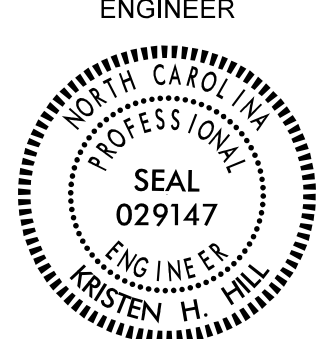


GEOTECHNICAL ENGINEER



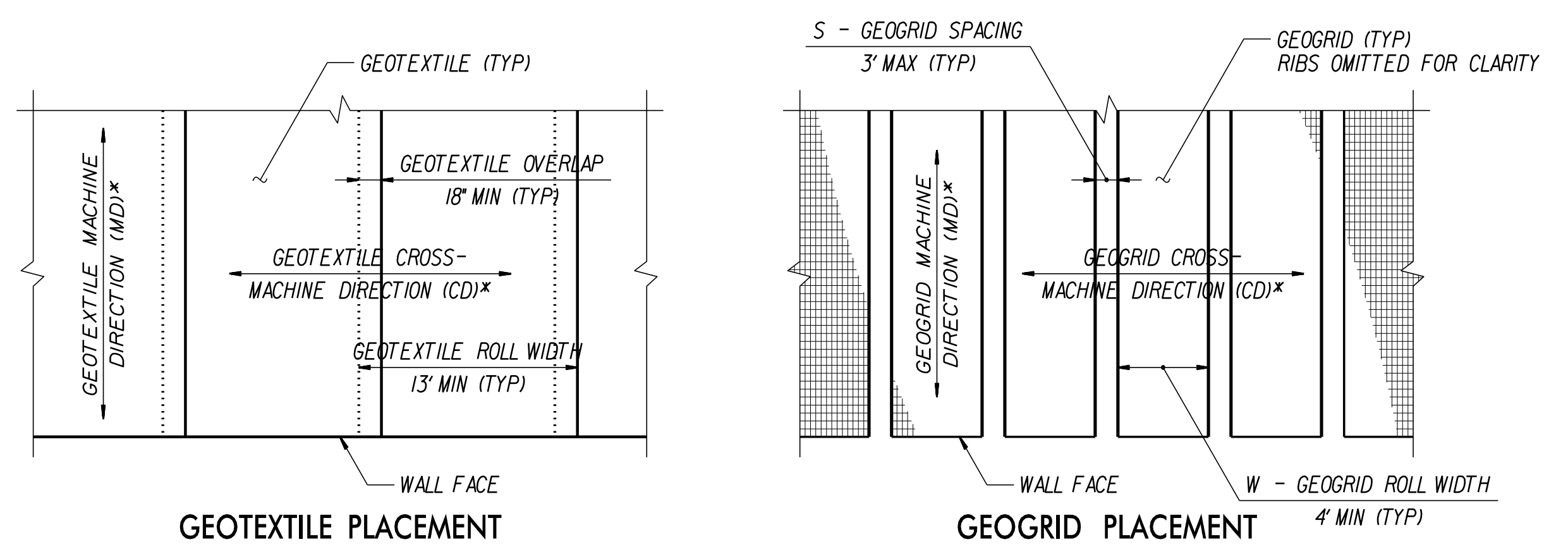
ENGINEER

Designed by: Kristen Hill 3/5/2020

ES2020CBS48224FZ SIGNATURE DATE SIGNATURE DATE

WALL	LAYER NO.*	APPROX. WALL ALIGNMENT STATIONING		LAYER ELEVATION (FT)	MINIMUM REINFORCEMENT STRENGTH IN MD		CLASS VI BACKFILL REQUIRED FOR LAYERS***	BOTTOM LAYER*** APPROX. EXCAVATION DEPTH (FT)
		TO	FROM		GEOTEXTILE LONG-TERM DESIGN TENSILE STRENGTH (LB/FT)	GEOGRID LONG-TERM DESIGN TENSILE STRENGTH (LB/FT)		
1	1	12+90	to 13+90	18	2,640	1,875	-	-
	2	12+60	to 14+25	16.5	2,640	1,875	-	-
	3	12+30	to 14+50	15	2,640	1,875	-	-
	4	11+90	to 14+65	13.5	2,640	1,875	-	-
	5	11+50	to 14+80	12	4,800	3,600	-	-
	6	11+10	to 14+90	10.5	4,800	3,600	-	-
	7	10+50	to 14+96	9	4,800	3,600	-	-
	8	10+10	to 14+96	7.5	4,800	3,600	-	1.8 to 2
	9	10+00	to 14+55	6	7,200	5,000	-	2.5 to 3
	10	10+00	to 14+35	4.5	7,200	5,000	-	3.5 to 4.5
	11	10+00	to 14+25	3	7,200	5,000	-	3 to 5
	12	10+00	to 14+00	1.5	7,200	5,000	-	2 to 5
	13	10+75	to 13+85	0	10,000 **	-	X	1.8 to 5.5
	14	10+85	to 12+75	-1.5	10,000	-	X	1.8 to 3
	15	11+50	to 12+60	-3	10,000	-	X	1.8 to 3
2	1	10+00	to 10+70	10	2,640	1,875	-	-
	2	10+00	to 11+25	8.5	2,640	1,875	-	-
	3	10+00	to 11+45	7	2,640	1,875	-	-
	4	10+00	to 11+55	5.5	4,800	1,875	-	-
	5	10+00	to 11+60	4	4,800	3,600	-	-
	6	10+00	to 11+64	2.5	7,200	3,600	-	-
