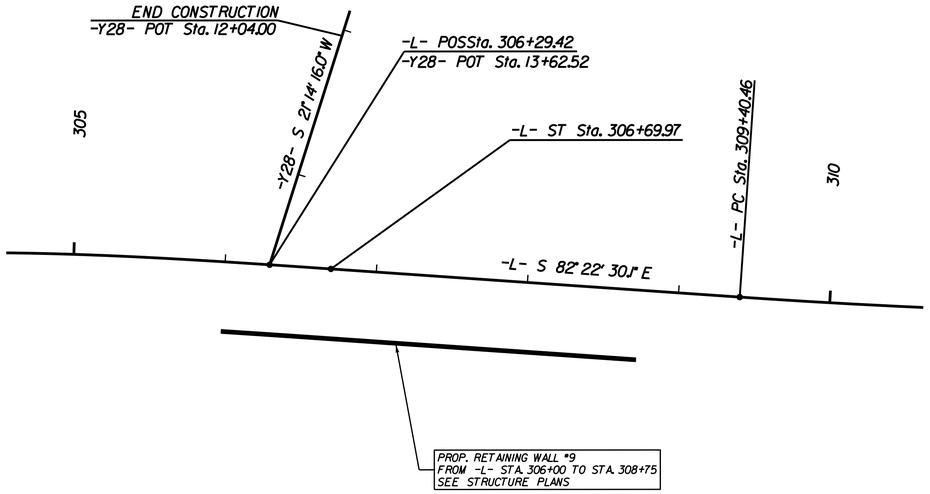

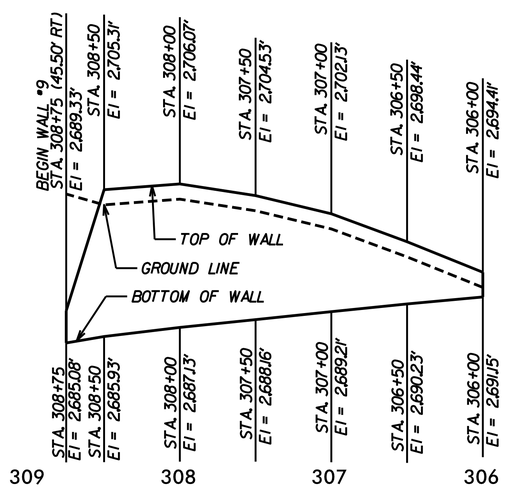

GEOTECHNICAL ENGINEER	ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 027869 ENGINEER DAVID L. TEAGUE	
DocuSigned by: David Teague 8/29/2014	
5014EE449B0A4... SIGNATURE DATE	SIGNATURE DATE

NOTES:

FOR SOIL NAIL RETAINING WALLS, SEE SOIL NAIL RETAINING WALLS PROVISION.

FOR SINGLE FACED PRECAST CONCRETE BARRIER, SEE ROADWAY PLANS AND SECTION 857 OF THE STANDARD SPECIFICATIONS.

BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALL NO. 9, SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALL NO. 9 FOR WALL HEIGHTS EQUAL TO THE DESIGN HEIGHT (DIFFERENCE BETWEEN GRADE ELEVATION AND BOTTOM OF WALL ELEVATION) PLUS EMBEDMENT (DIFFERENCE BETWEEN BOTTOM OF WALL ELEVATION AND TOP OF LEVELING PAD ELEVATION).

DESIGN RETAINING WALL NO. 9 FOR THE FOLLOWING:
1) MINIMUM DESIGN LIFE = 100 YEARS
2) IN-SITU ASSUMED MATERIAL PARAMETERS:
   UNIT WEIGHT, γ = 120 PCF
   FRICTION ANGLE, ϕ = 30 DEGREES
   COHESION, c = 0 PSF

USE TYPICAL SECTION C FOR RETAINING WALL NO. 9.

PAY ITEMS
SOIL NAIL RETAINING WALLS = 3,700 SQ.FT.
SOIL NAIL VERIFICATION TESTS = 2
SOIL NAIL PROOF TESTS = 8

PROJECT NO.: R-2519B (35609JJ)
YANCEY/MITCHELL **COUNTY**
STATION: 306+00.00 -L- TO 308+75.00 -L-
SHEET 1 OF 1

GEOTECHNICAL ENGINEERING UNIT
☐ EASTERN REGIONAL OFFICE
☐ WESTERN REGIONAL OFFICE
☒ CONTRACT OFFICE
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

RETAINING WALL NO.9
SOIL NAIL WALL

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	W-11
1			3			TOTAL SHEETS
2			4			18

PREPARED BY:	D.TEAGUE	DATE:	5/11
REVIEWED BY:	E.WILLIAMS	DATE:	5/11