EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] Structural Upgrade	**Project Number:** CD01821
Date Prepared: 10/06/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year 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)
Current Authorized Amount: $2,364K	**Approved In-Service Date:** 12/31/2025
Supplement Request: $3,184.9K	**Estimated In-Service Date:** 12/31/2026
Total Capital Request: $5,548.9K	**Authorization Type:** Supplement Request
	Reason: : Cost Overage

1. Project Background

Supplemental funding is being requested for this project. The total capital request is $5,548.9K which is (135%) $3,184.9K more than the current authorized amount of $2,364K. Challenges while the civil construction was underway, future necessary scope changes and subsequent overhead costs result in this supplemental funding request.

The scope changes and associated costs were necessary to ensure the successful execution of the duct bank installation and related infrastructure upgrades. [redacted]

Civil challenges in routing the duct bank into MH60 led to test pits and construction delays, ultimately requiring partial rerouting and duct stubbing, which added to project costs. [redacted] supports safety improvements and addresses community noise complaints, aligning with long-term operational goals. Compliance with Town of Greenwich requirements—including sewer inspections, paving contributions, parking revenue compensation, and mandated night work—was critical to maintain permitting and community relations. Securing a laydown site and performing test pits were necessary logistical steps to support efficient construction and meet municipal documentation standards. These changes reflect prudent project management decisions made to overcome unforeseen conditions while maintaining safety, regulatory compliance, and community responsiveness.

Location Information:

Division: Western

District: Stamford

City: Greenwich

2. Supplement Justification Overview

This project's variance of $3,184.9K is needed to facilitate the installation of the new duct bank and associated infrastructure. In [redacted], resulting in approximately $55K in additional internal labor costs. Further work is needed to [redacted] adding $77K in direct project costs. Civil modifications to route the duct bank into MH60 incurred an additional $36K due to test pits and construction delays. The cost of new [redacted] increased by $25.5K, offering improved safety and noise reduction. Town of Greenwich requirements added $156K in outside service costs, including sewer line video inspections, paving cost-sharing, parking meter revenue compensation, mandated use of flowable fill, and night work. A laydown site on Old Track Rd was secured for $216.4K, and sixteen test pits were performed at a cost of $39.36K to support town documentation requirements.

3. Supplement Justification Detail

Scope Change:

- Due to [redacted] The additiona internal labor and overtime to facilitate this work was about $55k.
- Additional cost was incurred on the civil side to get the duct bank into MH60. [redacted] This required some additonal test pits and delays in construction. Ultimately we needed to stay with the original plan of going to MH60. [redacted] The additional cost was about $36k.
- The grates for the [redacted] have increased in cost by $25.5k. We are using this vault as a test location for new piston opened grates. The new grates provide two benefits. The first is safety since the piston reduces the stress on line workers opening the very heavy grates. The second is noise reduction when vehicles travel over the vaults. The company receives numerous complaints about noise from our vault tops in Greenwich and Stamford.
- We will also need to perform the following work to facilitate running the new cables in the duct bank:

- [redacted]
- [redacted]

The cost of this work will be about $77k in additional direct cost to the project.

Town of Greenwich Requirements (These cost are included in the Outside Service acutals)

- We were required to perform a CCVT Video of the sewer lines along the duct bank route at a cost of $6,410
- We had to make a cost sharing payment of $40k for mill and paving along the duct bank path
- We had to pay the town for loss revenue from parking meters at a cost of $37.2k
- The town required the use of flowable fill instead of native soil above the duct bank at a cost of $48.6k
- The duct bank installation had to be done at night, which was not known at the time of the full funding at a cost of about $23.8k.

Laydown Site

- A laydown site was secured on Old Track Rd in Greenwich for the civil contractor to stage equipment and material for this project. The cost for this site is $216.4k.

