EVERSOURCE

Project Approval Form

Project Title [redacted] New Service Helmsford Way	**Project Number:** CD02426
Date Prepared: 05/29/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
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: 12/31/25	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $1M	**Authorization Type:** Full Funding

1. Executive Summary

Project CD02426 is established to provide [redacted]

- [redacted]
- [redacted]
- [redacted]
- Project Location:
  - Division: Central
  - District: Hartford AWC
  - Town: Windsor
- Under Eversource's NB-2 policy "Pricing Policy for Standard Charges", which is applicable to the work inside of the customer's premises; the customer's contribution is estimated to be $46K. This includes the primary metering pad, 3-PH primary riser, 740' of 4/0 primary cable, and other necessary costs associated to the new service work. The private property work (NB-2) will be handled through an annual work order separate from this project.
- Under part B of the NB-12 calculations, the Anticipated Annual Distribution Company Revenue is estimated to be $314K, and then over a period of 6.7 years the Anticipated Annual Distribution Company Revenue equals $2,104K. The construction cost to update the system is $1,007K does not exceed 6.7 times Anticipated Annual Revenue generated; therefore, modifications to the distribution system will be at no cost to the customer.

- Under Part C, of NB-12 the customer is responsible for providing an advance payment when there is a significant risk that the Company's new construction may not be used to the extent specified by the customer. Therefore, the customer is responsible to provide an advance payment of $1,007K + CIAC. The advance payment is derived from prorating the total cost of the project based on the requested load and divided by the total capacity resulting from circuit upgrades to the 24J5 circuit.

Total Cost	$1,007K
Customer's portion of the circuit capacity (3 MVA/3 MVA)	100%
Anticipated Annual Revenue	$314K
Section A-NB-12 Revenue Amount for 3 MVA *6.7 Annual Revenue exceeds construction cost	$2,104K
Section B- NB-12 Costs	0
Section C- NB-12 Costs	$1,007K

The approved Partial Funding estimate is $980.8K capital dollars and was approved on 5/2/24. The Full Funding estimate is $1.007M. The difference in cost is $26.2K, an increase of 1.99%. There is no change in the scope, but the design will use 556 TW instead of 477 TW due to material availability.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	Total
Internal Labor and Construction Equipment	198.1	198.1
Outside Services	27.9	27.9
Materials	86.5	86.5
Removals	16.8	16.8
Other	0.0	0.0
Risk and Contingency	70.3	70.3
Subtotal	**399.5**	**399.5**

Indirect Capital Costs		
Indirects/Overheads (including benefits)	608.1	608.1
Capitalized interest or AFUDC, if any	0.0	0.0
Subtotal	**608.1**	**608.1**
Total Capital Costs (Gross)	**1,007.6**	**1,007.6**
Less Total Customer Contribution	**0.0**	**0.0**
Project Costs (Net)	**1,007.6**	**1,007.6**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

- Amazon requested to upgrade to a primary service for their existing building to allow for new Fleet EV charging. Their needs are 3.758 MW in total for 2025/2026.

- [redacted]

b. Project Need

- [redacted]

- [redacted]

Project Scope

c. Project Scope

The scope of the project is as follows:

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

Major materials:

- 5400’ of 556 TW.

4. Alternatives Considered

NWS Exclusion Criteria (select all that apply)

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.5

☐ Project cost < $250k	☒ New Service
☐ CDOT Relocation	☐ Generator interconnection project
☐ Maintenance, Asset condition or safety related*	

Project Option Comparison

[redacted]

Additional Benefits (not required to meet scope of project)		
Authorization Type	Full	Partial
Capital Cost	$1,007.6K	$2,248K
Expense Cost	$53.15K	$116K
Total Cost	$1,060.75K	$2,364K
Preferred option	X	

Option Summary

Preferred: **Option 1;** [redacted] This option is preferred due to the cost vs benefit compared to option 2, while still allowing for the increased load and maintaining design standards.

