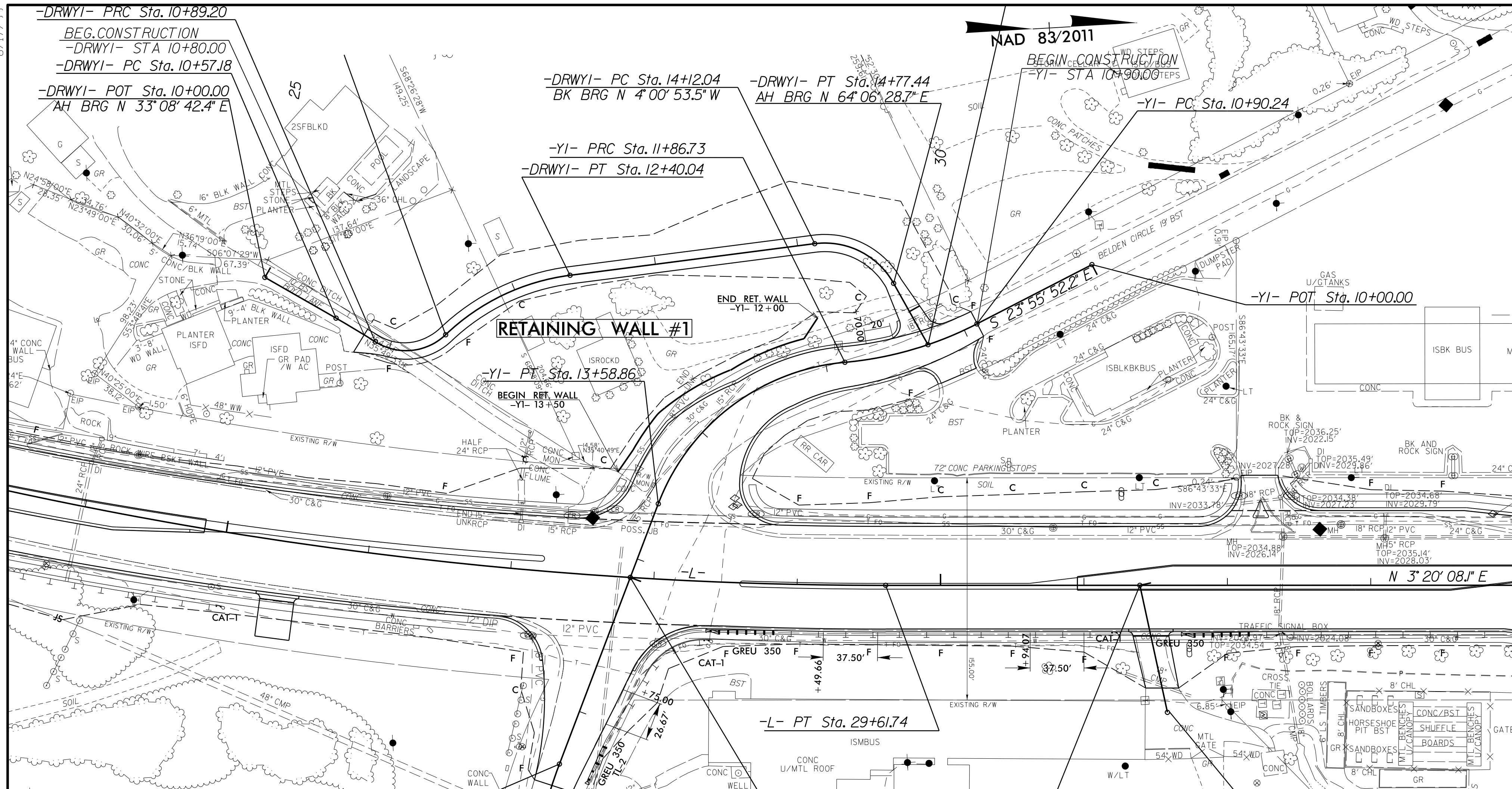


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8.17.17.99



-DRWYI-

PI Sta 10+73.19 Δ = 2° 26' 45.4" (RT) D = 7° 38' 22.0" L = 32.02' T = 16.01' R = 750.00'	PI Sta 11+20.44 Δ = 75° 59' 20.3" (LT) D = 143° 14' 22.0" L = 53.05' T = 31.25' R = 400.00'
PI Sta 11+92.86 Δ = 36° 22' 59.0" (RT) D = 37° 12' 18.2" L = 97.79' T = 50.67' R = 154.00'	PI Sta 14+49.23 Δ = 68° 07' 22.2" (RT) D = 104° 10' 26.9" L = 65.39' T = 37.18' R = 55.00'

