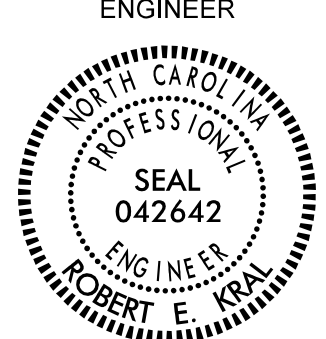
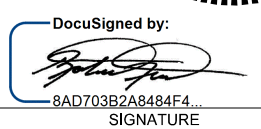
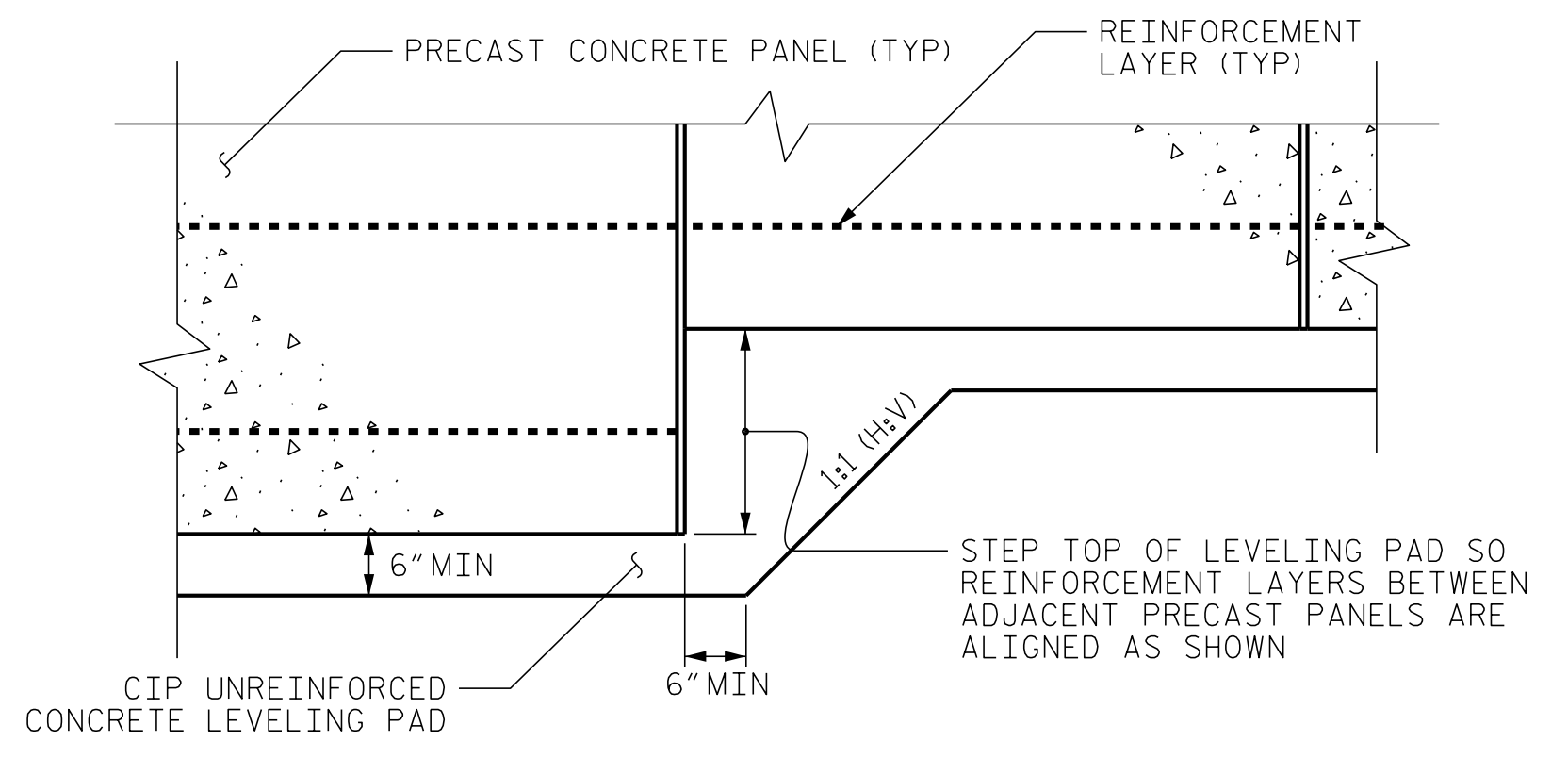