Other(s): **Option 2;** [redacted] This option was not selected due to the increased cost over Option 1 for a total load that may not justify it.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	April 2024

Milestone/Phase Name	Estimated Date
100% Detailed Engineering Completion	September 2024
Fully Funded	June 2025
Construction Start	September 2025
In Service Date	December 2025

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2025	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Internal engineering resources not available to perform the work.	2025	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	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	2025	Medium	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2025	Medium	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	*YES*
B. PAF Partial Authorization Checklist	*YES*

EVERSOURCE

Project Approval Form

C. Initial Funding PAF	*YES*
D. NB-2 Worksheets	*YES*

Attachment A: Partial Funding PAF

Project Titl[redacted]New Service Helmsford Way	**Project Number: CD02426**
Date Prepared: 03/06/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
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: 12/31/25	**Feeder**: 24J5
Total Capital Request: $980.8K	**Authorization Type:** Partial Funding

1. Executive Summary

Project CD02426 is established to provide [redacted]

- [redacted]
- [redacted]
- [redacted]
- Project Location:
  - Division: Central
  - District: Hartford AWC
  - Town: Windsor

The NB-12 calculation for the 3 MVA of load is $2,104k for one primary service. For the preferred option which has only one primary service, since the NB-12 expected revenue is larger than the construction cost subsection B of NB-12 does not apply. However, the anticipated load is considered at risk and NB-12-subsection C applies. As a result, the customer will be asked to provide a refundable advance based on the additional capacity required to upgrade the circuit, of $980.8K for

the preferred option. The additional advance amount will be refunded when the circuits are put to full use, as specified in the customer's request.

Under Eversource's NB-2 policy "Pricing Policy for Standard Charges", which is applicable to the work inside of the customer's premises; the customer's contribution is estimated to be $46,438.47. This includes the primary metering pad, 3-PH primary riser, 740' of 4/0 primary cable, and other necessary costs associated to the new service work.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2025	Total
Direct Capital Costs		
Internal Labor and Construction Equipment	63.9	63.9
Outside Services	182.9	182.9
Materials	204.2	204.2
Removals	140.9	140.9
Risk and Contingency	1.3	1.3
Other	0.0	0.0
Subtotal – Direct Costs	**593.1**	**593.1**
Indirect Capital Costs		
Indirect/Overheads (including benefits)	363.6	363.6
Capitalized interest or AFUDC, if any	24.1	24.1
Subtotal – Indirect Costs	**387.7**	**387.7**
Total Gross Capital Costs	**980.8**	**980.8**
Customer Contribution	**46.4**	**46.4**
Total Net Project Costs	**934.4**	**934.4**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

- [redacted]
- [redacted]

b. Project Need

- [redacted]
- [redacted]

c. Project Scope

The scope of the project is as follows:

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

Major materials:

- 5400’ of 477 AAC 150 kcmil TW.

[redacted]

4. Alternatives Considered

- Option 1, [redacted]. This option is preferred due to it costing less than the other option, while still allowing for the increased load and maintaining design standards.

- Option 2, [redacted] This option was not selected due to the increased cost over Option 1 for a total load that may not justify it.

Project Option Comparison

[redacted]

Authorization Type	Partial	Partial
Capital Cost	$980.8K	$2,248K
Expense Cost	$50.2K	$116K
Total Cost	$1,031K	$2,364K
Preferred option	X	

5. Project Schedule

Add any additional milestones that are pertinent to the project.

Milestone/Phase Name	Estimated Date
Partial Approval	April 2024
100% Detailed Engineering Completion	September 2024
Fully Funded	February 2025
Construction Start	May 2025
In Service Date	December 2025

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2025	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2024	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

9. References

No References.

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

Attachment	Included in Submittal?
A. Project Need Statement / Cost Estimate	*YES*
B. Load Summaries	*YES*
C. System and Station One-Lines	*YES*
D. Geographic Maps	*YES*

Attachment A: Project Need Statement

EVERSOURCE

Project Approval Form

[Option #1: [redacted].]

