

**Modification/Change Order No.1**

Bid Number: 21-020

PO #: 195195

Fort Bend County Drainage District

EWP – Oyster Creek Channel Bank Stabilization Phase II

Fort Bend County, Texas

February 12, 2021

<b>CHANGE ORDER/MODIFICATION NO. 1</b>		Effective Date:	Page 1 of 1
Contract: 21-020	Dated: 11/10/2020	Project: EWP – Oyster Creek Channel Bank Stabilization Phase II	
Issued By (Contracting Local Organization): Fort Bend County		Issued To (Contractor): NBG Constructors, Inc	
TYPE OF MODIFICATION ( <i>check appropriate box below</i> )			
<input checked="" type="checkbox"/> CHANGE ORDER: Issued pursuant to Article 14.4 the changes set forth below are made by this modification.			
Contract Price	\$ 4,495,380.00	PERFORMANCE TIME: None	
Net Increase in Contract Price:	\$ 185,072.97		
REVISED Contract Price:	\$4,680,452.97		
ATTACHMENTS ( <i>If none, so state.</i> ):			
This modification is hereby made a part of the contract. Except as provided herein, all terms and conditions of the original contract (as revised) remain unchanged and in full force and effect.			
<b>CONTRACTOR'S RELEASE OF CLAIMS</b>			
In consideration of the modification agreed to herein as complete equitable adjustment for the Contractors proposal, dated 2-12-2021, the Contractor hereby releases Fort Bend County from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances concerning the added work for the above added work, including all impacts to the work, overhead and profit.			
Recommended By:(print or type name/title of signer)			
Thomas P. Beach, PE M&E Consultants <i>Thomas P. Beach</i>			
<b>Important Note:</b> Contractor IS required to sign this document and return two (2) copies to the issuing office.			
CONTRACTOR (print or type name/title of signer) Robert T. Rogers III Vice President NBG Constructors, Inc.		Sponsors/Contracting Local Organization Adam Wright <i>Adam Wright</i> Fort Bend County Drainage District	
SIGNATURE (person authorized to sign)	DATE	SIGNATURE (County Judge)	DATE
<i>Robert T. Rogers III</i>	2/23/21		

Modification/Change Order No.1  
 Fort Bend County Drainage District  
 EWP – Oyster Creek Phase II Channel Bank Stabilization  
 Fort Bend County, Texas  
 February 12, 2021  
 Contract No: 21-020

**DESCRIPTION OF MODIFICATION/CHANGE ORDER**

Pursuant to General Condition, Article 14.4, the contract shall be modified as following.

Site 434 shall be modified as shown on the attached drawings. The sheet length (H) shall be increased to 23', the Top Elevation of Site 434 shall be installed at elevation 43.0. This change shall add 6' x 690' = 4140 square foot.

Site 435 shall be modified to exclude sheet pile from the pipeline crossing and installing rock riprap in the same area as shown on the attached drawing. 340 tons of R-300 rock riprap shall be added due to this change. The sheet pile square footage shall be decreased 1380 sq ft on Site 435.

Site 412 shall be modified to increase length by adding wall from subtracted Site 435 wall, that was modified due to the pipeline crossing. The added wall length shall be installed to the same elevations planned, thus adding 1500 sq ft of sheet pile.

Compensation shall be in accordance with the applicable added items below and measurement shall be in accordance with the contract specified methods. Contractor Quality Control shall be accomplished in accordance with Construction Specification 94 for the added work.

Changes to the Bid Schedule:

Item No.	Work or Material	Spec.	Quantity	Units	Unit Price	Amount
6	Steel Sheet Pilings (increase by 4260 SF to 107,054 SF, contract price increase of \$ 149,100.00)	13	107,054	SF	\$ 35.00	\$ 3,746,890.00
10	Rock Riprap (increase by 340 tons to 2030 tons, contract price increase of \$23,800.00)	61	2,030	Tons	\$70.00	\$142,100.00
24	Added Site Preparation Site 412	420	1	LS	\$XXX	\$12,172.97

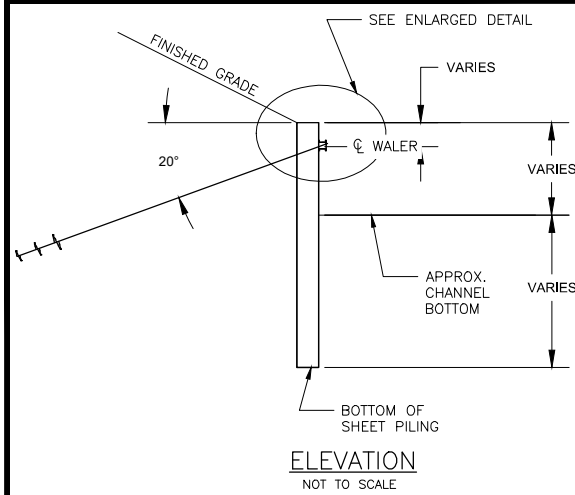
Modification/Change Order No. 1 (Con't.)