-YI-

PI Sta 11+39.09 Δ = 22° 06' 45.3" (RT) D = 22° 55' 05.9" L = 96.48' T = 48.85' R = 250.00'	PI Sta 12+83.03 Δ = 64° 02' 32.6" (LT) D = 37° 12' 18.2" L = 172.13' T = 96.31' R = 154.00'
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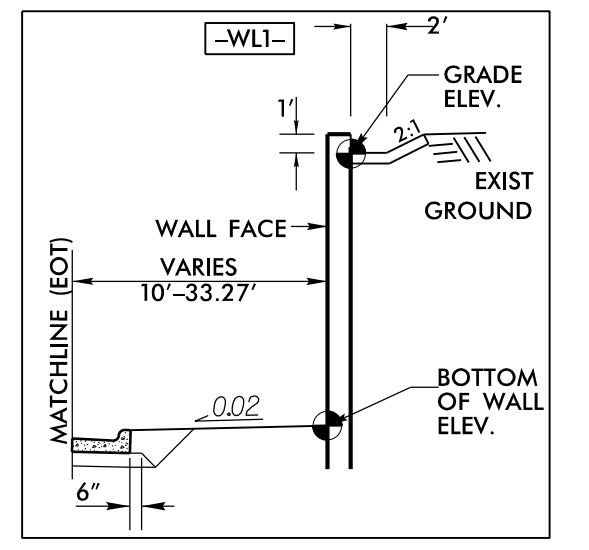
-L-

PI Sta 24+60.02 Δ = 20° 17' 00.1" (LT) D = 2° 00' 00.0" L = 1,014.17' T = 512.45' R = 2,864.79'
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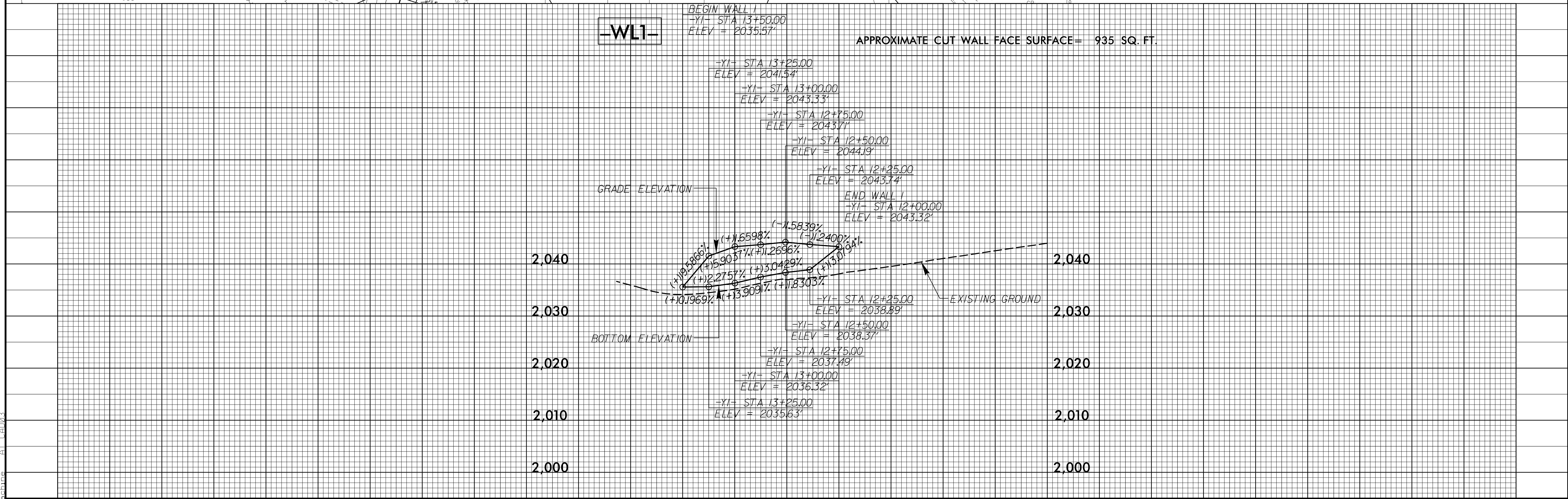
PROJECT REFERENCE NO. R-5734A	SHEET NO. W-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	GEOTECHNICAL ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