	7	10+00	to 11+64	1	7,200	3,600	-	1.8 to 2.5
	8	10+00	to 11+00	-0.5	7,200	-	X	1.8 to 3.5
	9	10+00	to 10+65	-2	7,200	-	X	2 to 9

MINIMUM REQUIRED REINFORCEMENT LENGTH		
WALL	WALL ALIGN. STATIONS	LENGTH
1	10+00 to 13+11.75	17
1	13+11.75 to 13+58.25	15
1	13+58.25 to 14+96.6	17
2	10+00 to 10+43.63	12
2	10+43.63 to 11+63.90	10



GEOTEXTILE PLACEMENT
(100% COVERAGE MIN FOR GEOTEXTILE REINFORCEMENT)

GEOGRID PLACEMENT
(80% COVERAGE MIN FOR GEOGRID REINFORCEMENT - $\frac{W}{W+S} \times 100 \geq 80\%$)

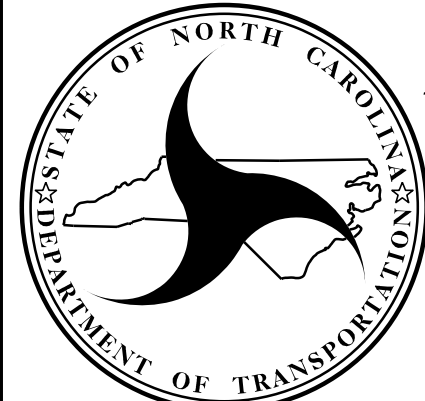
GEOSYNTHETIC PLACEMENT DETAILS
(PLAN VIEW)

* SEE PARTIAL ELEVATION ON SHEETS W-17 & W-18 FOR REINFORCEMENT LAYER NUMBERING
 ** FROM APPROXIMATELY STATION 10+75 TO 13+85, PLACE HIGH STRENGTH GEOTEXTILE. SEE SHEETS W-17, W-18 AND W-21 FOR PLAN AND ELEVATION VIEWS OF HIGH STRENGTH GEOTEXTILE EXTENTS.
 **** SEE PROFILE VIEW ON SHEETS W-17 & W-18 FOR FURTHER DETAIL.

PROJECT NO.: 40212.1.1 (B-4863)
 CARTERET COUNTY
 STATION: 15+75 & 50+70 -L-

PREPARED BY: K.H.H. DATE: 03/2020
 REVIEWED BY: A.Y.A. DATE: 03/2020

W&M
 9751 SOUTHERN PINE BLVD
 CHARLOTTE, NC 28273
 (704) 523-4726



NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

**GEOTECHNICAL
 ENGINEERING UNIT**

REINFORCED RETAINING WALL BACKFILL

REVISIONS						SHEET NO. W-20
NO.	BY	DATE	NO.	BY	DATE	
1			3			
2			4			