Design Alternative CD02426-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$831,588
Contingency Amount:	$199,581
Estimate:	$1,031,169
Reimbursement:	$0
Net Amount:	**$1,031,169**
Description:	Reconductoring overloaded 4/0 section with 477 TW

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$9,124.96
OH WIRE OH - Remove circuit wire (3 phase)	23-OH37A			$22,464.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 15% police contingency	23-ALL18			$85,082.00
ACT ACT Estimate for Contractor Crews 30% contractor adder	23-ALL12			$170,165.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil Reconductoring with 477 AAC 150 Mil Covered Wire from p#964 to p#1002 Bloomfield Ave.	23-OH27			$544,752.00

[Option #2: [redacted]]

EVERSOURCE

Project Approval Form

Design Alternative CD02426-03

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,906,360
Contingency Amount:	$457,527
Estimate:	$2,363,887
Reimbursement:	$0
Net Amount:	$2,363,887
Description:	[redacted]

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$9,124.96
OH WIRE OH - Line Extension w/Aerial Cable - (any gauge) #1 Aerial cable extension up to Day Hill / Helmsford Way Intersection	23-OH35			$955,656.00
UG CABLE DB/UG - 1/0 - 3-1/C (3ph) Cu 1/0 UG is rated for 203 for 75 percent loaded for two circuits or [redacted] amazon need is only 95.4 MVA	23-UG113A			$14,175.20
ACT ACT Estimate for Contractor Crews 30% contractor contingency	23-ALL12			$392,531.00
POLE DB/UG - Riser - 3ph DB/UG Riser 3 Ph.	23-UG146			$14,032.72
POLE OH - POLE - 3ph (Eversource custodian) Install New Pole	23-OH14			$6,078.80
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph Oh Vertical Disconnect Switch	23-OH43			$13,368.16
OTHER OTHER One Unit of Type 422 SWGR Pref/Alt	23-ALL14			$233,950.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer Police, used 15%	23-ALL18			$196,266.00
CONDUIT UG-Ductline-up to 12 duct-Non- Traveled/Non-Paved Underground Ductbank for both [redacted] primary cable.	23-UG138			$71,177.60

Attachment B: Project Load Summary

[Before]



[After: Option 1:]



[After: Option 2:]

[redacted]

C. System and Station One-Lines

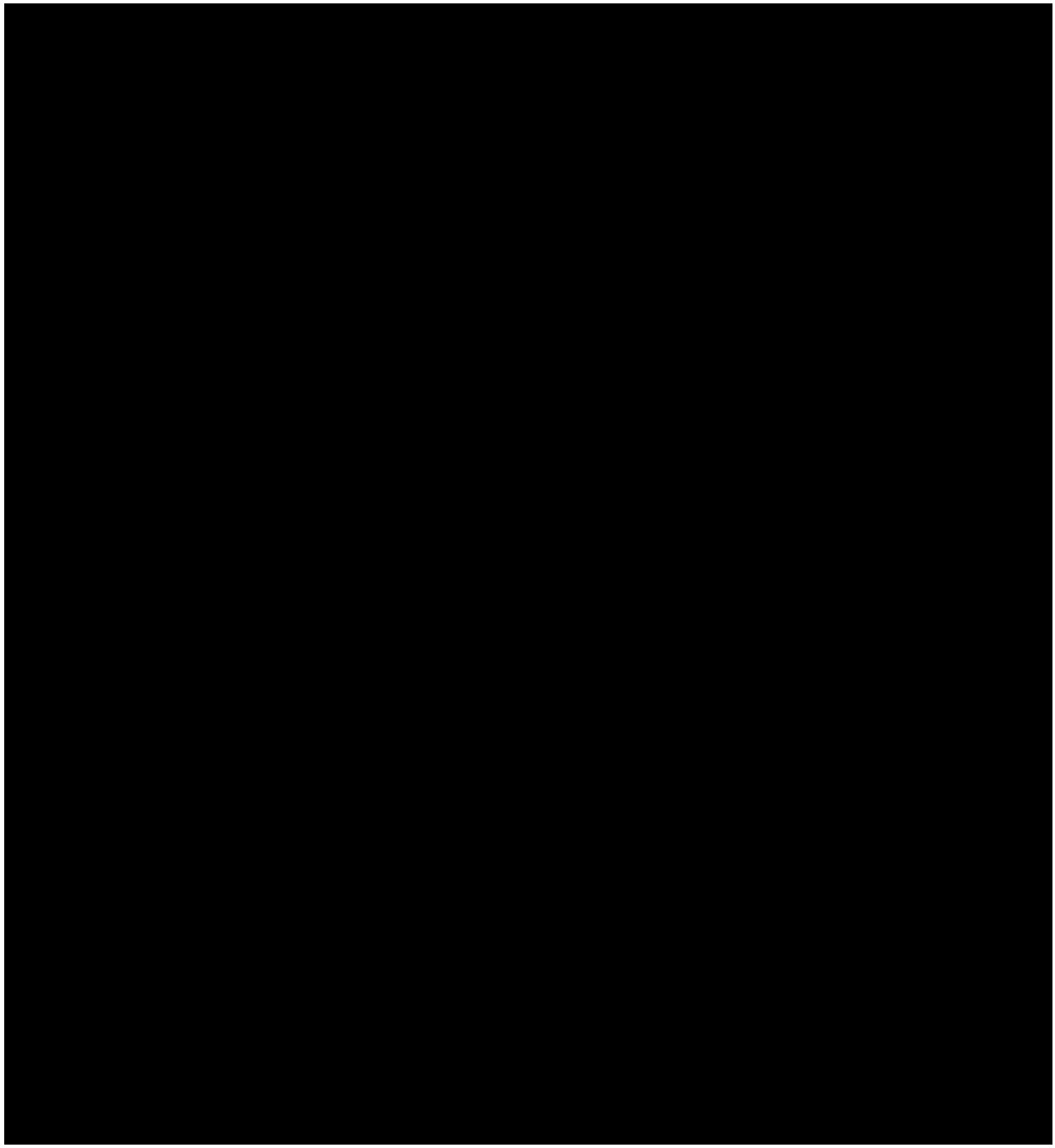
[After: Option 1: [redacted]]



