EVERSOURCE

Operations Project Authorization Form

Approved on June 5, 2025 EPAC

Link to Meeting Minutes

Project Title: Weston [redacted] Sound Mitigation	**Project Number: CS00712**
Date Prepared: 05/23/2025	**Company: Eversource CT**
Organization: Asset Management	**Class(es) of Plant: D SS**
Project Initiator: [redacted]	**Project Category: Stations - General**
Managing Organization: Project Mgt and Construction	**Schedule ID#: CS00712**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Capital Investment part of original Op Plan:** Yes
Estimated in service date: August 2025	**Emergency Related Request? No**
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☐ local PTF ☒ Distribution ☐ N/A (General Plant)
EJ Community: No	**Authorization Type: Full Funding**
Total Capital Request: $539K	

[1] Executive Summary

[redacted]

Recently, a noise complaint from an adjacent property owner north of the substation was received (See Figure 1 for an aerial overview of the substation). An initial sound study evaluation (Reference 1) was performed in July of 2024 along the north property line that confirmed that sound levels at the substation property line were above the upper limit of allowable nighttime operating A-weighted decibel (dBA) levels permitted by the CT Department of Energy and Environmental Protection (DEEP) noise regulations.

The 2024 sound study revealed that the recorded acoustic measurement along the north property line is dominated by sound produced by the [redacted]. The study notes that

[redacted]

This project had initial funding of $200K approved in PowerPlan on September 30, 2024 (Reference 2). As of April 28, 2025, $102K has been spent to develop and model sound reduction options, work with sound wall and LTC vendors, completion of preliminary engineering

packages, constructability walkdowns, planning grade estimates, P6 schedule development, and development of this full funding PAF. See Attachment A for the project estimate.

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[2] Project Costs Summary

Note: Dollar values are in thousands and rounded to nearest thousand

Line item Category	Prior Authorized	Actuals to Date	2025 to Go	2026	Total Request
1. ROW / Easements / Land Acquisition	-	-	-	-	-
2. Environmental Approvals / Permits	-	-	-	-	-
3. Outreach	-	-	$1	-	$1
4. Siting Approvals / Permits	-	$5	$1	-	$5
5. Engineering / Design	-	$12	$9	-	$21
6. Materials (Eversource purchased)	-	-	-	-	-
7. Construction (incl materials by contractors)	-	-	$183	-	$183
8. Testing / Commissioning	-	-	$4	-	$4
9. Project Mgmt Team	-	$15	$20	-	$35
10. Removals	-	-	$13	-	$13
11. Other	-	-	$5	-	$5
12. Risks	-	-	$41	-	$41
SUBTOTAL DIRECTS W/ RISKS	**$200**	**$31**	**$276**	**-**	**$307**
13. Indirects/Overhead	-	$70	$134	-	$204
14. AFUDC	-	$1	$12	-	$13
PROJECT TOTAL – BASELINE BUDGET	**$200**	**$102**	**$422**	**-**	**$524**
15. Contingency	-	-	$15	-	$15
TOTAL CAPITAL REQUEST	**$200**	**$102**	**$437**	**-**	**$539**
16. Reimbursables/Customer Contribution	-	-	-	-	-
PROJECT TOTAL (LESS REIMBURSABLES)	**$200**	**$102**	**$437**	**-**	**$539**
O&M	-	-	-	-	-
TOTAL REQUEST	**$200**	**$102**	**$437**	**-**	**$539**

Detail other costs, project risk items and their allocations:

Other Costs	Allocation
Other Costs - Sales and Use Tax (SUT) Costs	$5K
Risk	**Allocation**
1. Outage impacts	$16K
2. Weather delays	$25K
Total	$41K

Explain unique payment provisions, if applicable: N/A

Identify and detail any unique O&M impacts resulting from this project:

Due to the limited space around the [redacted], the modular walls will need to be removed each time Substation Operations needs personnel and/or truck access to the area surrounding the transformer and along the northwest fence line in case of planned or unplanned work. This will result in an increase in labor costs and response times when needing to remove and reposition the modular sound walls when access to the station equipment is needed.

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[3] Technical Justification

Project Need, Objective and Justification

[redacted]

Due to customer complaints, the sound level improvement is targeted to be completed by end of August 2025.

Project Scope

[redacted]

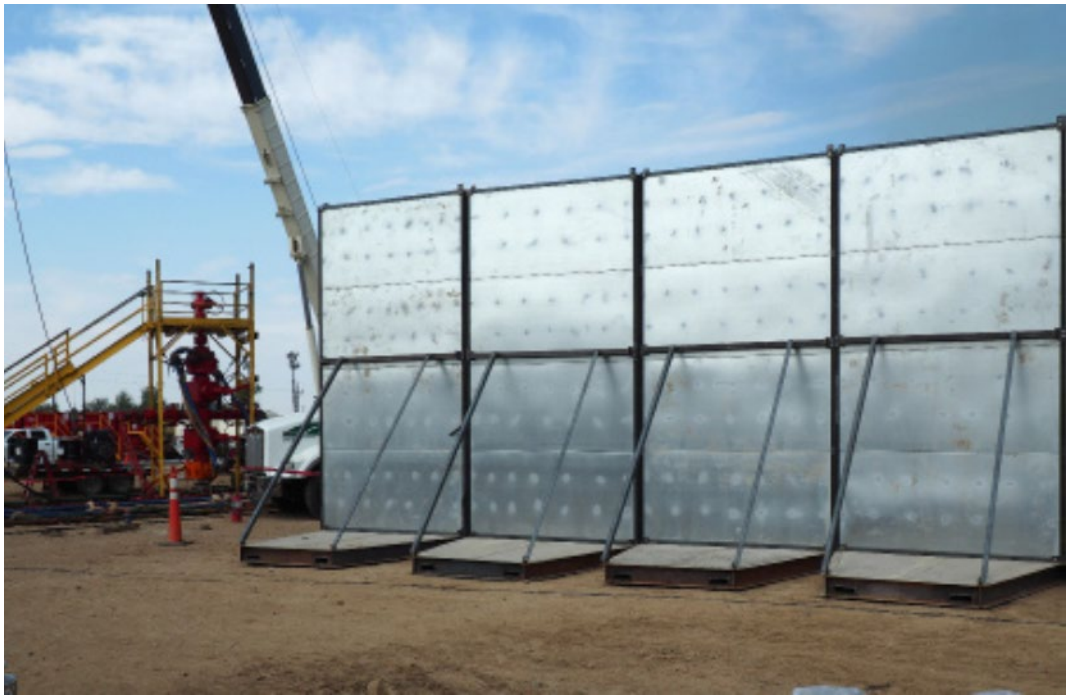
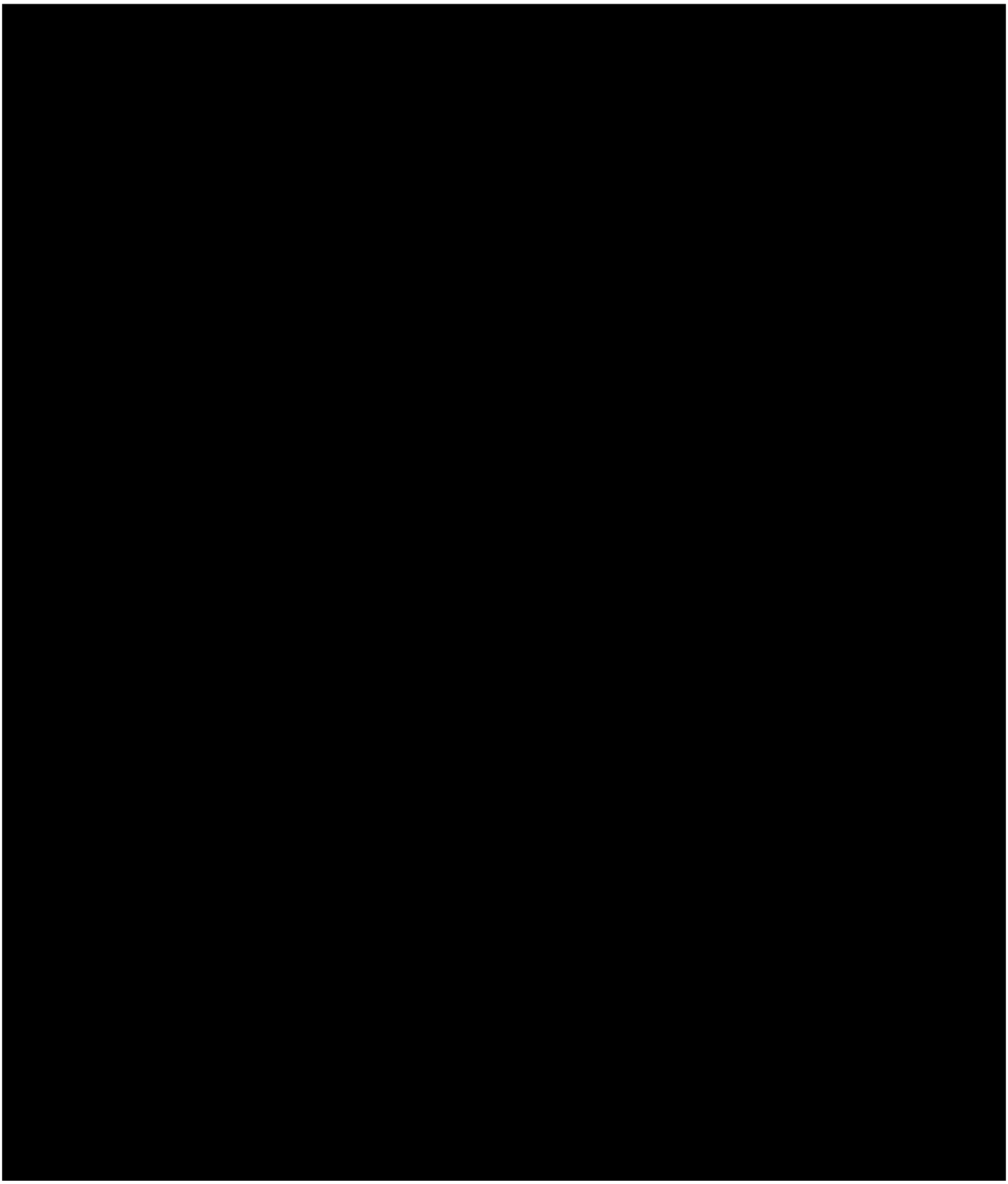


