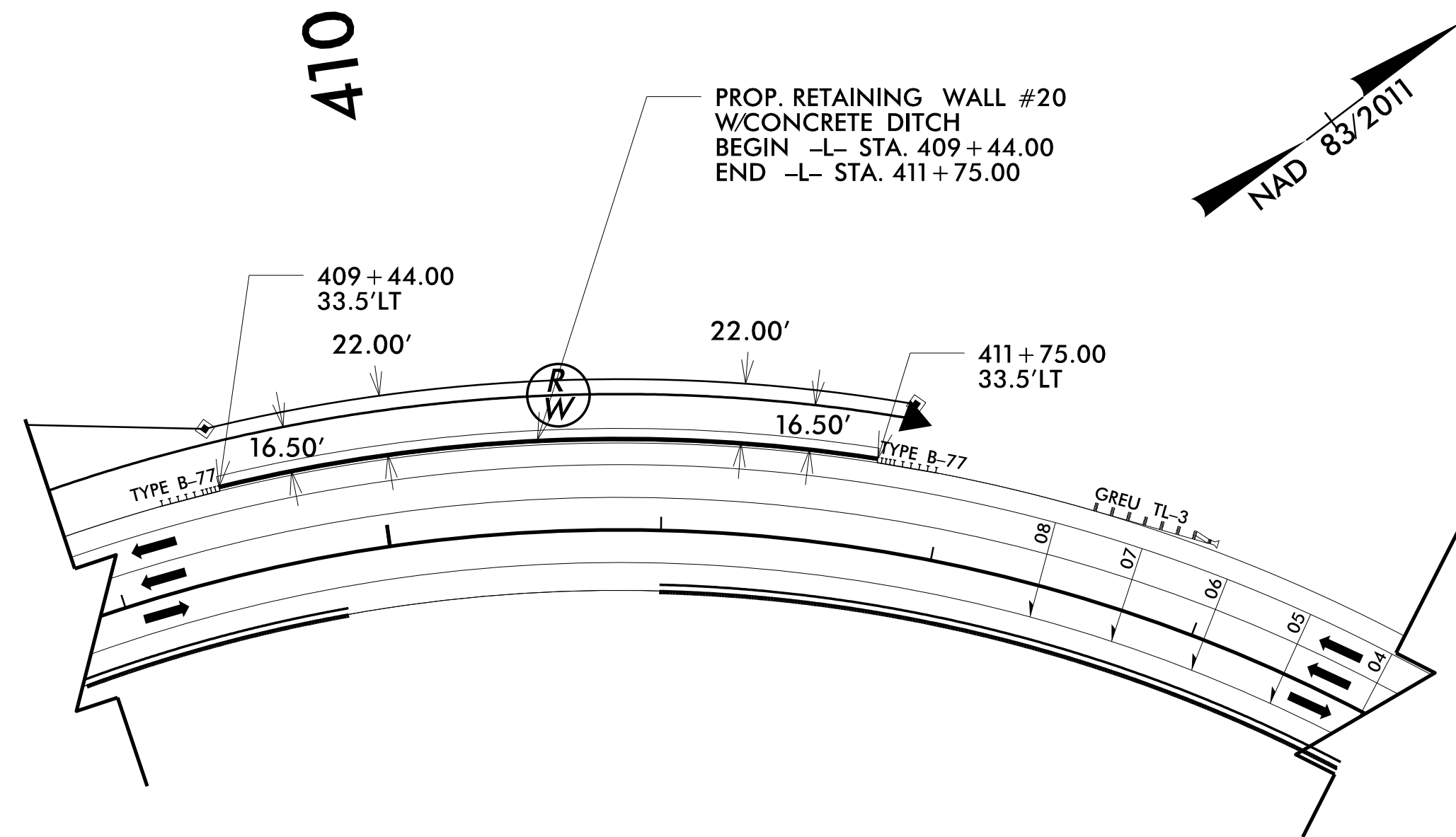
