 to West Haven/Orange)	0.4	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	3.9	1.6
		Proposed in Application	1 115-kV Double Circuit Monopole 1 345-kV Delta Monopole (borders SCCRWA land; forested)	80 85	11.2	16.0
8 South (from West Haven/Orange Border to E. Devon SS)	9.6	Existing	(2) 115-kV H-Frames (1) 115-kV Lattice	57 80	3.9	1.6
		Low Magnetic Field Design	(1) 115-kV Double Circuit Monopole (1) 345-kV Split-Phase Monopole (includes Lexington Green, Eisenhower Park)	80 105	1.7	5.9

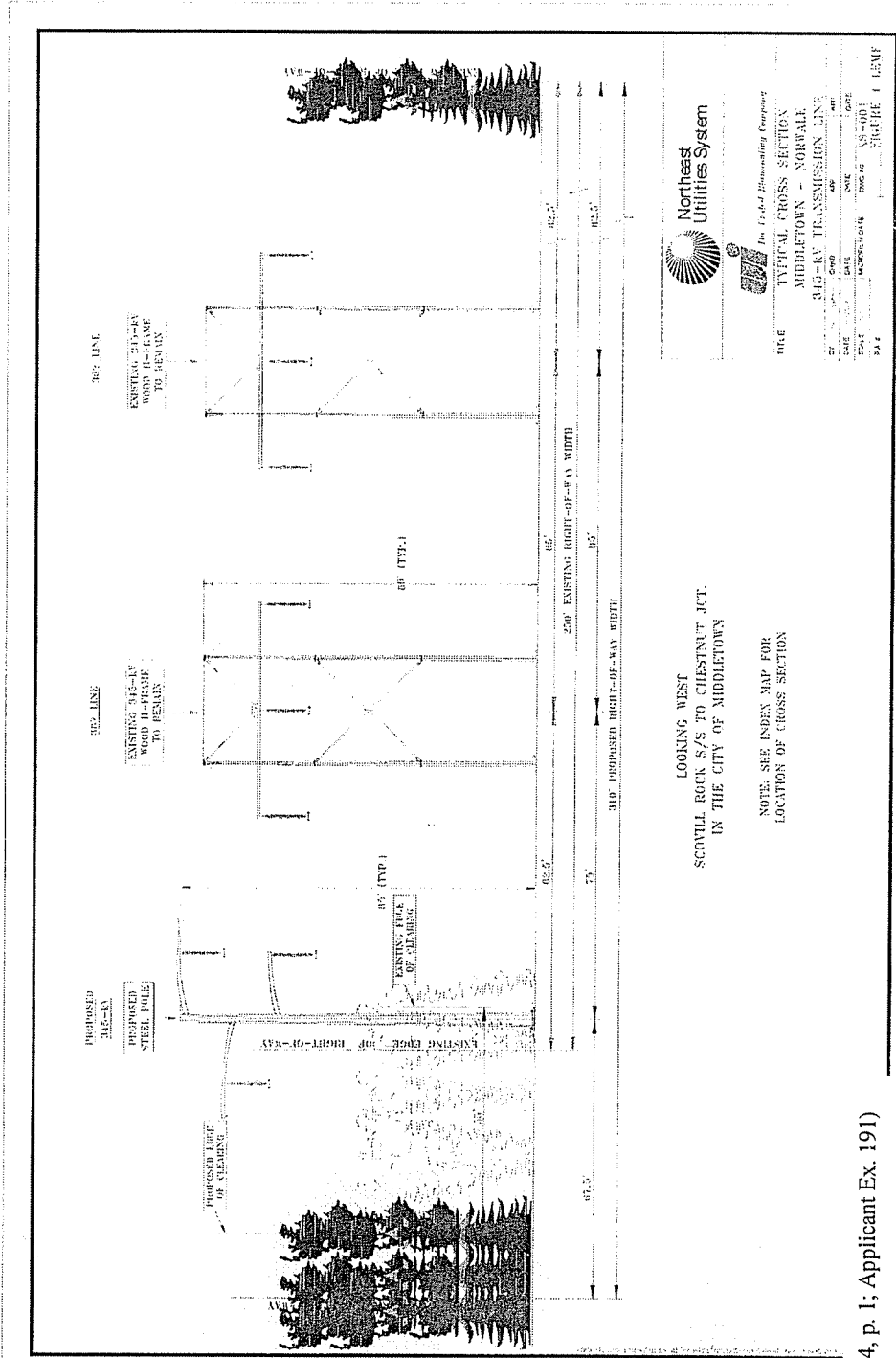
(Applicant Ex. 1, vol. 10; Applicant Ex. 96; Applicant Ex. 124; Applicant Ex. 189; Applicant Ex. 191)



Cross Section 1 (15GW Case)

Typical Segment – Scovill Rock S/S to Chestnut Junction  
 in the City of Middletown

Site Condition	Transmission ROW																										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	S/E Edge	100'	50'	Center	50'	100'	N/W Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'
Existing Lines (For Reference)	5.4	6.1	7.0	8.0	9.2	10.9	12.9	15.7	19.4	24.8	32.6	42.9	57.0	70.2	99.1	66.7	33.8	25.6	20.0	16.1	13.3	11.1	9.5	8.1	7.1	6.2	5.5
345 kV Delta (optimized height & phasing)	2.1	2.3	2.5	2.7	3.0	3.3	3.7	4.1	4.6	5.3	6.2	31.0	77.0	106.7	39.4	102.1	28.8	21.8	17.0	13.7	11.2	9.4	8.0	6.9	6.0	5.2	4.6



**Northeast Utilities System**  
*The United Illuminating Company*

TYPICAL CROSS SECTION  
 MIDDLETOWN - NORWALK  
 345-KV TRANSMISSION LINE

DATE: 04/11/11  
 SCALE: AS SHOWN  
 DRAWN BY: J. LEMP  
 CHECKED BY: J. LEMP

LOOKING WEST  
 SCOVILL ROCK S/S TO CHESTNUT JCT.  
 IN THE CITY OF MIDDLETOWN

NOTE: SEE INDEX MAP FOR  
 LOCATION OF CROSS SECTION

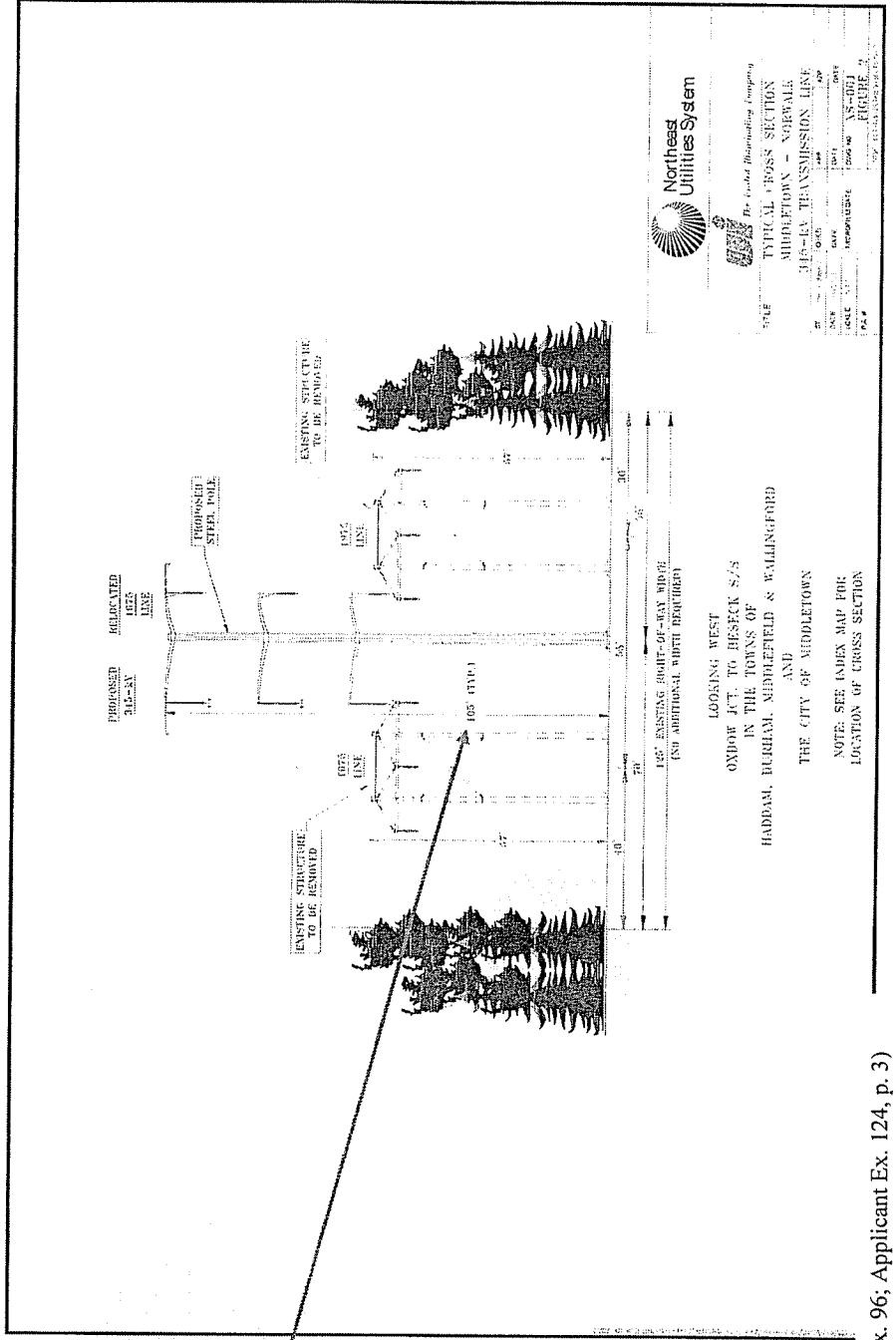


Cross Section 2 (15GW Case)

Typical Segment – Oxbow Junction to Beseck S/S in the Municipalities of Haddam, Durham, Middlefield, Wallingford & Middletown

		Transmission ROW																										
Site Condition		150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	S/E Edge	50'	25'	Center	25'	50'	N/W Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'
Existing Lines (For Reference)		0.3	0.3	0.4	0.5	0.7	1.0	1.4	2.0	3.1	5.2	9.2	15.6	30.2	32.5	32.5	21.5	13.9	7.5	4.3	2.7	1.7	1.2	0.9	0.6	0.5	0.4	0.3
Proposed Lines with an additional 30' in height		3.3	3.7	4.3	5.0	5.8	6.9	8.2	9.9	11.9	14.5	17.6	20.5	25.0	26.2	21.0	14.5	12.2	9.8	8.0	6.6	5.6	4.8	4.1	3.6	3.1	2.8	2.5

Note: Structure height would be increased by 30 feet, typical structure height would be 135 feet.