Contract price increase - \$ 185,072.97

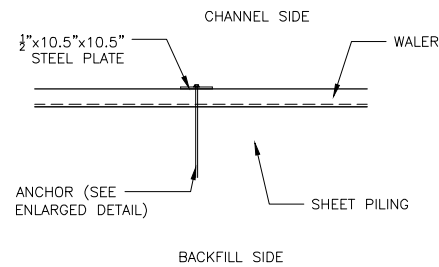
Contract Performance time: - none

#### CONTRACTOR'S STATEMENT OF RELEASE

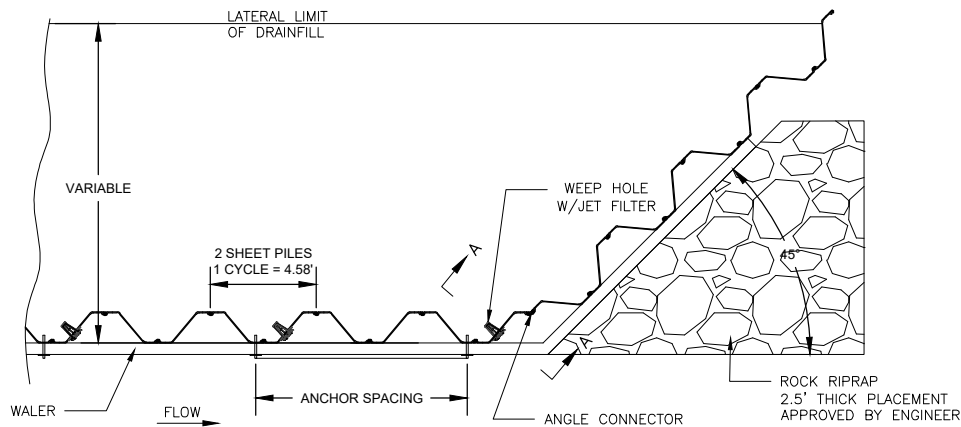
In consideration of the modification agreed to herein as complete equitable adjustment for the Contractor's proposal, dated 2-12-2021, the Contractor hereby releases Fort Bend County from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances concerning the added work for the above added work, including all impacts to the work, overhead and profit.



ANCHOR SHALL BE CHANCE HELICAL SCREW ANCHORS OR AN APPROVED EQUIVALENT AND SPACED AS SPECIFIED IN TABLE BELOW. RESISTANCE TEST SHALL BE PERFORMED AS PER CONSTRUCTION SPECIFICATION 81.



