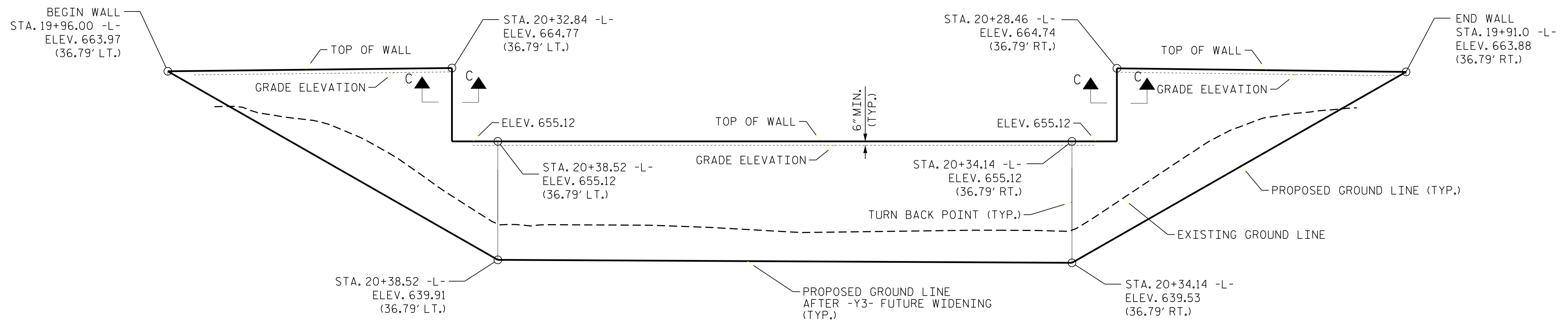
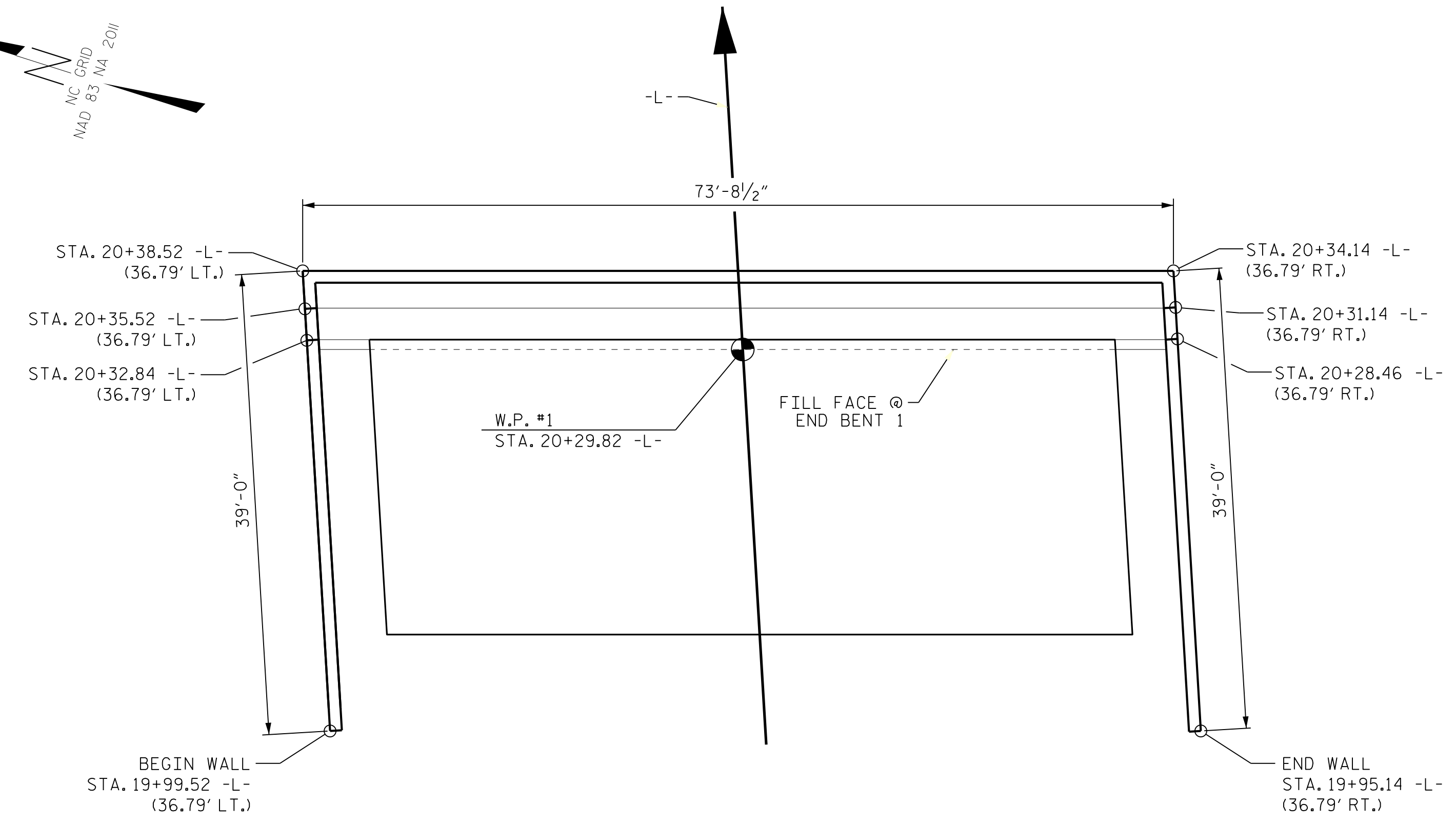
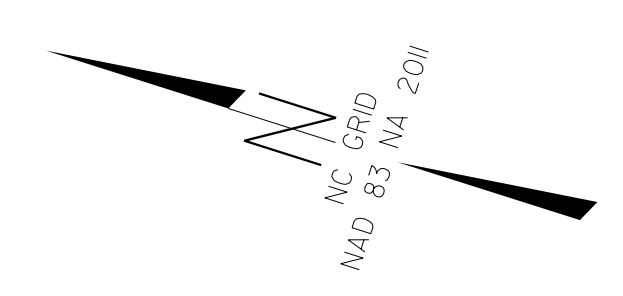