**Northeast Utilities System**

Dr. Carter Blawie Building Engineering

TYPICAL CROSS SECTION  
MIDDLETOWN - NORWALK  
315-KV TRANSMISSION LINE

SCALE: 1/4\"/>

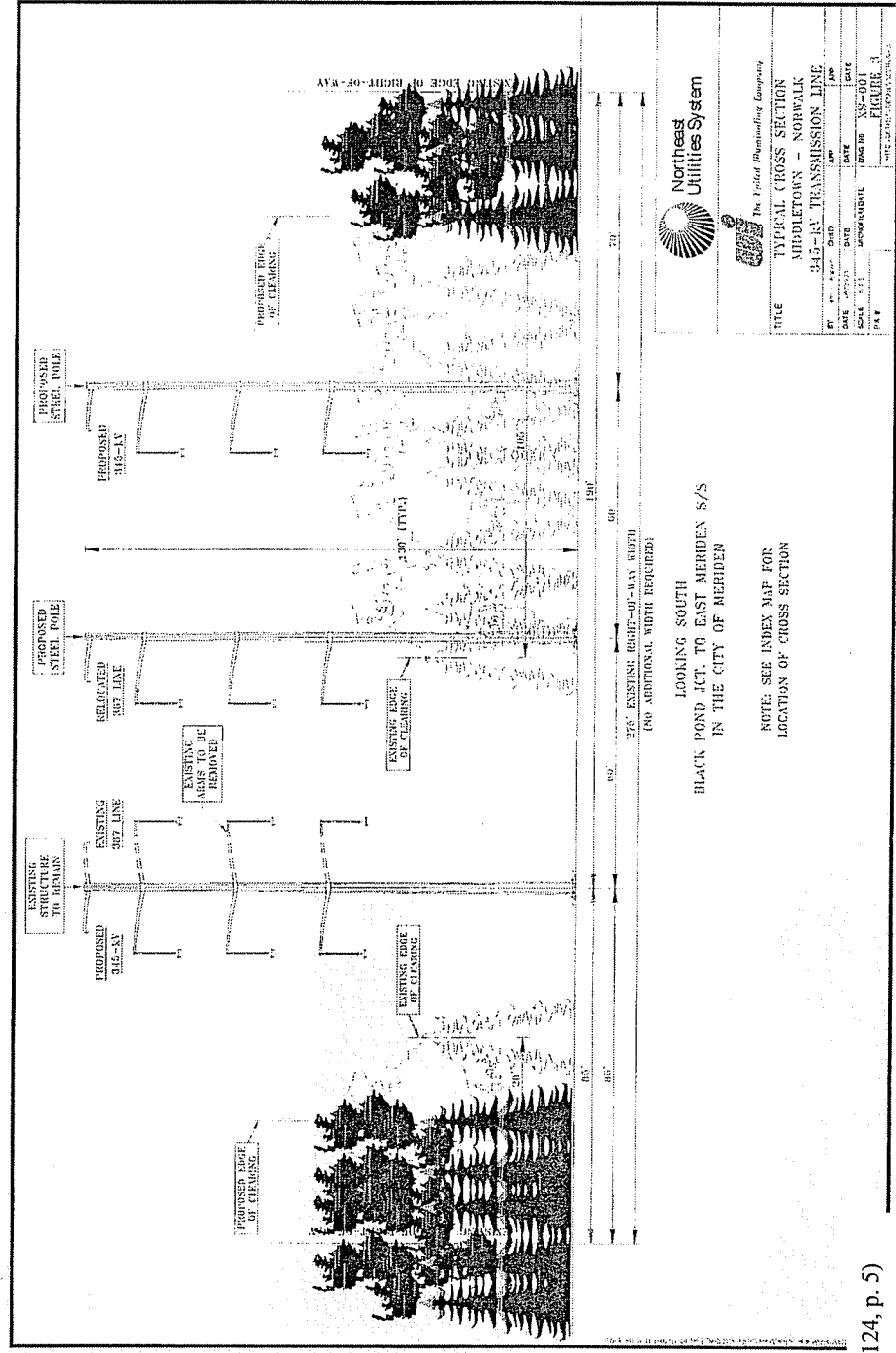


**Cross Section 3 (15GW Case)**

**Typical Segment – Black Pond Junction to East Meriden S/S  
in the City of Meriden**

Transmission ROW																											
Site Condition	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	NW Edge	50'	25'	Center	25'	50'	NW Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'
Existing Lines (For Reference)	2.4	2.7	3.1	3.5	4.0	4.7	5.5	6.6	7.9	9.7	12.2	62.9	62.0	38.7	23.2	14.8	4.7	4.0	3.5	3.1	2.7	2.4	2.2	2.0	1.8	1.6	1.5
Proposed Lines on Existing ROW (For Reference)	1.0	1.1	1.3	1.4	1.7	1.9	2.3	2.8	3.5	4.5	5.9	40.3	58.8	78.6	81.8	82.2	12.9	9.8	7.6	6.1	4.9	4.1	3.4	2.9	2.5	2.2	1.9

**Note:** From Black Pond south for three spans structures would be shifted to the eastern side of the right-of-way. Davit arms would also need to be shifted on the some structures.

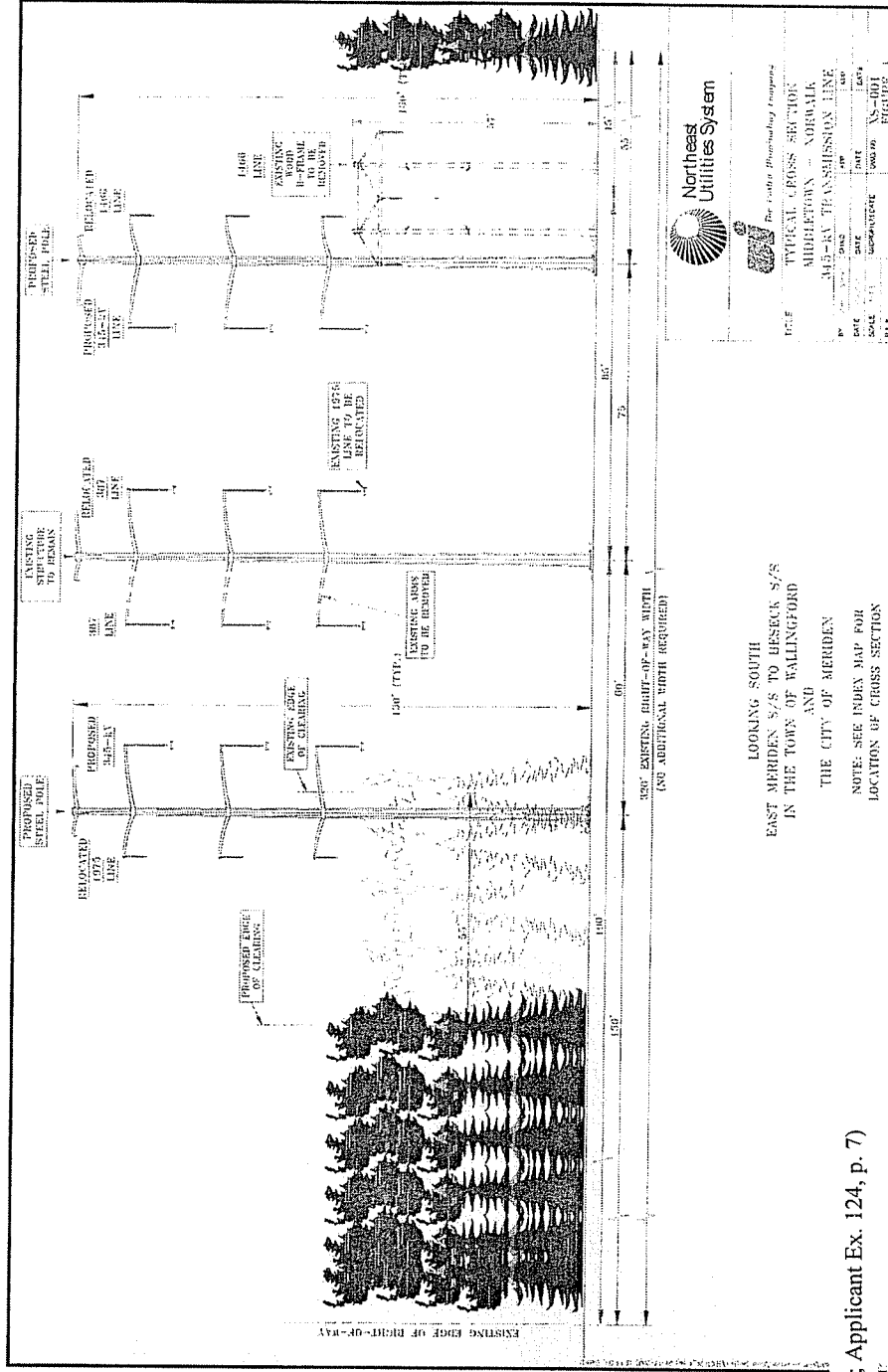






## Cross Section 4 (15GW Case) Typical Segment – East Meriden S/S to Beseck S/S in the Town of Wallingford

Site Condition	Transmission ROW													NW Edge		
	150'	135'	120'	106'	90'	75'	60'	45'	30'	15'	60'	25'	Carion		25'	60'
Existing Lines (For Reference)	2.0	2.2	2.4	2.9	3.2	3.6	4.1	4.6	5.3	5.1	27.0	43.6	68.6	74.2	61.5	11.9
Proposed Lines on Existing ROW (For Reference)	1.3	1.5	1.6	1.8	2.1	2.4	2.7	3.2	3.7	4.4	5.3	32.8	43.6	50.1	57.4	70.9