ANCHOR DETAILS  
NOT TO SCALE

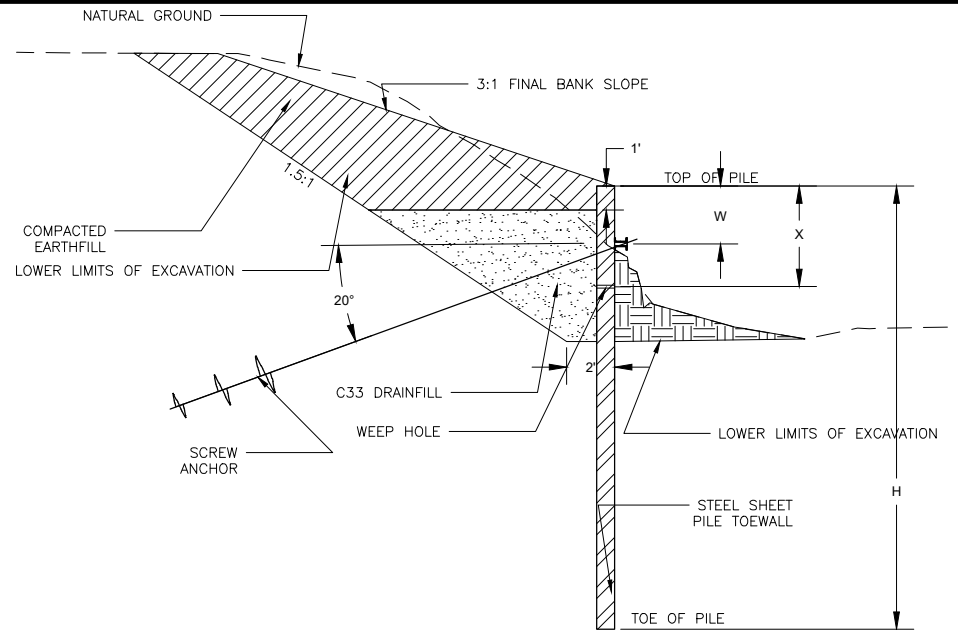
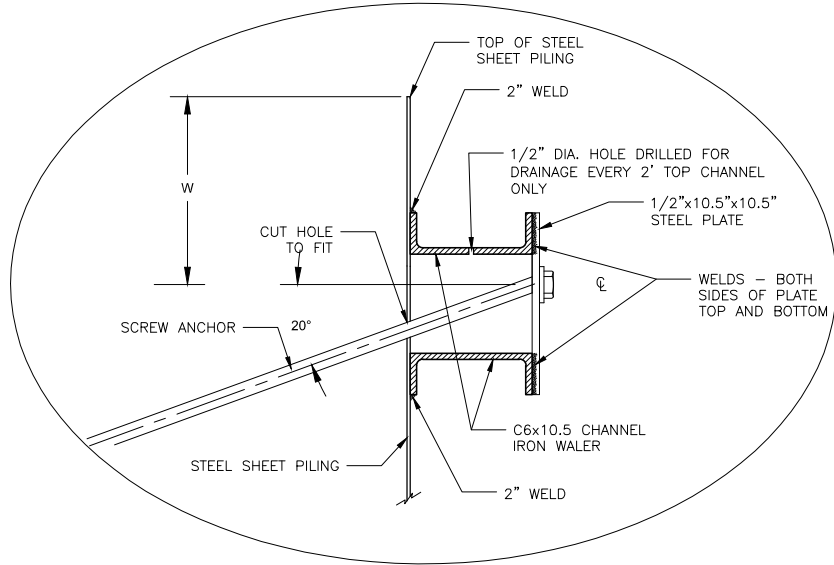


ENLARGED DETAIL  
NOT TO SCALE

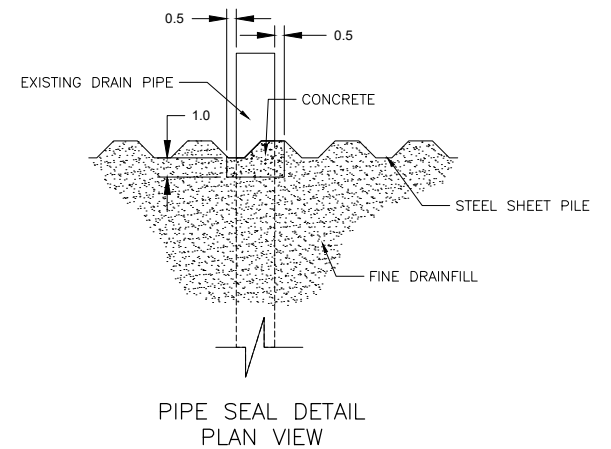
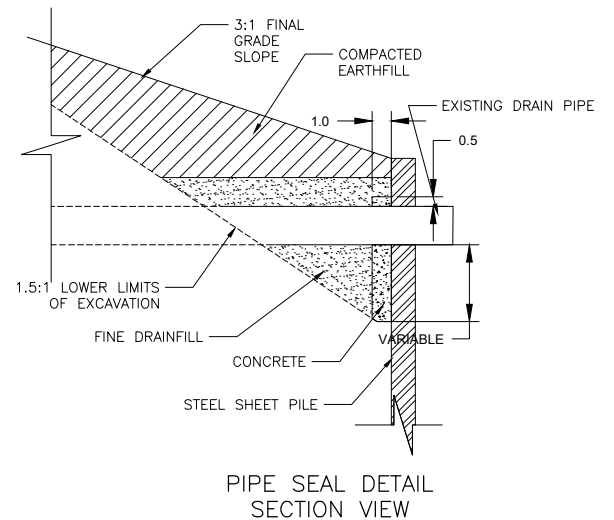
NOTE:  
SHEET PILES SHALL BE MODIFIED BY CUTTING OR DRILLING A HOLE TO ALLOW THE ANCHOR SHAFT SECTION AND WEEP HOLE DRAIN IN ACCORDANCE WITH SHEET PILING MANUFACTURER'S RECOMMENDATIONS.  
WHEN SPlicing OF THE WALER IS REQUIRED, IT SHALL BE DONE AT THE STEEL PLATE.  
THE WALER AND STEEL SHEET PILING SHALL BE WELDED WHERE THEY COM IN CONTACT. THE MIN. WELD LENGTH SHALL BE 2 INCHES AT BOTH THE TOP AND BOTTOM. THE PLATE SHALL BE WELDED TO THE WALER ON BOTH SIDES AT THE TOP AND BOTTOM.

