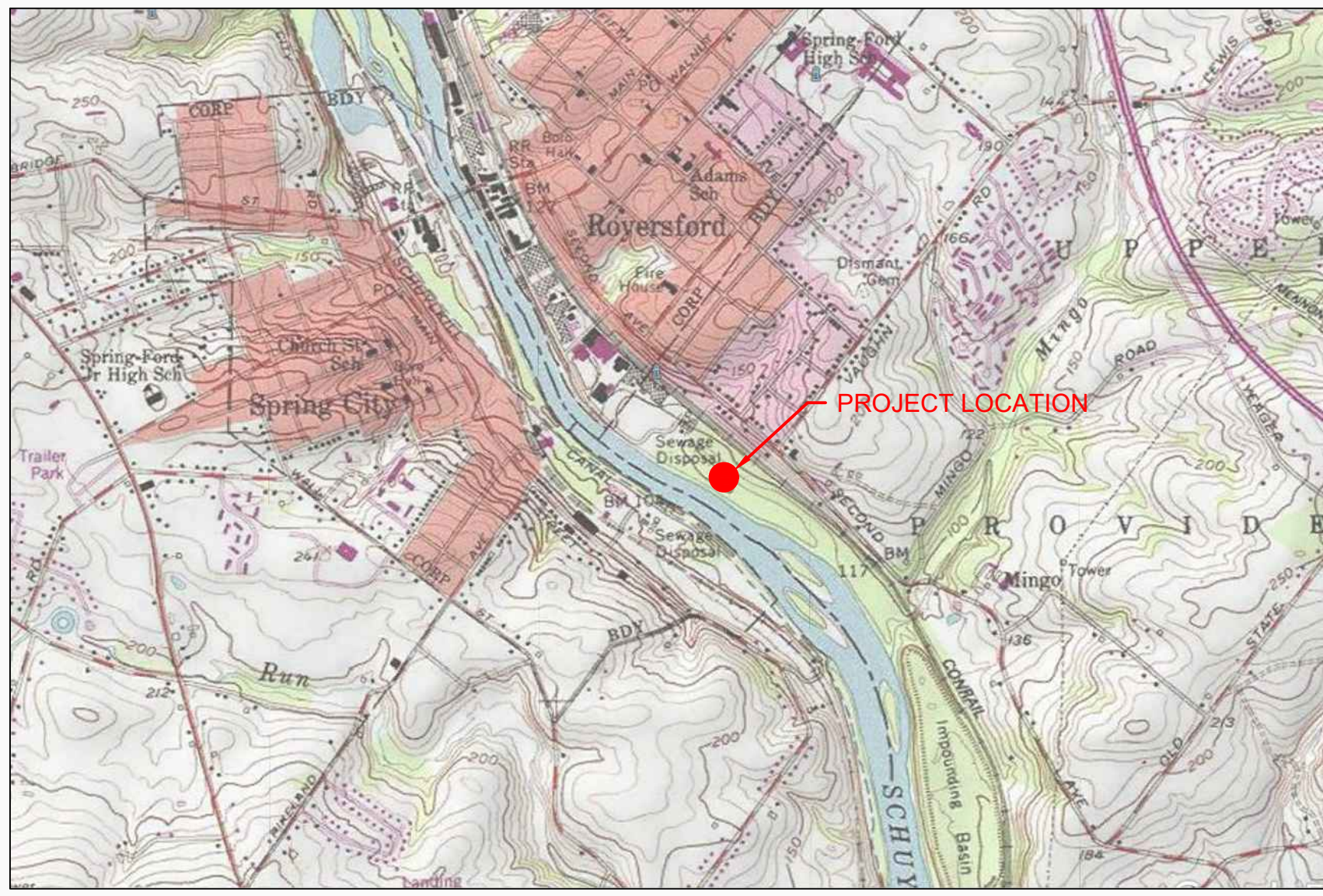


DWG. NO.	DWG. TITLE
TEXAS EASTERN TRANSMISSION SYSTEM EAGL-LAMT, 20-INCH LN 1, MP 9.65 SCHUYLKILL RIVER REPLACEMENT	
MAPPING DRAWINGS	
EAGL-C-8201	COVER SHEET & VICINITY MAP
EAGL-L-1200	ACCESS AND OVERVIEW MAP
EAGL-X-318A	PLD-318A (REFERENCE)
EAGL-LAMT LN 1 SHT. 011	EXISTING ALIGNMENT (REFERENCE)
EAGL-A-1000	CONSTRUCTION ALIGNMENT
EAGL-A-1010	RETIREMENT ALIGNMENT
REFERENCE DRAWINGS	
SR1-HDD-062323-01	HDD PLAN AND PROFILE
SR2-HDD-061623-01	REFERENCE DRAWING
STANDARD SHEET 1 OF 2	
ES-0032	TYPICAL STANDARD WETLAND CROSSING
	STREAMBED TRENCH DETAIL
SF-9002	CALIBRATED SPAN TEST SITE
SP-1000	PIPELINE CROSSING MAT
SP-4210	ISOLATION CAP
STANDARD SHEET 2 OF 2	
ES-0018	PERMANENT SLOPE BREAKERS
ES-0019	CHEVRON SLOPE BREAKERS
ES-0020	TRENCH BREAKER DETAIL (SACK)
ES-0021	TRENCH BREAKER DETAIL (FOAM)
ES-0022	PERMANENT TRENCH BREAKER OPTIONS

DWG. NO.	DWG. TITLE

TEXAS EASTERN TRANSMISSION SYSTEM EAGL-LAMT, 20-INCH LN 1, MP 9.65 SCHUYLKILL RIVER REPLACEMENT CHESTER & MONTGOMERY COUNTIES, PENNSYLVANIA 2023

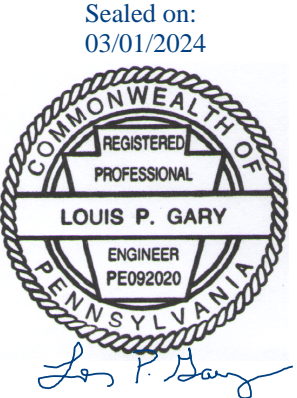
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				PROJ. ENG./ DESIGN ENG.	PROJ. MGR./ DESIGN MGR.	PROJECT DIRECTOR
02/06/2023	<input checked="" type="checkbox"/> ISSUED FOR REVIEW-30%(A)	LGF		JC	RG	
03/14/2023	<input checked="" type="checkbox"/> ISSUED FOR REVIEW-60%(B)	LGF		JC	RG	
03/14/2023	<input checked="" type="checkbox"/> ISSUED FOR REVIEW-60%(C)	LGF		JC	RG	
04/07/2023	<input checked="" type="checkbox"/> ISSUED FOR BID(D)	LGF		RG	AC	
05/19/2023	<input checked="" type="checkbox"/> ISSUED FOR BID-REV 1	SAR		RG	AC	
05/30/2023	<input checked="" type="checkbox"/> ISSUED FOR PERMIT(F)	SAR		RG	AC	
06/19/2023	<input checked="" type="checkbox"/> ISSUED FOR CONSTRUCTION(0)	SAR		RG	AC	
01/10/2024	<input checked="" type="checkbox"/> ISSUED FOR PERMIT REV 1(1)	SAR		RG	AC	
03/01/2024	<input checked="" type="checkbox"/> ISSUED FOR CONSTRUCTION-REV 1(2)	SAR		RG	AC	



VICINITY MAP
SCALE: N.T.S.