Test Pits

- Sixteen test pits were performed to facilitate the plan and profile document required by the town at a cost of $39,360

The indirect cost went up an additional $1,872.1K**.**

4. Supplement Cost Summary (Project Total)

Line-item Category	To Date Spend Year(s)	Prior Authorized Year(s)	Variance (Supplemental Request) Year(s)	New Total Request (Add Prior Authorized and Variance) Year(s)

Internal Labor and Construction Equipment	172.7	112.4	147.0	259.4
Outside Services	976.2	688.7	777.1	1,465.8
Materials	140.9	116.2	95.4	211.6
Removals	143.4	204.4	39.2	243.6
Risk and Contingency	0.0	0.0	253.9	253.9
Other	1.0	1.2	0.3	1.5
SUBTOTAL DIRECTS W/ RISKS	**1,434.2**	**1,122.8**	**1,312.9**	**2,435.7**
Indirect / Overhead (including benefits)	1,864.7	1,144.3	1,822.6	2,966.9
AFUDC	146.3	96.8	49.5	146.3
Subtotal – Indirect Costs	**2,011.0**	**1,241.2**	**1,872.1**	**3,113.2**
TOTAL CAPITAL REQUEST	**3,445.2**	**2,364.0**	**3,184.9**	**5,548.9**
Reimbursables/Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
PROJECT TOTAL (LESS REIMBURSABLES)	**3,445.2**	**2,364.0**	**3,184.9**	**5,548.9**

New Total Request by Year (if applicable)

Line item Category	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Actual	2025 Estimate	2026 Estimate	Total
Internal Labor and Construction Equipment	1.0	1.2	55.6	21.2	93.7	53.5	33.2	259.4
Outside Services	5.9	6.7	314.3	119.8	529.5	302.1	187.5	1,465.8
Materials	0.9	1.0	45.4	17.3	76.4	43.6	27.1	211.6
Removals	0.9	1.0	46.2	17.6	77.8	56.5	43.6	243.6
Risk and Contingency	0.0	0.0	0.0	0.0	0.0	109.1	144.8	253.9
Other	0.0	0.0	0.3	0.1	0.6	0.3	0.2	1.5
SUBTOTAL DIRECTS W/ RISKS	**8.7**	**9.8**	**461.8**	**175.9**	**777.9**	**565.2**	**436.3**	**2,435.7**
Indirect / Overhead (including benefits)	11.7	11.4	190.8	366.3	1,284.4	635.3	467.0	2,966.9
AFUDC	0.2	1.9	16.2	59.0	69.1	0.0	0.0	146.3
Subtotal – Indirect Costs	**11.9**	**13.3**	**207.0**	**425.3**	**1,353.5**	**635.3**	**467.0**	**3,113.2**
TOTAL CAPITAL REQUEST	**20.6**	**23.1**	**668.8**	**601.2**	**2,131.4**	**1,200.4**	**903.3**	**5,548.9**
Reimbursables/Customer Contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
PROJECT TOTAL (LESS REIMBURSABLES)	**20.6**	**23.1**	**668.8**	**601.2**	**2,131.4**	**1,200.4**	**903.3**	**5,548.9**

5. Lessons Learned

N/A

Full Funding PAF

Project Title: [redacted] Structural Upgrade	**Project Number:** CD01821
Date Prepared: 05/05/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
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: 12/31/2025	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $2,364K	**Authorization Type:** Full Funding

Executive Summary

Full funding is being requested for this project at a cost of $2,364K, which is 164% of the partial funding request of $1,446.5K. The main driver for the cost overage is outside services cost for obtaining plan and profile drawings and permits as well as overhead costs. The project was originally presented and had partial approval for $2,000K. Since then, it had a change of scope, and the revised project was approved for $1,446.5K

The Town of Greenwich is planning a streetscape project along [redacted] where they will reconstruct sidewalks and completely repave [redacted] from [redacted]. The Town requested of all subsurface utility owners that all underground infrastructure be installed or upgraded as necessary prior to their planned project. A review of Eversource's existing infrastructure shows the degradation of 2 manholes and a small, congested manhole that needed to be remedied given the opportunity described above.