Figure 2 - Example Concrete Modular Sound Wall

Background



[4] Alternatives Considered





[5] Project Schedule

Milestone	Scheduled Completion Date
IFR Approval	September 2024
SDC Approval (for applicable projects)	May 2025
Conversion of Tx development costs, 183 to 107 (applicable to projects that require SSF approval and/or ISO preferred alternative selection)	N/A
EPAC Partial Funding Approval (for applicable projects)	N/A
Preliminary Design Completion (or latest pre-full funding design phase)	June 2025
EPAC Full Funding Approval	June 2025
Siting Approval (if the Soundwall is needed)	May 2025
Start of Construction	August 2025
Project In-Service Date (ISD)	August 2025
Project Need Date (for applicable projects)	N/A
ISO Related Milestones: (for applicable projects)	
• ISO Preferred Alternative Selected	N/A
• PAC Presentation	N/A
• TCA Submittal	N/A

See Attachment B for the P6 Schedule.

[6] Regulatory Approvals

An Exempt Modification Filing with the CT Siting Council will be required for this project if the sound wall is needed. This approval could be received in as little as six (6) to eight (8) weeks. The filing will be submitted regardless of if the wall is needed or not to keep the in-service date on track.

EJ Community Considerations:

This project is not located in an Environmental Justice (EJ) Community.

[7] Risk and Risk Mitigation Plans

Contingency: A contingency amount of $15K has been included in the total project estimate to account for any unknowns.

Risk Mitigation:

Risk	Mitigation
1. Outage impacts	This risk is mitigated by including risk funds in the estimate to accommodate any delays in construction schedule due to outage conflicts/cancellations. The risk is further mitigated by the project team holding weekly status meetings and will remain in contact with vendors and substation operations as the construction kick-off date approaches.
2. Weather delays	Unanticipated weather events and/or lack of available field personnel due to storm duty may restrict the ability to perform construction activities. This risk is mitigated by the project team holding weekly status meetings and will remain in contact with vendor and substation operations as the construction kick-off date approaches.

[8] References

References
1. [redacted] - Sound Evaluation at [redacted], July 2024
2. CS00712 [redacted] Sound Mitigation IFR – Approved 9/19/24

[9] Attachments (One-Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A. Cost Estimate	YES
B. P6 Schedule	YES
C. Constructability Review	YES

Project Checklist - Transmission & Substation Capital Project	
Project Name: [redacted] **Sound Mitigation**	**Project Number: CS00712**

Facility Type:
☐BPS ☐BES ☐PTF ☐local PTF ☐non-PTF ☐CIP ☒Distribution ☐General Plant ☐CONVEX ☐SCADA

PLANNING	
Is a NX-9 required?	No
Is an ISO-NE PAC presentation required?	No
ISO-NE Presentation Date (if completed):	N/A
Cost in ISO-NE Presentation ($M) (if completed):	N/A
Is a PPA required?	No
ISO-NE Approval Date (if completed):	N/A
Is a TCA Application Required?	N/A
TCA Submittal Date (if submitted):	N/A
Cost in TCA Submittal ($M) (if submitted):	N/A
Enter ISO-NE RSP / Asset Condition ID, if assigned:	N/A

PLANNING/PROTECTION & CONTROLS	
Are RAS/SPS/UVLs affected?	No

OPERATIONS			
Outage Required?	☒ Primary Equipment (Power Transfer)	☐ Secondary Equipment (P&C only)	☐ Outage Not Required
Do SCLL Conditions Exist?	No		
Has an outage schedule been approved?	No		
Are Operations & Maintenance procedures/training required?	No		

STANDARDS	
Does the project include standard equipment and designs?	No

SUBSTATION ENGINEERING	
Does this impact Revenue Metering	No
Is preliminary short circuit/ breaker duty analysis required?	No
Are there any changes to the baseline audible noise?	Yes
Is there an impact to the existing ground grid?	No
Is a Transient Over Voltage (TOV) analysis required?	No

Project Checklist - Transmission & Substation Capital Project	
Project Name: [redacted] Sound Mitigation	**Project Number: CS00712**