Stantec


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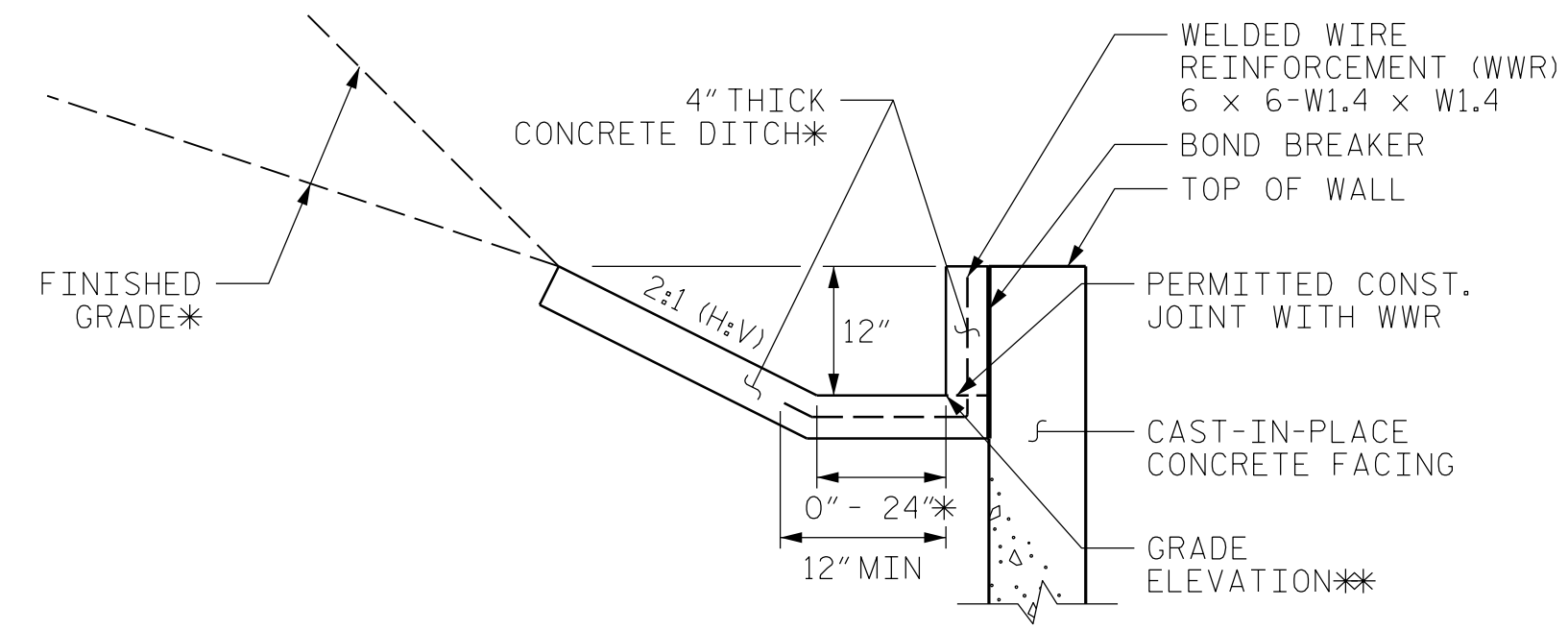
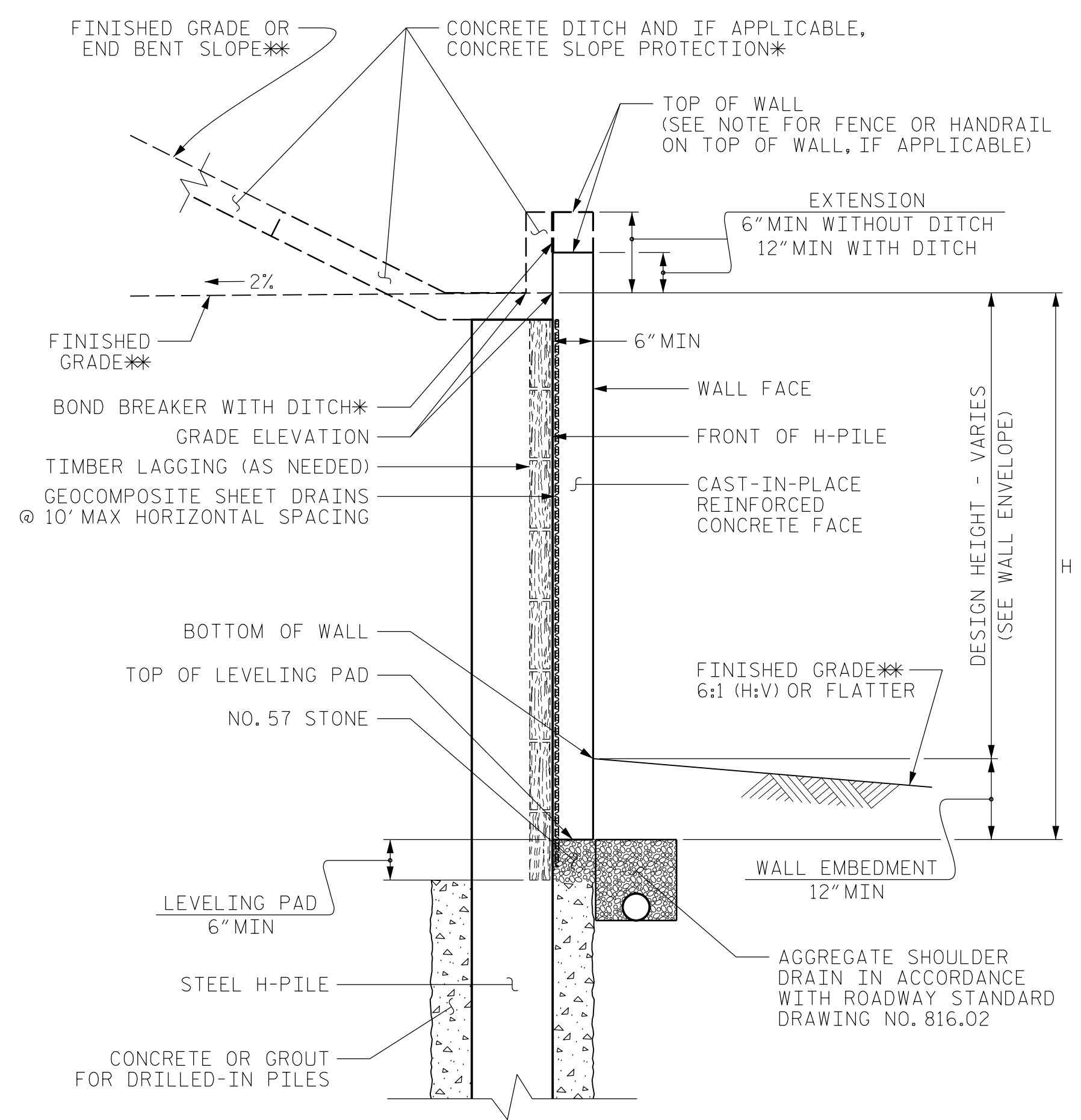