This project proposes to [redacted]

- Division: Western
- District: Stamford AWC
- City/Town: Greenwich

Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2021 – 2023 Actuals	2024 Actual	2025 Actual	2025 Estimate	Total
Internal Labor and Construction Equipment	52.9	19.4	3.8	36.3	112.4
Outside Services	324.2	118.7	23.5	222.2	688.7
Materials	54.7	20.0	4.0	37.5	116.2
Removals	48.0	17.6	3.5	43.2	112.3
Risk and Contingency	0.0	0.0	0.0	92.1	92.1
Other	0.6	0.2	0.0	0.4	1.2
Subtotal	**480.4**	**175.9**	**34.9**	**431.6**	**1,122.8**

Indirect Capital Costs	Prior Years Actuals	2024 Actual	2025 Actual	2025 Estimate	Total
Indirects/Overheads (including benefits)	213.9	366.3	55.3	508.7	1,144.3
Capitalized interest or AFUDC, if any	18.3	59.0	19.6	0.0	96.8
Subtotal	**232.2**	**425.3**	**74.9**	**508.7**	**1,241.2**

Total Capital Costs (Gross)	**712.6**	**601.2**	**109.8**	**940.4**	**2,364.0**
Less Total Customer Contribution					
Project Costs (Net of Reimbursement)	**712.6**	**601.2**	**109.8**	**940.4**	**2,364.0**

1. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The Town of Greenwich is planning to completely repave [redacted]. The Town has urged all subsurface utility owners to install or upgrade all underground infrastructures as necessary prior to the planned roadway work. It is prudent we take advantage of this opportunity and upgrade the necessary structures before the town completes the [redacted] pavement project. Eversource's civil engineer was asked to inspect 3 manholes & 1 network transformer vault, and these are the findings:

[redacted]: Heavy concrete delamination and spalls in ceiling, several hollow areas throughout all walls and several major spalls in walls. [redacted]

[redacted]: The walls and roof of this structure are in poor condition. [redacted]

[redacted] The roof of this structure was found to be in good condition. [redacted]

Over the years there has been several complaints by Eversource's field workers about the size and difficulty to work in this manhole. The Greenwich Streetscape project provides an opportunity to remedy this situation and make this hole safer for field workers to work in.

[redacted]

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

b. Project Need

This project originated from a request by the Town of Greenwich to review subsurface facilities and make improvements as required prior to the civil work associated with roadway improvements. A review was conducted, and it was [redacted].

c. Project Scope

[redacted]

- **Major Material:**
- 1000 Cu UG Cable ----------1800 ft
- 8 position Duct Bank ----------600 ft

2. Alternatives Considered

NWS Exclusion Criteria (select all that apply)

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

Project Option Comparison

[redacted]

Authorization Type	Full	Full	Full
Total Cost	$2.4M	N/A	N/A
Total Cost / CM Saved	N/A	N/A	N/A
Total Cost / CI Saved	N/A	N/A	N/A
Preferred option	X		

Option Summary

*Deteriorating roofs and walls and small congested manholes.

One alternative explored was trying to enlarge MH 58 as originally planned. Extensive resources were used to explore if this MH could be enlarged, but this all proved futile. It was discovered that, while the manhole could be extended lengthwise, it could not be widened because of current obstructions alongside it. The decision was made to bypass MH 58 with the primary cables in a new duct bank instead.

3. Project Schedule

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

4. Regulatory Decisions

N/A

5. Codes and Standards

N/A

6. 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.

7. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Partial Funding PAF	*YES*

Attachment A: Partial Funding PAF:

Project Title: [redacted] Structural Upgrade	**Project Number:** CD01821
Date Prepared: 03/25/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UNDERGROUND STRUCTURE ISSUE
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: $1,446.5K	**Authorization Type:** Partial Funding

9. Executive Summary

The Town of Greenwich is planning a streetscape project along [redacted] where they will reconstruct sidewalks and completely repave [redacted] from Putnam Avenue to Railroad Avenue. The Town has made it quite clear to all subsurface utility owners that all underground infrastructure must be installed or upgraded as necessary prior to their planned project. After careful review of Eversource's existing infrastructure, it was determined to have manholes repaired and install duct banks given the opportunity described above.