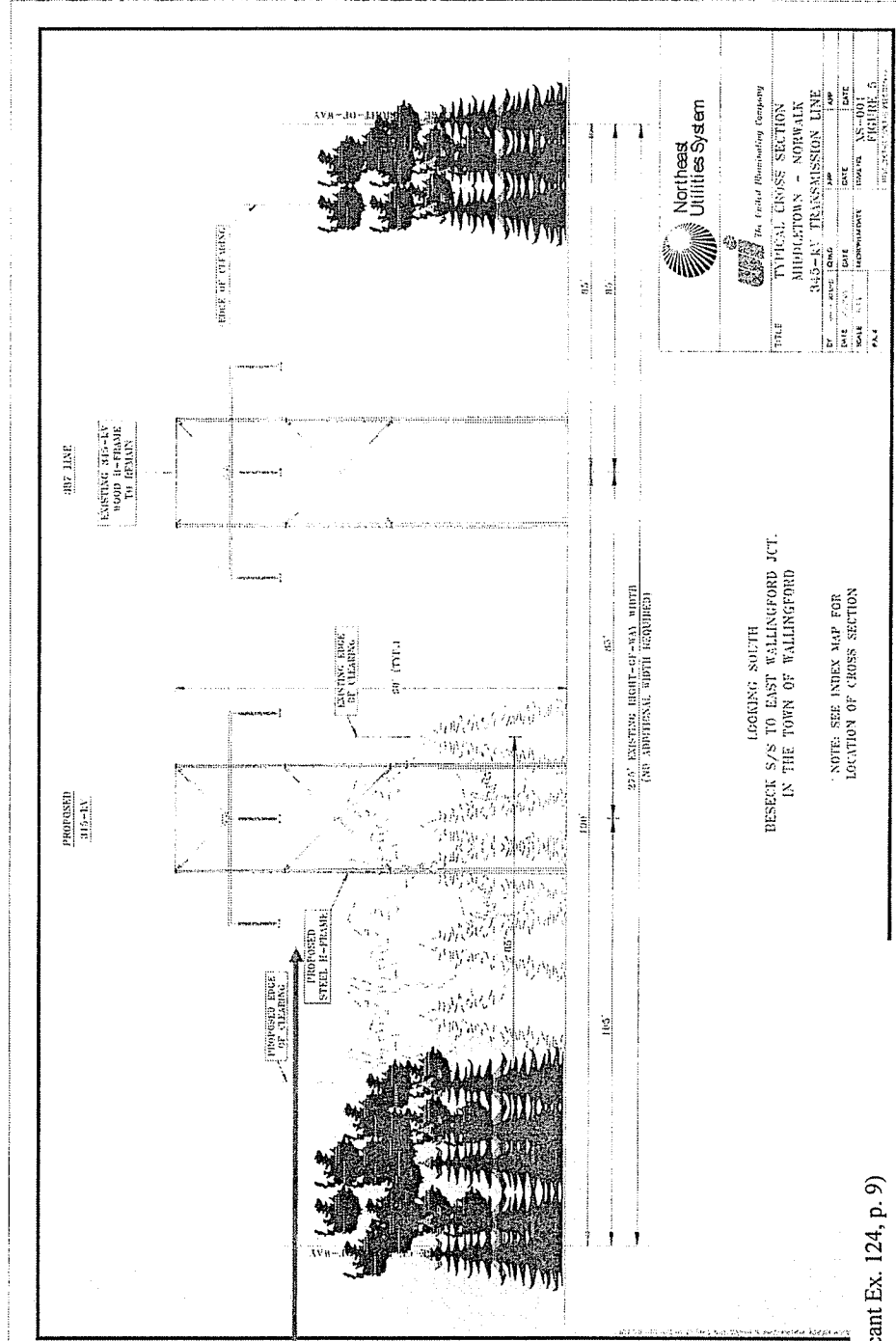
(Applicant Ex. 1, vol. 10; Applicant Ex. 124, p. 7)



**Cross Section 5 (15GW Case)**

**Typical Segment – Besek S/S to East Wallingford Junction  
in the Town of Wallingford**

Site Condition	Transmission ROW																										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	NW Edge	50'	Center	25'	S/E Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'		
Existing Lines (For Reference)	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.4	3.9	4.5	5.2	17.5	29.5	56.1	102.0	123.7	24.7	18.2	13.9	10.9	8.8	7.3	6.1	5.2	4.5	3.9	3.4
2 345KV Delta	1.0	1.1	1.3	1.4	1.6	1.5	2.0	2.4	2.8	3.4	4.2	35.9	61.3	77.4	104.6	121.2	21.2	15.4	11.6	9.0	7.2	5.8	4.8	4.1	3.5	3.0	2.6



**Proposed H-Frame structure would be replaced with Delta-monopole structure with a typical height of 108 feet. Applicant's exhibit 96.**

(Applicant Ex. 1, vol. 10; Applicant Ex. 124, p. 9)

**Northeast Utilities System**

*The Federal Manufacturing Company*

TITLE: TYPICAL CROSS SECTION  
MIDDLETOWN - NORWALK  
345-KV TRANSMISSION LINE

BY: [Signature] DATE: [Date]  
CHECKED: [Signature] DATE: [Date]  
SCALE: 1" = 100' DRAWN BY: [Signature] DATE: [Date]  
P.L. FIGURE 5

LOOKING SOUTH  
BESEK S/S TO EAST WALLINGFORD JCT.  
IN THE TOWN OF WALLINGFORD

NOTE: SEE INDEX MAP FOR LOCATION OF CROSS SECTION

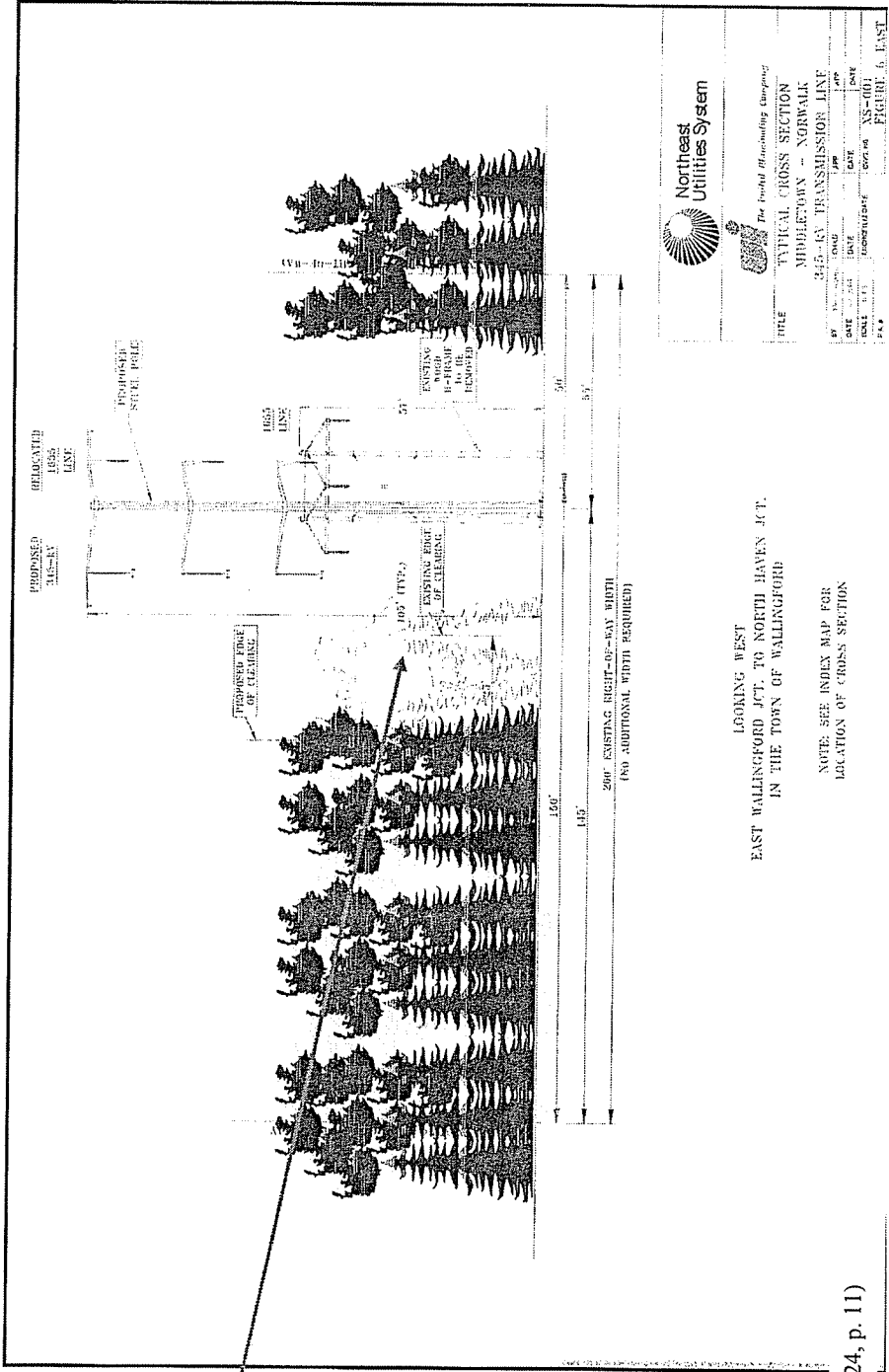


Cross Section 6 (15GW Case) East Segment

Typical Segment – East Wallingford Junction to North Haven Junction  
 in the Town of Wallingford

