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8/17/99

RETAINING WALL -W1- DETAIL SHEET

stv STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

PROJECT REFERENCE NO.
U-5850

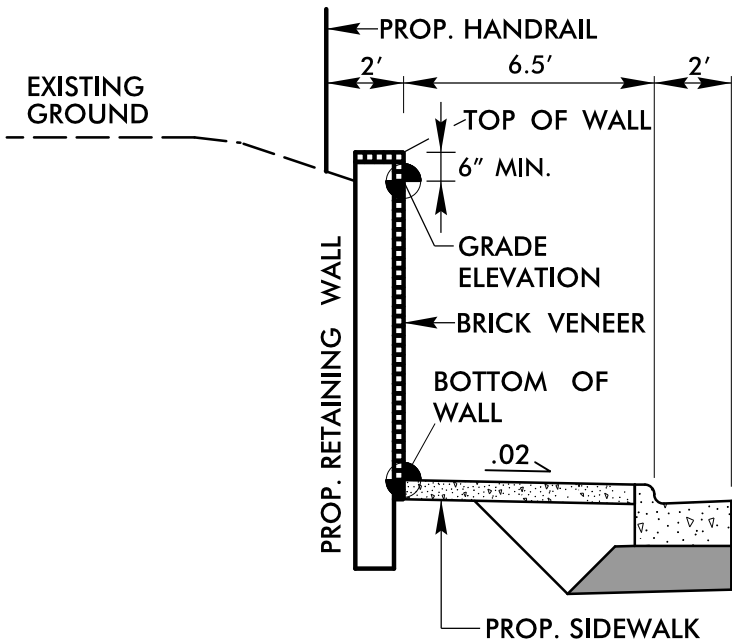
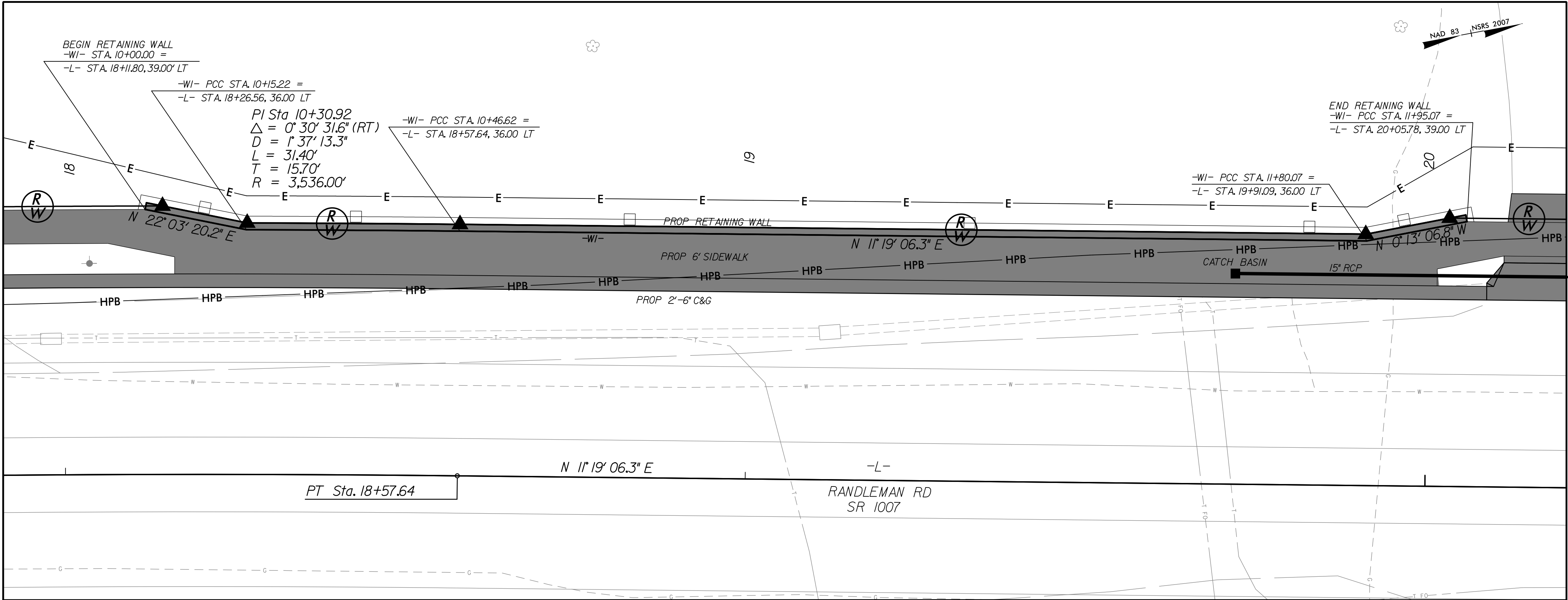
SHEET NO.
W-1