DRAINFILL GRADATION REQUIREMENTS

THE FINE DRAINFILL SHALL COMPLY WITH THE GRADATION REQUIREMENTS FOR FINE AGGREGATE OF ASTM, C33 - CONCRETE AGGREGATES.  
THE COARSE DRAINFILL SHALL COMPLY WITH THE GRADATION REQUIREMENTS FOR COARSE AGGREGATE NO. 89 OF ASTM, C33 - CONCRETE AGGREGATES.  
INSTALLATION AND MATERIALS QUALITY SHALL COMPLY WITH THE REQUIREMENTS OF CONSTRUCTION SPECIFICATION 24 AND MATERIALS SPECIFICATION 521.



THE WEEP HOLES SHALL USE THE JET FILTER DRAIN SYSTEM, MODEL JF4-SS CVLV - 316 STAINLESS STEEL OR OTHER METHOD AS APPROVED BY ENGINEER. THE WEEP HOLES SHALL BE INSTALLED AT THE ELEVATIONS AND INTERVALS AS SHOWN IN THE TABLE BELOW FOR EACH SITE.



SHEET PILE WALL DETAILS

SITE NO.	TOP ELEV.	EL. OF LOWER LIMITS OF EXC. @ CHANNEL	TOE ELEV.	HEIGHT (H), FT	LENGTH, FT	SHEET PILE AREA, SF	WALER, DIST. (W), FT	SHEET PILE SIZE	MOMENT OF INERTIA, IN <sup>4</sup> /FT	SECTION MODULUS, IN <sup>3</sup> /FT	DRAINFILL (FINE+COARSE), CY 2'	CHANCE ANCHOR PRODUCT NO. 1/2	REQ'D HELIX & SIZE, IN. 1/2	ANCHOR SPACING, FT.	MIN. ANCHOR LENGTH, FT	MIN. ANCHOR TORQUE, FT-LBS	ANCHOR LOAD TEST REQ'D, NO.	WEEP HOLE, DIST. (X), FT	WEEP HOLE, SPACING, FT
412	43.0	35.0	18.0	25	268	6,700	2.0	NZ 19	255.5	33.5	352	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
424	43.0	38.0	26.0	17	561	9,537	2.0	NZ 19	255.5	33.5	406	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
425	43.0	38.0	26.0	17	507	8,619	2.0	NZ 19	255.5	33.5	366	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
426	43.0	38.0	26.0	17	502	8,534	2.0	NZ 19	255.5	33.5	362	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
427	43.0	38.0	26.0	17	500	8,500	2.0	NZ 19	255.5	33.5	361	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
428	43.0	38.0	26.0	17	640	10,880	2.0	NZ 19	255.5	33.5	906	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
429	55.0	47.0	38.0	17	514	8,738	2.0	NZ 19	255.5	33.5	371	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
432	43.0	38.0	26.0	17	298	5,066	2.0	NZ 19	255.5	33.5	211	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
433	50.0	42.0	27.0	23	354	8,142	2.0	NZ 19	255.5	33.5	493	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
434	43.0	38.0	20.0	23	690	15,870	2.0	NZ 19	255.5	33.5	501	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"
435	43.0	38.0	20.0	23	716	16,468	2.0	NZ 19	255.5	33.5	1,095	SS 150	10, 12, 14	9'-2"	24	3,800	ALL	TBD	9'-2"