Site Condition	Transmission ROW														NW Edge	16'	30'	45'	60'	75'	90'	106'	120'	135'	160'							
	150'	135'	120'	105'	90'	75'	60'	45'	30'	16'	25'	Center	25'	60'												60'						
Existing Lines (For Reference)	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	1.2	2.7	4.0	1.2	0.8	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
As proposed additional 30' in height	1.3	1.4	1.6	1.7	2.0	2.2	2.5	2.9	3.3	3.9	4.5	6.2	11.1	14.6	16.8	15.9	9.4	7.8	6.5	5.4	4.6	3.9	3.4	2.9	2.5	2.2	2.0	2.0	2.0	2.0	2.0	

Note: Structure height would be increased by 30 feet, typical structure height would be 135 feet.



**Northeast Utilities System**

For Final Bidding Copying

TYPICAL CROSS SECTION

MIDDLEBURY - NORWALK

245-155KV TRANSMISSION LINE

DATE: 10/15/11

DRAWN BY: [Name]

CHECKED BY: [Name]

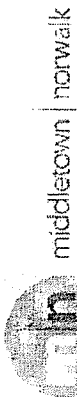
FIGURE 6, PART

LOOKING WEST

EAST WALLINGFORD JCT. TO NORTH HAVEN JCT.

IN THE TOWN OF WALLINGFORD

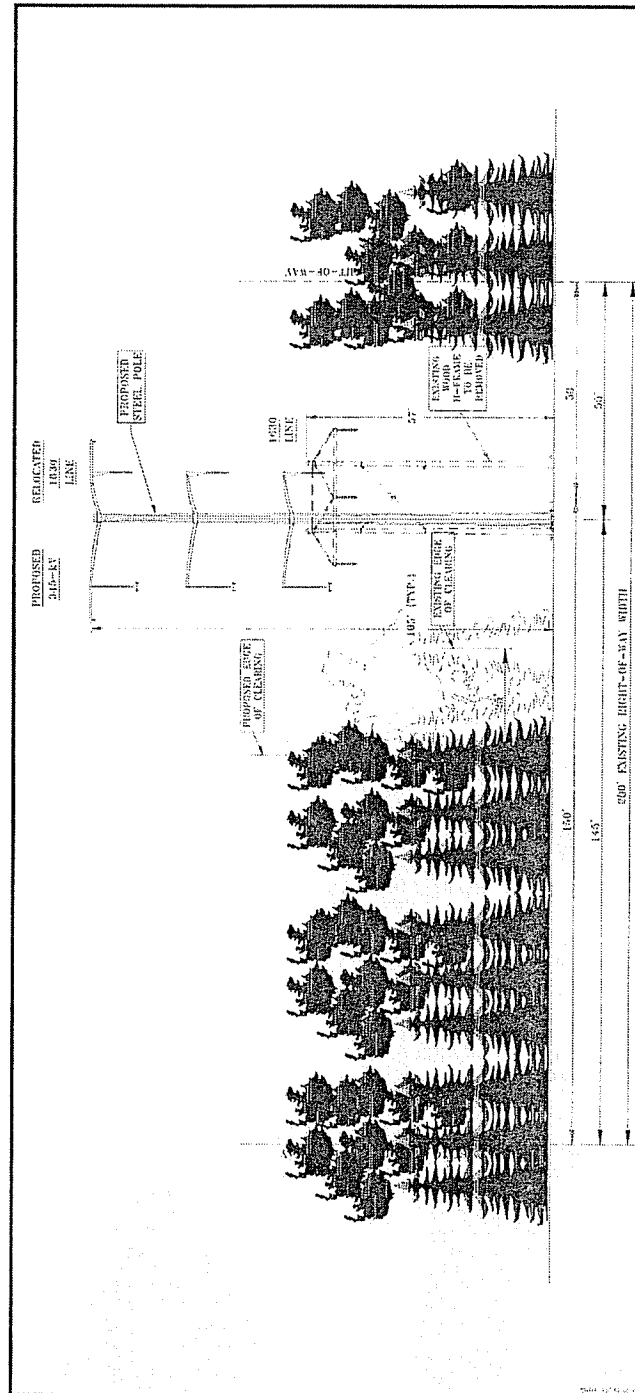
NOTE: SEE INDEX MAP FOR LOCATION OF CROSS SECTION



# Cross Section 6 (15GW Case) West Segment

## Typical Segment – North Haven Junction to Wallingford Junction in the Town of Wallingford

Site Condition	Transmission ROW														NW Edge	50'	NW Edge	150'										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	Center	25'	50'	15'					30'	45'	60'	75'	90'	105'	120'	135'	150'	
Existing Lines (For Reference)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.7	1.2	2.4	5.5	8.2	2.4	1.5	1.1	0.8	0.6	0.5	0.4	0.3	0.2	0.2	0.2
Proposed Lines on Existing ROW (For Reference)	1.3	1.4	1.6	1.7	2.0	2.3	2.6	3.0	3.6	4.2	5.1	10.9	17.5	29.5	43.6	35.8	12.4	9.5	7.5	6.0	4.9	4.1	3.5	3.0	2.5	2.2	1.9	



THE FIRST RESPONSIBILITY COMPANY

TITLE: TYPICAL CROSS SECTION  
 MIDDLETOWN - NORWALK  
 245-KV TRANSMISSION LINE

BY: [blank] DATE: [blank] APP: [blank]  
 DATE: [blank] DATE: [blank] DATE: [blank]  
 SCALE: 1" = 10' DRAWING NO: NS-001  
 FIGURE: 6, WEST

LOOKING WEST  
 NORTH HAVEN ACT. TO WALLINGFORD ACT.  
 IN THE TOWN OF WALLINGFORD

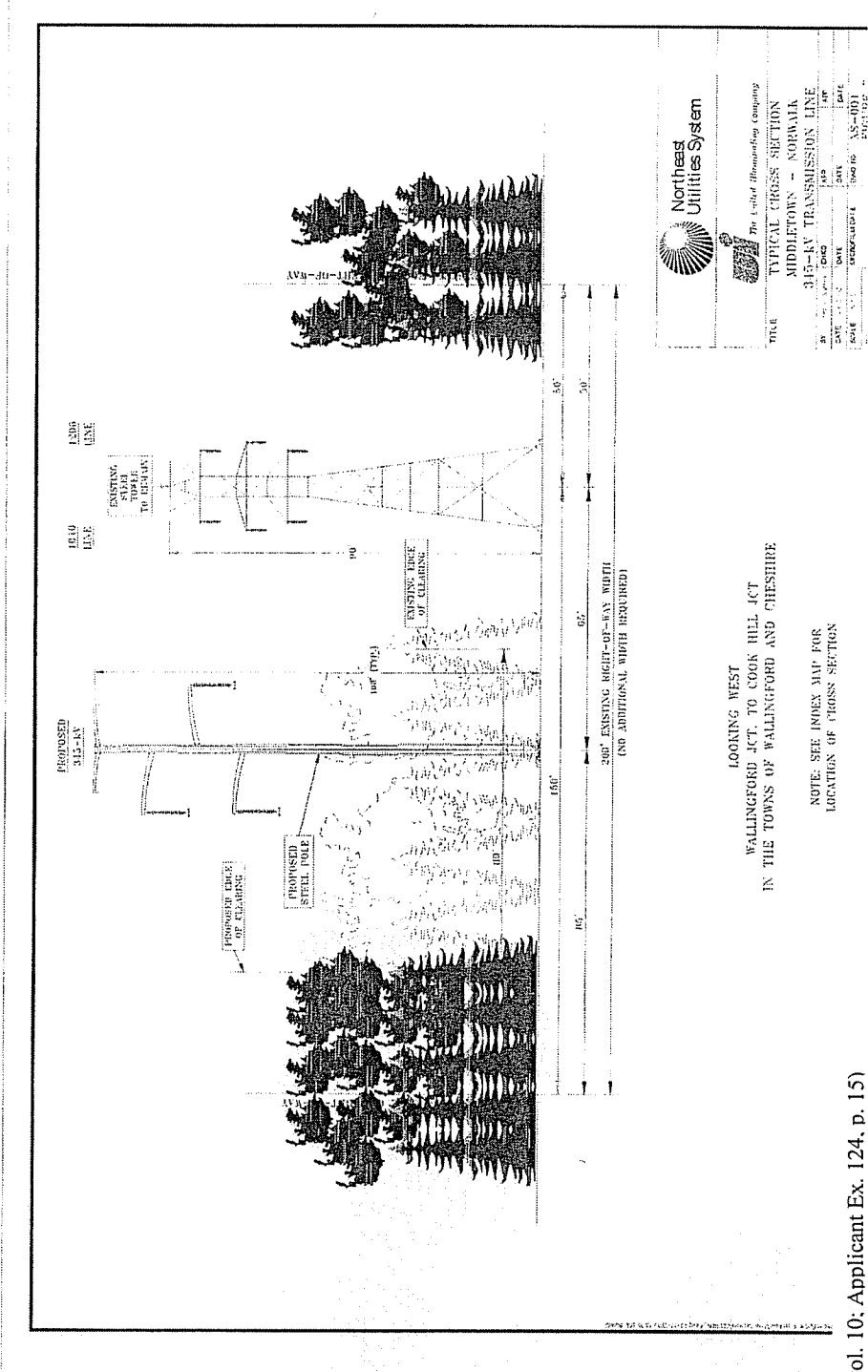
NOTE: SEE INDEX MAP FOR  
 LOCATION OF CROSS SECTION



Cross Section 7 (15GW Case)