P&C ENGINEERING	
OP-22 - Are PMUs and DDR required?	No
If BPS, is an NPCC Directory #4 presentation required?	No
Are ISO-NE OP-24 Appendix B updates necessary?	No
TRANSMISSION LINE ENGINEERING	
Are there any changes that affect the baseline EMF?	No
Are there any changes that affect the baseline EMI?	No
SITING	
Has Siting reviewed this project?	Yes
Name of Siting contact:	[redacted]
Is a Siting filing required? *(If yes, list in regulatory approvals section)*	Yes
PERMITTING	
Is there any permitting required? *(If yes, list in regulatory approvals section)*	No
PROJECT SERVICES (OUTREACH) and ROW WORK COORDINATION	
Has Project Services reviewed this project?	Yes Choose an item
Name of Project Services contact:	[redacted]
What is the level of outreach expected?	Low
Has ROW Coordination reviewed this project?	No
Is this project coordinating with other existing scheduled work?	No
ENVIRONMENTAL JUSTICE COMMUNITIES	
Has the Equity and Environmental Justice team reviewed this project?	No
Name of Equity and Environmental Justice contact:	N/A
Is any part of this project in an Environmental Justice Community?	No
Was the Equity Framework Checklist completed?	N/A
Has enhanced outreach required per State Regulatory requirements been completed?	N/A
INITIATOR	
Has a field constructability review been completed?	Yes

Project Checklist - Transmission & Substation Capital Project	
Project Name: [redacted] Sound Mitigation	**Project Number: CS00712**
INVESTMENT RECOVERY	
Does the project require development of an Investment Recovery plan?	No
COST ESTIMATING	
What team/firm prepared the cost estimate?	The Eversource Estimating Team prepared estimate
Name of the person who prepared the estimate:	[redacted]
Was the estimate reviewed by Eversource Estimating?	Yes - Full Review

ATTACHMENT A

Return to TOC

Project name **CS00712 - [redacted] Sound Mitigation**
Project no **CS00712**
Project manager [redacted]
Project estimator

Est accuracy **Planning (-25% to +25%)**
Ext accuracy
State **CT**
Business unit **Distribution**

Description	Total	% Directs	% Total	Weston Option A - Preferred	Weston Option B - Non-preferred
ROW / Easements / Land purchases	-	0.0%	0.0%	-	-
Environmental Approvals / Permits	-	0.0%	0.0%	-	-
Project Services	3,100	0.3%	0.2%	1,000	2,100
Siting Approvals / Permits	11,700	1.1%	0.7%	5,400	6,300
Engineering / Design	36,600	3.4%	2.3%	20,800	15,800
Materials (Eversource purchased)	-	0.0%	0.0%	-	-
Construction (inc contractor sourced material)	775,900	71.9%	49.4%	182,500	593,400
Testing / Commissioning	3,800	0.4%	0.2%	3,800	-
PMT Project Mgmt Team	70,500	6.5%	4.5%	34,700	35,800
Removals	35,900	3.3%	2.3%	13,100	22,800
Other (including CWIP & Taxes)	23,300	2.2%	1.5%	4,700	18,600
Risks	119,000	11.0%	7.6%	41,000	78,000
Project Directs (including risks)	**1,079,800**	**100.0%**	**68.7%**	**307,000**	**772,800**
Indirects/Overhead	411,700		26.2%	204,300	207,400
AFUDC	36,800		2.3%	12,900	23,900
Project Total - Baseline Budget	**1,528,300**		**97.3%**	**524,200**	**1,004,100**
Contingency	43,000		2.7%	15,000	28,000
Project Total - Approval Level	**1,571,300**		**100.0%**	**539,200**	**1,032,100**
Reimbursables/Customer Contribution	-		0.0%	-	-
Project Total (less reimbursables)	**1,571,300**			**539,200**	**1,032,100**

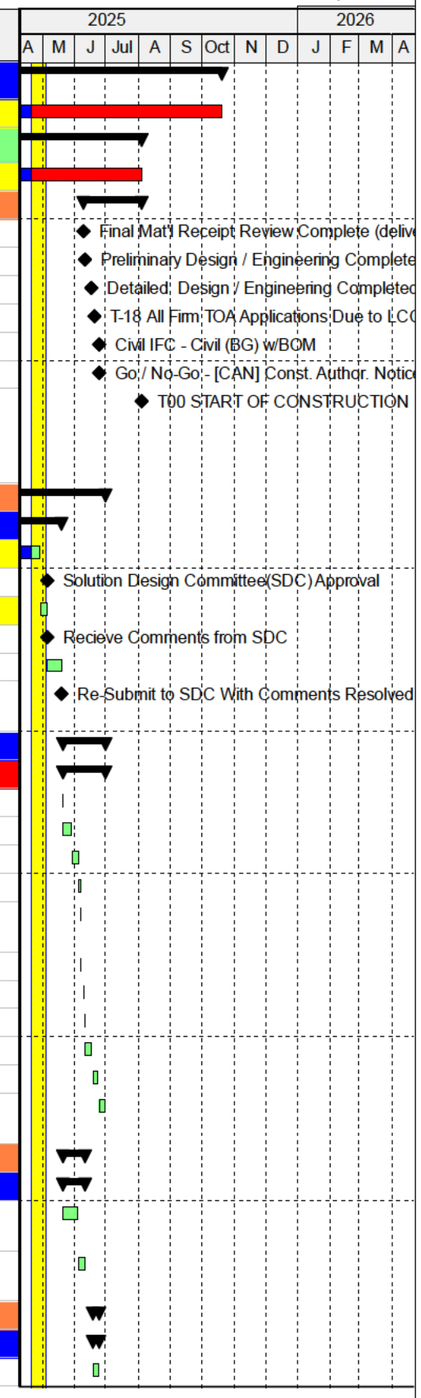
Metrics	[redacted]				
Escalation (included above)	54,400			15,100	39,400
Miscellaneous					
Risks & Contingency / Project Total - Approval level (less Risks & Contingency)	11.50%			11.59%	11.45%
Estimate Range	*Planning (-25% to +25%)*			*Planning (-25% to +25%)*	*Conceptual (-25% to +50%)*
Low	1,178,500			404,400	774,100
Expected	1,571,300			539,200	1,032,100
High	1,964,100			674,000	1,548,200

Return to TOC

CBS1 > 2 > 3 > 4	Description	Total Amount	Actual Amount	Labor Hours	Labor Amount	Material Amount	Subcontract Amount	Equipment Amount	Other Amount
Weston Option A - Preferred		**539,253**	**102,363**	**936**	**96,435**	**120,150**	**-**	**4,551**	**215,754**
03	SCS Outreach	1,020	236	4	784	-	-	-	-
04	Siting Approvals / Permits	5,413	4,495	16	918	-	-	-	-
05	Engineering / Design	20,785	11,701	90	9,084	-	-	-	-
07	Construction (incl matl's by contractors)	182,499	-	402	57,798	120,150	-	4,551	-
08	Testing / Commissioning	3,781	-	60	3,781	-	-	-	-
09	PMT Project Mgmt Team	34,746	14,546	340	20,200	-	-	-	-
10	Removals	13,071	-	24	3,870	-	-	-	9,201
11	Other	4,686	-	-	-	-	-	-	4,686
12	Risks	41,000	-	-	-	-	-	-	41,000
13	Indirects/Overhead	204,322	70,386	-	-	-	-	-	133,936
14	AFUDC	12,930	999	-	-	-	-	-	11,931
15	Contingency	15,000	-	-	-	-	-	-	15,000