DESIGNED BY: BTB  
DRAWN BY: JPK  
CHECKED BY: TPB  
FILE NAME: Oc Phase 2.dwg  
DATE CHECKED: 9/14/2020

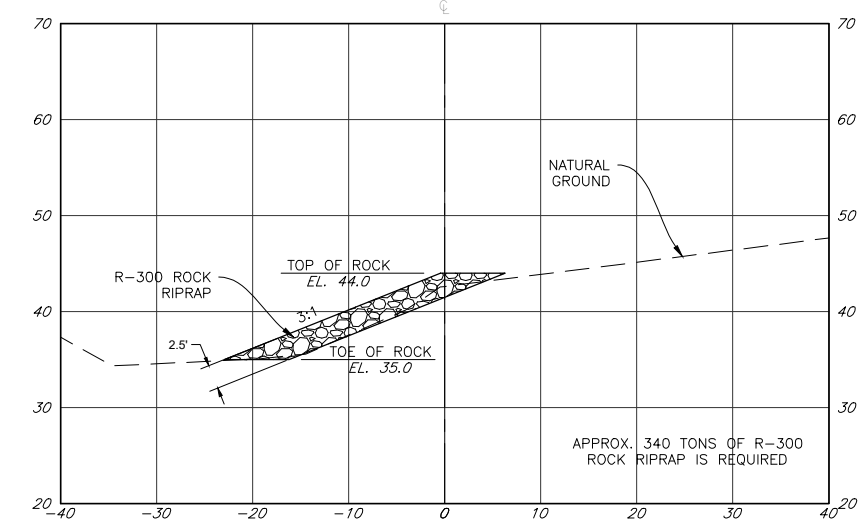
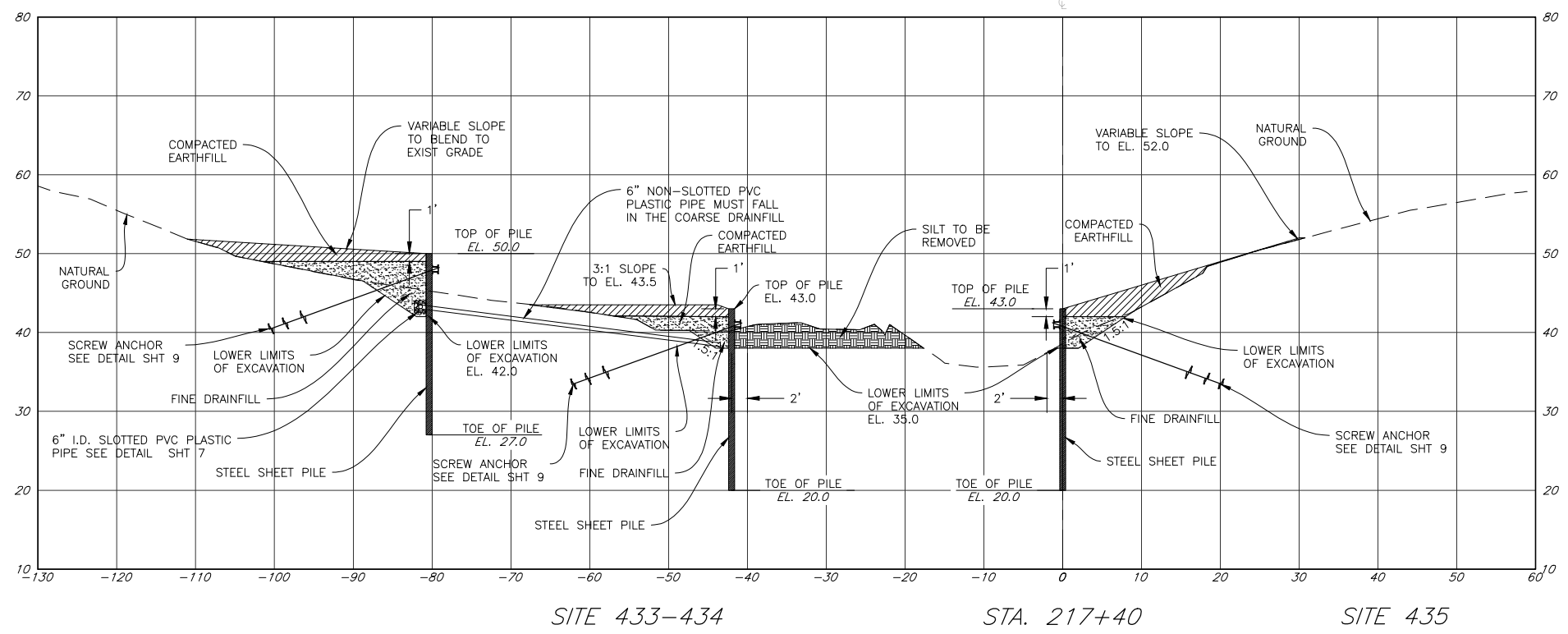
SHEET PILE WALL DETAILS  
OYSTER CREEK - BANK STABILIZATION  
FORT BEND DRAINAGE DISTRICT  
IN  
FORT BEND COUNTY, TEXAS