Typical Segment – Wallingford Junction to the Cheshire Town Line  
 in the Town of Wallingford

Site Condition	Transmission ROW														NW Edge	NW Edge	150'										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	Center	25'	50'	Edge													
Existing Lines (For Reference)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.7	1.0	1.8	4.4	10.6	4.4	2.9	2.0	1.4	1.1	0.8	0.7	0.5	0.4	0.4	0.3
Proposed Lines on Existing ROW (For Reference)	1.8	2.0	2.3	2.7	3.2	3.8	4.5	5.6	7.0	9.0	11.9	37.2	53.9	45.8	28.7	25.4	10.2	7.2	5.4	4.2	3.4	2.8	2.4	2.0	1.8	1.6	1.4

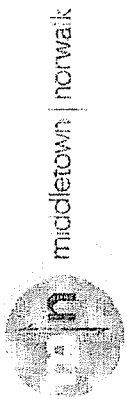


**Northeast Utilities System**  
 The Utility Professionals Company  
 TYPICAL CROSS SECTION  
 MIDDLETOWN - NORWALK  
 345-KV TRANSMISSION LINE

DATE: 08/10/10  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 SCALE: AS SHOWN  
 SHEET NO: AS-001  
 TOTAL SHEETS: 122

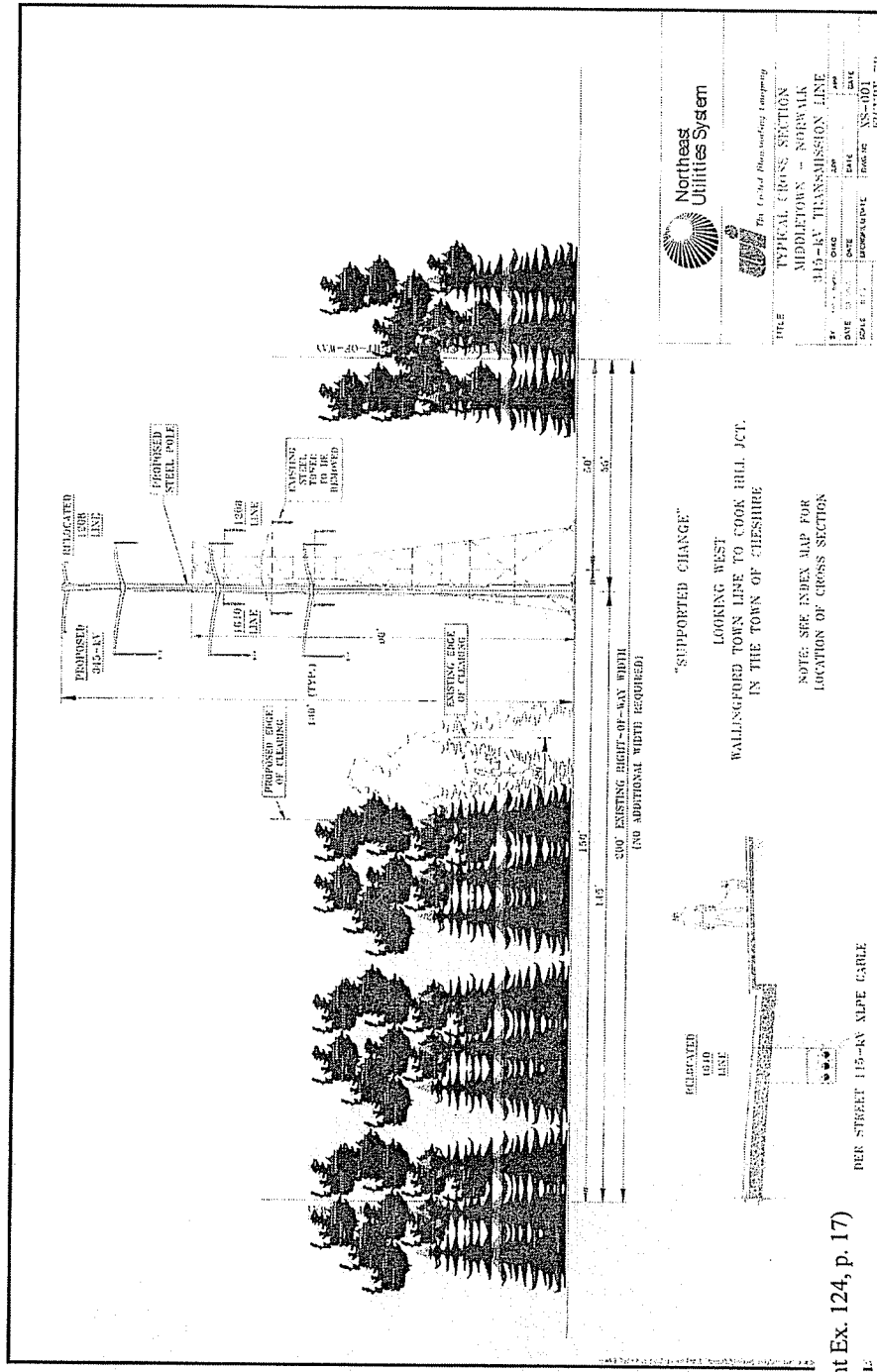
LOOKING WEST  
 WALLINGFORD JCT. TO COOK HILL JCT  
 IN THE TOWNS OF WALLINGFORD AND CHESHIRE

NOTE: SEE INDEX MAP FOR  
 LOCATION OF CROSS SECTION



**Cross Section 7B (15GW Case)**  
**Typical Segment – Cheshire Town Line to Cook Hill Junction**  
**in the Town of Cheshire**

Site Condition	Transmission ROW													NW Edge													
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	50'	25'	Center		25'	50'											
Existing Lines (For Reference)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.7	1.0	1.8	4.4	10.6	4.4	2.9	2.0	1.4	1.1	0.8	0.7	0.5	0.4	0.4	0.3
Proposed Lines on Existing ROW (For Reference)	1.6	1.7	1.9	2.2	2.4	2.8	3.2	3.7	4.3	5.2	6.2	13.0	20.8	34.7	50.3	42.6	17.9	14.6	10.6	7.6	6.6	5.6	4.7	4.0	3.5	3.0	2.6