ROADWAY DESIGN
ENGINEER

DocuSign Envelope ID: 9836462-C272-4B53-8835-2059EC3A1FCB

SEAL
043891
ENGINEER
JENN C. STEPHENS
2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



RETAINING WALL DETAIL
NOT TO SCALE

SCALE 1" = 10'

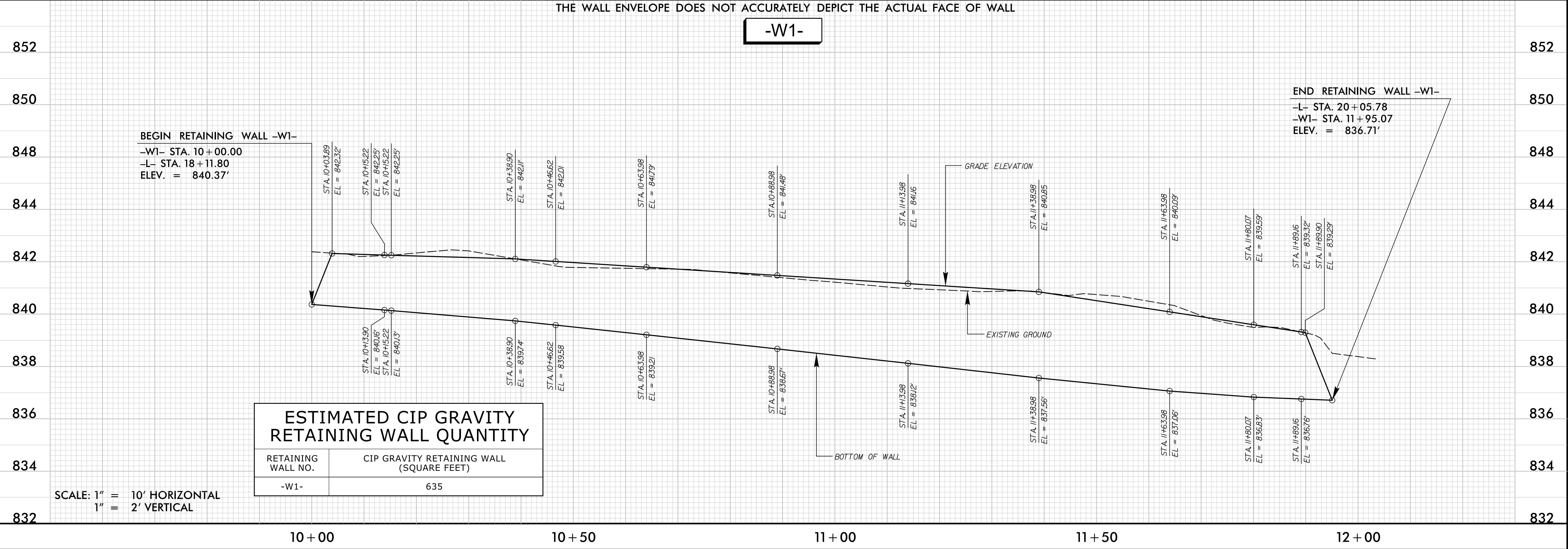
PLAN VIEW

