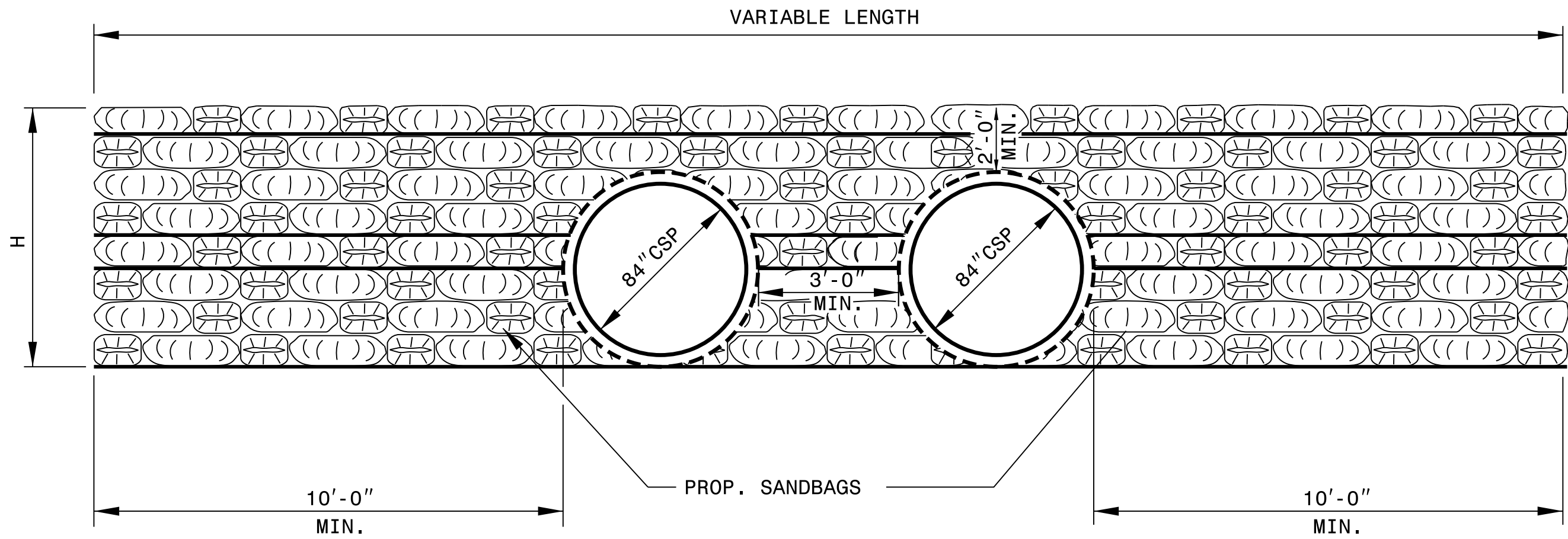


PLAN



FRONT ELEVATION

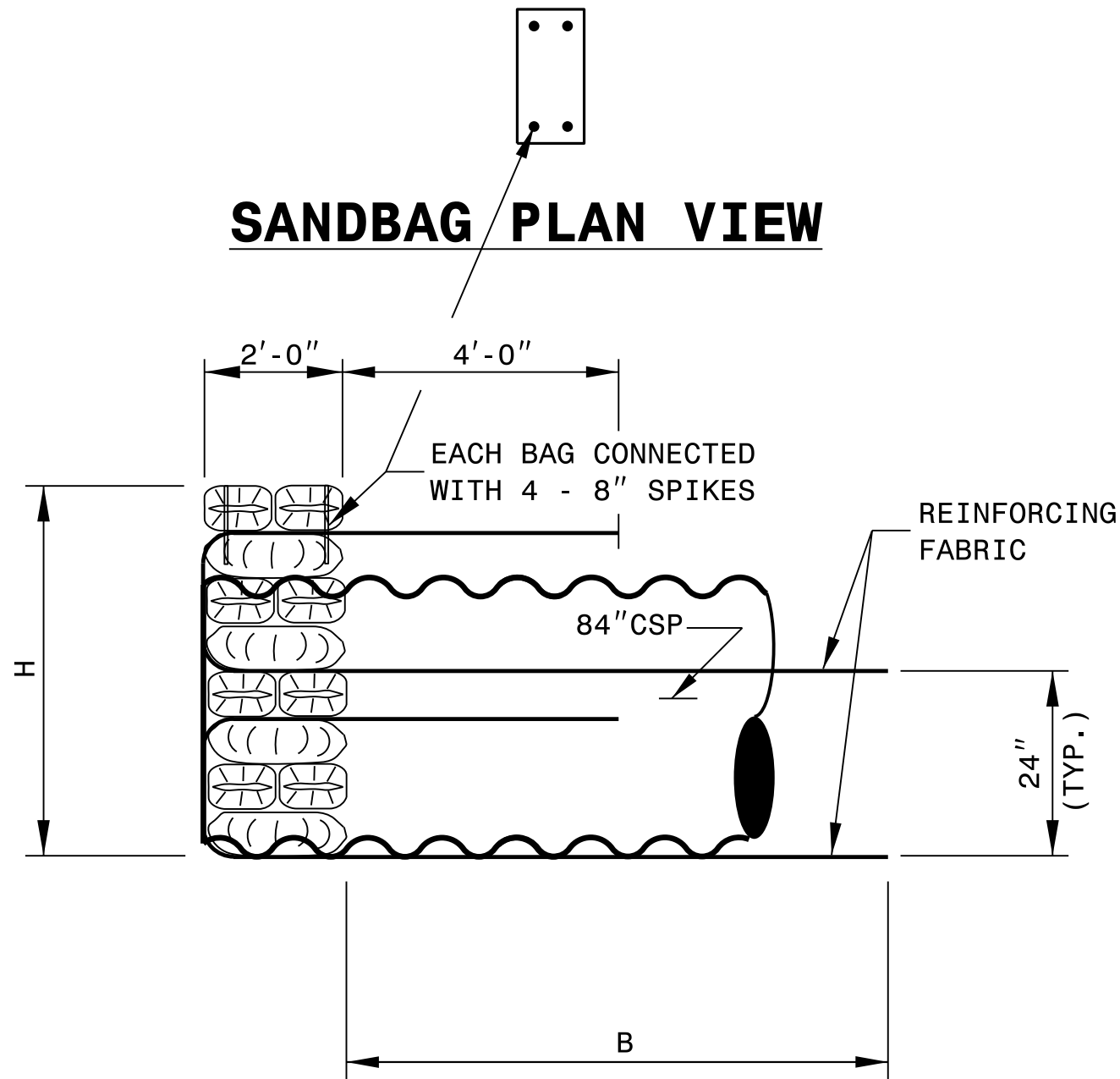
REINFORCING FABRIC		
WALL HEIGHT H (ft)	REINF. LENGTH B (ft)	ULTIMATE TENSILE STRENGTH (lb/ft)
< 4	6	2400
4 TO 6	6	3000
6 TO 8	= H	3600
8 TO 10	= H	4500

