EVERSOURCE

Project Approval Form

Project Title: [redacted]	Project Number: CD01304
Date Prepared: 09/25/2024	Company: Eversource CT
Organization: Distribution Engineering	Project Category: Lines - ROW
Project Initiator: [redacted]	Project Type: Specific
Initiating Organization: Distribution	Capital Investment part of original Op Plan: Yes
Project Manager: [redacted]	Emergency Related Request? No
Project Sponsor: [redacted]	Facility Type (check all that apply): ☒ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2024	
Total Capital Request: $3,637.3K	Authorization Type: Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of **$3,637.3K** which is 220.4% of the partial funding capital estimate of $1,650.6K. There is no scope change on the project. Please see the breakdown below for the variance between the full funding and partial funding estimate for each of the following categories:

Material

- The Partial Funding Estimate called to install 3,500 ft of 1000 CU cable. This project required a total of 4,115 ft of cable (additional 615 ft).
- The project was completed in November of 2021, which also led to the increased cost.

Outside Services

- The Partial Funding Estimate omitted one of the Engineering Contractors.
- The civil contractor accounted for approximately $1.0M of the outside services, while the fully loaded Partial Funding Estimate was closer to $800K.
- The Partial Funding estimate called for the installation of five manholes, while only four were installed in the field.

Internal Labor (Straight & OT)

- Cancelled overtime due to the State Police inability to fill requests for rolling stops on [redacted] for conductor removal contributed to this request.
- Additional labor was required to install the additional 1000 CU Cable mentioned above.
- Change in labor rates for internal labor also contributed marginally to the increased cost.

The Original Project was presented as follows:

- [redacted]

[redacted] *The crossarms are rotten and have had repairs to them in the past. Visual inspection has identified woodpecker holes in several poles. Both structures are 50 years old and are at the end of their useful life. The existing wood structures are not in compliance with the current Grade B construction standards.*

- *Project CD01304* [redacted]

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2019	2020	2021	2022	2023	2024	Total
Direct Capital Costs							
Internal Labor and Construction Equipment	1.8	6.9	62.8	0.0	5.3	0.0	76.8
Outside Services	1.2	103.9	795.3	38.2	4.4	40.6	983.7
Materials	0.0	2.7	442.0	0.0	0.0	-33.7	411.0
Removals	0.7	24.7	283.7	8.3	2.1	1.5	321.0
Risk and Contingency	0.0	0.0	0.0	0.0	0.0	71.3	71.3
Other	0.0	0.0	0.9	0.0	0.0	0.0	0.9
Subtotal – Direct Costs	**3.7**	**138.3**	**1,584.7**	**46.5**	**11.9**	**79.7**	**1,864.7**
Indirect Capital Costs							
Indirect/Overheads (including benefits)	3.4	97.7	1,366.9	41.9	12.5	40.3	1,562.8
Capitalized interest or AFUDC, if any	0.1	6.0	44.6	159.0	0.0	0.0	209.7
Subtotal – Indirect Costs	**3.5**	**103.8**	**1,411.5**	**200.9**	**12.5**	**40.3**	**1,772.5**
Total Gross Capital Costs	**7.2**	**242.0**	**2,996.2**	**247.5**	**24.3**	**120.0**	**3,637.3**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**7.2**	**242.0**	**2,996.2**	**247.5**	**24.3**	**120.0**	**3,637.3**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

4. Alternatives Considered

- Replace existing wood poles and crossarms, with new wood poles and crossarms: $390.8K. Like for like replacement will not meet the current NESC grade B requirements for freeway crossings. Additionally, a like for like replacement will violate the CDOT required clearances for wires above an interstate highway. To meet these requirements, taller more robust wood or steel structures would be needed requiring a complete redesign. Actual material costs for steel poles vs. taller H class poles are similar. Steel poles will outlast wood and is more resilient to woodpecker and other environmental factors.

- Install [redacted]: $3,637.3K. This option is preferred due to eliminating the existing wood structures and cable [redacted]. The underground option and design was approved by Operations on 7/16/2020.

- Replace "X" braces on existing pole structures: $64.8K. Leaves 50-year-old poles and is still in violation of CDOT requirements.