THE WALL ENVELOPE DOES NOT ACCURATELY DEPICT THE ACTUAL FACE OF THE WALL



I:\NOV-2016\1358\1-1\Projects\18_JH\5734A_Wall Addendum\5734A_rdy_wl_Envelopes.dgn
 11/14/2018 3:36:07 PM EST

PROJECT REFERENCE NO. R-5734	SHEET NO. W-2
GEOTECHNICAL ENGINEER  Signature: <i>Jeremy R. Hamm</i> Date: 5/3/2018	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



CONCRETE DITCH BEHIND WALL WITH CONCRETE FACING

*SEE ROADWAY PLANS FOR CONCRETE DITCH AND FINISHED GRADE DETAILS.
*SEE WALL ENVELOPE FOR GRADE ELEVATIONS.

SOLDIER PILE WALL WITH CAST-IN-PLACE 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.
- A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALL NO. 1. INCLUDE WALL ATTACHMENT DETAILS IN THE DESIGN SUBMITTAL.
- AT THE CONTRACTOR'S OPTION, USE DRIVEN H-PILES FOR RETAINING WALL NO. 1.
- USE A SOLDIER PILE RETAINING WALL WITH A CAST-IN-PLACE REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 1.
- BEFORE BEGINNING SOLDIER PILE WALL DESIGN FOR RETAINING WALL NO. 1, 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.

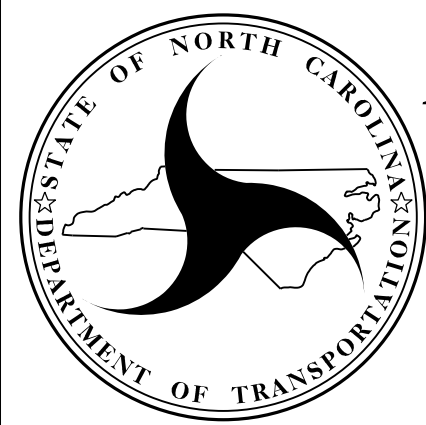
- DESIGN RETAINING WALL NO. 1 FOR THE FOLLOWING:
- 1) H = DESIGN HEIGHT + WALL EMBEDMENT
 - 2) DESIGN LIFE = 100 YEARS
 - 3) MINIMUM WALL EMBEDMENT ELEVATION = 1 FT
 - 4) MINIMUM PILE PENETRATION INTO ROCK = N/A
 - 5) IN-SITU ASSUMED MATERIAL PARAMETERS:
 UNIT WEIGHT, $\gamma = 110$ LB/CF
 FRICTION ANGLE, $\phi = 28$ DEGREES
 COHESION, $c = 0$ LB/SF

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

PREPARED BY: HUNSBERGER, W. S.	DATE: 11/03/17
REVIEWED BY: HAMM, J. R.	DATE: 11/03/17



FALCON ENGINEERING, INC.
 1210 TRINITY ROAD, SUITE 110
 RALEIGH, NC 27607
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**NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS**

**GEOTECHNICAL
 ENGINEERING UNIT**

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

**RETAINING WALL NO. 1
SOLDIER PILE WALL WITH
CAST-IN-PLACE FACE**