EXHIBIT A	
PO NO.	-
PLANT W.O. NO.	-
PIPELINE W.B.S. NO.	30001031
YEAR	2023

**ISSUED FOR
03/01/2024
CONSTRUCTION**



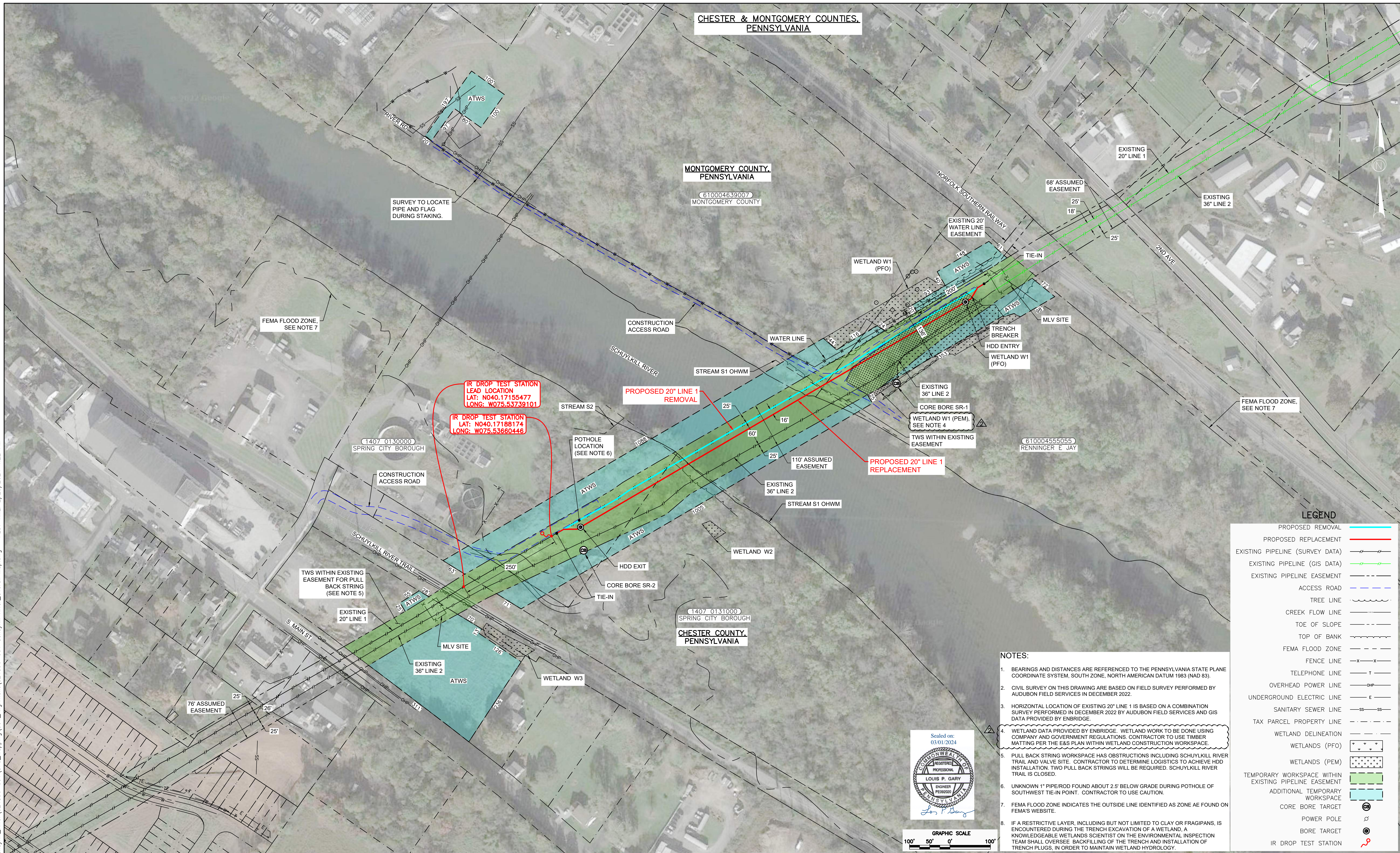
PREPARED BY:

audubon
Engineering
3505 W SAM HOUSTON PKWY. N.
SUITE 150
HOUSTON, TEXAS 77043
PHONE: (281) 669-0590



Texas Eastern Transmission, LP
915 North Eldridge Parkway, Suite 1100, Houston, TX 77079 713-627-5400

S:\AE\Projects\Enbridge\Schuykill_River\024896-001\870_Mapping\001_Alignment\Schuykill_River_Overview_Map.dwg - PLOT TIME: 2/29/2024 4:22 PM

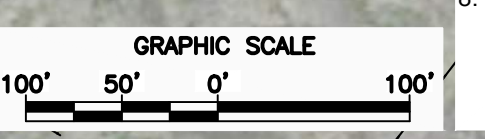
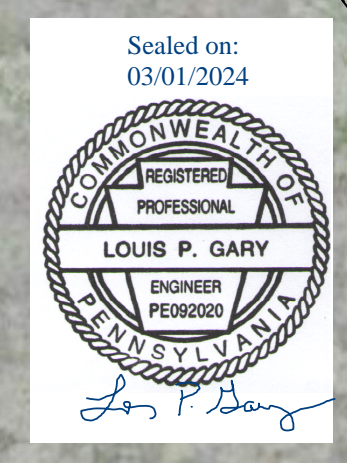


LEGEND

PROPOSED REMOVAL	
PROPOSED REPLACEMENT	
EXISTING PIPELINE (SURVEY DATA)	
EXISTING PIPELINE (GIS DATA)	
EXISTING PIPELINE EASEMENT	
ACCESS ROAD	
TREE LINE	
CREEK FLOW LINE	
TOE OF SLOPE	
TOP OF BANK	
FEMA FLOOD ZONE	
FENCE LINE	
TELEPHONE LINE	
OVERHEAD POWER LINE	
UNDERGROUND ELECTRIC LINE	
SANITARY SEWER LINE	
TAX PARCEL PROPERTY LINE	
WETLAND DELINEATION	
WETLANDS (PFO)	
WETLANDS (PEM)	
TEMPORARY WORKSPACE WITHIN EXISTING PIPELINE EASEMENT	
ADDITIONAL TEMPORARY WORKSPACE	
CORE BORE TARGET	
POWER POLE	
BORE TARGET	
IR DROP TEST STATION	

NOTES:

- BEARINGS AND DISTANCES ARE REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (NAD 83).
- CIVIL SURVEY ON THIS DRAWING ARE BASED ON FIELD SURVEY PERFORMED BY AUDUBON FIELD SERVICES IN DECEMBER 2022.
- HORIZONTAL LOCATION OF EXISTING 20" LINE 1 IS BASED ON A COMBINATION SURVEY PERFORMED IN DECEMBER 2022 BY AUDUBON FIELD SERVICES AND GIS DATA PROVIDED BY ENBRIDGE.
- WETLAND DATA PROVIDED BY ENBRIDGE. WETLAND WORK TO BE DONE USING COMPANY AND GOVERNMENT REGULATIONS. CONTRACTOR TO USE TIMBER MATTING PER THE E&S PLAN WITHIN WETLAND CONSTRUCTION WORKSPACE.
- PULL BACK STRING WORKSPACE HAS OBSTRUCTIONS INCLUDING SCHUYKILL RIVER TRAIL AND VALVE SITE. CONTRACTOR TO DETERMINE LOGISTICS TO ACHIEVE HDD INSTALLATION. TWO PULL BACK STRINGS WILL BE REQUIRED. SCHUYKILL RIVER TRAIL IS CLOSED.
- UNKNOWN 1" PIPE/ROD FOUND ABOUT 2.5' BELOW GRADE DURING POTHOLE OF SOUTHWEST TIE-IN POINT. CONTRACTOR TO USE CAUTION.
- FEMA FLOOD ZONE INDICATES THE OUTSIDE LINE IDENTIFIED AS ZONE AE FOUND ON FEMA'S WEBSITE.
- IF A RESTRICTIVE LAYER, INCLUDING BUT NOT LIMITED TO CLAY OR FRAGIPANS, IS ENCOUNTERED DURING THE TRENCH EXCAVATION OF A WETLAND, A KNOWLEDGEABLE WETLANDS SCIENTIST ON THE ENVIRONMENTAL INSPECTION TEAM SHALL OVERSEE BACKFILLING OF THE TRENCH AND INSTALLATION OF TRENCH PLUGS, IN ORDER TO MAINTAIN WETLAND HYDROLOGY.



**ISSUED FOR
03/01/2024
CONSTRUCTION**

REV	DSN	CK	DESCRIPTION	ITEM NO.	DESCRIPTION	QTY
			ISSUED FOR CONSTRUCTION-REV 1 (03/01/2024)			
			ISSUED FOR PERMIT-REV 1 (01/10/2024)			
			ISSUED FOR CONSTRUCTION (06/19/2023)			
			ISSUED FOR PERMIT (05/30/2023)			
			ISSUED FOR BID-REV 1 (05/19/2023)			
			ISSUED FOR BID (04/07/2023)			

audubon
Engineering
3505 W SAM HOUSTON PKWY. N.
SUITE 150
HOUSTON, TEXAS 77043
PHONE: (281) 669-0590