GEOTECHNICAL ENGINEER
 NORTH CAROLINA PROFESSIONAL SEAL 028669
 RICHARD S. WEBB
 DocuSigned by: Scott Webb 01/20/2022
 DATE: 01/20/2022
 SIGNATURE: _____ DATE: _____
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



ELEVATION - MSE WALL NO. 1
 AT END BENT 1
 STATIONS AND OFFSETS GIVEN AT FRONT FACE OF WALL



PLAN - MSE WALL NO. 1
 STATIONS AND OFFSETS GIVEN AT FRONT FACE OF WALL

ESTIMATED MSE WALL QUANTITIES (SQUARE FEET)

MSE ABUTMENT WALL NO. 1	2100 SF
MSE ABUTMENT WALL NO. 2	2100 SF
TOTAL	4200 SF

DESIGN MSE ABUTMENT WALLS FOR THE FOLLOWING:
 1) H = DESIGN HEIGHT + EMBEDMENT
 2) DESIGN LIFE = 100 YEARS
 3) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 6000 PSF
 4) MINIMUM REINFORCEMENT LENGTH (L) = 0.7 H
 5) DESIGN PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (g) LB/CF	FRICTION ANGLE (f) DEGREES	COHESION (c) LB/SF
COARSE AGGREGATE	110	38	0
FINE AGGREGATE	120	34	0
RETAINED SOIL	120	30	0
FOUNDATION SOIL	120	30	0

DUE TO THE PRESENCE OF TRIASSIC SOIL, CUT SLOPES MAY NOT BE STABLE.
 SEE "ANALYSIS OF SLOPE FAILURE IN OVERCONSOLIDATED FISSURED RESIDUAL SOIL" PUTRICH ET AL. TRR 1089

PROJECT NO.: B-5737
 ROCKINGHAM COUNTY
 STATION: 20+86.07 -L-
 SHEET 1 OF 4

PREPARED BY: R. WEBB DATE: 1-22
 REVIEWED BY: D. TEAGUE DATE: 1-22

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

MSE ABUTMENT WALLS ENVELOPES

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W1
2			4			