This CD01821 project was presented before and SDC approved. However, there is a scope change.

Under the initial scope the project proposed:

- [redacted]
- [redacted]

Now, this project proposes to [redacted] This change of scope is due mainly to time constraints and challenges in executing the original plan.

- Division: Western
- District: Stamford AWC
- City/Town: Greenwich

10. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2025	Year 2026	Year 2027+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	30.7	0.0	0.0	30.7
Outside Services	594.1	0.0	0.0	594.1
Materials	36.8	0.0	0.0	36.8
Removals	343.8	0.0	0.0	343.8
Risk and Contingency	1.2	0.0	0.0	1.2
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**1,006.6**	**0.0**	**0.0**	**1,006.6**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	435.1	0.0	0.0	435.1
Capitalized interest or AFUDC, if any	4.8	0.0	0.0	4.8
Subtotal – Indirect Costs	**439.9**	**0.0**	**0.0**	**439.9**
Total Gross Capital Costs	**1,446.5**	**0.0**	**0.0**	**1,446.5**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**1,446.5**	**0.0**	**0.0**	**1,446.5**

11. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The Town of Greenwich is planning to completely repave [redacted] from [redacted] The Town has urged all subsurface utility owners to install or upgrade all underground infrastructures as necessary prior to the planned roadway work. It is prudent we take advantage of this opportunity and upgrade the necessary structures before the town completes the [redacted] pavement project. Eversource's civil engineer was asked to inspect the 3 manholes & 1 Vault Room, and these are the findings:

[redacted]

b. Project Need

This project originated from the requirement from the Town of Greenwich to review subsurface facilities and make improvements as required prior to the civil work associated with roadway improvements. MH#58 contain 3 – 27.6 kV feeders combined with 3 sets of secondary mains and numerous services. Working in confined and crowded spaces is labor intensive and increases the duration of feeder outages. A review was conducted, and

it was determined that we should undertake projects that were already under consideration, specifically [redacted]

c. Project Scope

[redacted]

- **Major Material:**
- 1000 Cu UG Cable ----------1800 ft
- 8 position Duct Bank ----------600 ft

12. Alternatives Considered

NWS Exclusion Criteria (select all that apply)

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

*Deteriorating roofs and walls and small congested manholes.

13. Project Schedule

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

14. Regulatory Decisions

N/A

15. Codes and Standards

N/A

16. 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.

17. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. UG Structures	*YES*

Attachment A: Cost Summary:

Segment 1:

Design Alternative CD01821-03

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	20.00%
SubTotal:	$805,401
Contingency Amount:	$161,080
Estimate:	$966,482
Reimbursement:	$0
Net Amount:	$966,482
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	23-ALL16	[redacted]		$18,262.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18			$15,000.00
UG CABLE UG - Cable Removal - all cables Remove the existing cables between MH#57, MH#58 and MH#60	23-UG117			$46,800.00
OTHER OTHER Contractor cost added	23-ALL14			$256,715.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved Install 600' 8 position duck bank between MH#57, MH# 357 and MH#	23-UG137			$243,984.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu Install 600' of 1000 Cu UG cable for each [redacted]	23-UG114B			$224,640.00

Associated / Impacted Devices

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

Segment 2:

Design Alternative CD01821-04

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$164,131
Contingency Amount:	$32,826
Estimate:	$196,957
Reimbursement:	$0
Net Amount:	**$196,957**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	23-ALL16	[redacted]		$9,131.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18			$5,000.00
OTHER OTHER Estimated Repair Cost for MH53 and MH53A	23-ALL14			$150,000.00

Segment 3:

Design Alternative CD01821-05

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$271,131
Contingency Amount:	$54,226
Estimate:	$325,358
Reimbursement:	$0
Net Amount:	**$325,358**
Description:	

