EVERSOURCE

Project Authorization Supplement Justification

Appendix 4
Supplement Request Form

Date Prepared:	11/30/2016		Project Title: [redacted] Replace Culvert	
Company: Eversource CT			Project ID Number: CS00034	
Organization: Strategy & Performance			Plant Class/(F.P. Type): Distribution	
Project Initiator:	[redacted]		Project Type: Specific	
Project Owner/Manager:	[redacted]		Capital Investment Part of Original Operating Plan?	Yes
Project Sponsor:	[redacted]		O&M Expenses Part of the Original Operating Plan?	No
Current Authorized Amount:	$	385,000	Estimated In Service Date:	5/31/2017
Supplement Request:	$	345,000	Other:	
Total Request:	$	730,000		

Project Authorization Supplement Justification

The existing culvert located at the beginning of the [redacted] driveway entrance is undersized and requires enlargement. After discussions with the nearby upstream neighbor, who has experienced extensive flooding on his property, and the city of Danbury, it was determined to have an engineering study performed on the capacity of the existing culvert. The study revealed that the existing culvert, owned by Eversource, was undersized when it was designed and installed many years ago.

This project includes the cost of replacing the existing culvert with a larger capacity one and the cost to support the cable getaway duct bank which goes over the culvert. The work was originally approved on 10/29/14. It was approved for construction on 4/15/15 for an estimated cost of $385k. Numerous delays and scope changes have resulted in a significant increase in the estimated construction cost. The main reason for the scope change is because a second duct bank was discovered during the excavation. In addition to the duct bank over the culvert, a second duct bank was found under the culvert. In addition to delaying the construction, this caused the new, pre-cast culvert pieces to have to be modified.

The work will be performed by a vendor in the fall of 2016. The total estimated cost is $730k. That includes the contractor bid of $456k, Eversource CT labor, and all loaders.

The primary reason for the cost increase is the increase in the contractor bid from $172k to $456k, an increase of $284k. The reasons for the contractor bid increase include:
$11,800 for additional clearing and grubbing for the culvert relocation and creation of laydown area for culvert pieces at the site.
$152,200 to build a conduit support trestle.
$84,000 for sheet piling.
$30,800 for additional crane time and trucking.
$2,400 for the demolition of surplus culvert pieces.

None of the above items were included in the original scope provided by Eversource that the contractors bid on. As the detailed engineering was completed, the additional requirements became apparent and necessitated the increased bid.

Project Authorization Supplement Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	Supplement Request	Total
Capital Additions - Direct	$200	$324	$524
Less Customer Contribution	0	0	0
Removals Net of Salvage 7%	15	24	39
Total Direct Spending	$215	$349	$564
Capital Additions - Indirect	164	-12	152
AFUDC	6	8	14
Total Capital Request	$385	$345	$730
O&M	0	0	0
Total Request	$385	$345	$730

Note: Dollar values are in thousands

Total Supplement Request by year view:

	2016	2017	2018+	Total
Capital Additions Direct	$256	$268	$0	$524
Less Customer Contribution	0	0	0	0
Removals Net of Salvage 7%	19	20	0	39
Total Direct Spending	$276	$288	$0	$564
Capital Additions - Indirect	80	71	0	152
AFUDC	12	2	0	14
Subtotal Request	$369	$361	$0	$730
O&M	0	0	0	0
Total Request	$369	$361	$0	$730