

DESIGN CRITERIA:  
 EFP - 35 pcf  
 FRICTION - 0.35  
 PASSIVE - 500 psf  
 F.S. = 1.5  
 MAXIMUM BEARING - 1,800 psf

NOTES

GENERAL

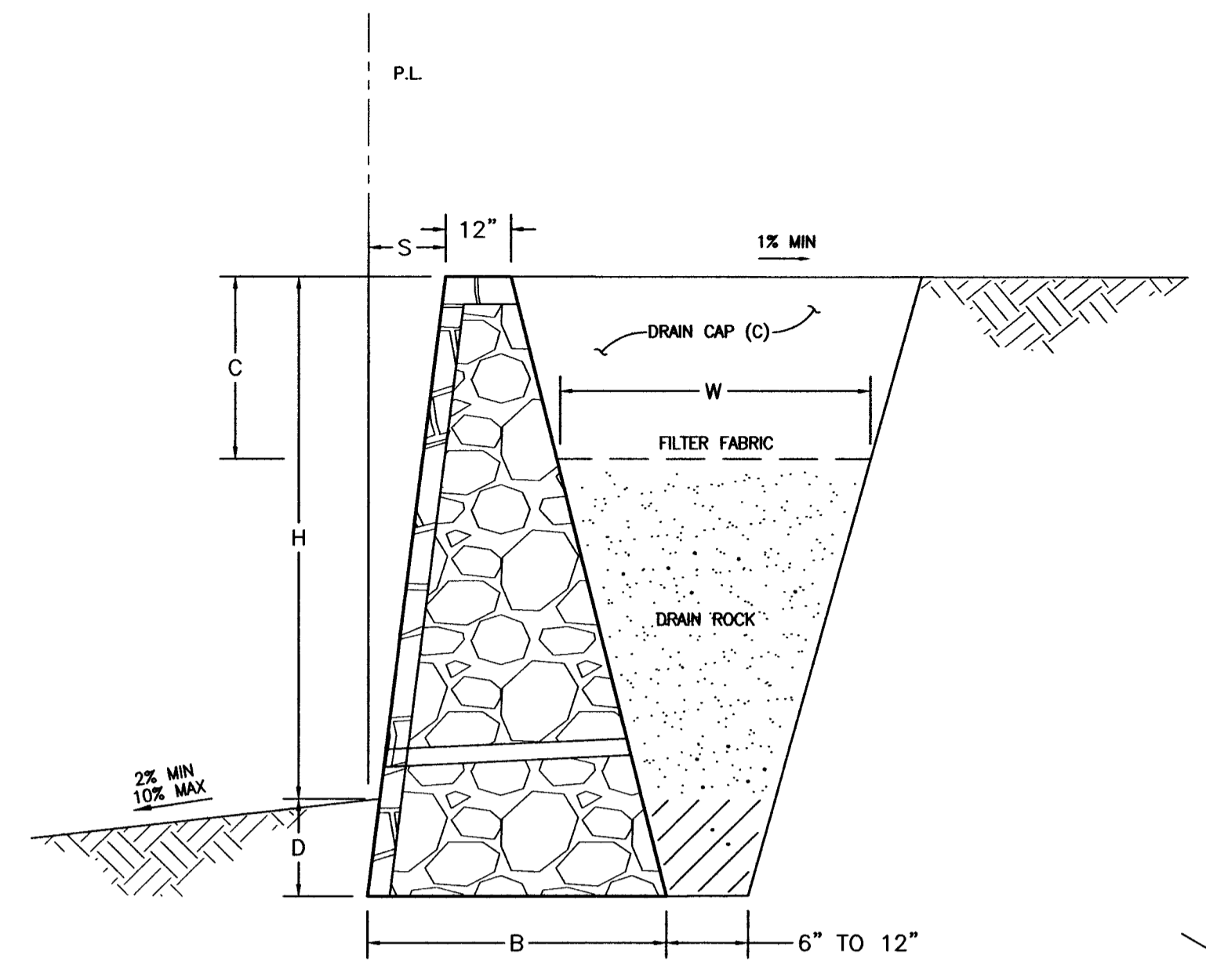
- These plans are based on Grading Plans by Corwin Engineering dated 1-5-17 & EMI soil report #BH153711. These plans are applicable only for the grading, retained heights (H) & other site conditions shown herein.
- These plans are intended only for structural considerations. Horizontal & vertical control is by others.
- Periodic observation during construction is recommended by or under the direction of a licensed professional engineer experienced in retaining wall design and construction. Periodic observations are made only to develop a general opinion regarding the contractor's compliance with project specifications. No warranty or guarantee is provided. The contractor shall assume all responsibility for ensuring construction is in accordance with these plans and local building code.
- If conditions change from those described herein, or if there are questions about these plans, the engineer should be notified immediately.
- Wall design complies with Section 1807.2 of the 2012 International Building Code.
- TEMPORARY SLOPE - By builder, as required for safety. Temporary slopes in COMPACTED FILL shall be constructed "fat" and cut back to reveal a firm compacted surface.
- SURCHARGE LOADS - ALLOWED AS SHOWN HEREIN. Structures within 1.5H of walls should be self supporting.
- SURFACE DRAINAGE - Positive drainage must be maintained at all times both during & after construction. Water shall not be allowed to pond near walls. Eroded sediments and soft or wet fill shall be removed from footings and behind walls.
- SUBSURFACE DRAINAGE - Provisions are not made in these plans to collect or control groundwater that may pass through or under walls. Analysis, evaluation, and mitigation of excessive subsurface drainage (groundwater) shall be the responsibility of others.
- It is the owner's responsibility to evaluate & mitigate the effects of drainage including erosion & scour potential & provide maintenance of permanent drainage structures.
- Minor movement & cracking is normal & expected for this construction. Maintaining the ground in a uniformly moist condition through regular irrigation & positive drainage will reduce but not eliminate cracking.