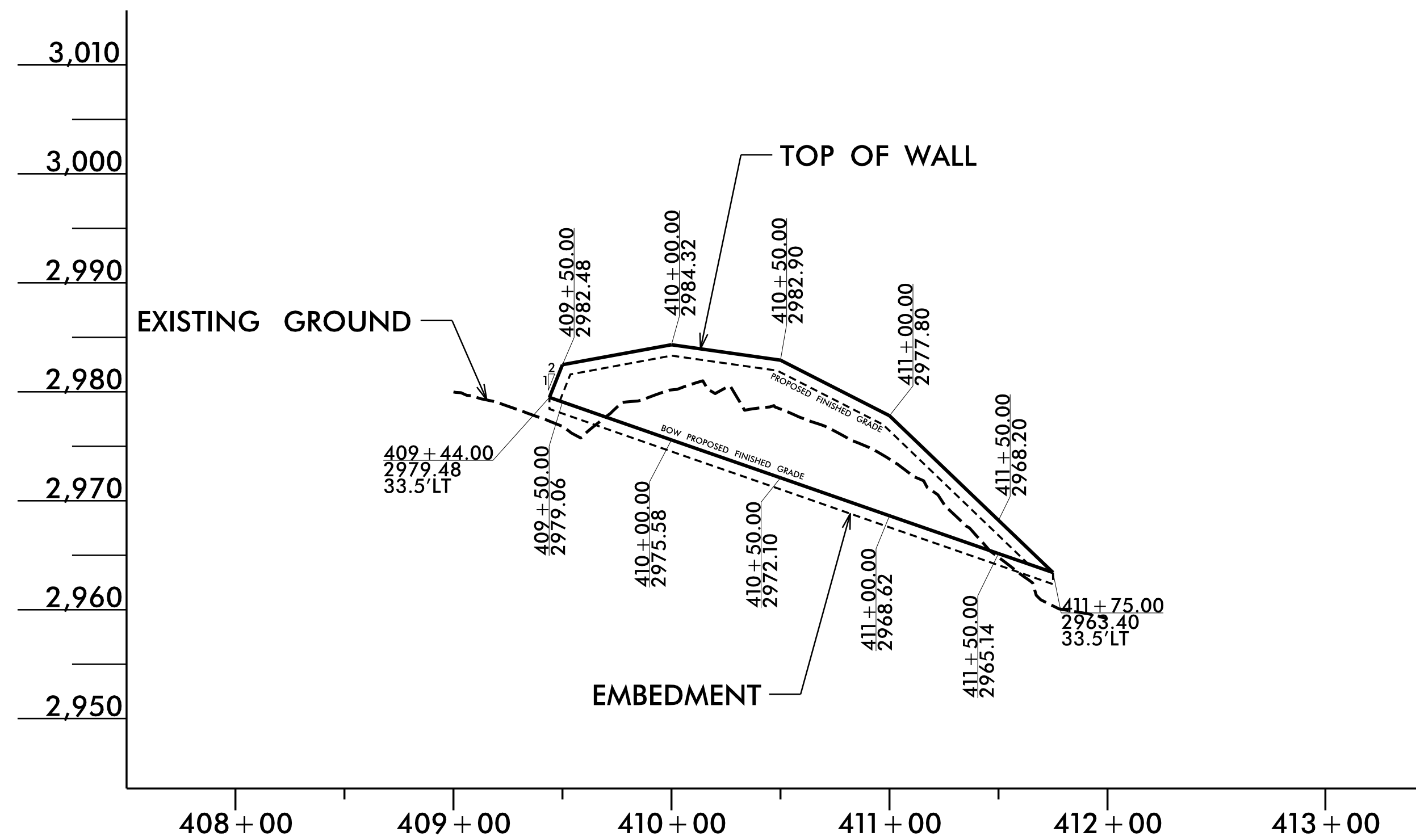