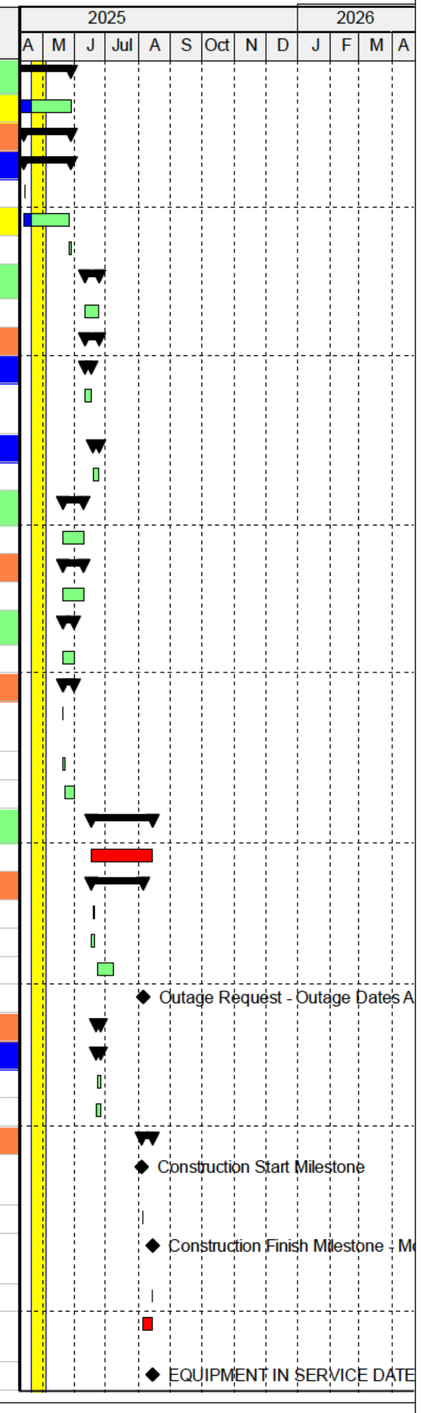
ATTACHMENT B

Activity ID	Activity Status	Activity Name	Original Duration	Actual Duration	Start	Finish	Remaining Duration	Duration % Complete	Activity Flag	Predecessors	Successors
CS00712 [redacted] Sound Mitigation			327d	124d	Oct-21-24 A	Oct-20-25	127d	61.16%			
PT1000	In Progress	Project Timeline	327d	124d	Oct-21-24 A	Oct-20-25	127d	61.16%			
CS00712.01 PROJECT PLANNING & FUNDING			198d	124d	Oct-21-24 A	Aug-04-25	74d	62.63%			
PPF1000	In Progress	Project Planning & Funding	198d	124d	Oct-21-24 A	Aug-04-25	74d	62.63%			
CS00712.01.01 T-Minus Milestones			171d	0d	Jun-08-25	Aug-04-25	171d	0%			
AT0401	Not Started	Final Mat'l Receipt Review Complete (delivered onsite)	0d	0d		Jun-08-25	0d	0%		DSSE-560	AT00
AT2605	Not Started	Preliminary Design / Engineering Completed	0d	0d		Jun-10-25	0d	0%	ENG-PRE	CE-030	AT00
AT1811	Not Started	Detailed Design / Engineering Completed	0d	0d		Jun-17-25	0d	0%	ENG-DTL	DSSE-110	AT00
AT1801	Not Started	T-18 All Firm TOA Applications Due to LCC	0d	0d		Jun-20-25	0d	0%	TOA	A00410	AT00
AT0805	Not Started	Civil IFC - Civil (BG) w/BOM	0d	0d		Jun-24-25	0d	0%	BG-IFC	DSSE-120	AT00
AT0203	Not Started	Go / No-Go - [CAN] Const. Author. Notice Form Completed	0d	0d		Jun-24-25	0d	0%		A1170	AT00
AT00	Not Started	T00 START OF CONSTRUCTION	0d	0d	Aug-04-25*		0d	0%	SOC	AT1801, AT1811, AT2605, AT3001, AT0203, AT0401, AT0805	A12660, A12570, CFM, CSM
CS00712.01.02 Project Funding			64d	14d	Apr-01-25 A	Jun-30-25	50d	21.88%			
CS00712.01.02.03 Solution Design Committee			35d	14d	Apr-01-25 A	May-19-25	21d	40%			
SDC-040	In Progress	Develop Soultions Selection Form (SSF)	20d	14d	Apr-01-25 A	Apr-28-25	6d	70%		SDC-030	SDC-060
SDC-050	Not Started	Solution Design Committee(SDC) Approval	0d	0d		May-05-25*	0d	0%	SDC	SDC-060	SDC-065
SDC-060	Not Started	Incorporate SDC Admin Comments	5d	0d	Apr-29-25	May-05-25	5d	0%		SDC-040	SDC-050
SDC-065	Not Started	Recieve Comments from SDC	0d	0d		May-05-25	0d	0%		SDC-050	SDC-070
SDC-070	Not Started	Incorporate SDC Approval Comments	10d	0d	May-06-25	May-19-25	10d	0%		SDC-065	SDC-080
SDC-080	Not Started	Re-Submit to SDC With Comments Resolved	0d	0d		May-19-25	0d	0%		SDC-070	DSSE-560, DSSE-100, A3550, FF1100
CS00712.01.02.05 Full Funding			29d	0d	May-20-25	Jun-30-25	29d	0%			
CS00712.01.02.05.02 EPAC - FF			29d	0d	May-20-25	Jun-30-25	29d	0%			
FF1100	Not Started	LE/PE/P&C Checklists	1d	0d	May-20-25	May-20-25	1d	0%		CE1740, SDC-080	FF1200
FF1200	Not Started	Submit Estimating Request	5d	0d	May-21-25	May-28-25	5d	0%	EST-FULL	FF1100	FF1300
FF1300	Not Started	Create Full Funding Estimate	5d	0d	May-29-25	Jun-04-25	5d	0%		FF1200	PAFF1100
PAFF1100	Not Started	PAF- Full Funding - Prepare	1d	0d	Jun-05-25	Jun-05-25	1d	0%	PAF Subr	FF1300	PAFF1300, PAFF1200
PAFF1200	Not Started	Team review of PAF. Includes Engineering, PM, and Asset Management Lead	0d	0d	Jun-06-25	Jun-06-25	0d	0%		PAFF1100	PAFF1300
PAFF1300	Not Started	PAF- Full Funding - Submit	1d	0d	Jun-06-25	Jun-06-25	1d	0%		PAFF1100, PAFF1200	PAFF1400
PAFF1400	Not Started	Incoporate EPAC Full Funding Comments	1d	0d	Jun-09-25	Jun-09-25	1d	0%		PAFF1300	FF1400
FF1400	Not Started	EPAC Meeting	1d	0d	Jun-10-25	Jun-10-25	1d	0%	EPAC-MD	PAFF1400	FF1500
FF1500	Not Started	Incorporate EPAC Full Funding PAF Meeting Review Comments	5d	0d	Jun-11-25	Jun-17-25	5d	0%		FF1400	FF1000
FF1000	Not Started	EPAC Approval - Duration Dependent on Approval Type	4d	0d	Jun-18-25	Jun-23-25	4d	0%		FF1500	FF1700
FF1700	Not Started	Full Funding PowerPlan Approval - Duration Dependent on Approval Type	5d	0d	Jun-24-25	Jun-30-25	5d	0%	PPA-FF	FF1000	CSM
CS00712.01.03 Civil Conceptual & Preliminary Engineering Design			15d	0d	May-20-25	Jun-10-25	15d	0%			
CS00712.01.03.02 Civil Preliminary Design			15d	0d	May-20-25	Jun-10-25	15d	0%			
DSSE-100	Not Started	ES Engineer Submit Preliminary Civil Design in Accordance w/Deliverables Checklist	10d	0d	May-20-25	Jun-03-25	10d	0%		CE1740, SDC-080	CE-030
CE-030	Not Started	ES Review & Comment Preliminary Civil Design & Approve Deliverables Checklist	5d	0d	Jun-04-25	Jun-10-25	5d	0%	ES-PRELIM	DSSE-100	AT2605, DSSE-110
CS00712.01.10 Project Management			5d	0d	Jun-18-25	Jun-24-25	5d	0%			
CS00712.01.10.02 Compliance Authorization Notification			5d	0d	Jun-18-25	Jun-24-25	5d	0%			
A1170	Not Started	Prepare CAN (Compliance Authorization Notification)	5d	0d	Jun-18-25	Jun-24-25	5d	0%		A3420, DSSE-120	AT0203