- Replace existing wood poles with steel transmission poles and [redacted]: $1,494K. Meets NESC grade B requirements for [redacted]

Project Option Comparison

Design Criteria	Option [redacted]			
Total Cost	$390.8K	$3,637.3K	$64.8K	$1,494K
Preferred option		X		

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	7/31/2020
100% Detailed Engineering Completion	11/30/2020
Construction Start	N/A, multiple WOs
In Service Date	12/31/2021

6. Regulatory Decisions

CT Department of Transportation (CDOT)

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2020	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Internal construction resources not available to perform the work.	2021	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Internal engineering resources not available to perform the work.	2020	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.

Materials shortage or long lead times	2021	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2021	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2021	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods
Technological risks involving integration of new technology	2021	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Customer Permission / Siting Council / Municipal approvals	2020	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Wetlands / Environmentally sensitive area	2021	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

N/A

10. Attachments (One Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A. Partial Funding PAF Form	*YES*
B. Project Photos	*YES*
C. Cost Estimate	*YES*
D. Project Overview	*YES*
E. Area of Construction	*YES*

Operations Project Authorization Form

Date Prepared: 9/29/2020	**Project Title:** [redacted]
Company: Eversource CT	**Project ID Number: CD01304**
Organization: Distribution Engineering	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: ROW Lines**
Project Sponsor: [redacted]	**Project Purpose: Relocate ROW from OH to UG**
Estimated in service date: 12/31/2021	**If Transmission Project: PTF? N/A**
Eng. / Constr. Resources Budgeted? Yes	**Capital Investment Part of Original Operating Plan? Yes**
Authorization Type: Revised Preliminary Funding	**O&M Expenses Part of the Original Operating Plan? Yes**
Total Request: $ 1,650,607	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

[redacted]. Each location consists of three poles with two, 21-foot crossarms in-between each pole. The crossarms are rotten and have had repairs to them in the past. Visual inspection has identified woodpecker holes in several poles. Both structures are 50 years old and are at the end of their useful life. The existing wood structures are not in compliance with the current Grade B construction standards.

Project CD01304 will [redacted]

Project Costs Summary

	Prior Authorized	2021	2022	2023+	Totals
Capital Additions - Direct	$0	$878,379	$0	$0	$878,379
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$205,427	$0	$0	$205,427
Total - Direct Spending	$0	$1,083,805	$0	$0	$1,083,805
Capital Additions - Indirect	$0	$479,059	$0	$0	$479,059
Subtotal Request	$0	$1,562,865	$0	$0	$1,562,865
AFUDC	$0	$31,113	$0	$0	$31,113
Total Capital Request	$0	$1,593,978	$0	$0	$1,593,978
O&M	$0	$56,629	$0	$0	$56,629
Total Request	$0	$1,650,607	$0	$0	$1,650,607

Financial Evaluation

Direct Capital Costs	2021	2022	2023+	Total
Straight Time Labor	$30,005	$0	$0	$30,005
Overtime Labor	$6,263	$0	$0	$6,263
Outside Services	$894,016	$0	$0	$894,016
Materials	$151,598	$0	$0	$151,598
Other, including contingency amounts (describe)	$1,923	$0	$0	$1,923
Total Direct Costs	**$1,083,805**	**$0**	**$0**	**$1,083,805**

Indirect Capital Costs	2021	2022	2023+	Total
Indirects/Overheads (including benefits)	$479,059	$0	$0	$479,059
Capitalized interest or AFUDC, if any	$30,025	$0	$0	$30,025
Total Indirect Costs	**$509,084**	**$0**	**$0**	**$509,084**
Total Capital Costs	**$1,592,890**	**$0**	**$0**	**$1,592,890**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$1,592,890**	**$0**	**$0**	**$1,592,890**

Total O&M Project Costs	**$57,717**	**$0**	**$0**	**$57,717**

Total Project Cost	**$1,650,607**	**$ -**	**$ -**	**$1,650,607**

Technical Justification:

Project Need Statement

[redacted]

The age and the condition of both wood structures is at the end of their useful life. Both structures are 50 years old. The crossarms are rotten and have been repaired in the past. Visual inspection has identified woodpecker holes in several poles. The 50-year-old structures are not built to the current Grade B construction standards.

[redacted]

Project Objectives

[redacted]

Project Scope

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted].