MATERIALS

- All MORTAR shall be Type 'S' - 1,800 psi min.
- STONE - Face stone & pattern shall be approved by owner. Minimum compressive strength - 5,000 psi.
- BACKING STONE shall be 8"x12" rip-rap or face stone rubble. Stones shall be sorted & nested by size to minimize voids.
- DRAIN - Continuous angular gravel or crushed stone sized 3/4"x3" w/ max. 12 percent #200 sieve size. Provide filter fabric cover w/ min. 2 oz/sy weight. Provide min. 2" diameter weep holes @ 10' spacing.
- DRAIN CAP - Moist native soil graded, compacted sufficiently to prevent settlement, & sealed to reduce infiltration of runoff. Use equipment and methods that will not damage walls. No trees or other large vegetation shall be planted within 1/3 H of the wall that may compromise the Drain Cap or allow surface water to infiltrate directly behind the wall or into the Subsurface Drain.
- CONTROL JOINTS shall be provided @ max. 25' spacing.
- BACK FILL - Stone rubble mixed with moist native soil and compacted sufficiently to prevent sink holes and low spots. Use only for H < 3.0'.

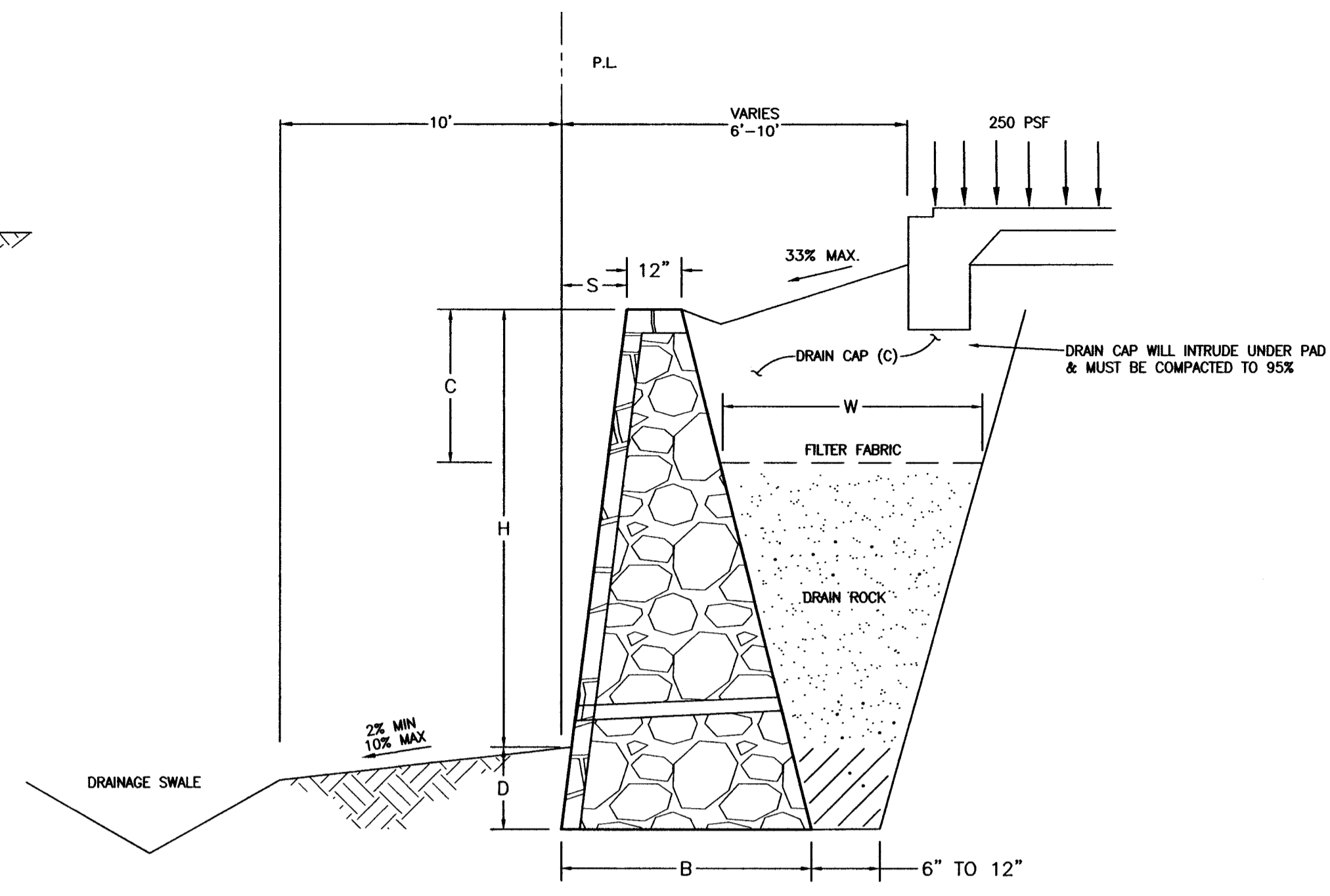
FOOTINGS

- All walls shall be provided a 1" MORTAR leveling course.
- All walls shall be bedded in UNDISTURBED SOIL OR ROCK to the minimum depth (D) specified on the Wall Schedule.