ENGINEERING APPROVALS			
DRAWN BY:	BID	CONSTRUCTION	
LGF			
TITLE	SIGNATURE	DATE	SIGNATURE

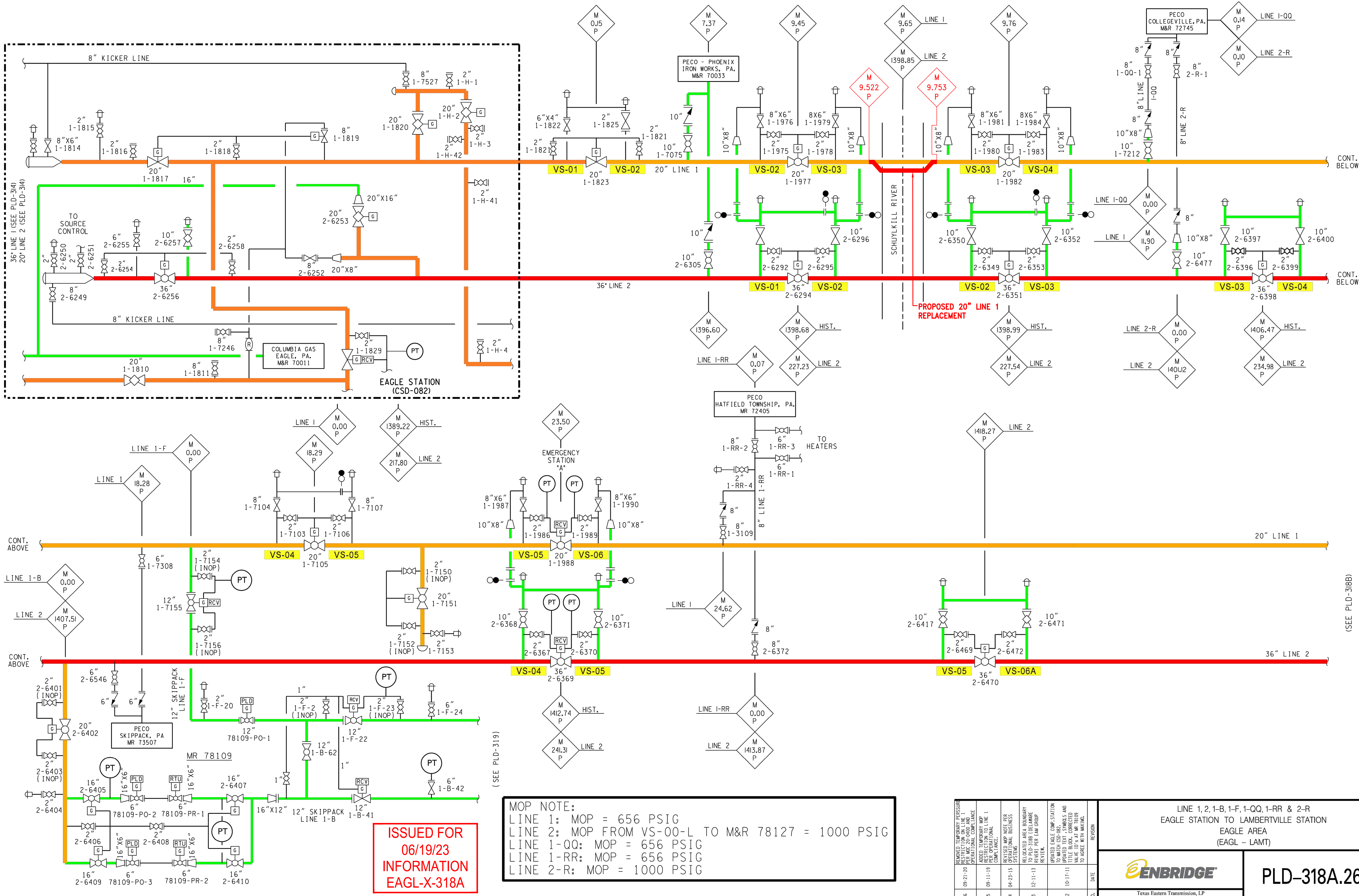
**TEXAS EASTERN TRANSMISSION SYSTEM
EAGL-LAMT, 20-INCH LN 1, MP 9.65
SCHUYKILL RIVER HDD REPLACEMENT
ACCESS & OVERVIEW MAP**

LOC. CHESTER & MONTGOMERY COUNTIES, PENNSYLVANIA

YEAR: 2023 | W.B.S. 30001031 | SCALE: 1"=100'

Texas Eastern Transmission, LP
915 North Eldridge Parkway, Suite 1100, Houston, TX 77079 713-627-5400

DWG.EAGL-L-1200 | REV. 2



MOP NOTE:
 LINE 1: MOP = 656 PSIG
 LINE 2: MOP FROM VS-00-L TO M&R 78127 = 1000 PSIG
 LINE 1-QQ: MOP = 656 PSIG
 LINE 1-RR: MOP = 656 PSIG
 LINE 2-R: MOP = 1000 PSIG

**ISSUED FOR
 06/19/23
 INFORMATION
 EAGL-X-318A**

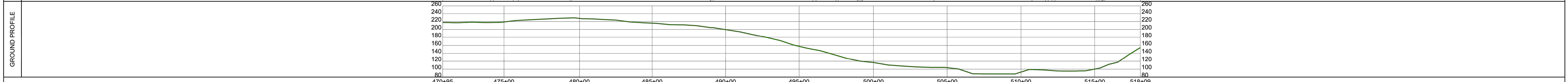
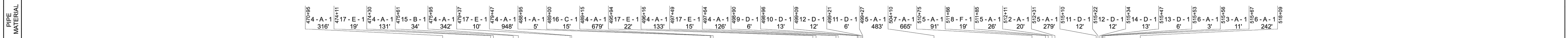
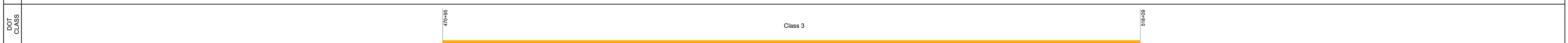
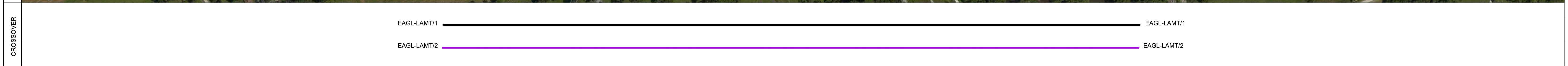
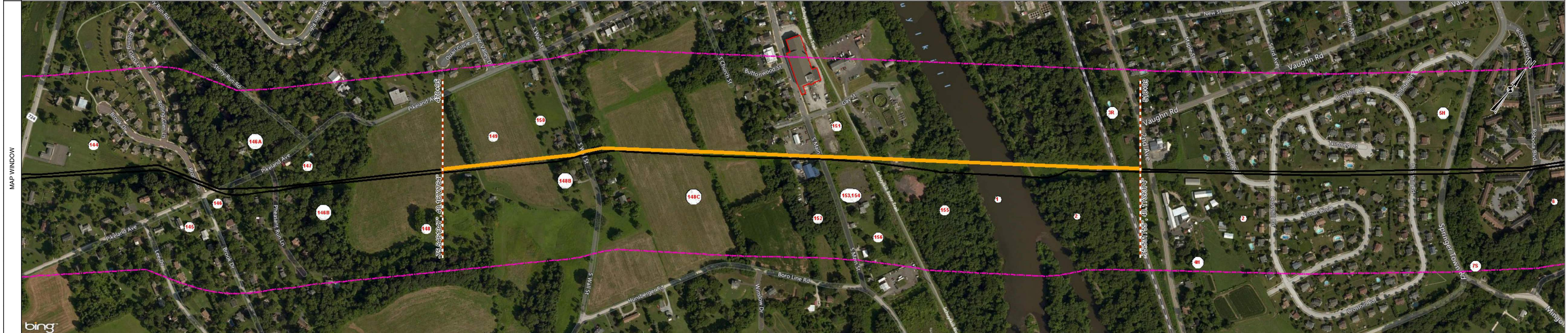
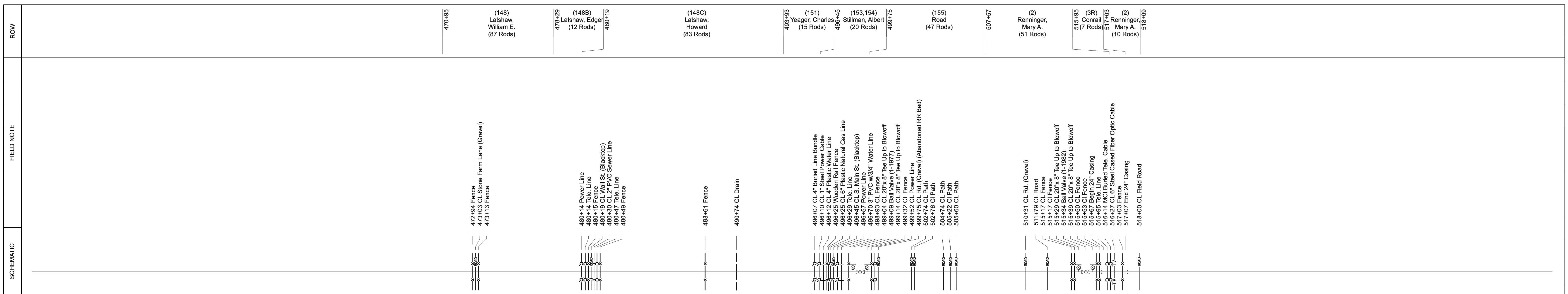
NO.	DATE	REVISION
26	09-21-20	REVISED TEMPORARY PRESSURE PER M&R 78109-PO-1 PER M&R 78109-PO-1 OPERATIONAL COMPLIANCE
25	09-11-19	ADDED TEMPORARY MOP PER M&R 78109-PO-1 PER M&R 78109-PO-1 OPERATIONAL COMPLIANCE
24	04-23-15	REVISED MOP NOTE PER M&R 78109-PO-1 PER M&R 78109-PO-1 OPERATIONAL COMPLIANCE
23	12-31-13	RELOCATED AREA BOUNDARY TO PLD-3188 (DELAWARE RIVER) PER EAM GROUP REVIEW
22	10-17-11	UPDATED CABLE COMP. STATION (M&R 78109-PO-1) WITH CORRECTED TITLE BLOCK, CORRECTED VALVE ID'S AT M&R 78109-PO-1 TO AGREE WITH MATING.