Major Material:

- 5 – 8' x 14' x 7' manholes
- 3,500' – 1,000 MCM EPR Cu, 23 kV

Background / Justification

Existing wood structures that have distribution circuits [redacted] have rotten crossarms that have been repaired in the past. Both structures are 50 years old. [redacted]

Business Process and / or Technical Improvements

[redacted]

Alternatives Considered with Cost Estimates

- Replace existing wood poles and crossarms, with new wood poles and crossarms: **$390.8K**. Like for like replacement will not meet the current NESC grade B requirements for freeway crossings. Additionally, a like for like replacement will violate the CDOT required clearances for wires above an interstate highway. To meet these requirements, taller more robust wood or steel structures would be needed requiring a complete redesign. Actual material costs for steel poles vs. taller H class poles are similar. Steel poles will outlast wood and is more resilient to woodpecker and other environmental factors.

- Install HDD construction [redacted]: **$1,012K**. [redacted]

- Replace "X" braces on existing pole structures: **$64.8K**. Leaves 50-year-old poles and is still in violation of CDOT requirements.

- [redacted]: **$1,494K**. Meets NESC grade B requirements for [redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Engineering / Funding	7/31/2020
Detail Engineering	11/30/2020
Full Funding	3/31/2021
Construction ISD	12/31/2021

Regulatory Approvals

CT Department of Transportation (CDOT)

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2020	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Internal construction resources not available to perform the work.	2021	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Internal engineering resources not available to perform the work.	2020	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Materials shortage or long lead times	2021	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2021	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2021	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods
Technological risks involving integration of new technology	2021	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Customer Permission / Siting Council / Municipal approvals	2020	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.

Wetlands / Environmentally sensitive area	2021	Low	Use of mats and specialty equipment, only work during certain times of the year.

References

None

Attachments (One-Line Diagrams, Images, etc.)