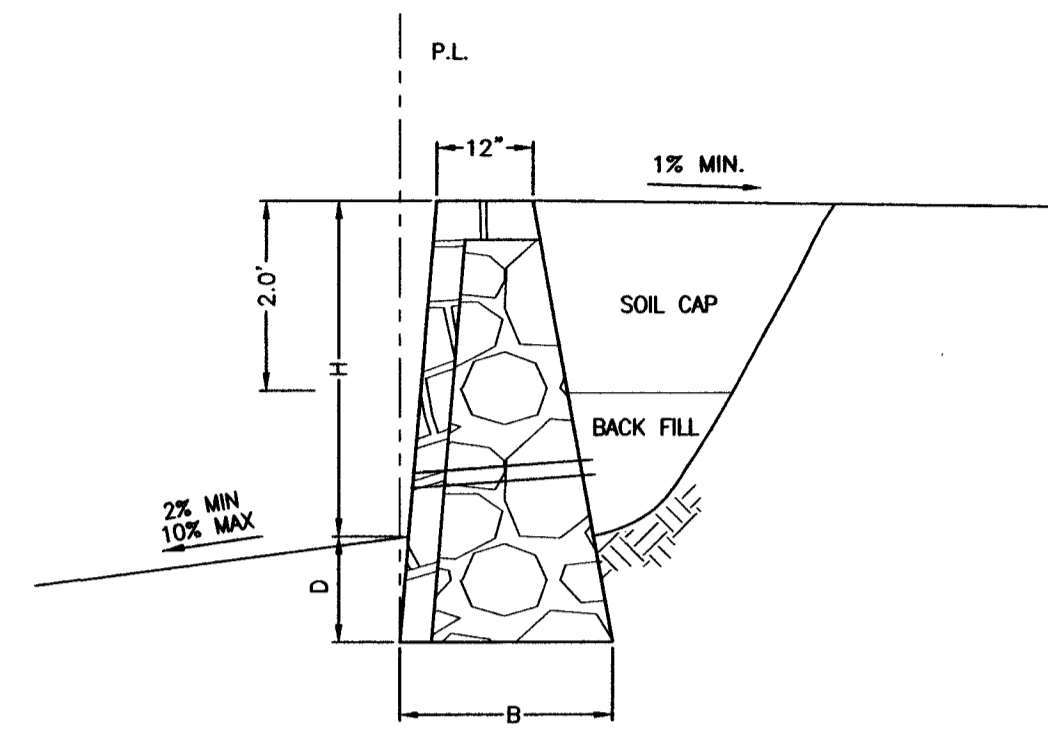
WALL SCHEDULE						
HEIGHT (H)	4'	5'	6'	7'	8'	9'
BASE WIDTH (B)	26"	36"	48"	60"	72"	84"
EMBEDMENT (D) *	12"	15"	18"	18"	24"	24"
DRAIN CAP (C)	24"	24"	24"	28"	32"	36"
BATTER (S)	7.5"	9.4"	11.3"	12.8"	15"	16.5"
DRAIN WIDTH (W)	19"	29"	42"	53"	64"	75"