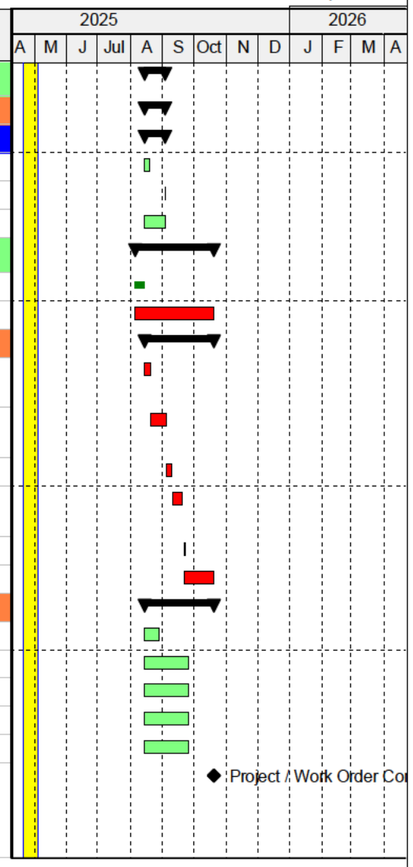
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Activity ID	Activity Status	Activity Name	Original Duration	Actual Duration	Start	Finish	Remaining Duration	Duration % Complete	Activity Flag	Predecessors	Successors
CS00712.04	**SITING APPROVALS / PERMITS / PROJECT SERVICES**		41d	15d	Mar-31-25 A	May-27-25	26d	36.59%			
SIT1000	In Progress	Siting Approvals / Permits / Project Services	41d	15d	Mar-31-25 A	May-27-25	26d	36.59%			
CS00712.04.03	State Approvals and Permits		31d	5d	Apr-12-25 A	May-27-25	26d	16.13%			
CS00712.04.03.01	Siting Council / Board		31d	5d	Apr-12-25 A	May-27-25	26d	16.13%			
PP2070	Completed	Mail Municipal/Property Owner Letter - CSC Notice of Exemption	1d	1d	Apr-14-25 A	Apr-14-25 A	0d	100%		PP2030	
PP2030	In Progress	CSC Notice of Exemption Review Period	45d	9d	Apr-12-25 A	May-26-25	36d	20%		S1000	PP2070, PP2040
PP2040	Not Started	CSC Notice of Exemption Decision	1d	0d	May-27-25	May-27-25	1d	0%		PP2030	CSM
CS00712.05	**ENGINEERING DETAILED / IFC DESIGN**		10d	0d	Jun-11-25	Jun-24-25	10d	0%			
ENG1000	Not Started	Engineering Detailed / IFC Design	10d	0d	Jun-11-25	Jun-24-25	10d	0%			
CS00712.05.01	Civil Engineering		10d	0d	Jun-11-25	Jun-24-25	10d	0%			
CS00712.05.01.01	Civil Engineering Detailed Design		5d	0d	Jun-11-25	Jun-17-25	5d	0%			
DSSE-110	Not Started	Civil Package - Detail Design	5d	0d	Jun-11-25	Jun-17-25	5d	0%		CE-030	AT1811, DSSE-120, A00400
CS00712.05.01.02	Civil Engineering IFC Design		5d	0d	Jun-18-25	Jun-24-25	5d	0%			
DSSE-120	Not Started	Civil Package - IFC	5d	0d	Jun-18-25	Jun-24-25	5d	0%	ES-IFC	DSSE-110	A1170, AT0805
CS00712.061	**PROCUREMENT MATERIAL - BALANCE OF MATERIAL**		13d	0d	May-20-25	Jun-08-25	13d	0%			
PBOM1000	Not Started	Procurement Material - Balance of Material	13d	0d	May-20-25	Jun-08-25	13d	0%			
CS00712.061.01	Civil Balance of Material		20d	0d	May-20-25	Jun-08-25	20d	0%			
DSSE-560	Not Started	Material - Confirm Material Delivery to Site	20d	0d	May-20-25*	Jun-08-25	20d	0%	M-DELIV	SDC-080	AT0401
CS00712.062	**PROCUREMENT OF SERVICE CONTRACTS**		8d	0d	May-20-25	May-30-25	8d	0%			
PSC1000	Not Started	Procurement of Service Contracts	8d	0d	May-20-25	May-30-25	8d	0%			
CS00712.062.02	Constructor of Choice - Direct Award or Bid		8d	0d	May-20-25	May-30-25	8d	0%			
A3550	Not Started	STAFFING DECISION -CONSTRUCTION: EVERSOURCE OR OUTSOURCE BID/COC	1d	0d	May-20-25	May-20-25	1d	0%		START, SDC-080	A3410
A3410	Not Started	CONST.SERVICES - COC - COC Meeting	1d	0d	May-21-25	May-21-25	1d	0%		A3550	A3420
A3420	Not Started	CONST.SERVICES - COC - Eversource Awards Contract - PO Issued	6d	0d	May-22-25	May-30-25	6d	0%		A3410	A1170
CS00712.07	**CONSTRUCTION**		43d	0d	Jun-16-25	Aug-15-25	43d	0%			
CON1000	Not Started	Construction	43d	0d	Jun-16-25	Aug-15-25	43d	0%			
CS00712.07.01	Outages		35d	0d	Jun-16-25	Aug-05-25	35d	0%			
A00400	Not Started	Outage Request - Determine Outage Date Requirements	3d	0d	Jun-18-25	Jun-20-25	3d	0%		DSSE-110	A00410
A00410	Not Started	Outage Request - Request Outage Dates	5d	0d	Jun-16-25	Jun-20-25	5d	0%		A00400	A12200, AT1801, A0042
A00420	Not Started	Outage Request - CONVEX Review Period	10d	0d	Jun-23-25	Jul-07-25	10d	0%		A00410	A00430
A00430	Not Started	Outage Request - Outage Dates Approved	0d	0d		Aug-05-25	0d	0%		A00420	A12660
CS00712.07.03	Site Development		5d	0d	Jun-21-25	Jun-25-25	5d	0%			
CS00712.07.03.01	Pre Construction		5d	0d	Jun-21-25	Jun-25-25	5d	0%			
A12160	Not Started	Pre - Construction Staging Complete	3d	0d	Jun-23-25	Jun-25-25	3d	0%		A12200	CSM
A12200	Not Started	Pre - Construction Build Access & Set Mounts	5d	0d	Jun-21-25	Jun-25-25	5d	0%		A00410	A12160
CS00712.07.04	Substation Construction		8d	0d	Aug-04-25	Aug-15-25	8d	0%			
CSM	Not Started	Construction Start Milestone	0d	0d	Aug-04-25		0d	0%		AT00, A12160, PP2040, FF1700	A12660, A12570, CFM, ConRep-S
A12570	Not Started	TOA Outage Switch (Off)	1d	0d	Aug-05-25	Aug-05-25	1d	0%		AT00, CSM, A12660	A12580
CFM	Not Started	Construction Finish Milestone - Monitor post install process	0d	0d		Aug-14-25	0d	0%		AT00, CSM, A12580, ConRep-S	A12710, A1020, A1030, A1040, A1270, ISD
A12580	Not Started	Transmission Switching (On)	1d	0d	Aug-14-25	Aug-14-25	1d	0%		A12660, A12570	CFM
A12660	Not Started	TOA Outage OOS - (25-XXXXX) - Safety Clearance OOS to install sound wall near 11F-4X Xfmr	10d	0d	Aug-05-25	Aug-14-25	10d	0%	OUT	A00430, AT00, CSM	A12580, A12570
ISD	Not Started	EQUIPMENT IN SERVICE DATE	0d	0d		Aug-15-25	0d	0%	ISD	CFM	A1110, DSSE-900