LINE 1, 2, 1-B, 1-F, 1-QQ, 1-RR & 2-R
 EAGLE STATION TO LAMBERTVILLE STATION
 EAGLE AREA
 (EAGL - LAMT)

ENBRIDGE

PLD-318A.26

Texas Eastern Transmission, LP
 5400 Westheimer Ct. Houston, TX 77056-3110 713 / 627-5400



VALVE					
ID	TYPE	CONNECT	RATING	CWO	IN-SERVICE
1-1977	Ball	Welded X Welded	1440	4766	1/1/1978
1-1982	Ball	Welded X Welded	1440	4766	1/1/1978

VALVE OPERATOR			
ID	TYPE	MANUFACTURER	SN
1-1977	Motor	UNKNOWN	54793
1-1982	Motor	UNKNOWN	54793

PIPE MATERIAL INDEX									
INDEX	OD	WT	GRADE	IN SERVICE	LW SEAM	MFR			
1	20	0.313	API-5L Gr-B	01/01/1950	SMLS	U.S. Steel			
2	20	0.3125	API-5L Gr-B	09/30/1953	SMLS	National Tube			
3	20	0.3125	API-5L Gr-B	09/30/1953	SMLS	National Tube			
4	20	0.375	API-5L-X-35	01/01/1943	ERW	Youngstown Sheet and Tube			
5	20	0.375	API-5L-X-35	01/01/1943	ERW	Youngstown Sheet and Tube			
6	20	0.375	API-5L-X-35	01/01/1943	ERW	Youngstown Sheet and Tube			
7	20	0.5	API-5L-X-35	01/01/1943	SMLS	National Tube			
8	20	0.312	API-5L-X-52	08/31/1971	SMLS	U.S. Steel			
9	20	0.406	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
10	20	0.594	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
11	20	0.406	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
12	20	0.594	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
13	20	0.406	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
14	20	0.594	API-5L-X-52	10/14/1978	SMLS	U.S. Steel			
15	20	0.375	API-5L-X-52	11/19/1986	DSAW	Kaiser Steel			
16	20	0.375	API-5L-X-55	08/24/1999	DSAW	Napa Pipe			
17	20	0.375	API-5L-X-55	08/28/1998	DSAW	Bethlehem Steel			

PIPE COATING MATERIAL			
INDEX	TYPE	MOP	CURRENT MOP
1	Coel Tar Enamel System	656	656
	Fusion Bonded Epoxy		
	Nap-Gard 7-2501		
	Roskote A-51		
	Scotchkote 206N		

LEGEND

- Ball: Tee, Tap
- Check: PI
- Gate: EQUATION
- Casing: Plug
- Ground Bed: MAR
- River Weight: Clock Spring
- Identified Site: Identified Site

Class 1 (Green)
Class 2 (Yellow)
Class 3 (Orange)
Class 4 (Red)

HCA Range (Blue)
660' Corridor (Pink)
Identified Site (Red)