INLET END SANDBAG HEADWALL AREA = 583 S.F.  
OUTLET END SANDBAG HEADWALL AREA = 371 S.F.

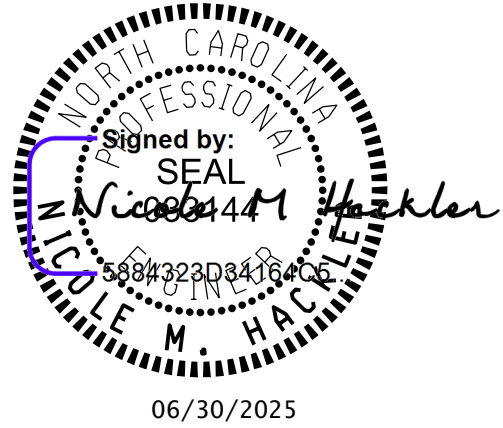
- NOTES:
- REINFORCED SANDBAG HEADWALLS ARE BASED ON THE FOLLOWING ASSUMPTIONS:
    - TRAFFIC SURCHARGE IS 240 PSF OR LESS AND BACKSLOPE IS 2:1 OR FLATTER.
    - GRADE IN FRONT OF WALL IS 6:1 OR FLATTER
    - MAXIMUM APPLIED BEARING PRESSURE IS LESS THAN 1 TSF.
  - REINFORCED SANDBAG HEADWALLS ARE BASED ON THE FOLLOWING IN-SITU SOIL PARAMETERS:
    - UNIT WEIGHT = 120 PCF
    - FRICTION ANGLE = 30 DEGREES

DO NOT USE REINFORCED SANDBAG HEADWALL DETAIL WHEN ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE OR WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS PRESENT BELOW BOTTOM OF PIPE.
  - PLACE REINFORCEMENT IN SLIGHT TENSION AND FREE OF KINKS, FOLDS, WRINKLES AND CREASES.
  - DO NOT SPLICE REINFORCEMENT IN THE REINFORCEMENT DIRECTION (RD). SEAMS ARE ALLOWED IN THE CROSS-REINFORCEMENT DIRECTION (CRD).
  - BACKFILL AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT BACKFILL WITH ROCK, BROKEN PAVEMENT OR SIMILAR MATERIAL.  
DO NOT DAMAGE REINFORCEMENT WHEN PLACING AND COMPACTING BACKFILL.  
DO NOT USE SHEEPSFOOT, GRID ROLLERS OR OTHER TYPES OF COMPACTION EQUIPMENT WITH FEET.  
DO NOT OPERATE HEAVY EQUIPMENT ON REINFORCEMENT UNTIL IT IS COVERED WITH AT LEAST 10" OF BACKFILL.  
USE ONLY HAND OPERATED EQUIPMENT TO COMPACT WITHIN 3 ft OF THE HEADWALL FACE.
  - #4 REINFORCING BARS (GRADE 60) 24" LONG MAY BE SUBSTITUTED FOR 8" SPIKES. DRIVE #4 BARS THRU 4 BAGS MAXIMUM.
  - HEADWALL DIMENSIONS MAY BE ADJUSTED FOR SINGLE, DOUBLE OR MORE PIPES AS SHOWN IN PLANS.



SIDE ELEVATION



06/30/2025

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS & DEVELOPMENT UNIT  
STANDARDS AND SPECIAL DESIGN  
Office 919-707-6950 FAX 919-250-4119

DETAIL OF REINFORCED  
SANDBAG ENDWALL

ORIGINAL BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
MODIFIED BY: rnbritt DATE: 12-5-2018  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
FILE SPEC.: details/rnbritt/english/misc/sandbag\_enddwalls.dgn