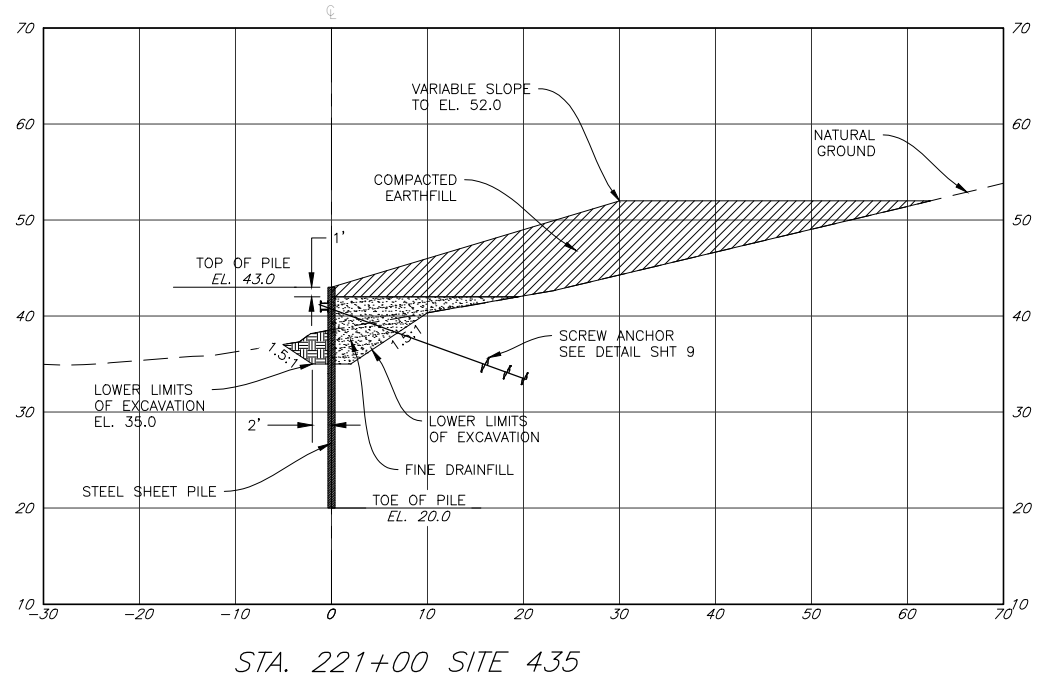
DRAWING NO. TX-EN-0791

SHEET NO. 9

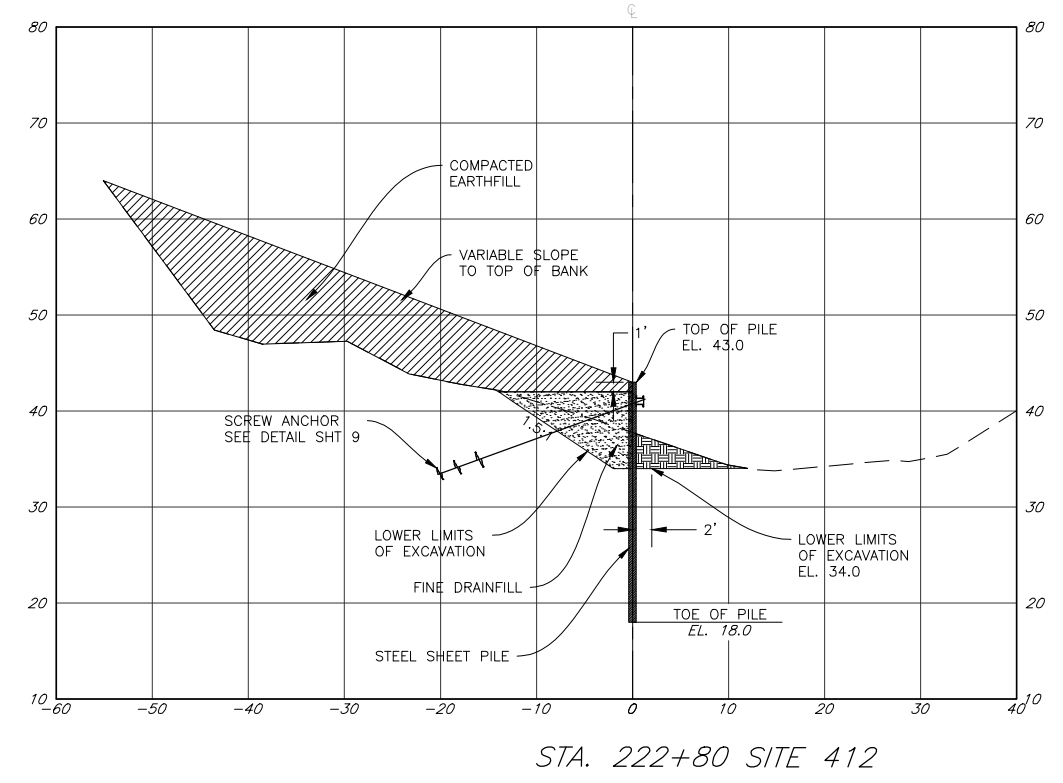
REVISIONS		
DATE	APPROVED	TITLE
2-3-2021		CORRECTED SHEET PILING ELEVATION



STA. 221+40  
 ROCK RIPRAP PLACED ALONG  
 GAS PIPELINE EASEMENT



STA. 221+00 SITE 435

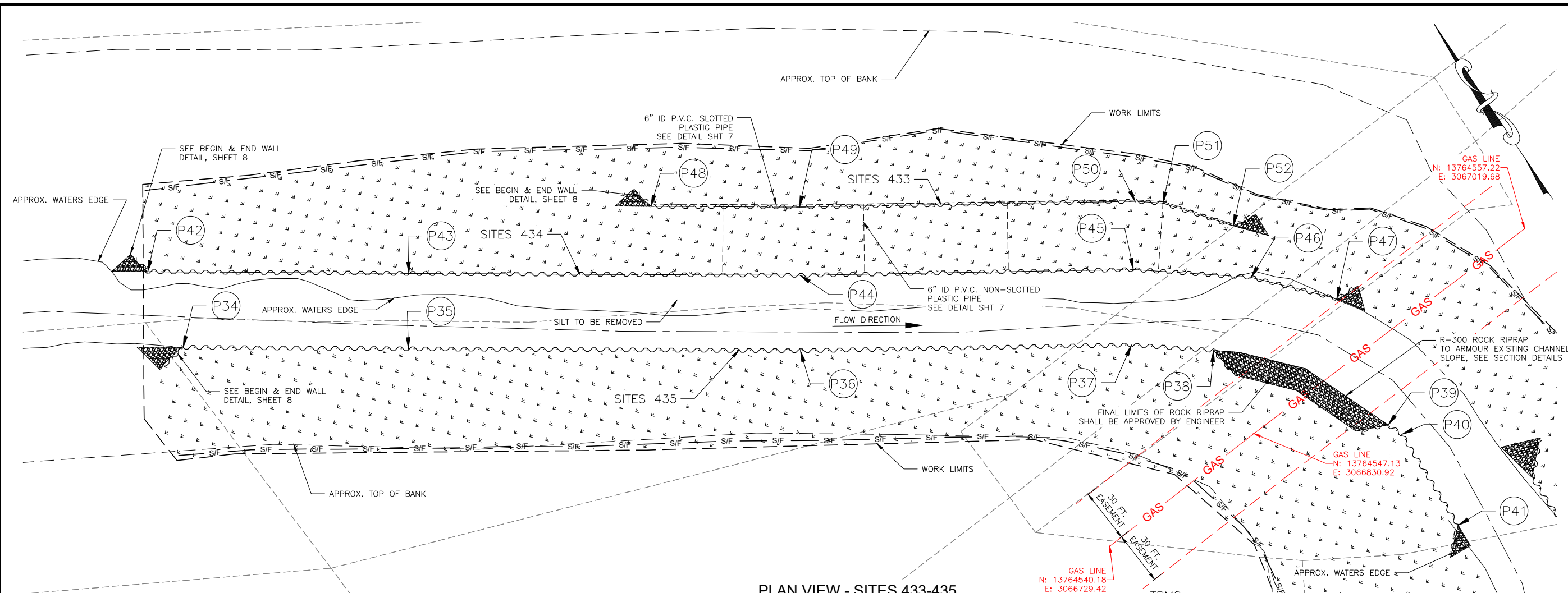


STA. 222+80 SITE 412

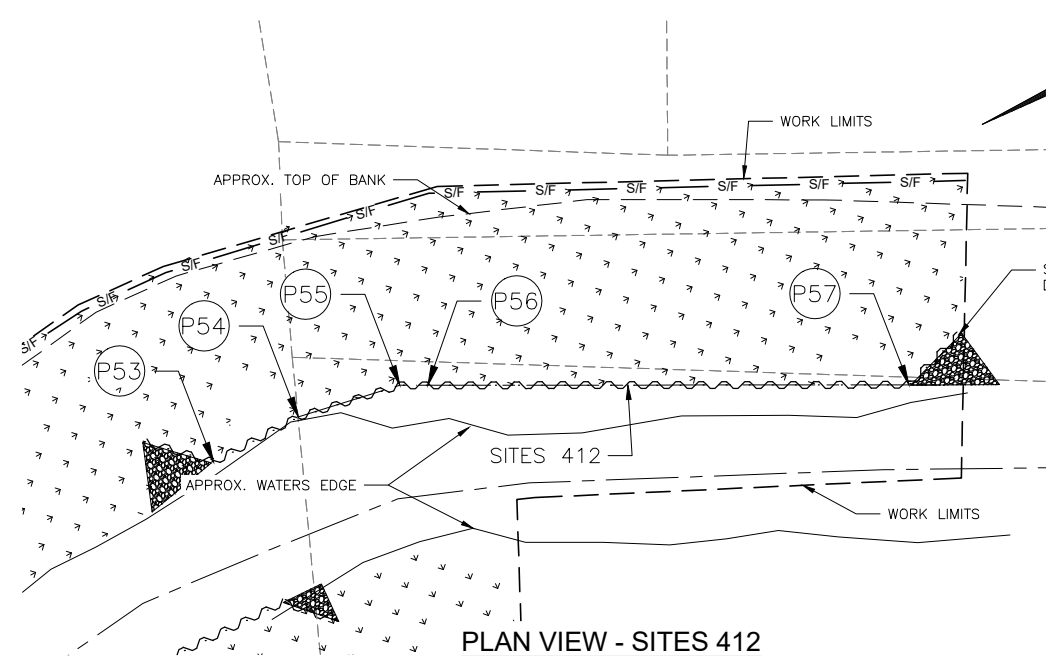
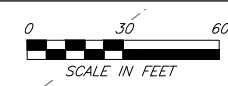
**LEGEND**

- SHEET PILE
- C OF WALL
- FINE DRAINFILL
- EXCAVATION
- COMPACTED EARTHFILL

REVISIONS		
DATE	APPROVED	TITLE
1/25/2021		ADJUSTED PILE EL. AND ADDED RIPRAP



PLAN VIEW - SITES 433-435



PLAN VIEW - SITES 412



SHEET PILE LAYOUT						
DESCRIPTION	STATIONS	TOP ELEV.	LOWER LIMITS EX.	TOE ELEV.	X-COORDINATE	Y-COORDINATE
SITES 435						
P34	214+40.62	43.00	38.00	20.00	3066364.26	13764920.79