ENBRIDGE

EAGL-LAMT 1

SEGMENT/LINE ID: 011

SHEET ID: MP 6.02-0.01

300 150 0 300 600 900

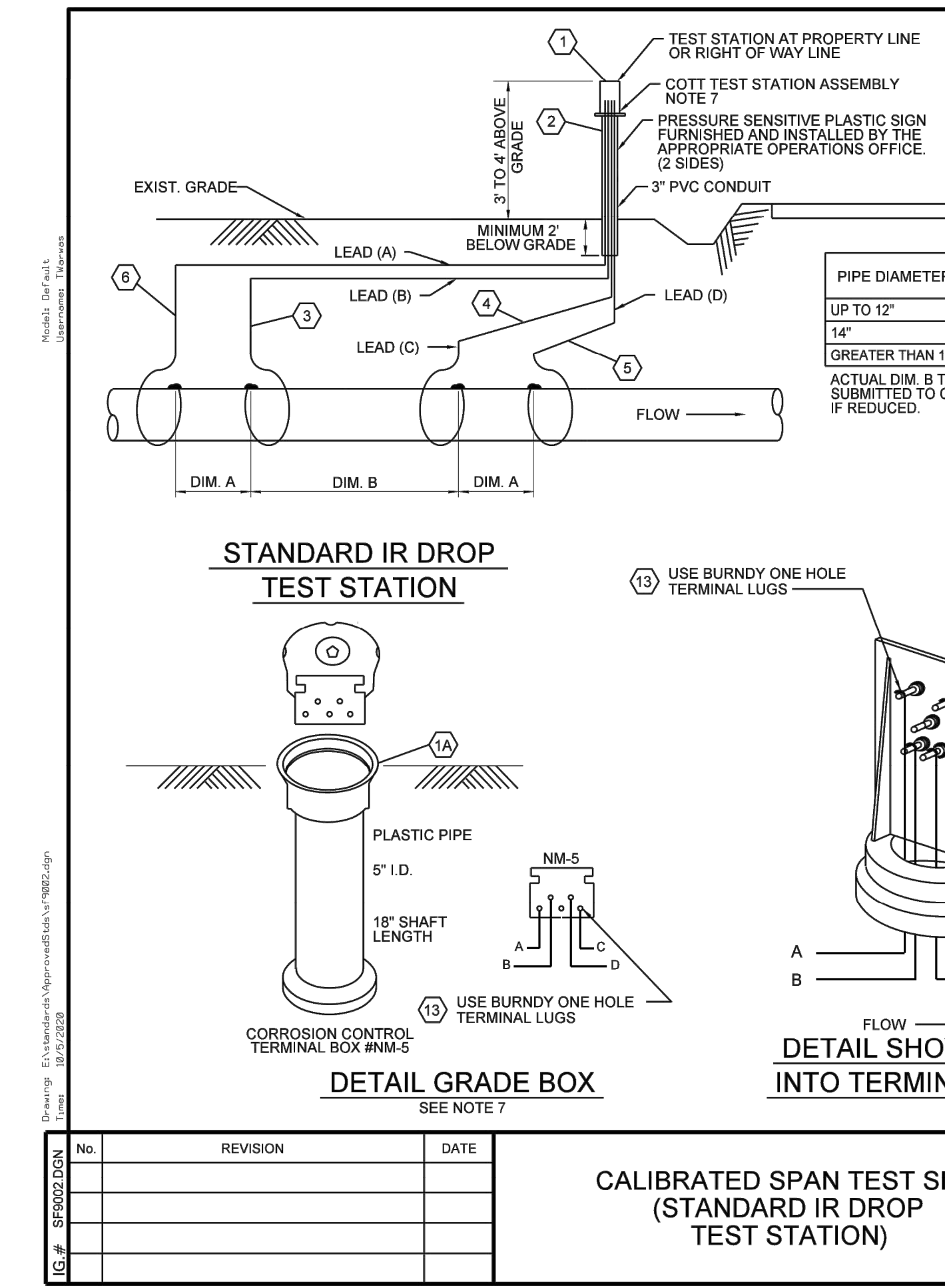
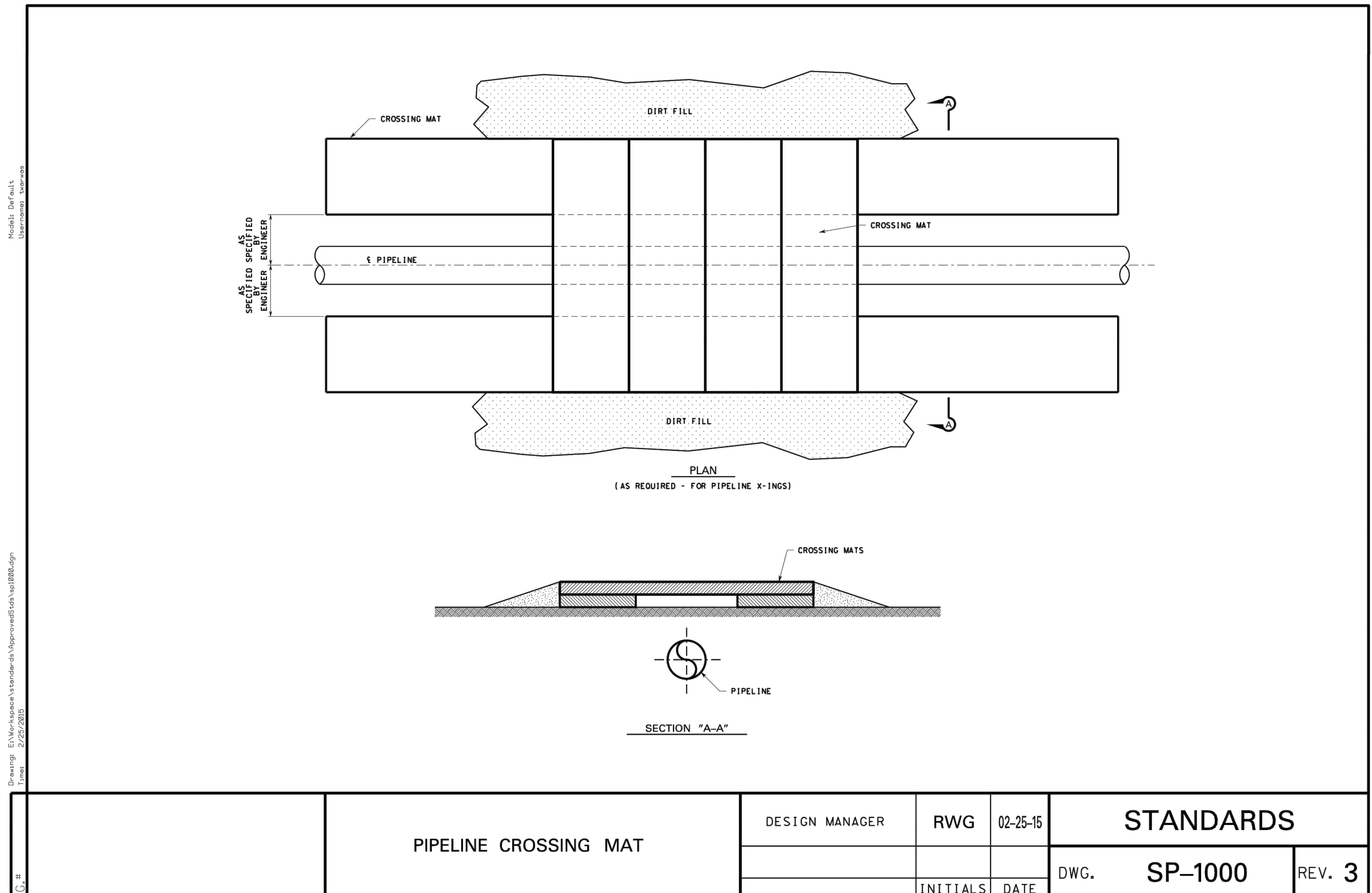
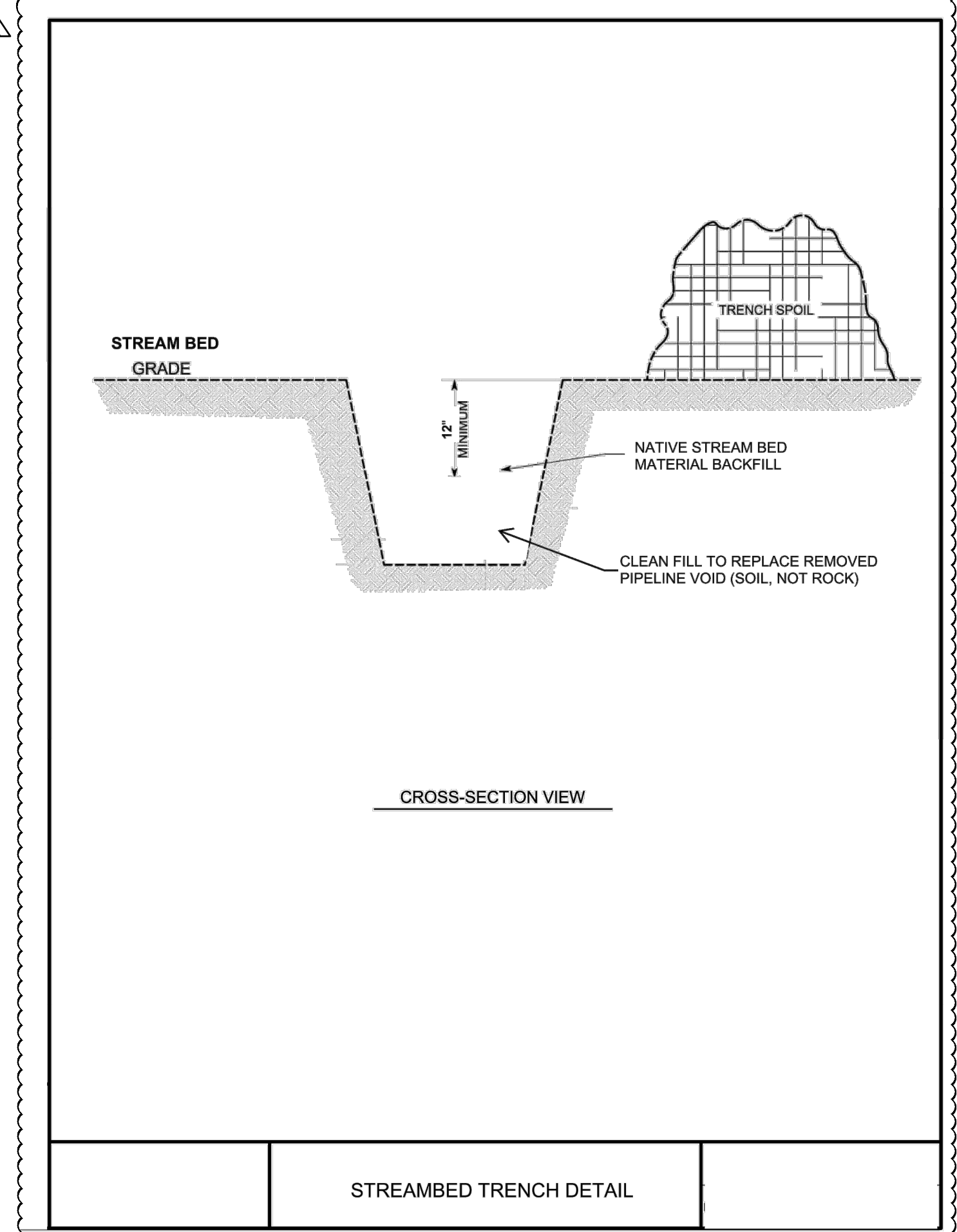
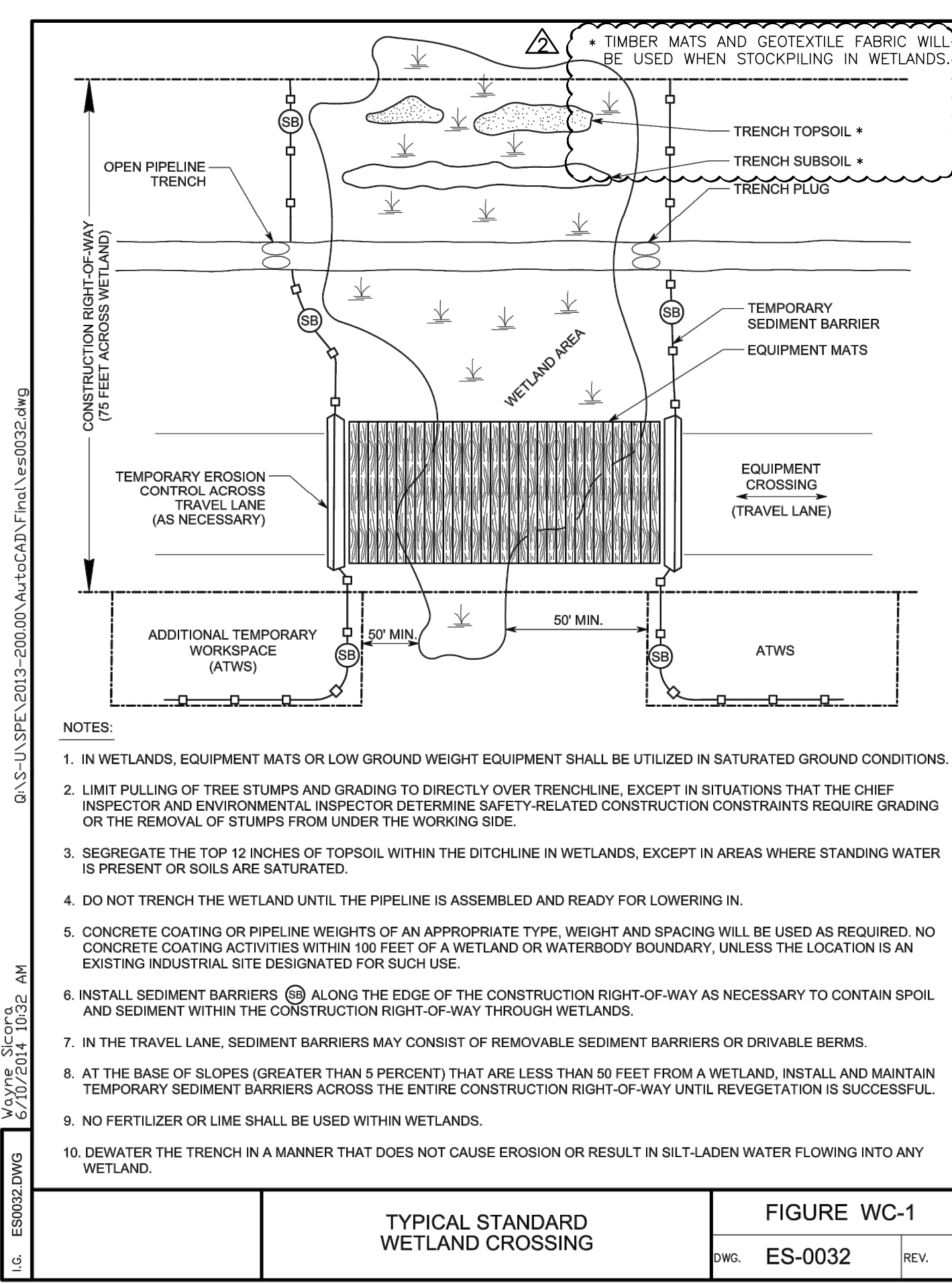
GRAPHIC SCALE - FEET

OPERATIONS ALIGNMENT SHEET

GENERATION DATE: 1/10/2019

FOR INFORMATION ONLY

MAP DISCLAIMER: This map has been compiled from the best existing sources available at the time of preparation. However, Enbridge Inc., Enbridge Energy and/or its affiliates and/or subsidiaries do not guarantee the accuracy of the map or assume responsibility of liability for any reliance thereon.