**B** REAR YARD RETAINING WALL  
 S1 N.T.S.



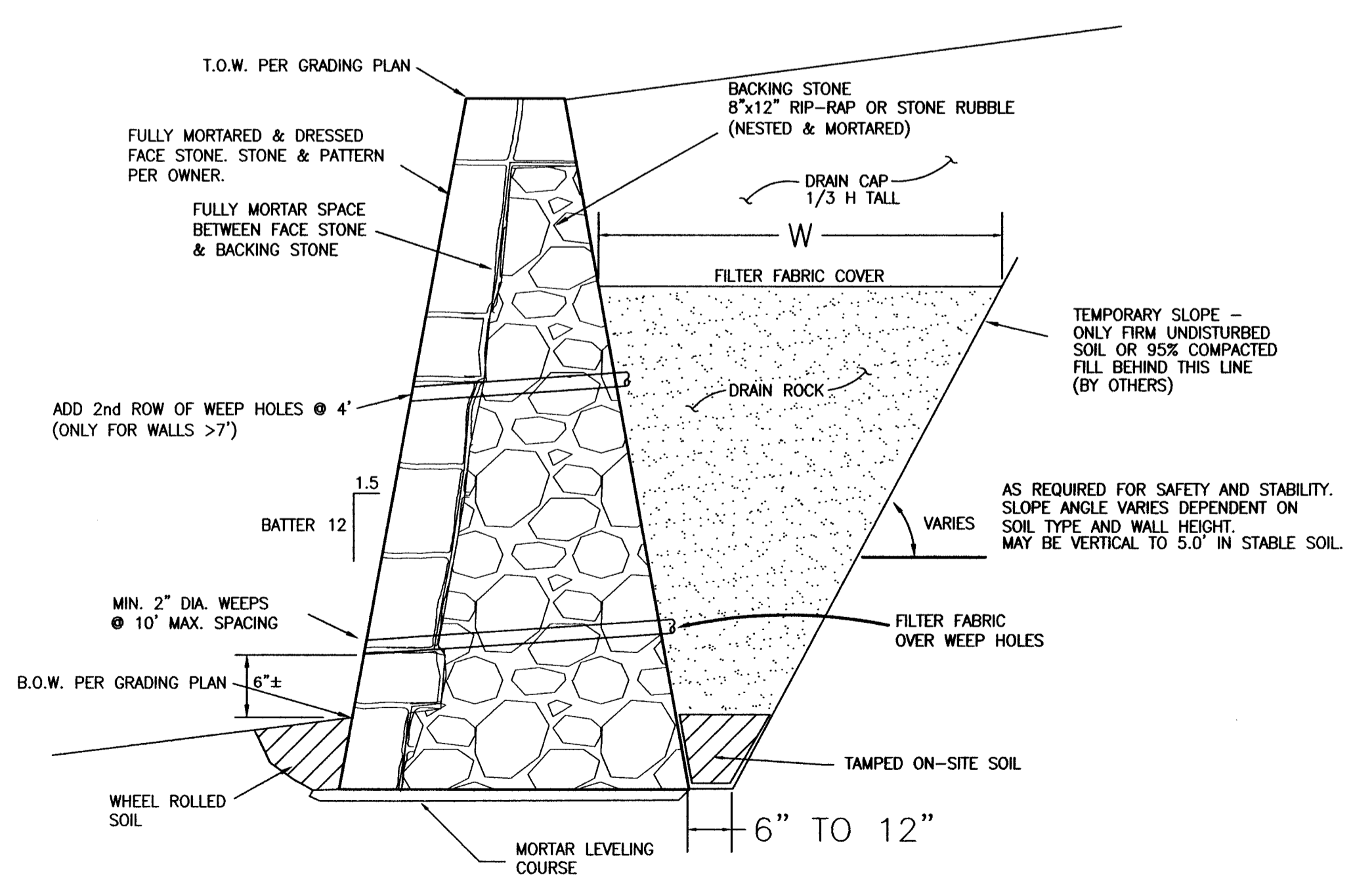
WALL SCHEDULE						
HEIGHT (H)	4'	5'	6'	7'	8'	9'
BASE WIDTH (B)	36"	48"	62"	72"	84"	98"
EMBEDMENT (D) *	12"	15"	18"	18"	24"	24"
DRAIN CAP (C)	24"	24"	24"	28"	32"	36"
BATTER (S)	7.5"	9.4"	11.3"	12.8"	15"	16.5"
DRAIN WIDTH (W)	24"	37"	51"	61"	72"	85"

