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GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 041986 ENGINEER D. MATTHEW BREWER

DocuSigned by: D. Matthew Brewer 7/15/2022
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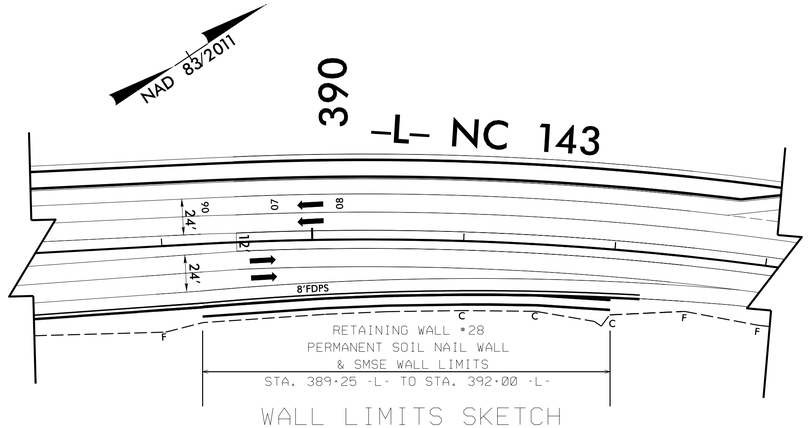
SIGNATURE DATE

ENGINEER

SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



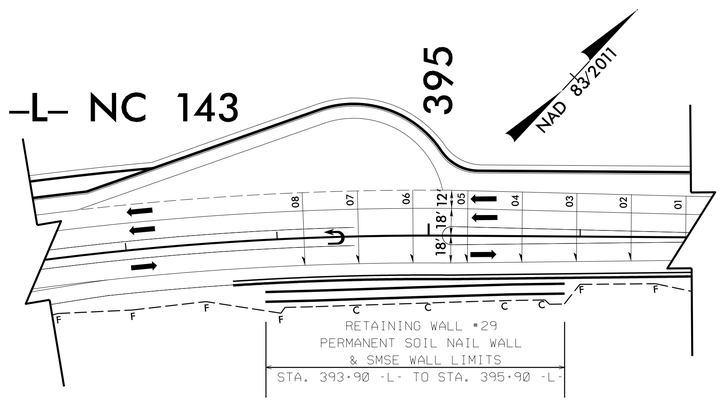
WALL LIMITS SKETCH

NOT TO SCALE

SMSE RETAINING WALL #28 INFORMATION									
STA. -L-	OFFSET RT FROM CL TO WALL FACE	TOP OF WALL	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'
389+25.00	47.86	3114.90	3114.40	3112.40	2.00	2.00	3115.00	2.60	0.5XH OR 6 FT (MIN)
389+50.00	47.41	3115.56	3109.55	3107.55	2.00	7.51	3115.24	7.69	0.5XH OR 6 FT (MIN)
390+00.00	45.59	3112.46	3105.44	3102.44	3.00	9.52	3111.72	9.28	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
390+50.00	43.62	3109.39	3102.74	3100.74	2.00	8.15	3108.37	7.63	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
391+00.00	41.94	3106.30	3099.48	3097.48	2.00	8.32	3104.54	7.06	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
391+50.00	40.22	3102.98	3096.07	3094.07	2.00	8.41	3100.79	6.72	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
391+90.00	40.08	3100.26	3094.07	3092.07	2.00	7.69	3098.25	6.18	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
392+00.00	39.93	3099.57	3099.07	3097.07	2.00	2.00	3098.00	0.93	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



WALL LIMITS SKETCH

NOT TO SCALE

SMSE RETAINING WALL #29 INFORMATION									
STA. -L-	OFFSET RT FROM CL TO WALL FACE	TOP OF WALL	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'
393+90.00	40.82	3086.22	3085.72	3083.72	2.00	2.00	3084.15	0.43	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
394+00.00	41.08	3085.56	3080.72	3078.72	2.00	6.34	3084.15	5.43	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
394+50.00	41.43	3082.24	3071.47	3068.48	3.00	13.27	3080.39	11.92	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
394+57.00	41.36	3081.79	3070.11	3067.11	3.00	14.18	3079.90	12.79	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
395+00.00	40.44	3079.03	3065.96	3062.96	3.00	15.57	3077.29	14.33	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
395+50.00	38.63	3075.85	3065.95	3063.95	2.00	11.40	3073.90	9.95	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
395+77.04	37.97	3074.09	3066.23	3064.23	2.00	9.36	3072.30	8.07	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
395+80.00	37.90	3073.90	3068.71	3066.71	2.00	6.69	3072.12	5.41	LOWER: 0.5XH OR 6 FT (MIN) UPPER: 0.7XH OR 10 FT (MIN)
395+90.00	37.69	3073.25	3072.75	3070.75	2.00	2.00	3072.12	1.37	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

PROJECT NO.: A-0009CB

GRAHAM COUNTY

RETAINING WALL #28 STATION: -L- 389+25, 47' RT TO 392+00, 39' RT

RETAINING WALL #29 STATION: -L- 393+90, 40' RT TO 395+90, 37' RT

SHEET 2 OF 10

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

Prepared in the Office of:

CAROLINAS GEOTECHNICAL GROUP
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(980) 339-8684

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

RETAINING WALL #28 AND #29 SHORED MECHANICALLY STABILIZED EARTH (SMSE) WALL

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

SHEET NO. W28_29 -2