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Activity ID	Activity Status	Activity Name	Original Duration	Actual Duration	Start	Finish	Remaining Duration	Duration % Complete	Activity Flag	Predecessors	Successors
CS00712.09	**TEST & COMMISSIONING**		20d	0d	Aug-15-25	Sep-03-25	20d	0%			
CS00712.09.02	**Testing Activities**		20d	0d	Aug-15-25	Sep-03-25	20d	0%			
CS00712.09.02.01	**Post Construction**		20d	0d	Aug-15-25	Sep-03-25	20d	0%			
A12710	Not Started	Post Constuction - Sound Monitoring Equiptment Installed	5d	0d	Aug-15-25	Aug-19-25	5d	0%		CFM	A12720
A12730	Not Started	Post Constuction - Sound Monitor Study Complete	1d	0d	Sep-03-25	Sep-03-25	1d	0%		A12720, A12690	FINISH
A12720	Not Started	Post Constuction - Sound Monitoring Conducted	20d	0d	Aug-15-25	Sep-03-25	20d	0%		A12710	A12730
CS00712.10	**PROJECT CLOSE OUT**		53d	0d	Aug-05-25	Oct-20-25	53d	0%			
ConRep-S	Not Started	RESOURCE ONLY ACTIVITY - CONSTRUCTION - CONSTRUCTION	8d	0d	Aug-05-25	Aug-14-25	8d	0%		CSM	CFM
PCO1000	Not Started	Project Close Out	53d	0d	Aug-05-25	Oct-20-25	53d	0%			
CS00712.10.01	**Civil Close Out**		45d	0d	Aug-15-25	Oct-20-25	45d	0%			
DSSE-900	Not Started	Field Engineering Prepare Civil Field Mark Ups (Tie after Last Civil Construction Activity)	4d	0d	Aug-15-25	Aug-20-25	4d	0%		ISD	DSSE-860
DSSE-860	Not Started	Eversource Engineering Verifies Civil Mark Up As-Built Drawing Package	10d	0d	Aug-21-25	Sep-04-25	10d	0%		DSSE-900	DSSE-970
DSSE-970	Not Started	Eversource Engineering Updates Civil As-Built Drawing Package	3d	0d	Sep-05-25	Sep-09-25	3d	0%		DSSE-860	DSSE-870
DSSE-870	Not Started	ES Create Transmittal, Approve Final As-Built Package, and EDC Files and Issue Drawings to Field	8d	0d	Sep-10-25	Sep-19-25	8d	0%	ES-ASB	DSSE-970	DSSE-1120, DSSE-880
DSSE-880	Not Started	PM to Document Civil As-Built Drawings Complete	1d	0d	Sep-22-25	Sep-22-25	1d	0%		DSSE-870	FINISH
DSSE-1120	Not Started	Complete TD-176 CIVIL Design Prep & Issue As-Built Dwgs	20d	0d	Sep-22-25	Oct-20-25	20d	0%		DSSE-870	FINISH
CS00712.10.11	**Project Management Close Out**		45d	0d	Aug-15-25	Oct-20-25	45d	0%			
A1110	Not Started	Restore / Remediate Site	10d	0d	Aug-15-25	Aug-28-25	10d	0%		ISD	FINISH
A1040	Not Started	PM Prepares Closeout Documentation, Lessons Learned Meeting, etc.	30d	0d	Aug-15-25	Sep-26-25	30d	0%		CFM	FINISH
A1270	Not Started	Prepare TD-707 Document	30d	0d	Aug-15-25	Sep-26-25	30d	0%		CFM	FINISH
A1020	Not Started	Cost Analyst Prepares FINAL Units of Property	30d	0d	Aug-15-25	Sep-26-25	30d	0%		CFM	FINISH
A1030	Not Started	Asset Management Complete Asset Update(s) in CASCADE	30d	0d	Aug-15-25	Sep-26-25	30d	0%	AMK.AM	CFM	FINISH
FINISH	Not Started	Project / Work Order Complete (FINAL SCHEDULE TASK/MILESTONE)	0d	0d		Oct-20-25	0d	0%		A12730, A1020, DSSE-1120, A1040, A1110, A1270, A1030, DSSE-880, NR02	



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ATTACHMENT C

EVERSOURCE

Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

Project Title: [redacted]-sound mitigation	☐	Prior Constructability Review Performed?
	☐	Program Related Site Specific Review?
Project Numbers(s): CS00712	**Project Constructability Phase:**	
Date(s) of Constructability Review: 03/13/2025	☒ Conceptual Engineering Design	
Click to enter a date	☐ Preliminary Engineering Design	
	☐ Detailed Engineering Design	
Project Scope Statement: The objective of this project is to evaluate sound levels and implement substation modifications to bring the [redacted] substation into compliance with applicable noise regulations.		

Department Review/Walkdown Attendees*:

Required [X]	Attended [X]	Department	Name	Required [X]	Attended [X]	Department	Name
☐	☒	Project Management	[redacted]	☐	☒	S/S Engineering	[redacted]
☐	☒	Asset Management		☐	☐	P&C Engineering	
☐	☒	Constr. Management		☐	☒	Civil Engineering	[redacted]
☐	☐	S/S Technical / LCE		☐	☐	Telecom	
☐	☒	S/S Operations**	[redacted]	☐	☐	Environmental	
☐	☐	Field Engineering		☐	☐	Real Estate	
☐	☐	Line Engineering		☐	☐	ROW T&D Rights & Survey	
☐	☐	Vegetation Management		☐	☐	Survey Engineering	
☐	☒	Siting	[redacted]	☐	☐	Cost Estimating	
☐	☐	Safety		☐	☐	Project Services (Outreach)	
☐	☐	SCADA		☐	☐	Material Procurement	

*** Sign-off in the table above for the Detailed Engineering Design Constructability Review indicates that all Action Items/Concerns from prior Constructability Reviews have been mitigated/resolved as documented in this form. Not every department is required to attend walkdowns for every project but should be consulted for project impact considerations**

** Internal Eversource Substation Operations must be included in the review even if external construction resources are planned

[Project Manager] certifies that this review was performed to completeness, that all applicable departments were informed of the project and have had opportunity to provide input to this review:

[redacted] _____ *04/07/2025*

Name / Signature *Date*

Documents available for use prior to Constructability Review					
[X]	Document	[X]	Document	[X]	Document

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

☒	Initial Scope -Birdseye site plan -General Arrangement	☐	Preliminary Drawings -Civil Site Drawing -Electrical Drawing -Section Drawings	☐	Prints in hand for marking up -Panel Front/Read View -Control Enclosure Layout -Floor / Wall Plans
☐	Detailed Scope Document	☐	Proposed Schedule	☐	Construction Sequence/Timeline
☒	Previous Notes / Comments / Observations	☐	Major Material / Equipment List	☐	Replace / Reuse of equipment

Action Items and Resolutions:

Item No.	Const. Review Action Item/Concern	Design Resolution/Mitigation:
1	4X Transformer :The field has concern about using the temp panel/wall as it was proposed from the sound report due to maintenance concern for getting equipment in/out of this area.	temp. wall but alternate the support/kicker/foot supporter to Outside and inside.
2	6X Transformer : Based on field visit/walkdown, the proposed wall in between the feeder and low side transformer will not work. The other side of the wall between the transformer to the bus structure will not work due to the restriction in the installation of the temp. sound wall. The wall along the fence line has minimal impact.	Alternative Solution approved to build an L shape sound wall with the dim. 32*16 + 56*16 ft
3	Control system for the even tap and odd tap issue, still to be considered ??	This solution is long-term – LTC manufacturer contacted and a LS bid received
4		
5		

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
A	**Engineering & Asset Management**		
1	**Scope of Work** - Is scope adequately developed and sufficiently detailed for intended deliverable? - Any complimentary projects or other adjacent obsolete equipment for inclusion? - Any overlapping projects that could impact work/outages? - Consider Physical Installation, P&C Scope, Civil Scope, Engineering studies, Design standard adherence - Any remote station impacts? - Engineering Estimates for Design and Technical Support? (EE and EOC) Total Project	☐	The scope is under development for this deliverable. No complimentary projects NA No remote station impacts.