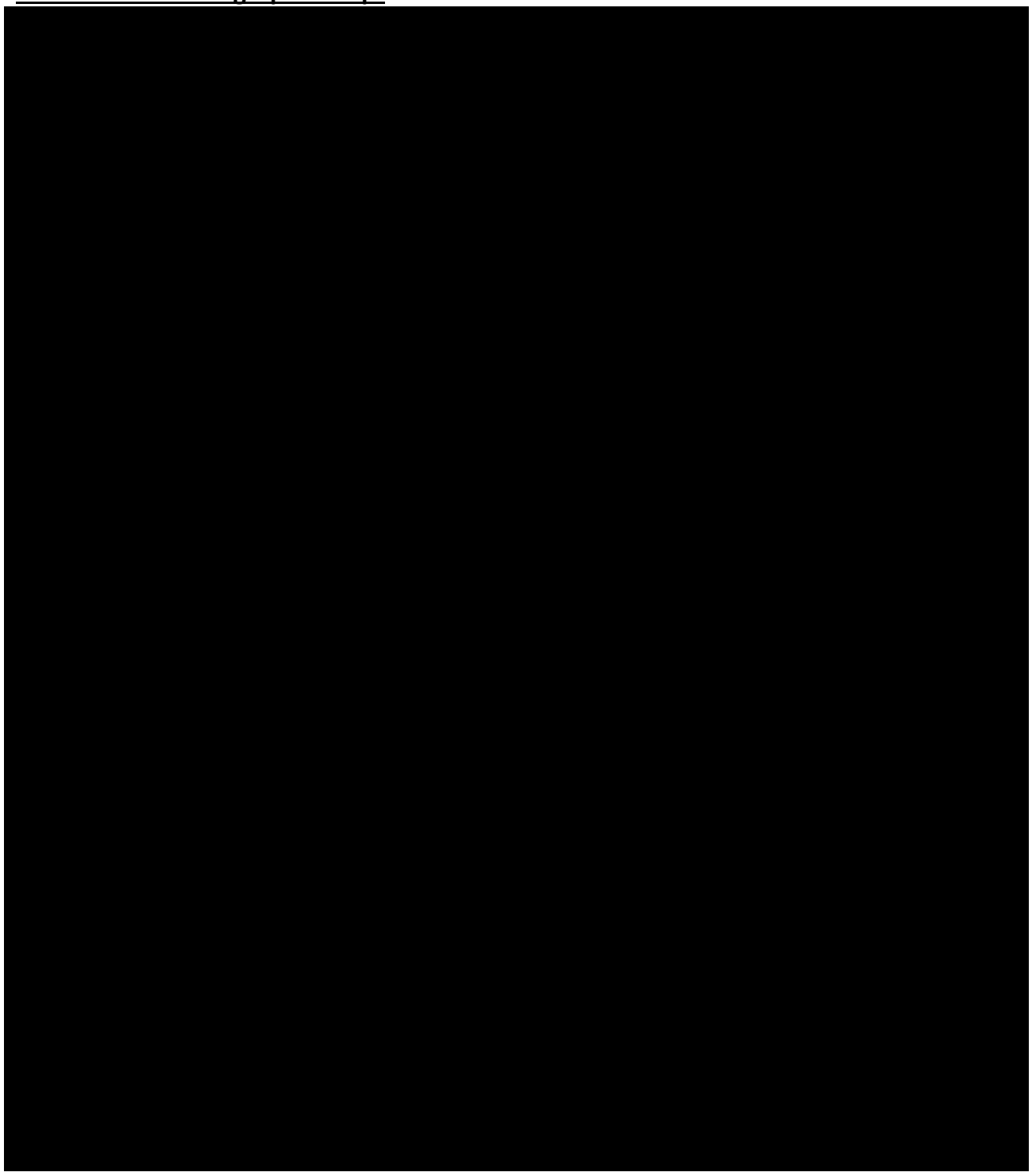
Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$4,562.48
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18			$4,000.00
OTHER OTHER 30% Contractor cost added	23-ALL14			$62,569.00
OTHER OTHER Roof replacement of VLT#59 at [redacted]	23-ALL14			$200,000.00

Associated / Impacted Devices

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

CD01821_project_needs_statement.pdf

Attachment B: Geographic Map:

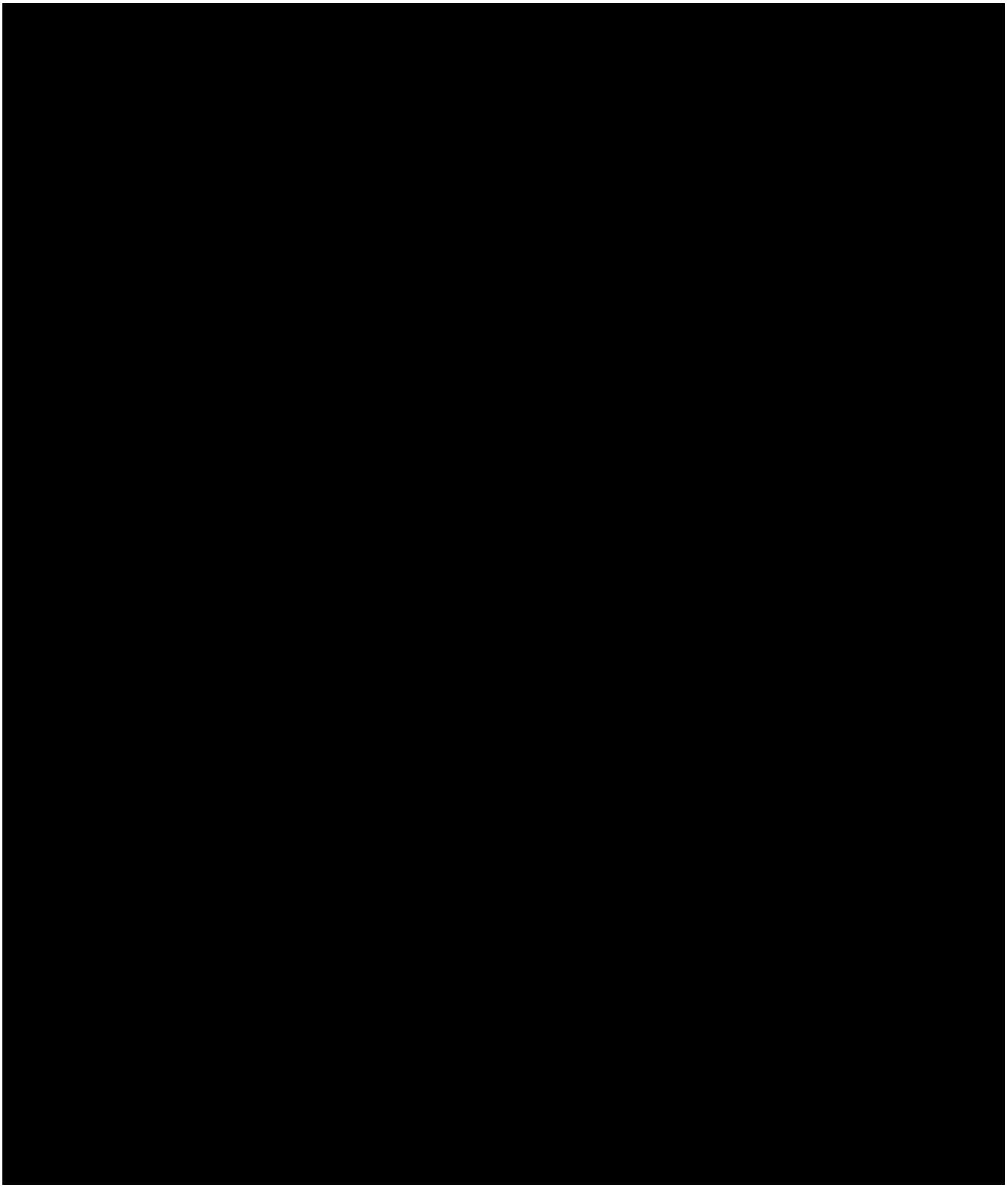


[redacted]



[redacted] - map 1.29.25.pdf

Attachment C: UG Structures:





UG structrures - 4.29.25.pdf