3A023A09%20ROW.docx


Load%20Summary%203A02%203A09.xlsx


CD01304_AIMS Need Statement_9-2


CD01304 Project Overview Drawing.p


CD01304 Primary Map - Before.pdf

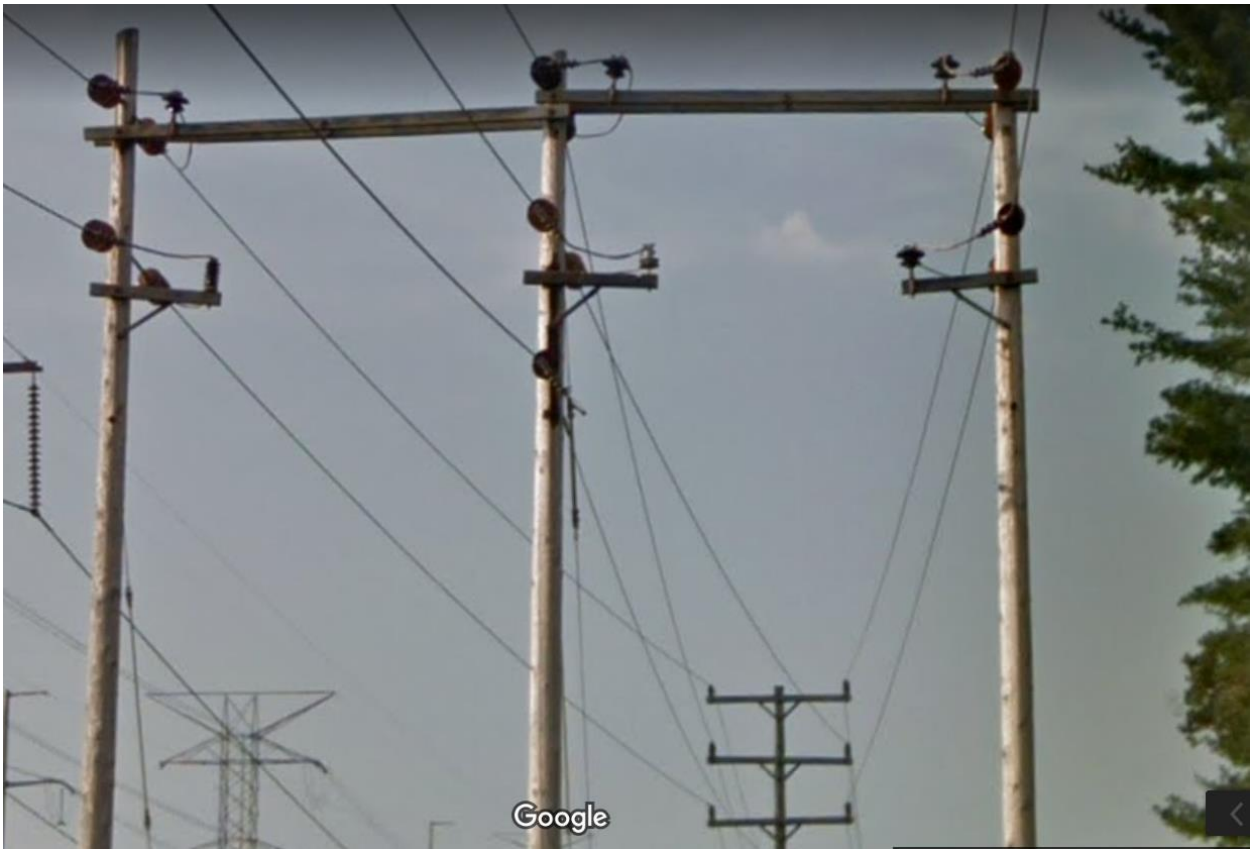
B. Project Photos





B. Project Photos (continued)





C. Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304
[redacted] ROW Structure Replacement

Work Classification		Ownership / Management	
Category:	Line	AWC:	Hartford
Type:	SRRL	Statewide:	No
Type Desc:	RIGHT OF WAY LINES	Owner:	[redacted]
Work Type:		Manager:	[redacted]

Project Information

Status:	Prelim Design Approved	Associated Projects:	
SPS #:		Assignment ID:	
AIS Score:		Patrol Find ID:	

Budget Summary - Preferred Option

Underground Manhole Duct system Bidwell Street

2021 ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
5	Underground option or[redacted]	Draft	0	24%	$1,650,607	$1,650,607
				2021 Total:	**$1,650,607**	**$1,650,607**
				Total Project:	**$1,650,607**	**$1,650,607**

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Underground Manhole Duct system Bidwell Street	5	$1,650,607	$0	100%	$1,096.60	$1,096.60	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Rebuild [redacted]	$644,903			$0.00	$0.00
2	Replace poles and spar arms [redacted]	$1,494,377			$0.00	$0.00
3	HDD underground [redacted]	$1,011,659			$0.00	$0.00
4	Replace X arms on Structures [redacted]	$148,846			$0.00	$0.00
5	Underground option on [redacted]	$1,650,607			$1,095.37	$1,095.37

Asset & Investment Management System 09/29/2020 Page 2 of 16

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01304

[redacted]OW Structure Replacement

Background / Scope

Issue:

Project Description:

Other Considerations:

Revision / ACT Comments:

If we don't do this project, what will happen?

Environmental

Water Pollution: No Change Soil Contamination: No Change Natural Habitats: No Change

Alternatives considered based on Environmental Impact or Description of Aspects Oil Spill Risks Considered? ☐

Safety Concerns With This Project? ☐

Explain:

External Stakeholders

Customer Impact / Involvement

Cust. Impacted: Approx. Pole Count (NU):

Crit. Cust. Impacted: Approx. Pole Count (Other):

Adjoining Property Owner Consent Required: ☐ Town Hearing Required: ☐

Other Utility Pole Custodian Area: ☐ Easement Required: ☐

State Highway Permit Required: ☐

Relocation / New Service

New Srvc. Contact: Requestor Type:

Customer Type: State Highway Project #:

Request Number: Route #:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Segment CD01304-01

General Information

Segment: 1 - Rebuild [redacted] Status: Prelim Design Approved

Segment Type: BACKBONE REHAB Town: MANCHESTER Budget Year: 2019

Work Type: BB-Rehab Trimming Required: ☐ In Service Date: 12/31/2019

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304
[redacted] ROW Structure Replacement

Segment CD01304-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$537,419
Contingency Amount:	$107,484
Estimate:	$644,903
Reimbursement:	$0
Net Amount:	**$644,903**
Description:	Transmission cost/pole includes ROW access on each side of highway and traffic control.