**C** TALL SURCHARGE WALL :  
 S1 KETTEN DRIVE, LOT UNNUMBERED  
 N.T.S.

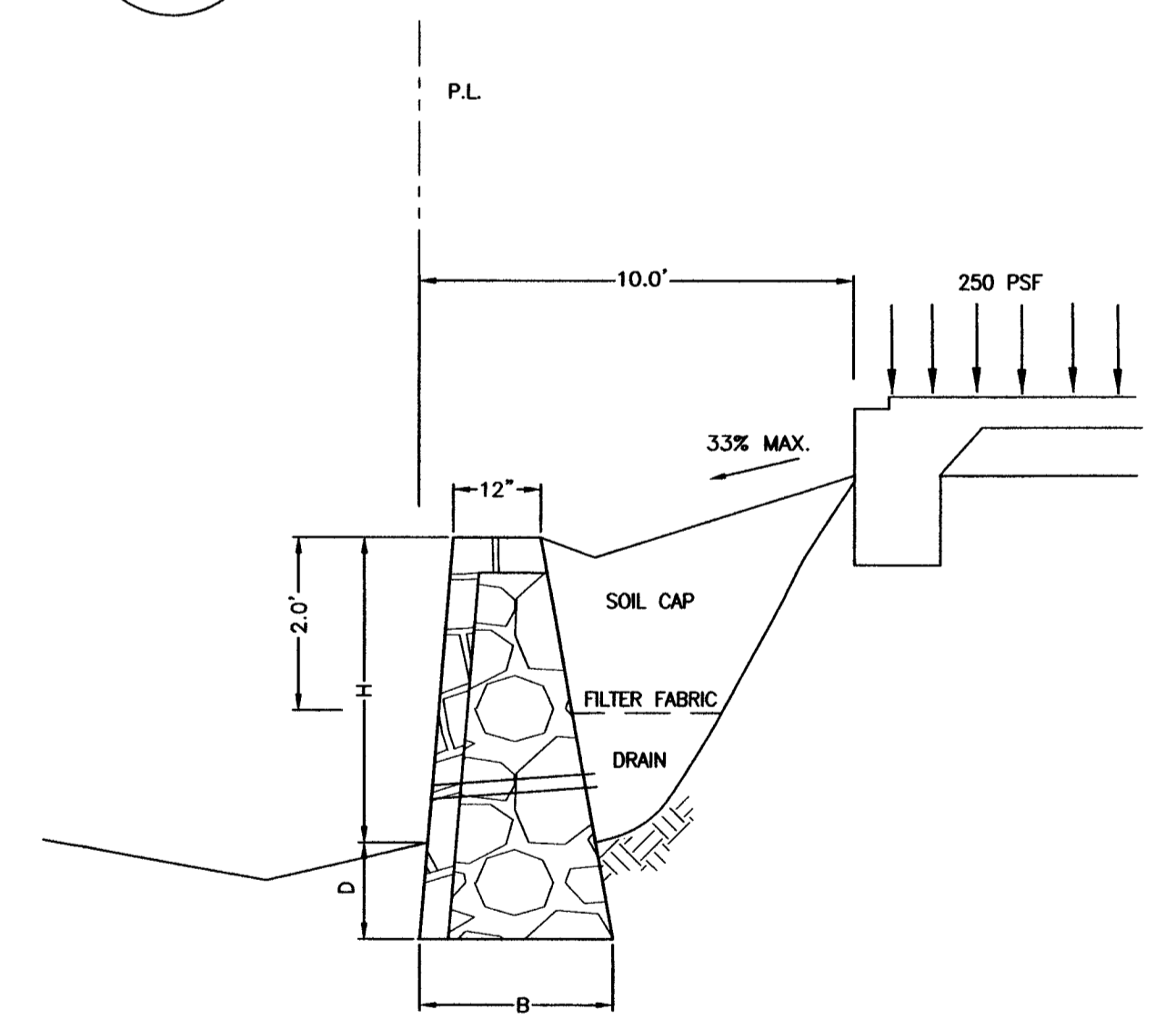


WALL SCHEDULE			
HEIGHT (H)	1'	2'	3'
BASE WIDTH (B)	14"	16"	18"
EMBEDMENT (D)	12"	12"	12"
DRAIN CAP (C)*	--	--	24"
BATTER (S)	2"	3"	4"

