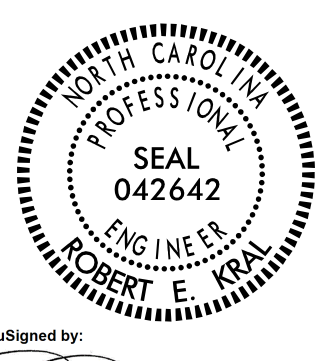


GEOTECHNICAL ENGINEER

ENGINEER



Robert E. Kral

08/01/2022

DATE

SIGNATURE

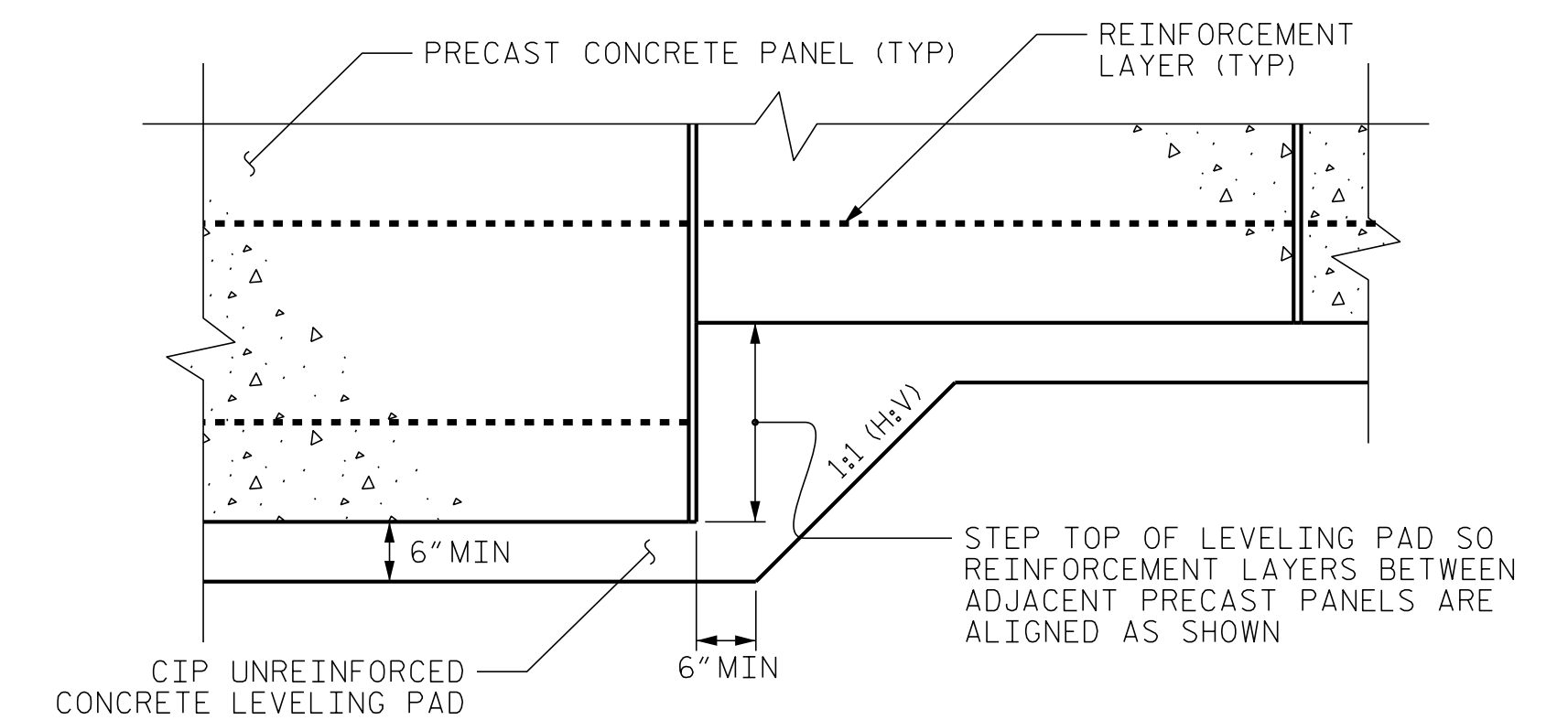
DATE

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

SMSE RETAINING WALL #30 INFORMATION									
STA. -Y2-	OFFSET 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"
26+50.00	38.50	2496.69	2496.69	2494.69	2.00	2.00	2496.69	2.00	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
27+00.00	31.84	2492.71	2471.33	2466.33	5.00	26.38	2484.15	17.02	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
27+50.00	31.82	2488.78	2462.08	2457.08	5.00	31.70	2481.05	23.97	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
28+00.00	31.79	2484.81	2460.82	2455.82	5.00	28.99	2477.73	21.91	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
28+50.00	31.47	2480.93	2473.26	2471.26	2.00	9.67	2477.42	6.16	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
28+75.00	30.56	2479.11	2479.61	2477.11	2.00	2.00	2479.11	2.00	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)