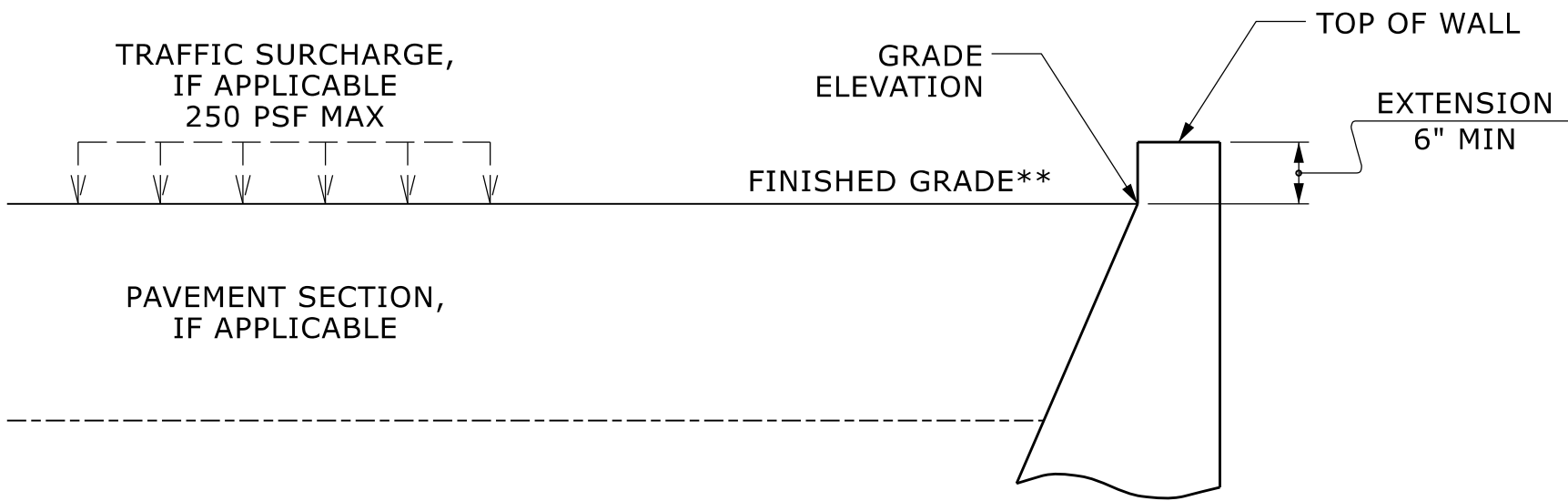
SEE SHEET 4 & 5 FOR FULL PLAN VIEW

SEE SHEET W-2 FOR GRAVITY WALL DETAIL

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

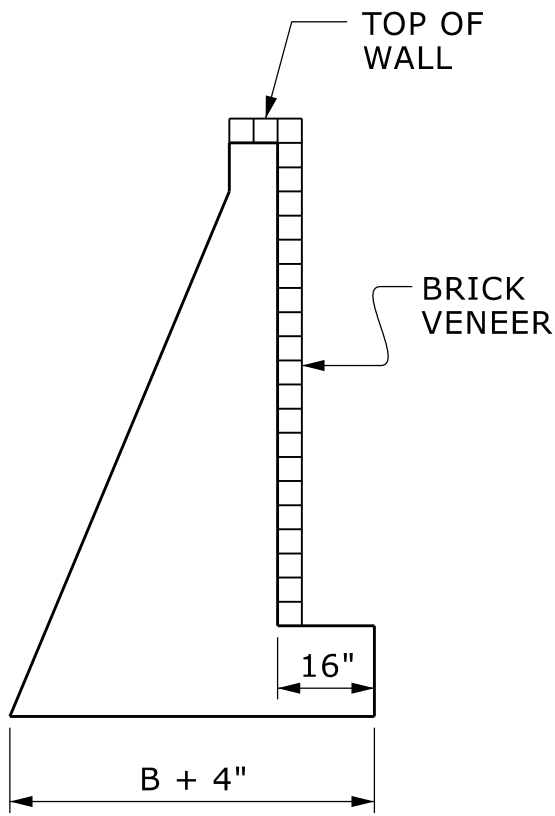
-W1-





NO SLOPE CASE

**SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.

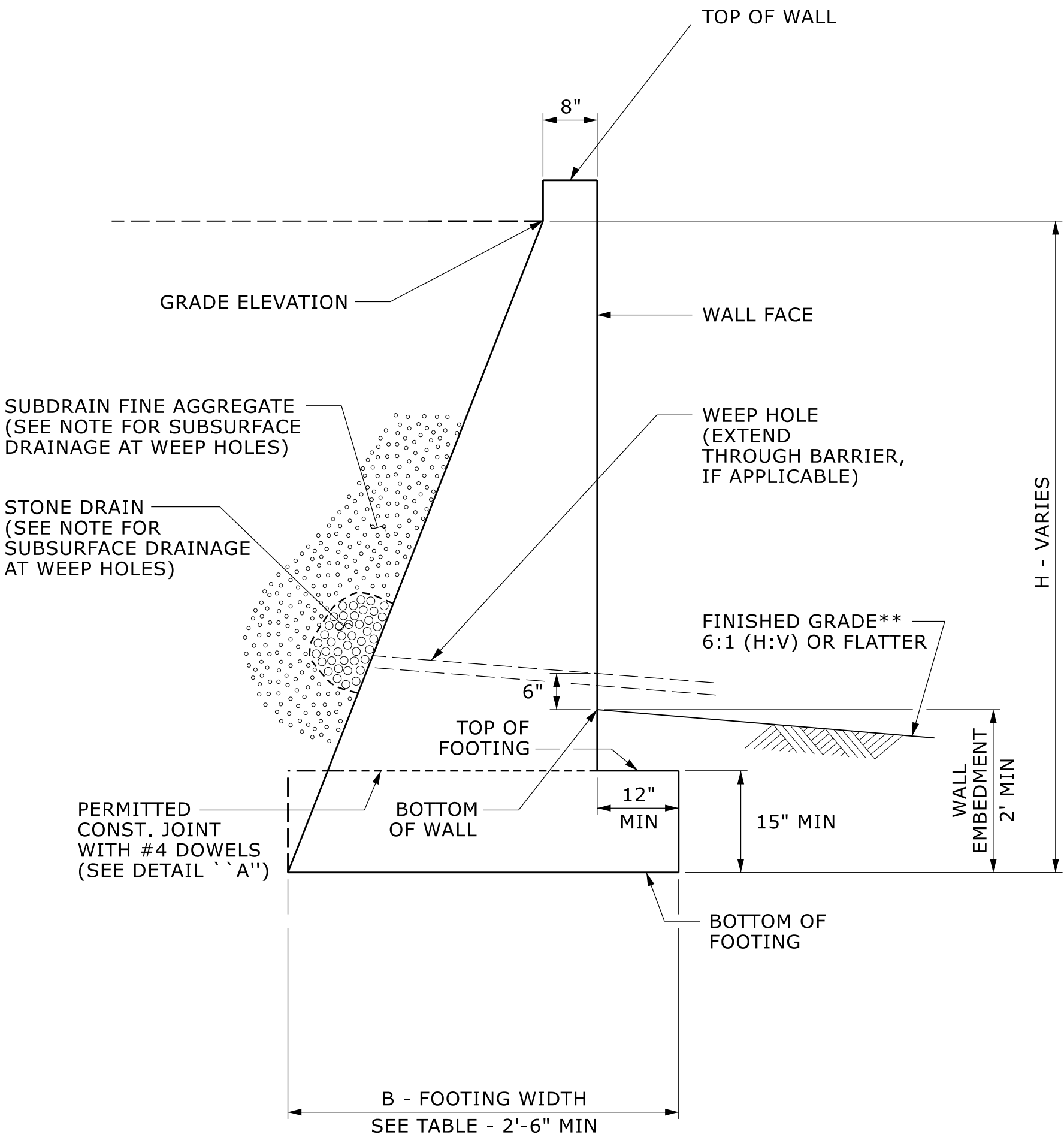