P35	215+65.67	43.00	38.00	20.00	3066467.59	13764849.89
P36	217+83.57	43.00	38.00	20.00	3066647.71	13764726.79
P37	219+67.83	43.00	38.00	20.00	3066802.17	13764626.16
P38	220+20.14	43.00	38.00	20.00	3066838.32	13764598.04
P39	221+21.67	43.00	38.00	20.00	3066895.56	13764509.19
P40	221+30.83	43.00	38.00	20.00	3066898.94	13764500.67
P41	221+90.38	43.00	38.00	20.00	3066896.46	13764441.18
SITES 434						
P42	214+19.17	43.00	38.00	26.00	3066371.52	13764966.73
P43	215+64.77	43.00	38.00	26.00	3066491.32	13764884.55
P44	217+83.12	43.00	38.00	26.00	3066671.02	13764761.73
P45	219+70.17	43.00	38.00	26.00	3066826.57	13764660.40
P46	220+32.82	43.00	38.00	26.00	3066878.39	13764620.08
P47	220+77.53	43.00	38.00	26.00	3066911.26	13764583.53
SITES 433						
P48	217+00.00	50.00	42.00	27.00	3066623.93	13764839.94
P49	217+82.72	50.00	42.00	27.00	3066692.12	13764793.34
P50	219+72.56	50.00	42.00	27.00	3066848.65	13764691.36
P51	219+88.00	50.00	42.00	27.00	3066860.90	13764681.83
P52	220+26.70	50.00	42.00	27.00	3066886.32	13764649.36
SITES 412						
P53	221+68.00	43.00	35.00	18.00	3066945.38	13764439.50
P54	221+98.00	43.00	35.00	18.00	3066945.19	13764409.50
P55	222+31.27	43.00	35.00	18.00	3066938.76	13764376.85
P56	222+40.00	43.00	35.00	18.00	3066934.62	13764369.18
P57	223+90.27	43.00	35.00	18.00	3066863.28	13764236.92

- LEGEND**
- SHEET PILE
  - OF CREEK
  - SILT FENCE
  - WORK LIMITS
  - APPROX. EASEMENT
  - APPROX. TREE LINE
  - APPROX. TOP CREEK BANK
  - APPROX. PARCEL
  - VEGETATION AREA
  - EXISTING FENCE
  - UNDERGROUND GAS PIPELINE
  - GAS EASEMENT LINES

REVISIONS		
DATE	APPROVED	TITLE
1/25/2021		ADDED GAS LINE, ADJUSTED PILING