GEOTECHNICAL ENGINEER  ROBERT E. KEAL	ENGINEER
DocuSigned by:  SA07082AB84F# SIGNATURE	7/15/2022 DATE
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SMSE RETAINING WALL #29A INFORMATION									
STA. -L-	OFFSET RT FROM CL TO WALL FACE	FINISHED GRADE	BOTTOM OF WALL	MINIMUM TOP OF LEVELING PAD	ESTIMATED MINIMUM SMSE WALL EMBEDMENT	* DESIGN SMSE WALL HEIGHT "H"	TOP OF SOIL NAIL WALL	APPROX. SOIL NAIL WALL HEIGHT	WALL REINFORCEMENT (MSE STRAP) LENGTH "L"
396+75.00	31.94	3063.95	3063.95	3061.95	2.00	2.00	3063.95	2.00	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
396+80.00	31.84	3066.45	3061.45	3059.45	2.00	7.00	3065.23	5.78	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
396+80.30	31.82	3066.60	3061.30	3059.30	2.00	7.30	3065.20	5.90	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
396+82.40	31.79	3066.46	3060.25	3058.25	2.00	8.21	3065.00	6.75	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
397+00.00	31.47	3065.26	3057.93	3054.93	3.00	10.33	3063.36	8.43	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
397+50.00	30.56	3061.87	3051.99	3048.99	3.00	12.88	3059.23	10.24	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
398+00.00	29.66	3058.50	3050.46	3047.46	3.00	11.04	3055.98	8.52	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
398+50.00	28.83	3055.17	3049.82	3047.82	2.00	7.35	3053.19	5.37	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
398+75.00	28.83	3050.59	3050.59	3048.59	2.00	2.00	3050.59	2.00	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)

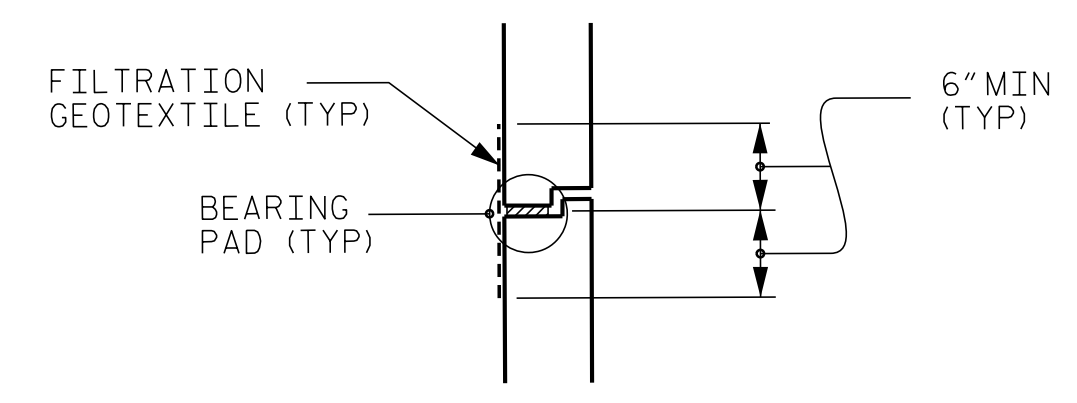
* FOR DESIGN WALL HEIGHT "H" AND ADDITIONAL CONSTRUCTION DETAILS, SEE ADDITIONAL SHEETS
ALL TABLE DIMENSIONS ARE GIVEN IN FEET



PRECAST PANELS
LEVELING PAD STEP DETAIL
NOT TO SCALE

FRONT SLOPE WALL EMBEDMENT		
SLOPE IN FRONT OF STRUCTURES		MINIMUM EMBEDMENT DEPTH
HORIZONTAL	FOR WALLS	H/20
	FOR ABUTMENTS	H/10
3.0H:1.0V	WALLS	H/10
2.5H:1.0V	WALLS	H/8.5
2.0H:1.0V	WALLS	H/7
1.5H:1.0V	WALLS	H/5
1.25H:1.0V	WALLS	H/4
1.0H:1.0V	WALLS	H/3

- NOTE:
- 1) MAINTAIN A MINIMUM BENCH WIDTH OF 4.0 FT IN FRONT OF THE WALL FOR ITS ENTIRE LENGTH.
 - 2) MINIMUM EMBEDMENT DEPTH OF 2 FT, UNLESS LARGER DEPTHS DICTATED BY ABOVE TABLE.
 - 3) MAXIMUM SLOPE OF 1H:1V WILL BE MAINTAINED ON FRONT SLOPES FOR THE ENTIRE LENGTH OF THE WALL.
 - 4) SUBMIT WITH THE WALL DESIGN INTERNAL, EXTERNAL, AND GLOBAL STABILITY ANALYSES. REFERENCE SPECIAL PROVISION GT-7 FOR SMSE WALL.



PRECAST PANEL
JOINT DETAILS
NOT TO SCALE

ESTIMATED SMSE WALL #29A QUANTITIES	
SHORED MSE RETAINING WALL #29A	2,070 SQ. FT.

ESTIMATED SOIL NAIL WALL QUANTITIES			
RETAINING WALL #	SOIL NAIL RETAINING WALLS (SQUARE FEET)	SOIL NAIL VERIFICATION TESTS	SOIL NAIL PROOF TESTS
29A	1,550 *	2	5

* INCLUDES RETAINING WALL EMBEDMENT

PROJECT NO.: A-0009CB
GRAHAM COUNTY
STATION: -L-396+75, 32' RT TO 398+75, 29' RT
SHEET 2 OF 6

Prepared in the Office of:



**CAROLINAS
GEOTECHNICAL
GROUP**
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(980) 339-8684

REVISIONS						SHEET NO. W29A-2
NO.	BY	DATE	NO.	BY	DATE	
1			3			
2			4			

PREPARED BY: DMB	DATE: 7/14/2022
REVIEWED BY: REK	DATE: 7/14/2022