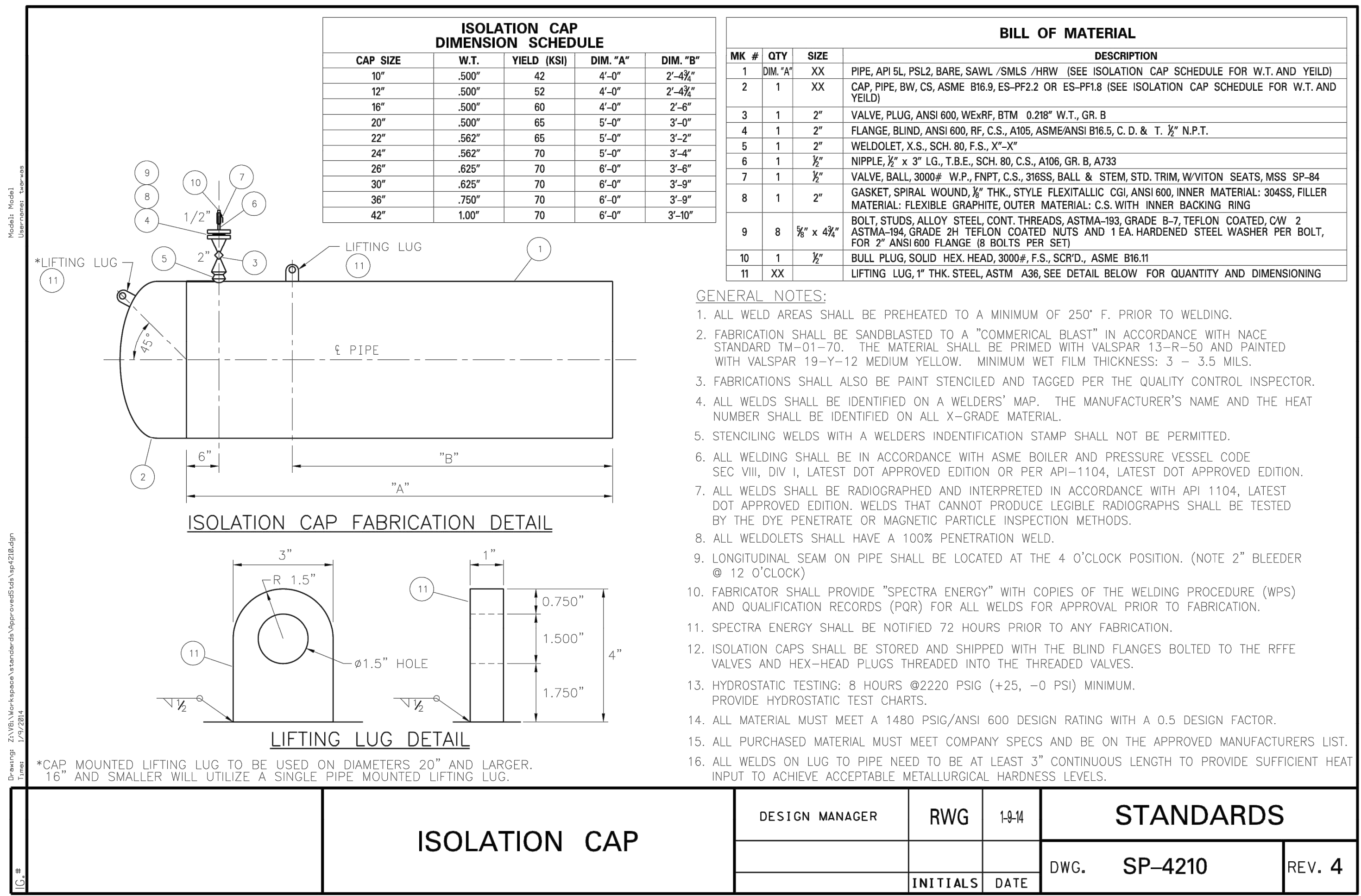


ITEM NO.	NO. REQ'D	DESCRIPTION
1	1	YELLOW COTT TEST STATION TYPE "BIG FINK" S LEAD CONFIGURATION
1A		ALTERNATE "C.P. TEST" CORROSION CONTROL TERMINAL BOX #NMS
2	1	3" DIA., 6'-0" LONG WHITE OR YELLOW COLOR P.V.C. CONDUIT
3	170'	#10 THHN STRANDED COPPER (B)
4	40'	#10 THHN STRANDED COPPER (C)
5	30'	#10 THHN STRANDED COPPER (D)
6	175'	#10 THHN STRANDED COPPER (A)
7		NOT USED
8		NOT USED
12		NOT USED
13	4	BURNDY ONE HOLE TERMINAL #YAV10-H3

WIRE	DESCRIPTION	AGT	ETNG	M&N-US	M&N-CANADA	MARKET HUB PARTNERS	NEXUS	OZARK	SESH	STT	TETCO	VCP
A	FAR UPSTREAM TEST LEAD	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE	BLUE
B	UPSTREAM TEST LEAD	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
C	DOWNSTREAM TEST LEAD	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
D	FAR DOWNSTREAM TEST LEAD	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
	TEST STATION CAP	YELLOW/ORANGE	YELLOW	YELLOW	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE

GENERAL NOTES:

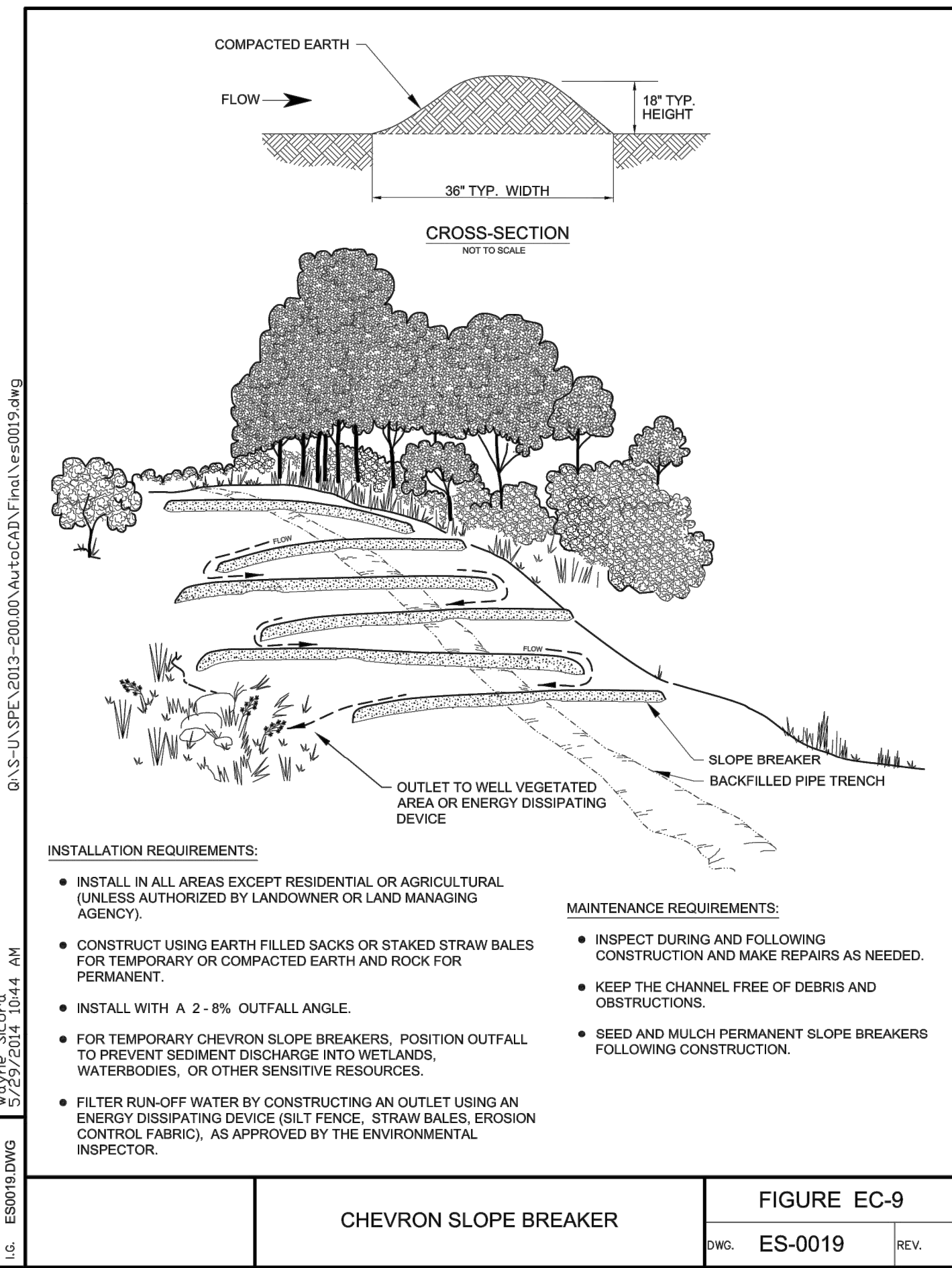
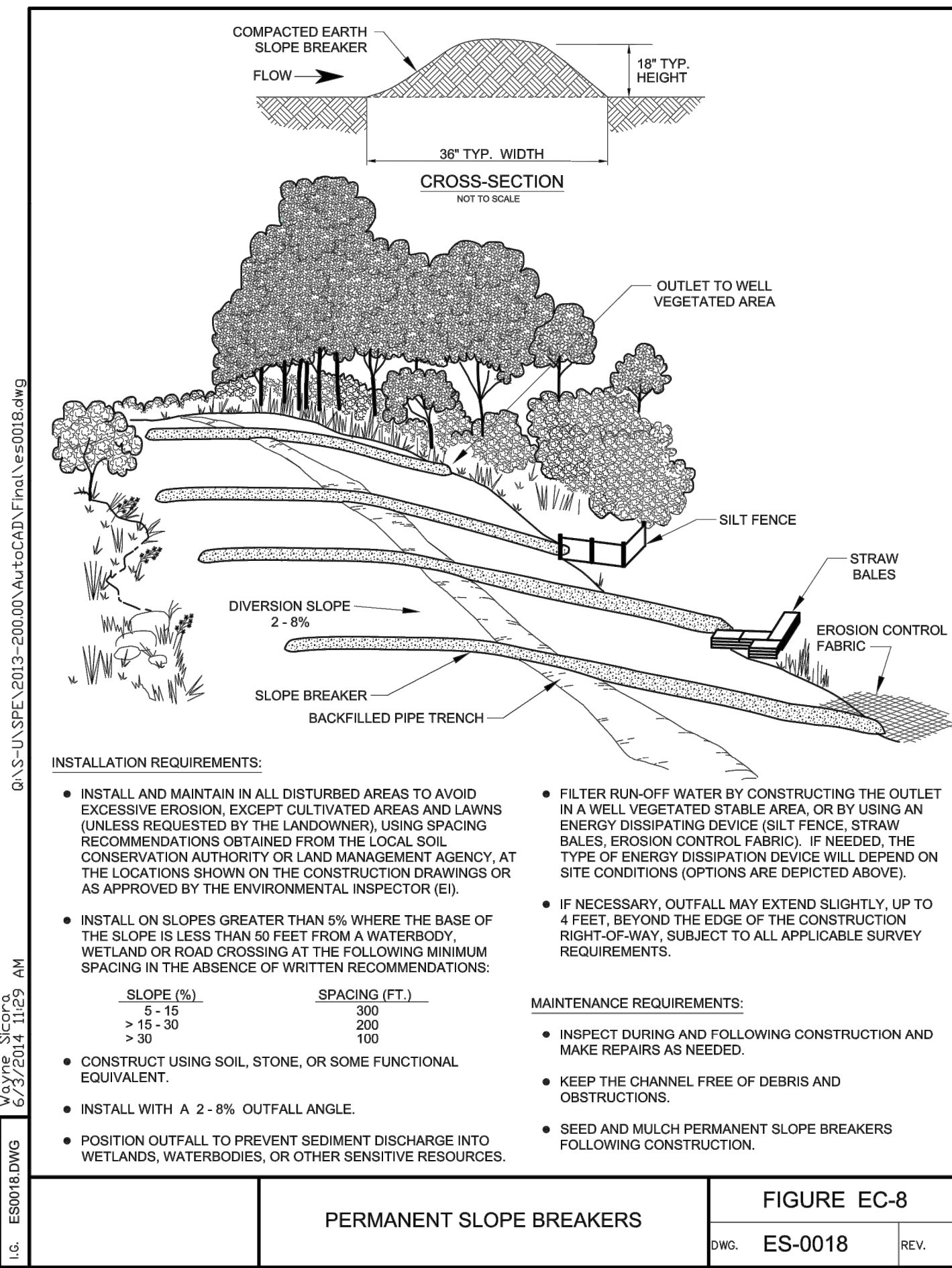
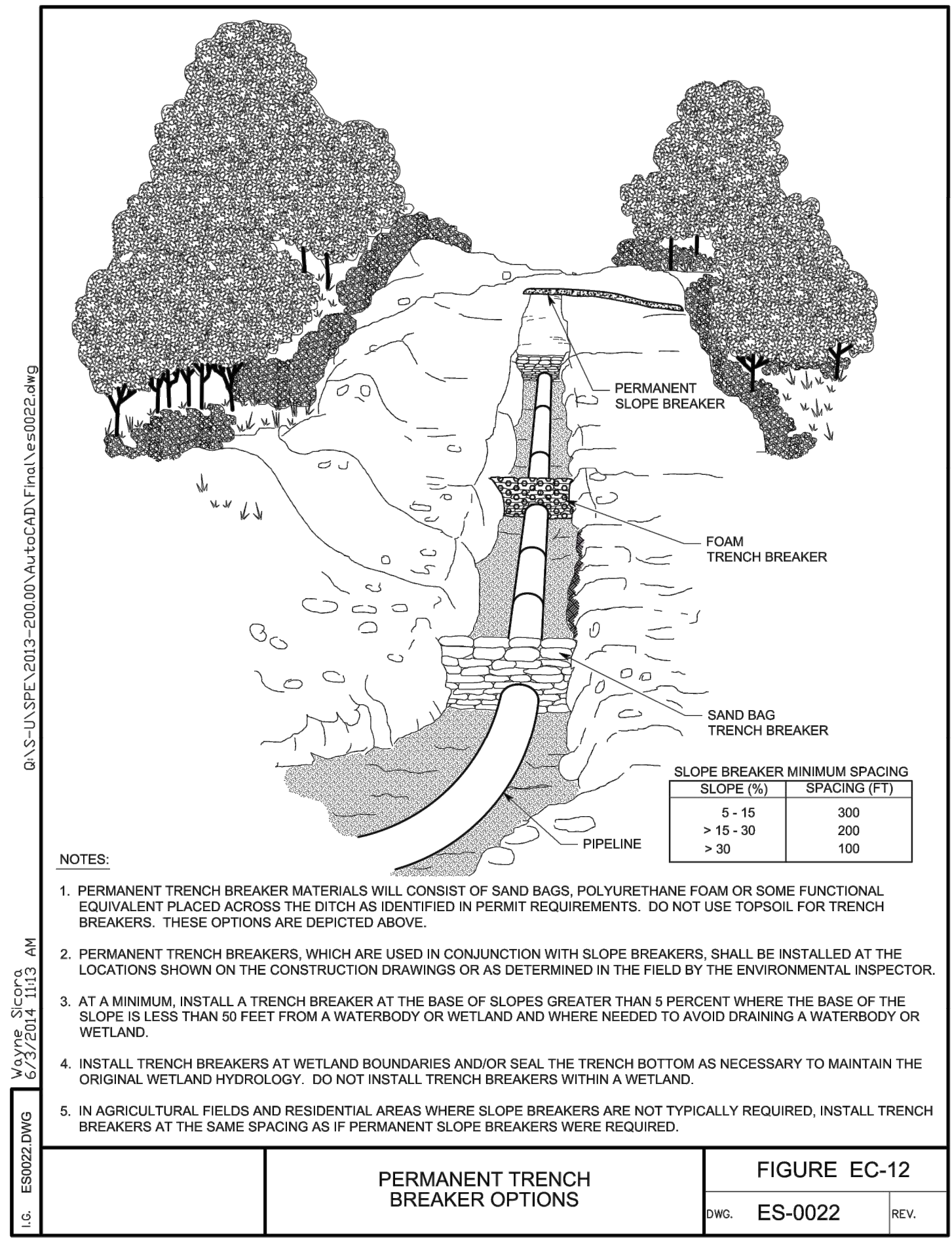
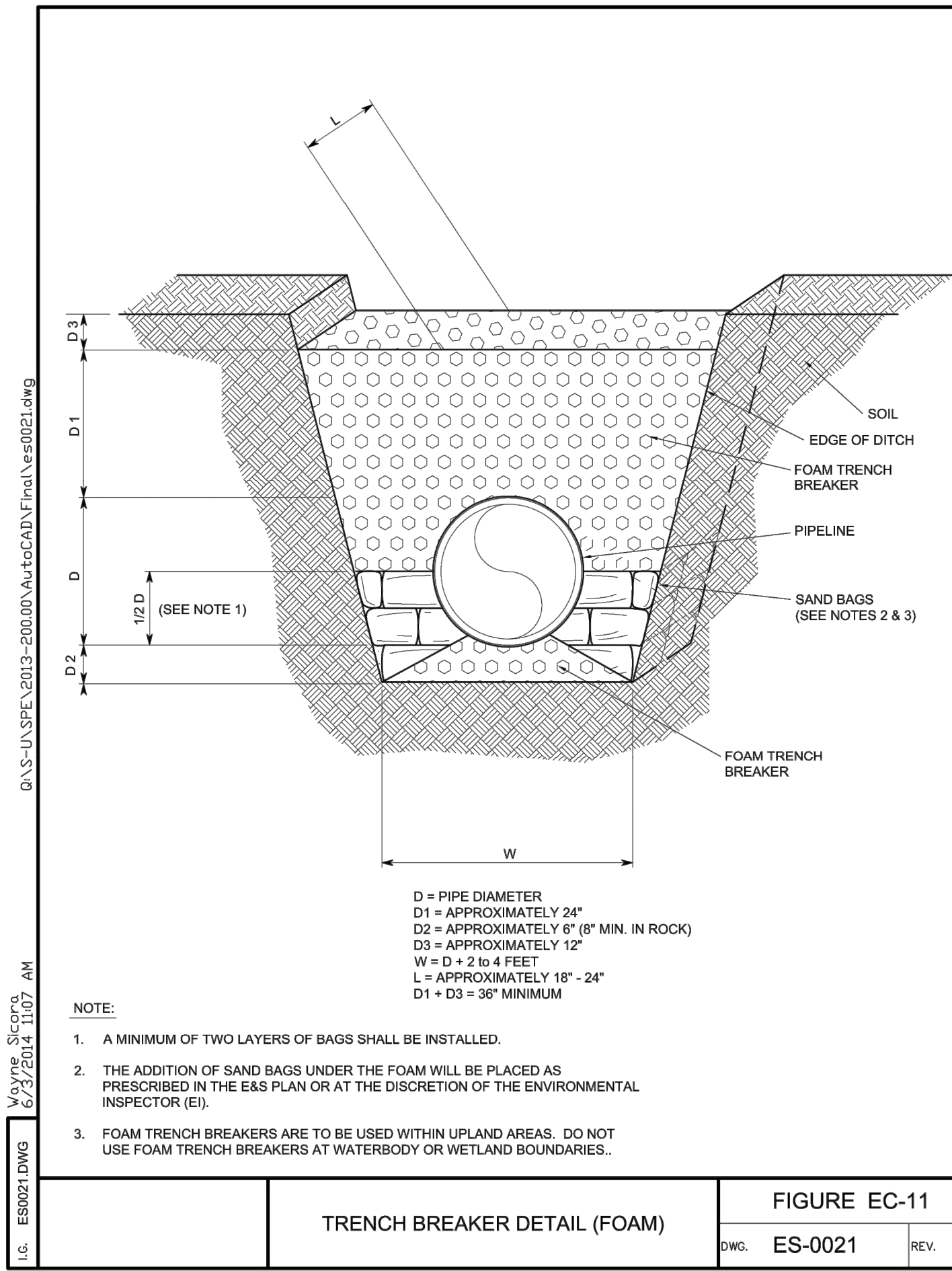
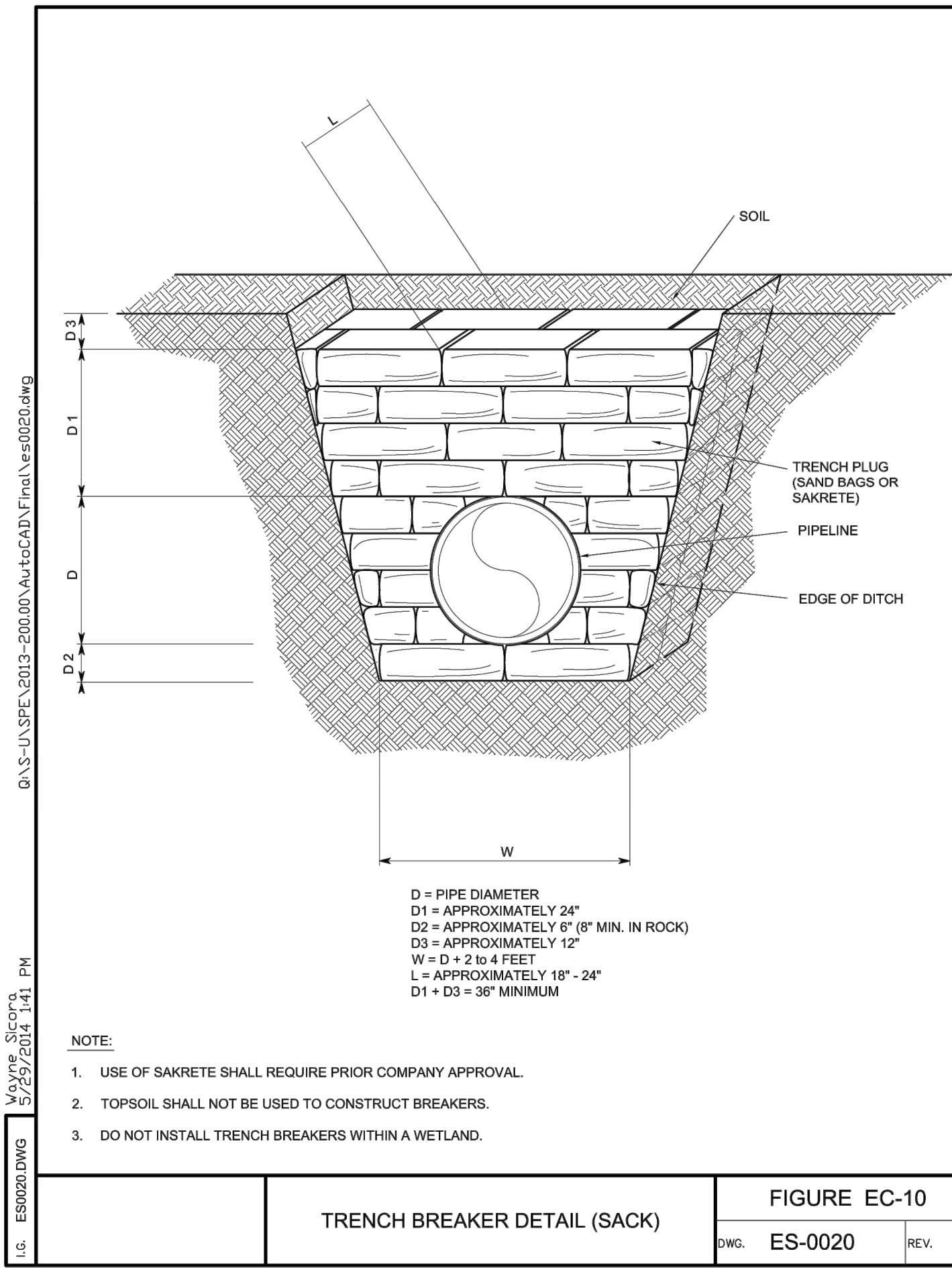
- RUN WIRES INSIDE COTT TEST STATION AND PROVIDE A 12" SLACK LOOP IN EACH END.
- ALL WIRES TO BE PIN BRAZED OR CADWELDED.
- TIE WIRES AROUND PIPELINE.
- TEST STATION LOCATIONS SHOWN ON ALIGNMENT SHEETS ARE APPROXIMATE. ACTUAL LOCATIONS TO BE FIELD DETERMINED BY COMPANY INSPECTOR AT TIME OF INSTALLATION.
- DECOUPLED GROUNDING MAT REQUIRED ON ALL TEST STATIONS IN POWER LINE RIGHT-OF-WAY. CONSULT REGIONAL TECHNICAL STAFF IF NECESSARY.
- REPAIR COATING AT TEST WIRE CONNECTIONS IN ACCORDANCE WITH SPECTRA ENERGY COATING MANUAL-AP-PC1.
- IN CONGESTED AREAS A GRADE BOX MAY BE USED TO TERMINATE TEST LEADS IN PLACE OF THE COTT TEST STATION.
- PIPE IN CALIBRATED SPAN SHALL BE WITHOUT CHANGE IN WALL THICKNESS, LINE CROSSINGS, WIRE CONNECTIONS, OR SIDE TAPS.