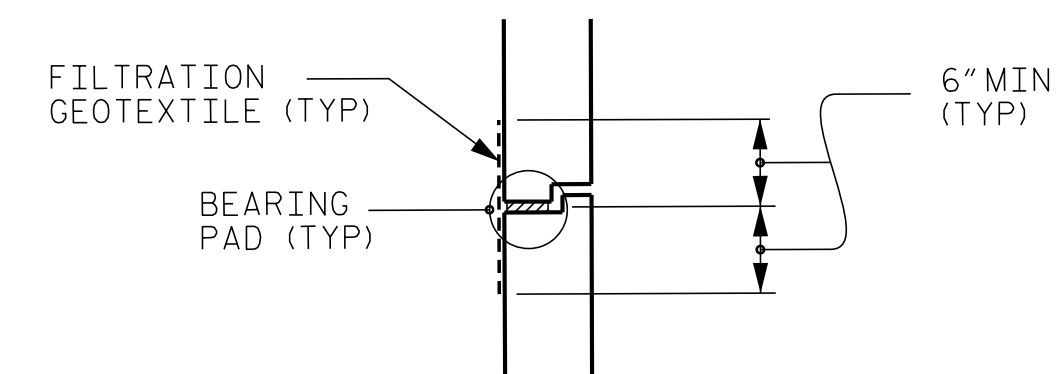
\* FOR DESIGN WALL HEIGHT "H" AND ADDITIONAL CONSTRUCTION DETAILS, SEE SHEETS 3 AND 4

ALL TABLE DIMENSIONS ARE GIVEN IN FEET



PRECAST PANELS LEVELING PAD STEP DETAIL

NOT TO SCALE



PRECAST PANEL JOINT DETAILS

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 10.0 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-12 FOR SMSE WALL.

ESTIMATED SMSE WALL #30 QUANTITIES

SHORED MSE RETAINING WALL #30     3,900 SQ. FT.

ESTIMATED SOIL NAIL WALL QUANTITIES

RETAINING WALL #	SOIL NAIL RETAINING WALLS (SQUARE FEET)	SOIL NAIL VERIFICATION TESTS	SOIL NAIL PROOF TESTS
30	3,500*	2	10

\* INCLUDES RETAINING WALL EMBEDMENT

PROJECT NO.: A-0009CC

GRAHAM COUNTY

STATION: -Y2- 26+50, 39' LT TO 28+75, 39' LT

SHEET 2 OF 7

Prepared in the Office of:



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

RETAINING WALL #30  
SHORED MECHANICALLY  
STABILIZED EARTH (SMSE) WALL

REVISIONS						SHEET NO. W30-2
NO.	BY	DATE	NO.	BY	DATE	
1			3			
2			4			

PREPARED BY: R. KRAL	DATE: 8/1/2022
REVIEWED BY: M. BREWER	DATE: 8/1/2022