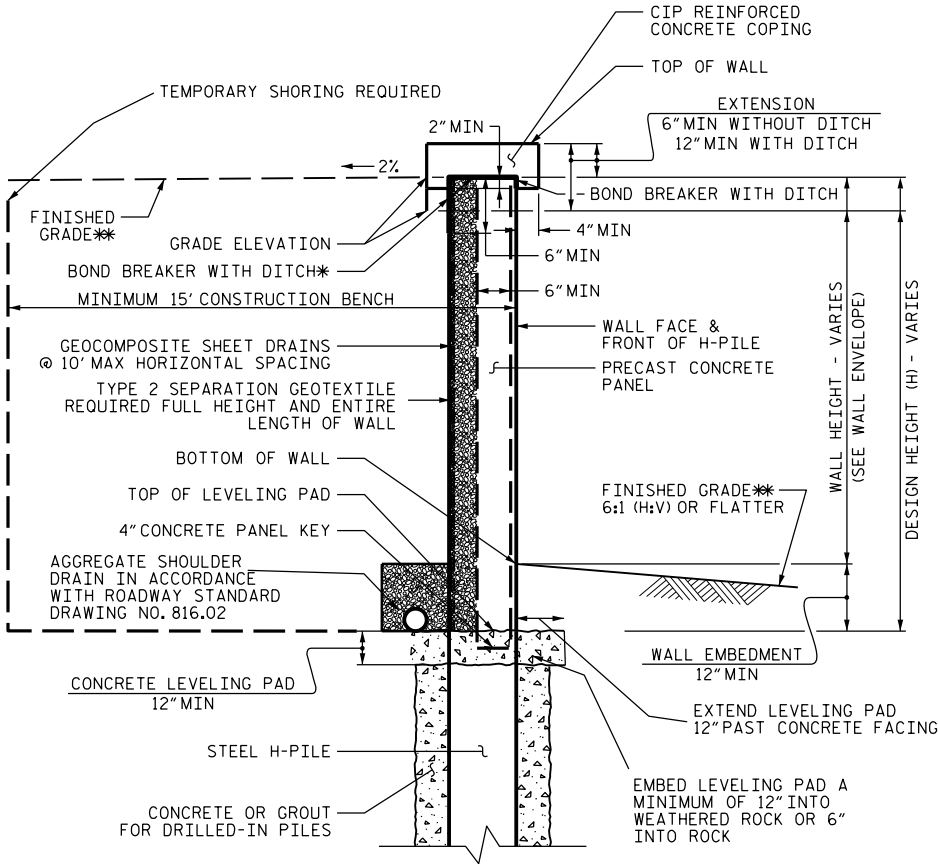
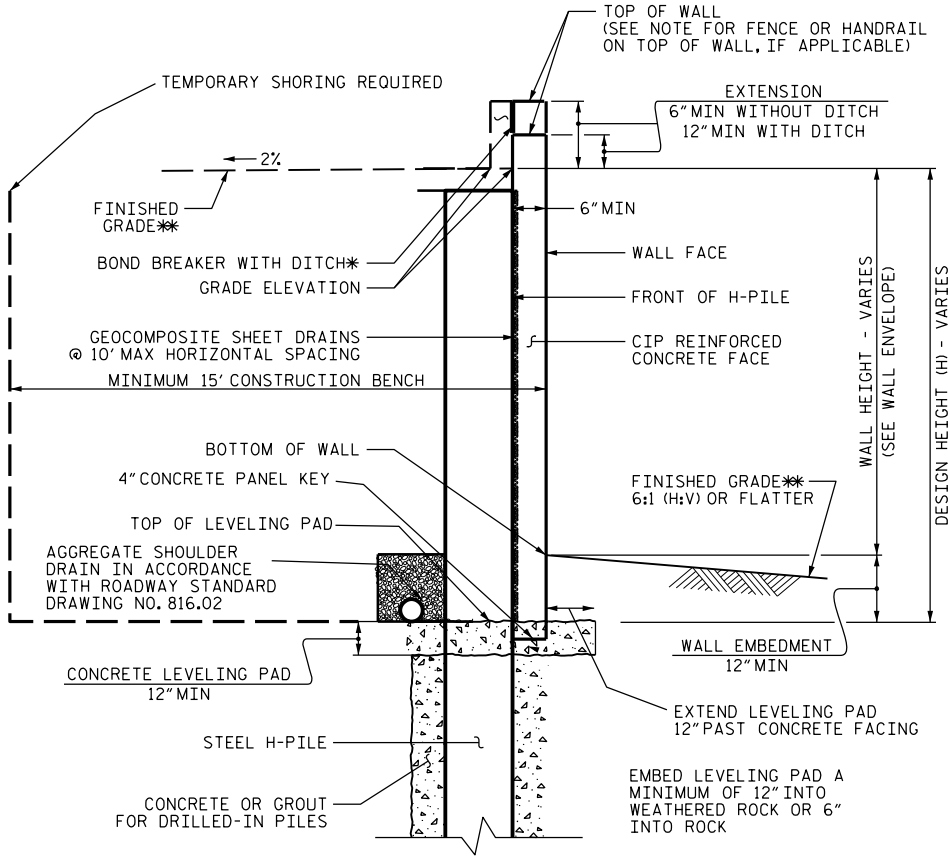