**Northeast Utilities System**

The Central Massachusetts Company

TITLE: TYPICAL CROSS SECTION  
 MIDDLETOWN - NORWALK  
 315-KV TRANSMISSION LINE

DATE: 01/03/08  
 DRAWN BY: JAC  
 CHECKED BY: JAC  
 SCALE: AS SHOWN  
 PROJECT: NS-001

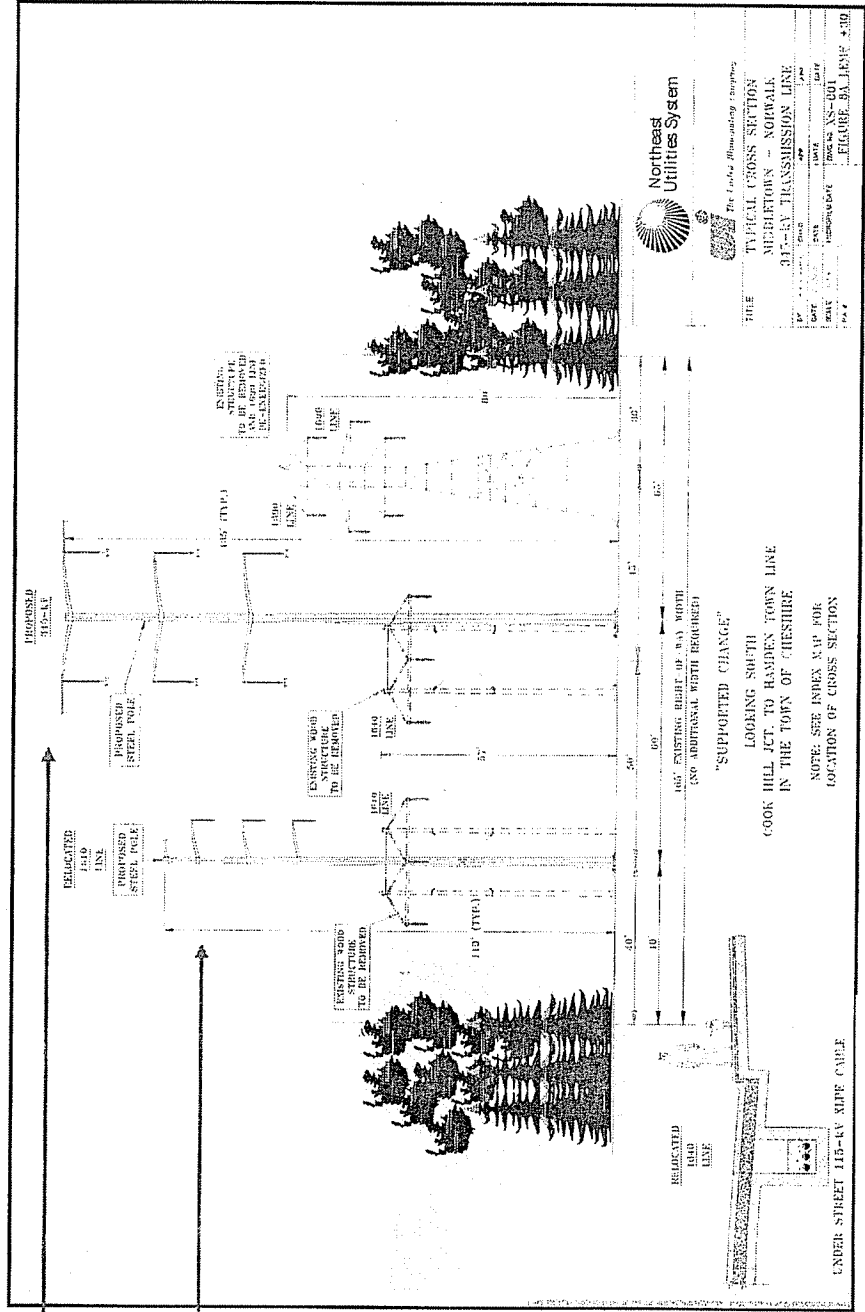


Cross Section 8A (15GW Case)

Typical Segment – Cook Hill Junction to the Hamden Town Line  
 in the Town of Cheshire

Site Condition	Transmission ROW																										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	S/E Edge	Center	50'	N/W Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'			
Existing Lines (For Reference)	0.5	0.5	0.6	0.8	0.9	1.1	1.5	2.0	2.7	4.0	6.2	8.2	6.7	7.8	4.9	2.8	2.0	1.5	1.1	0.9	0.7	0.6	0.5	0.4	0.4	0.3	
345 kV Split Phase - a 115 kV Line UG	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.8	1.9	2.2	1.8	4.3	10.1	18.3	26.7	14.0	6.0	4.1	3.0	2.2	1.6	1.3	1.0	0.8	0.7	0.6	0.5

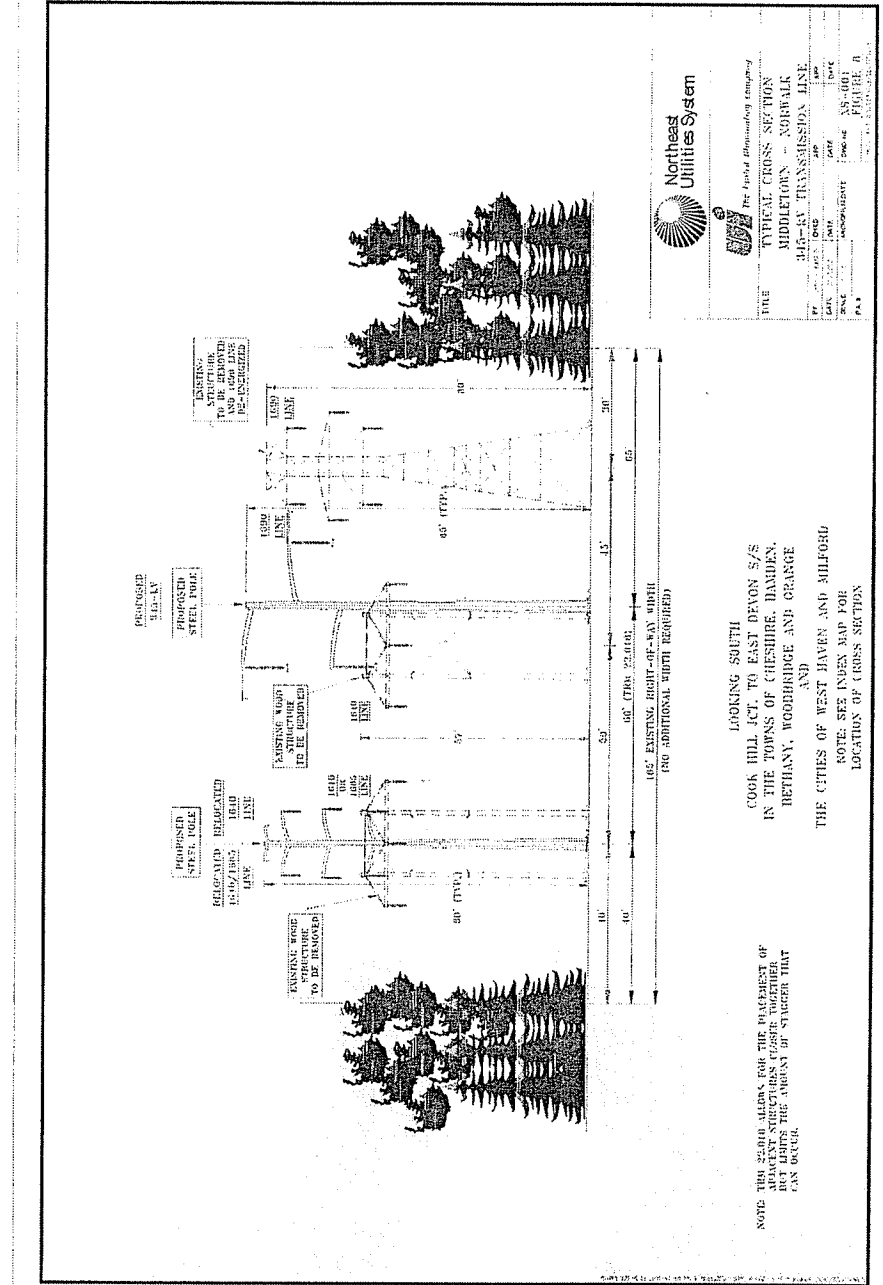
Note: The height of both structures would be decreased by 30 feet, typical structure height would be 80 feet for the 115kV monopole and 105 feet for the 345kV monopole.



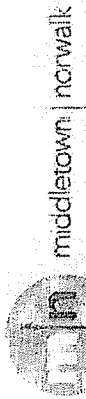


**Cross Section 8 (15GW Case) North Segment**  
**Typical Segment – Cheshire / Hamden Town Line to Glen Lake Junction**  
**in the Municipalities of Hamden, Bethany & Woodbridge**

Site Condition	Transmission ROW															NW Edge											
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	Center	25'	50'	75'	90'		105'	120'	135'	150'							
Existing Lines (For Reference)	0.4	0.4	0.5	0.5	0.7	0.9	1.2	1.5	2.1	3.1	4.7	9.5	5.5	6.9	7.6	4.5	2.5	1.9	1.4	1.0	0.8	0.7	0.5	0.4	0.4	0.3	0.3
Proposed Lines on Existing ROW (For Reference)	1.5	1.6	1.9	2.1	2.4	2.8	3.3	3.9	4.8	6.2	8.7	22.5	33.4	50.6	48.6	31.9	15.7	11.6	8.8	6.9	5.5	4.5	3.7	3.1	2.7	2.3	2.0

