TIMBER RETAINING WALLS - NOTES

FOR TIMBER RETAINING WALLS, SEE TIMBER RETAINING WALL SPECIAL PROVISION.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

BACKFILL BEHIND RETAINING WALL NO. 1 AND NO. 2 SHALL BE CLASS VI SELECT MATERIAL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS 1016-3 OR AT CONTRACTOR'S OPTION USE SELECT GRANULAR MATERAL, CLASS III.

A SEPARATION GEOTEXTILE IS REQUIRED BETWEEN THE REAR FACE OF THE TIMBER WALL AND THE BACKFILL MATERIAL. A SEPERATION GEOTEXTILE SHALL ALSO BE PLACED BETWEEN EXISTING EMBANKMENT AND BACKFILL MATERIALS IF CLASS VI SELECT MATERIAL IS USED FOR BACKFILL.

BEFORE BEGINNING WALL DESIGN, 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. FOR THE FOLLOWING:

1) IN-SITU ASSUMED MATERIAL PARAMETERS BELOW ELEVATION 2 FT:
   - UNIT WEIGHT, γ = 120 PCF
   - FRICTION ANGLE, ϕ = 30 DEGREES
   - COHESION, c = 0 PSF

2) BACKFILL MATERIAL PARAMETERS:
   - COARSE (CLASS VI)
   - UNIT WEIGHT, γ= 110 PCF
   - FRICTION ANGLE, ϕ= 38 DEGREES
   - COHESION, c = 0 PSF

   - FINE (CLASS III)
   - UNIT WEIGHT, γ= 120 PCF
   - FRICTION ANGLE, ϕ= 34 DEGREES
   - COHESION, c = 0 PSF

DESIGN RETAINING WALLS NO. 1 AND NO. 2 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

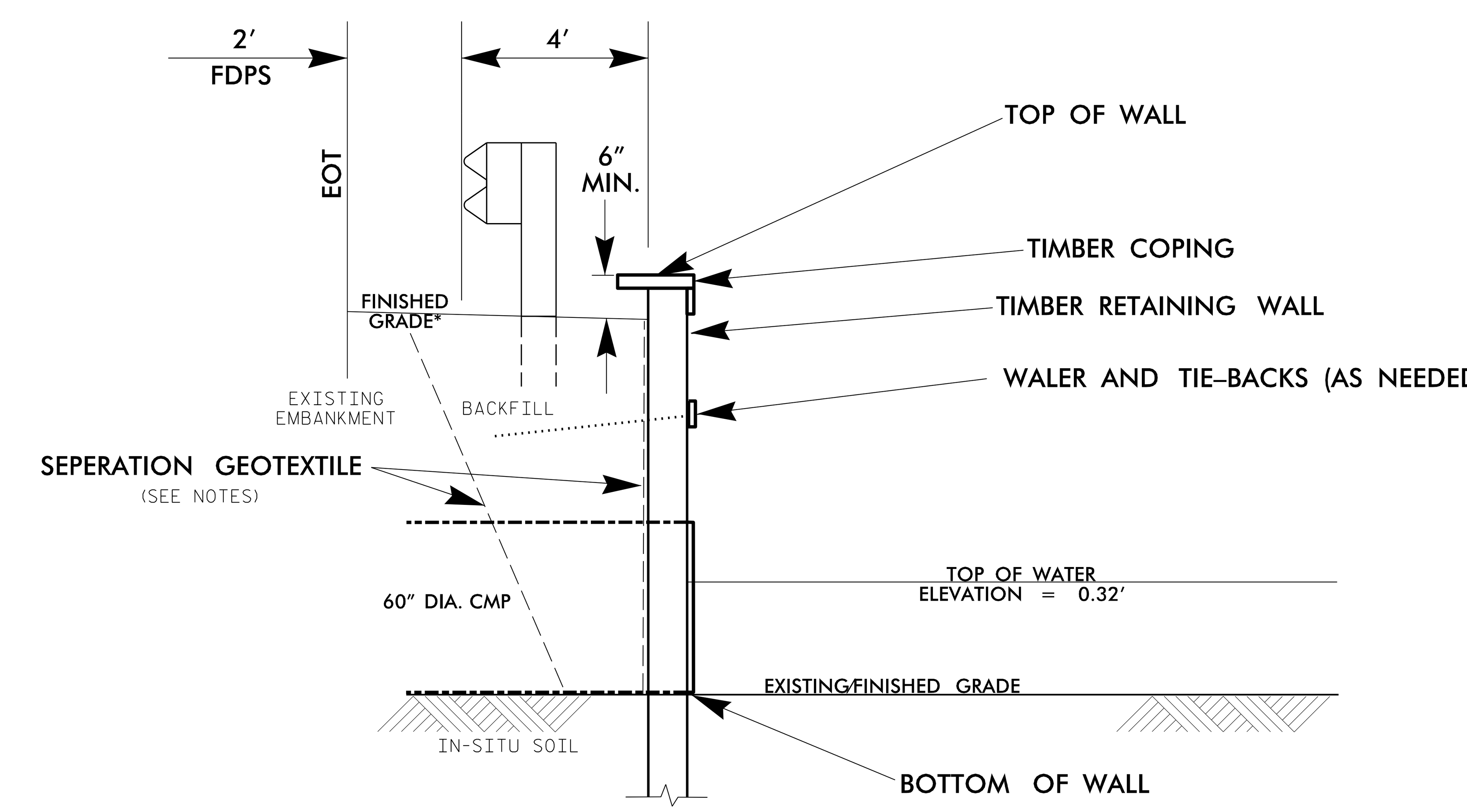
BEFORE BEGINNING TIMBER PILE WALL DESIGN FOR RETAINING WALLS NO. 1 AND NO. 2, SURVEY WALL LOCATION.

DESIGN RETAINING WALLS NO. 1 AND NO. 2 FOR A PIPE BEDDING UNDER OR THROUGH THE WALL AS SHOWN. VERIFY PIPE LOCATION AND ELEVATION BEFORE BEGINNING TIMBER WALL DESIGN OR CONSTRUCTION.

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH TIE-BACKS FOR RETAINING WALL NO. 1 AND NO. 2.

TEMPORARY SHORING IS REQUIRED IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION. SEE TRAFFIC CONTROL PLANS.

AT THE CONTRACTOR'S OPTION, TEMPORARY SHORING FOR WALL CONSTRUCTION MAY BE USED TO CONSTRUCT RETAINING WALL NO. 1 AND NO. 2.



TIMBER RETAINING WALL TYPICAL SECTION (N.T.S.)

*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 028422 ENGINEER DONALD W. BROWN, JR.

DocuSigned by: C06817F5F7... SIGNATURE 1/2/2019 DATE

ENGINEER

SIGNATURE DATE

PROJECT NO.: R-5014

DARE COUNTY

STATION: -Y3C- 10+30

SHEET 2 OF 2

PREPARED BY: D. BROWN, PE	DATE: 12-12-18
REVIEWED BY: C.T. TANG, PE	DATE: 12-12-18

STEWART

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

RETAINING WALL NO. 1 & RETAINING WALL NO. 2 PLAN NOTES & TYPICAL SECTION

REVISIONS

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

SHEET NO. 2G-3