[Option #2: [redacted]]

[redacted]

D. Geographic Maps



[After: Option 2: [redacted]

[redacted]

Attachment B: PAF Partial Authorization Checklist

Project Authorization Checklist

Project Initiator: [redacted]

Project #: CD02426

Project Titl [redacted] **New Service Helmsford Way**

Funding Type:

☒ Partial PAF ☐ Full PAF

Project Alternatives:

☒ Options considered ☒ Explanation why alternatives were not selected

☐ NWA considered ☒ Explanation why preferred option was selected

Project Requirements (Review all, and check all that apply):

☒ Easement ☐ TD007

☐ Trimming ☐ Estimate Received ☐ ROW trimming ☐ Estimate Received

☐ Environmental Review Initiated ☒ Review with Operations

☐ Pole permits (state roads) ☐ Underground permits

☐ P&C Settings ☐ Material long lead

☒ Synergi load flow

PAF Documents Attached:

☒ One Lines ☒ Geographical Map ☒ Load Projections ☒ Estimates

☐ Other Documents (List):

PAF Review Complete:

☐ Lead Reviewed by: [redacted] Date: 4-17-2024

☐ Manager Reviewed by: _____ Date: _____

Attachment C: Initial Funding PAF

EVERSOURCE

Project Approval Form

Project Title: [redacted] New Service, Helmsford Way Windsor	**Project Number:CD02426**
Date Prepared: 02/28/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** SPECIFIC PROJECTS-NEW SRVCE
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of 5-year plan?** Yes
	Emergency Related Request? No
Total Request: $30K	**Authorization Type:** Initial Funding

1. Project Need Statement

- Project CD02426 – Helmsford Way, Windsor, Service Upgrade - is established to provide power to an existing customer. This customer has a projected load addition of 2.76 MVA.
    - Project Location:
        - Division: Central
        - District: Hartford AWC
        - Town: Windsor

2. Project Objectives

- The project objective is to engineer a solution that ensures adequate capacity on the Distribution System to allow for 2.76 MVA more load while meeting required reliability and safety standards.

Project Initiator: [redacted]

Engineering Approval: [redacted]

Attachment D: NB-2 Worksheets



[Primary Metering Cabinet]