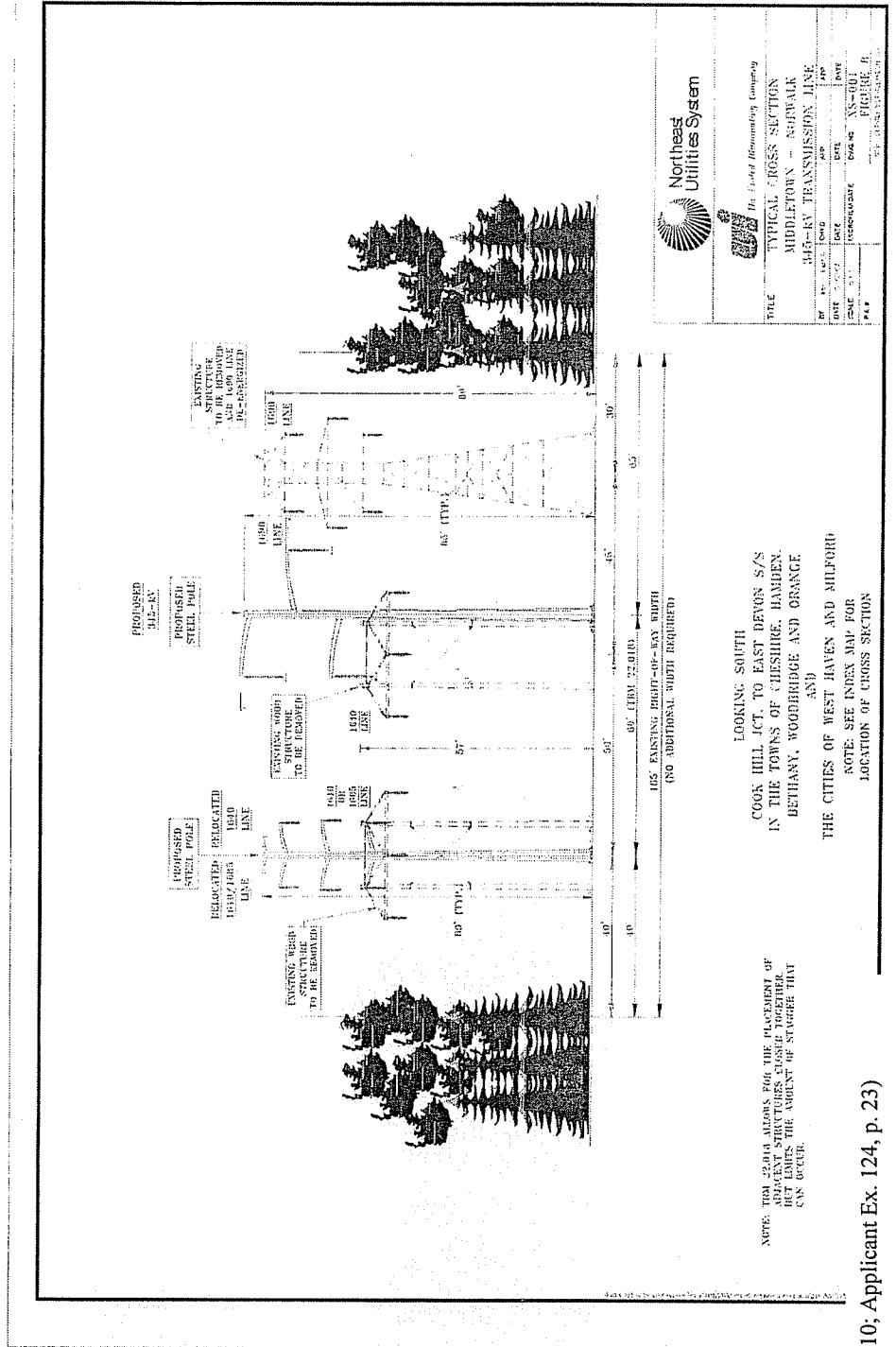






## Cross Section 8 (15GW Case) Middle Segment Typical Segment – Glen Lake Junction to CL&P Property on Clark Street in the Town of Woodbridge

Site Condition	Transmission ROW																										
	160'	135'	120'	105'	90'	75'	60'	45'	30'	16'	S/E Edge	60'	26'	Center	25'	60'	N/W Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	160'
Existing Lines (For Reference)	0.5	0.5	0.6	0.8	0.9	1.1	1.5	2.0	2.7	4.0	6.2	13.0	8.2	6.7	7.8	4.9	2.8	2.0	1.5	1.1	0.9	0.7	0.6	0.5	0.4	0.4	0.3
Proposed Lines on Existing ROW (For Reference)	1.5	1.6	1.8	2.1	2.4	2.6	3.3	3.9	4.8	6.2	8.7	22.6	33.5	50.7	48.6	31.6	15.7	11.6	8.8	6.9	5.5	4.5	3.7	3.1	2.7	2.3	2.0



**Northeast Utilities System**

*The United Illuminating Company*

TYPICAL CROSS SECTION  
MIDDLETOWN - NORWALK  
342-NV TRANSMISSION LINE

DATE: 08-10-11  
SCALE: 1" = 10'-0"  
CASE NO.: 15-101  
FIGURE NO.: 11-1

LOOKING SOUTH  
COOK HILL CT. TO EAST DEVON S/S  
IN THE TOWNS OF CHESHIRE, HAMBEN,  
BETHANY, WOODBRIDGE AND ORANGE  
53D

THE CITIES OF WEST HAVEN AND MILFORD  
NOTE: SEE INDEX MAP FOR  
LOCATION OF CROSS SECTION

NOTE: THIS DRAWING ALIGNS FOR THE PLACEMENT OF THE TRANSMISSION TOWER BUT LEAVES THE AMOUNT OF STAGGER THAT CAN OCCUR.

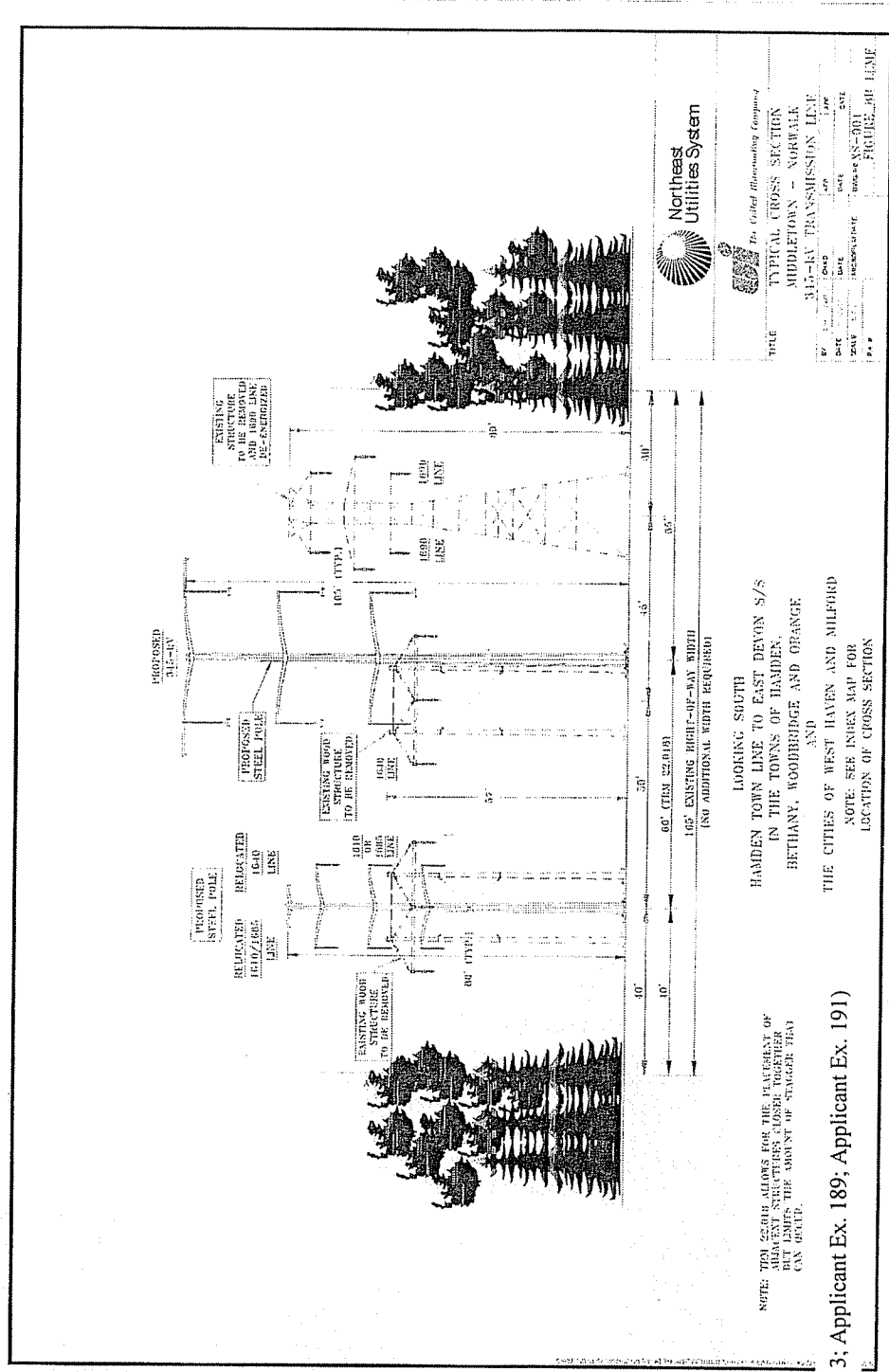


middletown | norwalk

**Cross Section 8 (15GW Case) Middle Segment**

**Typical Segment – CL&P Property on Clark St. to Pease Road Junction  
in the Town of Woodbridge**

Site Condition: Existing Lines (For Reference)	Transmission ROW																										
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	S/E Edge	25'	Center	25'	50'	NW Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'	
	0.5	0.5	0.6	0.8	0.9	1.1	1.5	2.0	2.7	4.0	5.2	8.2	8.2	5.7	7.8	4.9	2.8	2.0	1.5	1.1	0.9	0.7	0.6	0.5	0.4	0.3	
4 345 kV Split Phase	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.6	0.9	1.5	2.7	10.0	14.9	21.6	25.9	14.4	5.8	3.9	2.7	2.0	1.4	1.1	0.9	0.7	0.6	0.5	0.4



**Northeast Utilities System**  
*To United Illuminating Company*

TITLE: TYPICAL CROSS SECTION  
 MIDDLETOWN – NORWALK  
 345-KV TRANSMISSION LINE

BY: [ ] DATE: [ ]  
 CHECKED: [ ] DATE: [ ]  
 DRAWN: [ ] DATE: [ ]  
 IN CHARGE: [ ] DATE: [ ]

FIGURE NO. [ ]

LOOKING SOUTH  
 HAIDEN TOWN LINE TO EAST DEVAN S/S  
 IN THE TOWNS OF HAIDEN,  
 BETHANY, WOODBRIDGE AND ORANGE  
 AND  
 THE CITIES OF WEST HAVEN AND MILFORD  
 NOTE: SEE INDEX MAP FOR  
 LOCATION OF CROSS SECTION

NOTE: 100' 220KV ALLOWS FOR THE PLACEMENT OF  
 ADJACENT STRUCTURES CLOSER TOGETHER  
 BUT LIMITS THE AMOUNT OF STAGGER THAT  
 CAN OCCUR.