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$14,038.40
POLE OH - JUNCTION POLE - 3ph (CL&P custodian) pole 5821 in R.O.W	16-OH14A			$11,690.40
POLE OH - JUNCTION POLE - 3ph (CL&P custodian) Replace pole 5823[redacted]	16-OH14A			$11,690.40
OTHER OTHER Transmission cost for a two circuit mono pole	16-ALL14			$250,000.00
OTHER OTHER Transmission cost for a two circuit Mono pole	16-ALL14			$250,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	[redacted]	MANCHESTER	[redacted]	[redacted]	[redacted]	

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304
[redacted]ROW Structure Replacement

Segment CD01304-01

Reliability Projection

Title:

Outage Start Date: 01/01/2007 Outage End Date: 04/04/2019 Years History: 12.26

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-02

General Information

Segment: 2 - Replace poles and spar arms [redacted] Status: Prelim Design Submitted

Segment Type: STRUCTURAL HARDENING Town: MANCHESTER Budget Year: 2020

Work Type: BB-Rehab Trimming Required: ☐ In Service Date: 12/31/2020

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,205,142
Contingency Amount:	$289,234
Estimate:	$1,494,377
Reimbursement:	$0
Net Amount:	**$1,494,377**

Description:

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER	16-ALL14	[redacted]		$50,000.00
OTHER OTHER	16-ALL14			$900,000.00
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	16-ALL16			$28,096.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A			$46,761.60
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A			$140,284.80
OTHER OTHER Extra cost for ROW access both sides of the Road.	16-ALL14			$40,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	[redacted]	MANCHESTER	[redacted]			

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304
[redacted]ROW Structure Replacement

Design Alternative CD01304-02

Reliability Projection

Title:

Outage Start Date: 01/01/2007 Outage End Date: 04/30/2019 Years History: 12.33

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted]ROW Structure Replacement

Design Alternative CD01304-03

General Information

Segment: 3 - [redacted] Status: Draft

Segment Type: BACKBONE REHAB Town: MANCHESTER Budget Year: 2021

Work Type: BB-Reconductoring Trimming Required: ☐ In Service Date: 12/31/2021

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-03

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$815,854
Contingency Amount:	$195,805
Estimate:	$1,011,659
Reimbursement:	$0
Net Amount:	**$1,011,659**

Description: Underground option

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$5,000.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu	16-UG114B			$67,200.00
OTHER OTHER Stone ug Conduits 24 inches apart two sets of 2-6"	16-ALL14			$473,457.00
OTHER OTHER Transmission cost for engineering	16-ALL14			$70,000.00
POLE DB/UG - Riser - 3ph Two riers each side of 384	16-UG146			$43,177.60
OTHER OTHER WR 2317381 Remove old wire and poles	16-ALL14			$150,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted]ROW Structure Replacement

Design Alternative CD01304-04

General Information

Segment: 4 - Replace X arms on Structures[redacted] Status: Draft

Segment Type: BACKBONE REHAB Town: MANCHESTER Budget Year: 2020

Work Type: Other Trimming Required: ☐ In Service Date: 12/31/2021

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-04

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$124,038
Contingency Amount:	$24,808
Estimate:	$148,846
Reimbursement:	$0
Net Amount:	**$148,846**

Description:

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$14,038.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$5,000.00
OTHER OTHER Engineering cost	16-ALL14			$70,000.00
OTHER OTHER work to change arms	16-ALL14			$35,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-05

General Information

Segment: 5 - Underground option on [redacted] Status: Draft

Segment Type: BACKBONE REHAB Town: MANCHESTER Budget Year: 2021

Work Type: BB-Rehab+Record Trimming Required: ☐ In Service Date: 12/31/2021

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304

[redacted] ROW Structure Replacement

Design Alternative CD01304-05

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,331,134
Contingency Amount:	$319,472
Estimate:	$1,650,607
Reimbursement:	$0
Net Amount:	**$1,650,607**

Description:

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$15,000.00
TREE OH - Tree Trimming	16-OH61			$15,000.00
ENCLOSURE UG - MANHOLE - Precast	16-UG139			$314,932.00
POLE DB/UG - Riser - 3ph	16-UG146			$32,383.20
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 1000 Kcmil Cu (1750 x 2)	16-UG114B			$336,000.00
CONDUIT UG-Ductline-up to 12 duct-Non- Traveled/Non-Paved MCC property and from MH-5	16-UG138			$169,920.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved Paved duct line 8 conduits 6 inch	16-UG137			$265,880.00
OTHER OTHER Removal of overhead system	16-ALL14			$175,000.00

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01304
[redacted] ROW Structure Replacement

Design Alternative CD01304-05

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	[redacted]	MANCHESTER	[redacted]	[redacted]	0	
Existing			MANCHESTER			0	
Existing			MANCHESTER			0	
Existing			MANCHESTER			0	
Existing			MANCHESTER			[redacted]	
Existing			MANCHESTER				
Existing						0	
Existing						0	

Reliability Projection

Title:

Outage Start Date: 09/29/2016 Outage End Date: 09/29/2020 Years History: 4.00

[redacted]

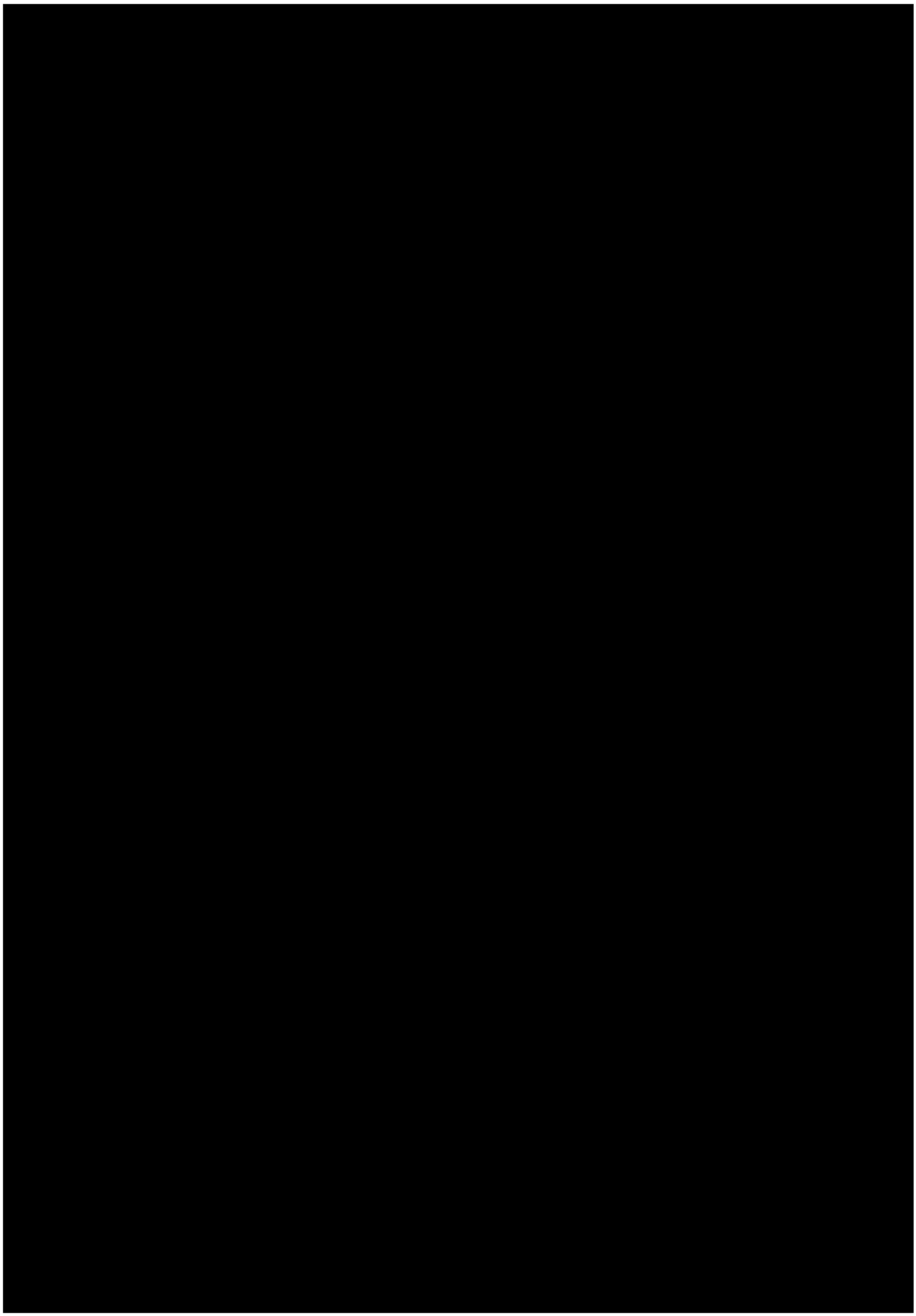
Cost Estimate Backup Details

Budget Summary - Preferred Option — Underground Manhole Duct system [redacted]

2021

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
5	Underground option on [redacted]	Draft	0	24%	$1,650,607	$1,650,607
				2021 Total:	**$1,650,607**	**$1,650,607**
				Total Project:	**$1,650,607**	**$1,650,607**

D. Project Overview



E. Area of Construction