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
2	**Materials Identified/Ordered** -Any concerns with BOM/Major Materials? Review BOM lead times and project need dates -Specialty Major Materials: Identify Specialty Equipment & Materials potentials - temporary/replacement - long lead items? -Any Materials needed to facilitate construction access?	☐	The materials BOM and types will be defined based on the design/Engineering solution
3	**Control House** - Review Unmapped equipment interferences, Control/Battery Enclosure Layout, HVAC System (if equipment added), space for new or modified equipment, AC / DC station breaker availability and service loading, Panel Space, Expansion, one-line and/or riser type panelboard drawings, other..	☐	Reviewed, N/A
4	**Ratings & Dimensions** for Major Equipment. Any concerns upon field review? Equipment Rating One Line (and/or equipment thermal ratings tables) - Review for any errors in field	☐	N/A
5	**Wall, Fence, Gate, and Foundation Considerations** -Any permanent / temporary alterations or relocations required? -Pre-Project Sound Measurements Needed? Sound Walls? -Take measurements for Foundation quantities, dimensions and concrete volumes -CIP Review/Ballistic needs. Any Physical Security Requirement Consideration? -Assess condition of existing yard equipment foundations and viability for reuse (if proposed) -Review station expansion areas (if needed) for structures, old foundations, etc. -Any Steel Structural Plan Considerations? -Any impacts to construction plan?	☐	yes , pre and post sound measurements needed
6	**Below Grade / Enclosure Raceway** - If possible, evaluate existing raceway and review spacing requirements. Review for any subsurface investigation needs or potential below grade obstructions. GPR/test pits needed? Geotechnical Investigation - is soil boring or resistivity investigation needed?	☐	NA

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
7	**Underground Obstructions** -Drawing review concerns? -Is preconstruction or test excavation needed? -Is reuse of underground control cables / Conduits /replace Non-Shielded Cable feasible (if applicable) -Are spare conduits available? Are they useable? -Review if any areas will need to be plated for increased load bearing for equipment access (i.e., large Xfmr, etc.)	☐	N/A
8	**Grounding Plan (Ground Grid)** - Will footprint impact layout or other equipment? Identify locations to improve grounding. Impacts to foundations and ground grid plans. Observations on wetlands or ability to perform tests	☐	NA
9	Nomenclature / Switching One-Line Diagram -Any obvious deviations from diagrams provided?	☐	NA
10	BPS Separation Requirements - Is this BPS Substation? Y/N (part of PAF) - Changes to pre-existing BPS standards?	☐	N/A
11	IEC 61850 Substation Automation and Communication Requirements - Any Impacts/Retrofit needed?	☐	N/A
12	Any Upgrades to ES Standards - Is retrofit needed to bring up to ES standards? Can that be done?	☐	N/A
B	**Construction**		
1	**Any safety hazards specific to the facility? i.e., Low Bus, Deterioration, etc.**	☐	Limited space for building the walls around the transformer and low bus at 6X , alternative under development
2	**Prior known Site Specific Conditions** -Common or Obvious station Issues -Missing scope items that could impact costs?	☐	None known
3	**Identify/Consider Required Depts for Construction?** -Who is constructor: Internal vs External Resources -S/S Ops, GO, Test, Field Engineering, etc. -Specialty Contractors Required? -Required Oversite Needed - Estimated level of CR and LCE support needed	☐	External CR needed at the time of assembly and installation if we are going with sound walls

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
4	**Site Plan, Access, and Temporary Construction Facilities:** -Confirm maintenance access for proposed new or replaced equipment -Verify clear footprint for yard equipment / Property Plan -General access to site, can areas outside substation be utilized? -Substation Entry Plan (driveway and drive path modifications) - Identification of Unique Requirements, i.e. (access bridges, station service, etc.) -Site Development Plan (grading and drainage) with Cut/Fill -Existing Rock Conditions? Potential Impacts (rock quantity)? -Any police details needed for deliveries, restricted hours, and/or need for extended hour approvals -Any Sanitary Civil Requirements? (Septic tanks, etc.) -Review turning radius for delivery trucks (if critical) -Any Substation Access and site/yard access Limitations? -Office Trailer Needs: Facilities, Utilities, Restroom, Container, Dumpster Space -Weather impacts to Site (Snow Placement) -Identify Material Laydown and Security -Where will new vs removed equipment go? -Construction permit for trailers outside substation fence?	☐	TBD NA YES – temp walls limit access to equipment in general N/A TBD – permits (depending on solution)
5	Unique Equipment Considerations: Gas insulated substation, Gas insulated line, Gas insulated bus, Pass Breaker, Statcom, Sync Condenser		N/A

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
6	**Outage & Energization Plan and Construction Sequence:** *Review electrical working clearances for equipment during construction, Detailed look at protection zone changes, Locked sequence or random outages, Outage durations minimized.* ***Considerations:*** -Approach Distances – Outage Requirements to maintain electrical clearances throughout proposed installation -Distribution Clearances -Clearance Holder Assignments -Drawings vs Field Conditions -Outage boundaries and interconnections -Phased approach needs for additional mobilizations -Verify outage sequence supports the planned construction sequence and timeline. (Lead Commissioning Engineer "LCE", Substation Operations, and Outage Planner input) -Any design alterations or considerations to Eliminate SCLL Conditions, Reduce Recall Time, Reduce Outage durations, Special Conditions -Additional outage requirements: Railroad Catenaries, Fiber outage, SCADA outage, Relay permissions -Seasonal or weather conditions impacts	☐	TBD later
7	**Equipment Testing & Acceptance** -Grounding plans / Resources? Will we need grounds hung? -Hi-pot testing and where will the equipment be set up?	☐	NA
8	Need for mobile generator and where connected (if needed)	☐	N/A
9	Need for mobile battery and where connected (if needed)	☐	N/A
10	OT work required or Notable Permit Conditions (special hours)?	☐	TBD
11	Coordination of boundaries/seams (Identification of point of demarcation for connection to existing equipment and/or for coordination with other municipalities)	☐	N/A
C	**Environmental**		
1	Soil Pre-Characterization or Grab Sampling Completed/Planned	☐	TBC – minimal grading for soundwalls