**D** RETAINING WALL, H=1'-3'  
 S1 (TYP. U.N.O.)  
 N.T.S.

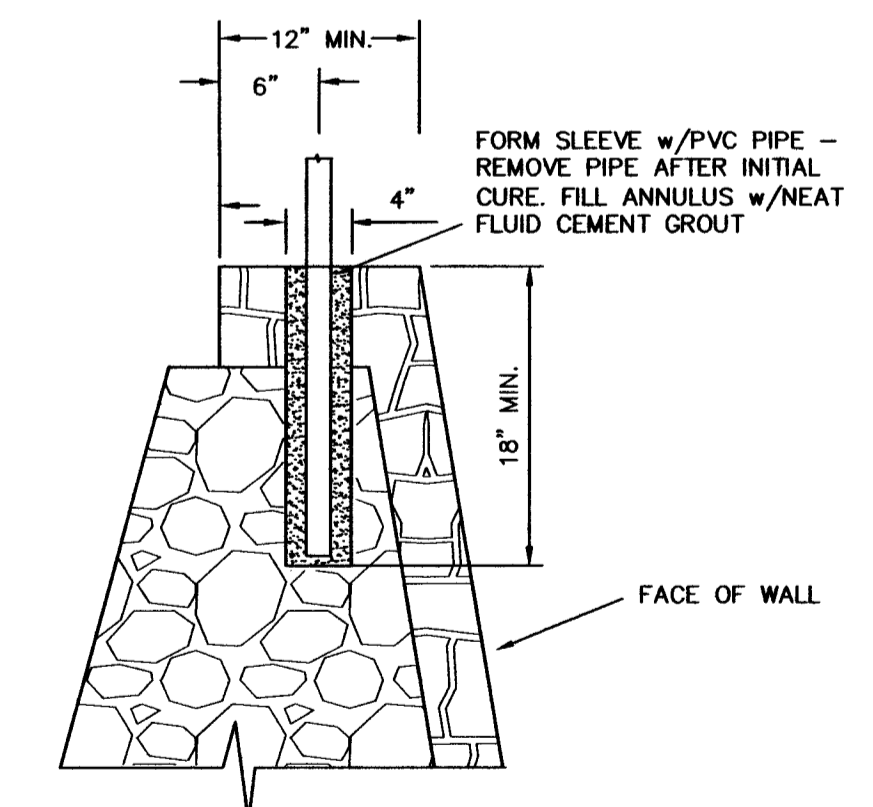


**A** GENERAL CONSTRUCTION  
 S1 N.T.S.

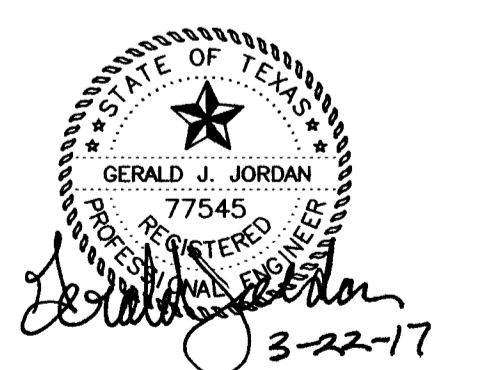


WALL SCHEDULE					
HEIGHT (H)	3'	4'	5'	6'	7'
BASE WIDTH (B)	18"	36"	44"	52"	62"
EMBEDMENT (D)	12"	12"	15"	18"	21"
DRAIN CAP (C)*	24"	24"	24"	24"	24"
BATTER (S)	4"	7.5"	9.4"	11.3"	13.1"

**E** SURCHARGE WALLS:  
 S1 BLOCKS 'C', LOTS 33-35  
 BLOCK 'D', LOTS 7-9,  
 ALSO KETTEN DRIVE, LOTS UNNUMBERED  
 N.T.S.



**FENCE POST SLEEVE**  
 N.T.S.



**RETAINING WALL DETAILS**  
 BREEZY HILL PHASE 6  
 CITY OF LEWISVILLE, TEXAS

**JORDAN CONSULTING ENGINEERS**  
 2400 W. PIONEER PARKWAY, SUITE 130, TEXAS 76013 (817) 890-0166  
 FIRM #1430

DATE: 3-21-17	CHECKED BY: GJJ	SHEET NO.
SCALE: N.T.S.	PROJECT NO. 3809	<b>S1</b>