# RETAINING WALL #20:



**RETAINING WALL #20 - PLAN**

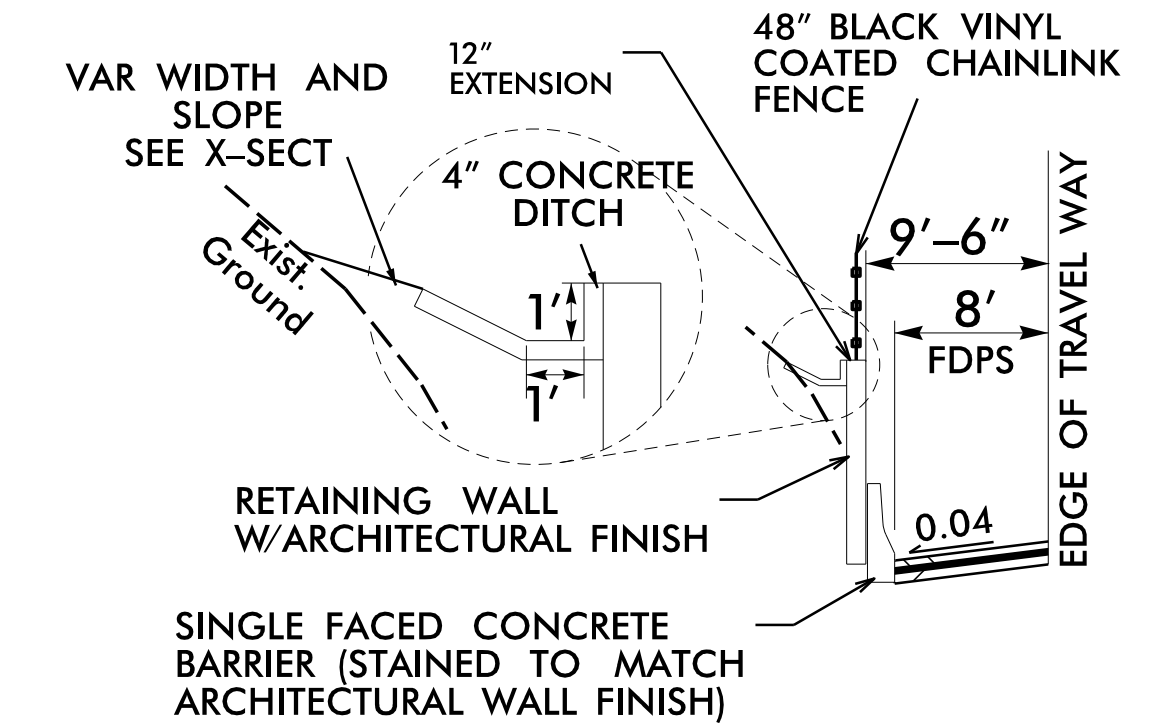
NOT TO SCALE



**RETAINING WALL #20 - ENVELOPE**

NOT TO SCALE  
BOW = BOTTOM OF WALL  
(LOOKING AT FACE OF WALL)

GEOTECHNICAL ENGINEER  Robert E. Kral	ENGINEER    DATE: 6/9/2022 SIGNATURE: _____ DATE: _____
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



**DETAIL FOR WALL #20**

NOT TO SCALE

-L- STA. 409+44.00 TO -L- STA. 411+75.00, LT

ESTIMATED SOIL NAIL WALL QUANTITIES			
RETAINING WALL NO.	SOIL NAIL RETAINING WALLS (SQUARE FEET)	SOIL NAIL VERIFICATION TESTS	SOIL NAIL PROOF TESTS
20	1,900*	2	10
FORM LINER ARCHITECTURAL FINISH			1,900* SF
HORIZONTAL DRAINS (CONTINGENCY)			120 LF

\* INCLUDES RETAINING WALL EMBEDMENT

SOIL NAIL RETAINING WALL #20						
STA. -L-	OFFSET FROM -L- (LT) FT.	ELEV. @ TOP OF WALL	BOW PROPOSED FINISHED GRADE	TOP OF LEVELING PAD	ESTIMATED WALL EMBEDMENT FT.	WALL DESIGN HEIGHT "H"
409+44.00	29.74	2979.48	2979.48	2978.48	1.00	1.00
409+50.00	29.91	2982.48	2979.06	2978.06	1.00	3.42
410+00.00	30.74	2984.32	2975.58	2974.58	1.00	8.74
410+50.00	31.58	2982.90	2972.10	2971.10	1.00	10.80
411+00.00	32.41	2977.80	2968.62	2967.62	1.00	9.18
411+50.00	33.25	2968.20	2965.14	2964.14	1.00	3.06
411+75.00	34.08	2963.40	2963.40	2962.40	1.00	1.00

PROJECT NO.: A-0009CB

GRAHAM COUNTY

RETAINING WALL #20: -L- 409+44, 34' LT TO 411+75, 34' LT

SHEET 1 OF 3

PREPARED BY: R. KRAL  
REVIEWED BY: M. BREWER

DATE: 5/11/2022  
DATE: 5/11/2022

RETAINING WALL #20 ENVELOPE AND WALL LAYOUT PROVIDED BY TGS ENGINEERS, INC.

Prepared in the Office of:

**CAROLINAS GEOTECHNICAL GROUP**  
2400 CROWNPOINT EXECUTIVE DRIVE  
SUITE 800  
CHARLOTTE, NC 28227  
(980) 339-8684

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS**

**GEOTECHNICAL ENGINEERING UNIT**

**RETAINING WALL #20  
SOIL NAIL RETAINING WALL**

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W20-1
2			4			