NO.	REVISION	DATE

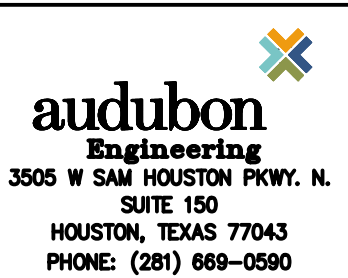
DESIGN MANAGER	TLK	10-5-20	STANDARDS

DESIGN MANAGER	RWG	1-4	STANDARDS



ISSUED FOR
 03/01/2024
 INFORMATION

DWG. NO.	DESCRIPTION	REV	DSN	CK	DESCRIPTION	ITEM NO.	DESCRIPTION	QTY
					ISSUED FOR INFORMATION-IFC-R1		(03/01/2024)	
					ISSUED FOR INFORMATION-IFP		(01/10/2024)	
	REFERENCE DRAWINGS				REVISIONS		MATERIALS	



DRAWN BY: LGF	ENGINEERING APPROVALS	
	BID	CONSTRUCTION
TITLE	SIGNATURE	DATE

TEXAS EASTERN TRANSMISSION SYSTEM
 EAGL-LAMT, 20-INCH LN 1, MP 9.65
 SCHUYLKILL RIVER HDD REPLACEMENT
 STANDARDS

LOC. CHESTER & MONTGOMERY COUNTIES, PENNSYLVANIA

YEAR: 2023 W.B.S. 30001031 SCALE: N/A