BRICK VENEER DETAIL

GEOTECHNICAL ENGINEER		ENGINEER	
Signed by: <i>W. Scott Hunsberger</i> 6/11/2025		DATE	
SUBSCRIBER SIGNATURE		DATE	
SIGNATURE		DATE	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

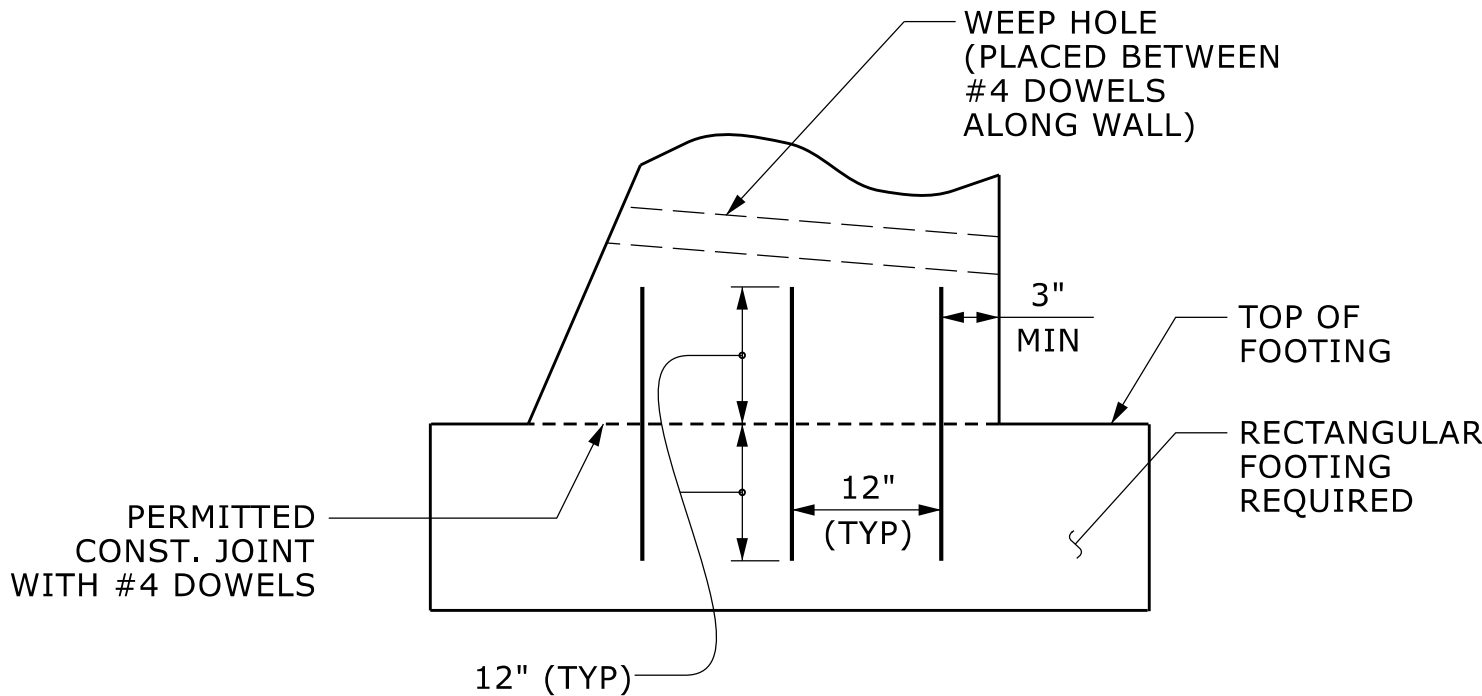
NOTES:

- FOR CIP GRAVITY RETAINING WALLS, SEE SECTION 453 OF THE STANDARD SPECIFICATIONS.
- FOR SUBSURFACE DRAINAGE AT WEEP HOLES, SEE ARTICLE 414-8 OF THE STANDARD SPECIFICATIONS.
- CIP GRAVITY WALLS ARE BASED ON THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 28 DEGREES
(GROUNDWATER WITHIN 7' OF BOTTOM OF FOOTING))
COHESION, c = 0 PSF
- BEFORE BEGINNING CIP GRAVITY WALL CONSTRUCTION, SURVEY WALL LOCATIONS AND SUBMIT WALL PROFILE VIEWS (WALL ENVELOPES) FOR REVIEW. FOR WALL ENVELOPES, INCLUDE BOTTOM OF WALL, EXISTING GROUND AND GRADE ELEVATIONS AND OTHER ELEVATIONS AS NEEDED AT INTERVALS OF 25' OR LESS ALONG WALLS. DO NOT START WALL CONSTRUCTION UNTIL WALL ENVELOPES ARE ACCEPTED.
- FOR BRICK VENEERS, SEE BRICK VENEER SPECIAL PROVISION.
- DO NOT PLACE CONCRETE FOR FOOTINGS UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.
- WHEN CONSTRUCTING CIP GRAVITY WALLS WITH A CONSTRUCTION JOINT AS SHOWN IN DETAIL "A", PROVIDE A MINIMUM OF 3 EQUALLY SPACED #4 DOWELS AT INTERVALS OF 1'-6" ALONG WALLS.



CIP GRAVITY WALL

**SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.



DETAIL "A"

H (FT)	3 - < 6
B/H Ratio	.80

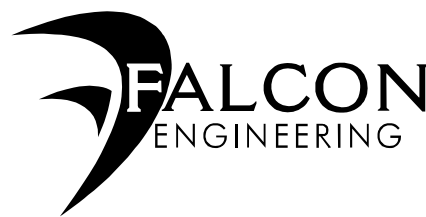
B/H RATIO (B = 2'-6" MIN)

PROJECT NO.: U-5850

GUILFORD COUNTY

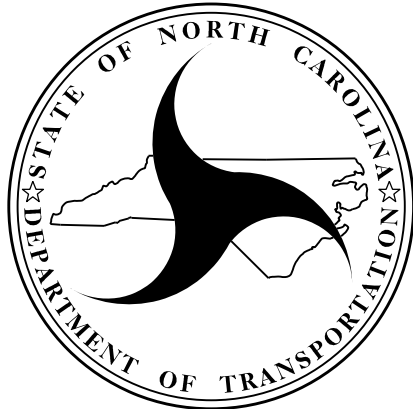
STATION: -L- 18+25

SHEET 2 OF 2 WALL ID -W1-



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NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL
ENGINEERING UNIT

CIP GRAVITY
RETAINING WALL

DATE: 02-18-2025

SHEET
NO.
W-2