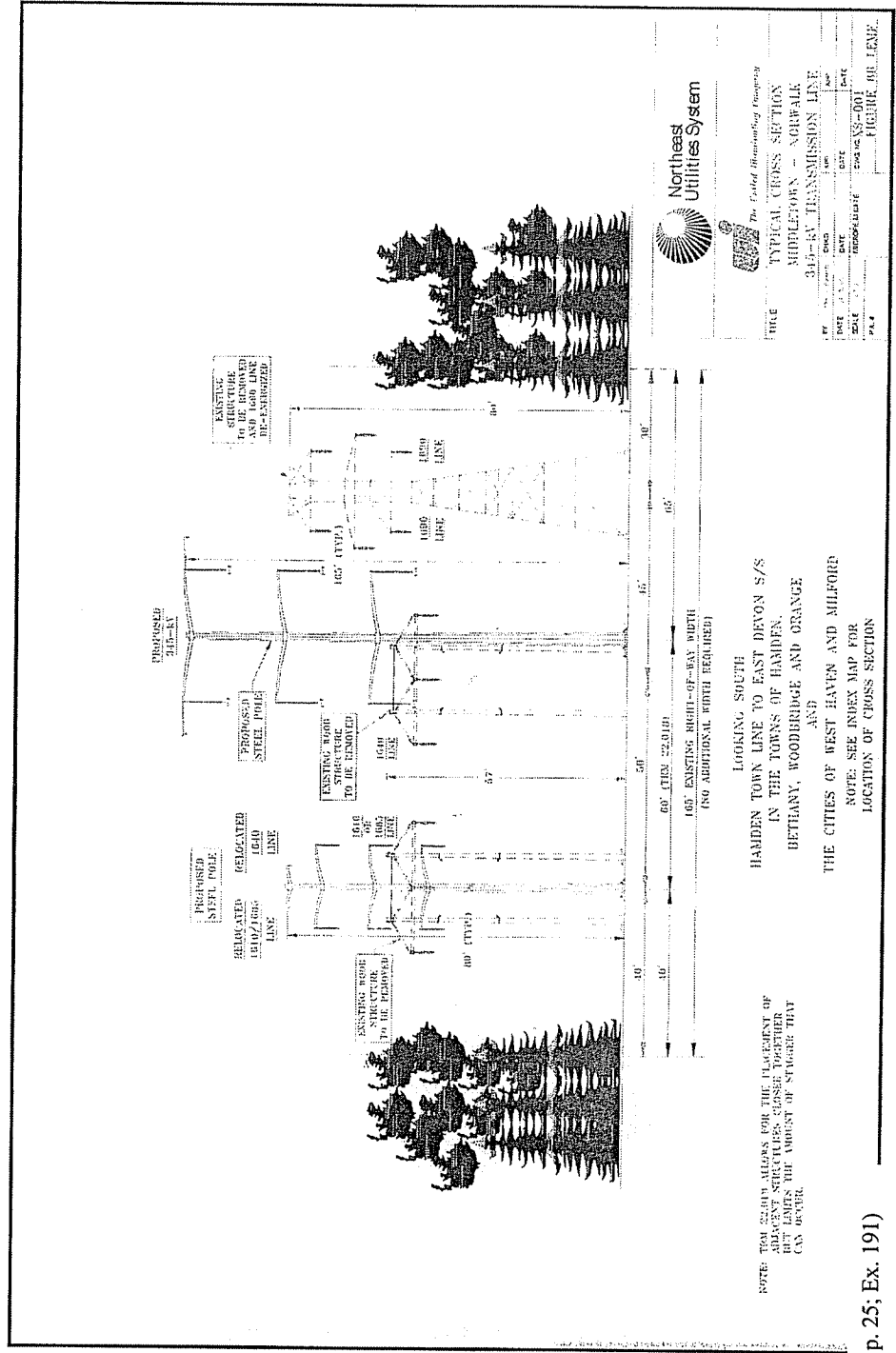


MiddleTownNorwalk

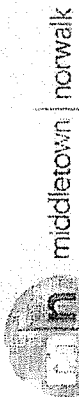
Cross Section 8 (15GW Case) South Segment

Typical Segment – Pease Road Junction to Rte 15 in Woodbridge

Site Condition Existing Lines (For Reference)	Transmission ROW													NW Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'					
	150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	25'	Corner	25'												50'	S/E Edge			
	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.9	1.4	2.2	3.9	11.1	12.7	11.3	7.0	3.2	1.6	1.1	0.7	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
4 345 KV Split Phase	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.7	1.0	1.7	5.7	11.7	19.7	21.6	14.1	5.9	4.0	2.9	2.1	1.6	1.2	1.0	0.6	0.6	0.5	0.5	0.4	0.4

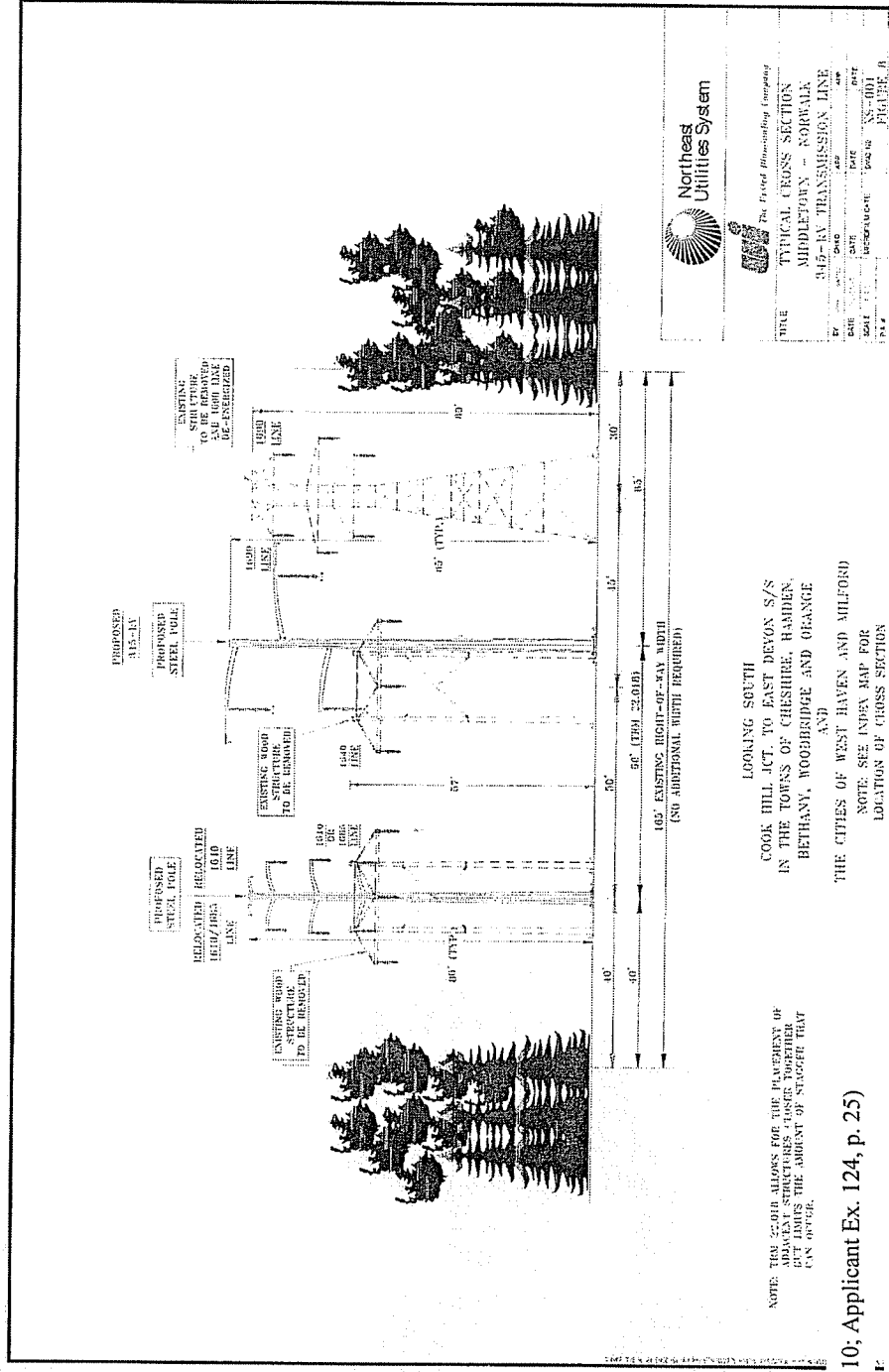


(Applicant Ex. 124, p. 25; Ex. 191)



**Cross Section 8 (15GW Case) South Segment**  
**Typical Segment -Rte 15 in Woodbridge to the West Haven / Orange Town Border**

		Transmission ROW																										
Site Condition		150'	135'	120'	105'	90'	75'	60'	45'	30'	15'	S/E Edge	50'	25'	Center	25'	50'	NW Edge	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'
Existing Lines (For Reference)		0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.9	1.4	2.2	3.9	11.1	12.7	14.3	7.0	3.2	1.5	1.1	0.7	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1
Proposed Lines on Existing ROW (For Reference)	0	1.8	2.0	2.3	2.7	3.1	3.7	4.5	5.5	6.8	8.7	11.2	18.1	29.9	46.8	49.0	32.3	16.0	11.9	9.0	7.1	5.7	4.6	3.8	3.2	2.8	2.4	2.1



LOOKING SOUTH  
 COOK HILL ACT TO EAST DEYON S/S  
 IN THE TOWNS OF CHESHIRE, HAMDEN,  
 BETHANY, ROXBURGH AND ORANGE  
 AND  
 THE CITIES OF WEST HAVEN AND MILFORD  
 NOTE: SEE INDEX MAP FOR  
 LOCATION OF CROSS SECTION

NOTE: THIS CROSS SECTION ALLOWS FOR THE PLACEMENT OF  
 EXISTING STRUCTURES AND UTILITIES  
 BUT LIMITS THE AMOUNT OF STRUCTURE THAT  
 CAN BE PLACED.