SOLDIER PILE WALL WITH PRECAST PANEL - TYPICAL SECTIONS

AT THE CONTRACTOR'S OPTION, CONNECT COPING TO PANELS WITH DOWELS OR EXTEND COPING DOWN BACK OF PANELS AND PILES.
*SEE CONCRETE DITCH BEHIND WALL DETAILS.
**SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.



SOLDIER PILE WALL WITH CIP FACE - TYPICAL SECTION

*SEE CONCRETE DITCH BEHIND WALL DETAILS.
**SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

NOTES:

FOR SOLDIER PILE RETAINING WALLS, SEE SOLDIER PILE RETAINING WALLS PROVISION.

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

DRILLED-IN H-PILES ARE REQUIRED FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

USE A SOLDIER PILE RETAINING WALL WITH PRECAST CONCRETE PANELS THAT MEET SECTION 1077 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

PAINT GALVANIZED H-PILES BLACK IN ACCORDANCE WITH ARTICLE 442-13 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

BEFORE BEGINNING SOLDIER PILE WALL DESIGN FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2, 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.

AT THE CONTRACTOR'S OPTION USE A SOLDIER PILE RETAINING WALL WITH A CIP REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

A MINIMUM 15FT CONSTRUCTION BENCH IS REQUIRED BEHIND RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

TEMPORARY SHORING IS REQUIRED FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2 IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION. SEE ROADWAY PLANS.

AT THE CONTRACTOR'S OPTION, USE A TEMPORARY SLOPE INSTEAD OF TEMPORARY SUPPORT OF EXCAVATIONS FOR RETAINING WALL NO. 1 AND RETAINING WALL NO. 2.

DESIGN RETAINING WALL NO. 1 AND RETAINING WALL NO. 2, FOR THE FOLLOWING:

- 1) DESIGN HEIGHT (H) = WALL HEIGHT + WALL EMBEDMENT
- 2) DESIGN LIFE = 100 YEARS
- 3) MINIMUM WALL EMBEDMENT DEPTH = 1 FT
- 4) IN-SITU ASSUMED SOIL MATERIAL PARAMETERS:
UNIT WEIGHT, γ = 115 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
- 5) IN-SITU ASSUMED WEATHERED ROCK/ROCK MATERIAL PARAMETERS:
UNIT WEIGHT, γ = 145 PCF
FRICTION ANGLE, ϕ = 38 DEGREES
ROCK MASS SHEAR STRENGTH, S_m = 15 KSF

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

GEOTECHNICAL ENGINEER	ENGINEER
11/21/2025	
SIGNATURE	DATE
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PREPARED BY: J. DAILY	DATE: 10/16/25
REVIEWED BY: K. HILL	DATE: 10/16/25



8848 RED OAK BLVD, SUITE A
CHARLOTTE, NC 28217
(704) 523-4726



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL
ENGINEERING UNIT

PROJECT NO.: B-5921

JACKSON COUNTY

STATION: -L- 15+25.00 TO 16+12.54 (WALL 1)

STATION: -L- 17+08.77 TO 18+25.00 (WALL 2)

SOLDIER PILE
RETAINING WALL NO. 1 AND
RETAINING WALL NO. 2

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