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
2	**Desktop investigation and EAD Review** -Required Permits -Stormwater Considerations -Dewatering requirements -Wetland and buffer review	☐	N/A
3	Risk or presence of PCB's/Asbestos/Lead/SF6	☐	N/A
4	Transformer Spill Containment Recommended?	☐	N/A
5	Expanding Footprint / New Buildings or future Expansion Plans? (Enviro Impact)	☐	N/A
6	Environmental oversight considerations? (Inspection type/Interval)	☐	TBD
7	Environmental mitigations - Any matting or seasonal needs? Review D&M Plan with CR.	☐	TBC– minimal grading for soundwalls
D	**Siting, Project Services, and ROW T&D Rights & Survey**		
1	**Any regulatory concerns or approvals needed?** - Any concerns noted that could be mitigated by scope/design alterations? - Likely to require visual screening? What considerations (feasibility or location)? -Zoning Relief and Permits required?	☐	• Implement sound mitigation solutions as soon as practicable (File and Ex Mod to CSC – emergency option?). • Once sounds walls are in-place, take actual sound measures in the field (during combo of (louder) odd tap with 4x and 6x operating at the same time. • Sound measure locations to be along all sides of SS property lines.
2	Other siting considerations?	☐	*Can far side of* [redacted] *be considered a regulatory sound limit location (even though beyond the SS PL)?*
3	**Neighbor/Abutter impacts:** - Any noise, visual impacts, or sensitive abutters - Any changes to lighting or additional lighting needed?	☐	Yes , noise impacting abutters, per complaint filed thru CSC – response reply required to CSC when solution/retesting completed, and results are below regulatory noise levels (day and night).
4	Review for roadway, gate access, trailers, equip height, noise, weekend/night work, or any potential public disturbance related to work	☐	All work to be done Mon – Sat., 7 am to 7 pm hours?
5	Installation within Eversource Rights - Is Rights and Restrictions Review required?	☐	Installation within ES rights, located on EV owned property
6	Expanding Footprint / New Buildings / Fence line or future Expansion Plans?	☐	TBD - fence kickout or gate to be added at side of 6X transformer – to make room for soundwall install.
7	Proposed Equipment on same property? - Any Encroachments	☐	NA
F	**Protection & Controls**		
1	Panel Graphic additions and/or Modifications	☐	N/A
2	Space on existing panels for new equipment? (front & rear of panel fronts)	☐	N/A

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Constructability Review Form: **M6-PM-2012 - Eversource**

Substation Constructability Review

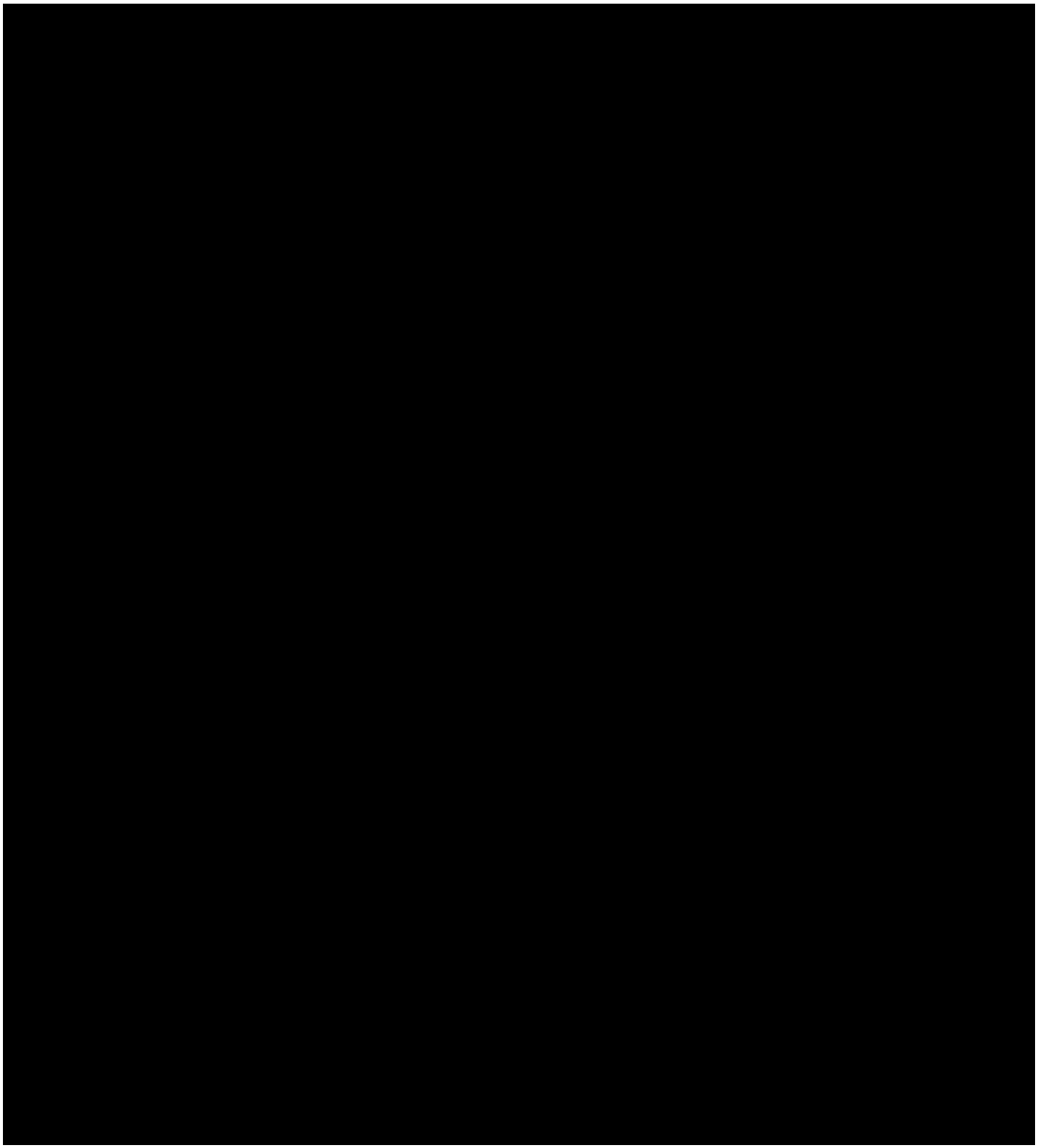
	Key Review Item Description	N/A or No Concern	Review Notes, Concerns, or Additional Info Needed
3	Panel fronts conform to drawings	☐	N/A
4	Access to bring new panels into control enclosure	☐	N/A
5	Nameplate list and location of nameplates	☐	N/A
6	Verifies that relays and meters that will be an interconnected project work are as shown on the drawings.	☐	N/A
7	Temporary protection, relays, control cable needed? How long will they be required?	☐	N/A
8	Will relay setting changes be needed? Any additional outage requirements for changes?		N/A
G	**Telecom Engineering**		
1	Review telecom equipment in existing control enclosure	☐	N/A
2	Review path to get telecom circuits into the station and paths within the control house. Determine whether new underground duct or overhead tray work is needed.	☐	N/A
3	Review current or proposed Telecom equipment power connections and validate with P&C any need for system 1 and system 2 separation.	☐	N/A
4	Review current Telecom fiber diversity and validate with P&C any fiber diversity requirements.	☐	N/A
5	Review and list any remote station impacts/updates	☐	N/A
6	Confirm whether correct interface equipment is available (i.e.) for fiber termination or multiplexor termination	☐	N/A
7	Confirm whether existing communications cabinets are enough to support additional telecommunications equipment installed	☐	N/A
8	Review space for any required additional communications cabinets which may be required to support additional telecommunications equipment installed	☐	N/A
9	Review third party Telecommunications at substation and confirm whether additional capacity or Ground Potential Rise protection is required	☐	N/A

Photos

(Ex. Equipment control cabinet, Breakers, MODs, CCVTs, PTs, Transformers)

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Constructability Review Form: **M6-PM-2012 - Eversource**



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