

CASE I, CASE II, AND CASE III

H	B	END AREA SQ. FT.	VOLUME C.Y. / L.F.
CASE I OR II OR III			
3'-0"	1'-6"	3.7500	0.1389
3'-6"	1'-9"	4.8125	0.1782
4'-0"	2'-0"	6.0000	0.2222
4'-6"	2'-3"	7.3125	0.2708
5'-0"	2'-6"	8.7500	0.3241
5'-6"	2'-9"	10.3125	0.3819
6'-0"	3'-0"	12.0000	0.4444
6'-6"	3'-3"	13.8125	0.5116
7'-0"	3'-6"	15.7500	0.5833
7'-6"	3'-9"	17.8125	0.6597
8'-0"	4'-0"	20.0000	0.7407
8'-6"	4'-3"	22.3125	0.8264
9'-0"	4'-6"	24.7500	0.9167
9'-6"	4'-9"	27.3125	1.0116
CASE I			
10'-0"	5'-0"	30.0000	1.1111
10'-6"	5'-3"	32.8125	1.2153
11'-0"	5'-6"	35.7500	1.3241
11'-6"	5'-9"	38.8125	1.4375
12'-0"	6'-0"	42.0000	1.5556
CASE II OR III			
10'-0"	6'-0"	35.0000	1.2963
10'-6"	6'-3"	38.0625	1.4097
11'-0"	6'-6"	41.2500	1.5278
11'-6"	6'-9"	44.5625	1.6505
12'-0"	7'-0"	48.0000	1.7778

NOTES

THE RETAINING WALL DEPICTED ON THIS DRAWING SHALL BE USED WHEN THE HEIGHT (H DIMENSION) OF THE WALL IS 12'-0" OR LESS PROVIDED THE FILL COMPLIES WITH THE FOLLOWING CONDITIONS:

CASE I - WALL BACKFILL SLOPES DOWN, IS LEVEL, OR SLOPES UP FROM WALL AT 20:1 OR FLATTER. THIS LOW SLOPE ALLOWS FOR BACKFILLS WHICH WOULD BE LEVEL EXCEPT FOR THE SLOPE REQUIRED TO FACILITATE PROPER DRAINAGE.

CASE II - BACKFILL SLOPES UP STEEPER THAN 20:1 BUT NOT STEEPER THAN 4:1.

CASE III - BACKFILL SLOPES UP STEEPER THAN 4:1 BUT NOT STEEPER THAN 2:1. WHEN H DIMENSION IS GREATER THAN 8' (HEIGHT OF EXPOSED FACE GREATER THAN 6') INCREASE THE EMBEDMENT DEPTH TO 1/4H, (1).

SPECIAL DESIGNS SHALL BE REQUIRED WHEN THE FOLLOWING CONDITIONS EXIST:

(A) WALL HEIGHT IS GREATER THAN 12'-0"

(B) WALL IS SURCHARGED WITH DEAD LOAD FILL SLOPES STEEPER THAN 2:1.

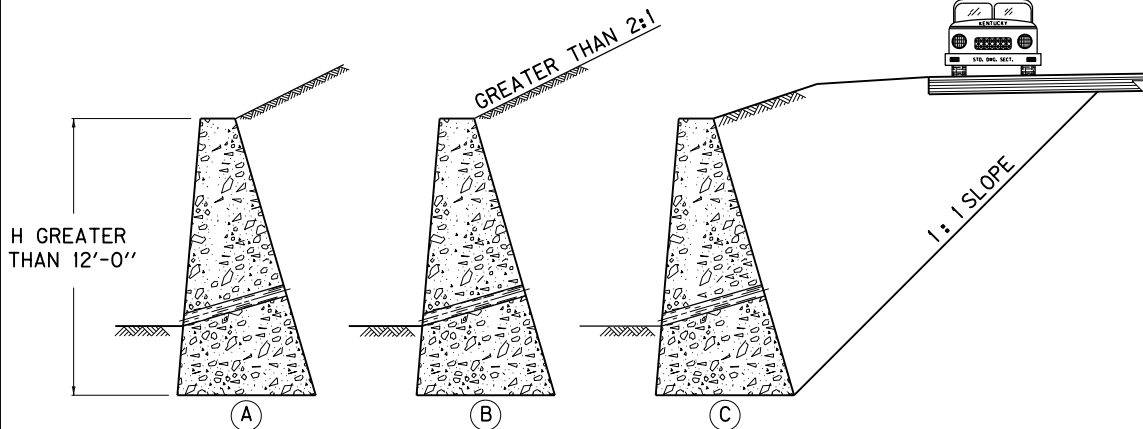
(C) WALL IS SURCHARGED WITH A LIVE LOAD WITHIN THE LIMITS OF A 1:1 SLOPE EXTENDING FROM THE BASE OF THE WALL.

AREAS AND VOLUMES HAVE BEEN COMPUTED WITHOUT DEDUCTING FOR BEVELED EDGES OR PIPE DRAINS. WHEN A RETAINING WALL VARIES IN HEIGHT, THE PRISMoidal FORMULA SHALL BE USED IN COMPUTING VOLUMES.

(1) MINIMUM EMBEDMENT VALUE FOR FIRM EARTH IS 2'-0"; CASE III REQUIRES AN EMBEDMENT OF 1/4H FOR A WALL OVER 8' (SEE CASE III ABOVE).

(2) BATTER: CASE I, AND CASE II
 H = 3'-0" TO LESS THAN 5'-0" (VERTICAL)
 H = 5'-0" TO LESS THAN 10'-0" (12 : 1)
 H = 10'-0" TO 12'-0" (6 : 1)
 CASE III
 H = 3'-0" TO LESS THAN 5'-0" (12 : 1)
 H = 5'-0" TO 12'-0" (6 : 1)

(3) FABRIC WRAPPED DRAINS AND 4" PIPE FOR WEEPHOLES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR GRAVITY TYPE RETAINING WALLS.



SPECIAL DESIGNS REQUIRED

PAY ITEM	PAY UNIT
CONCRETE, CLASS B	CU. YD.
STRUCTURE EXCAVATION	CU. YD.
GRANULAR EMBANKMENT (WHEN REQUIRED)	CU. YD.

KENTUCKY DEPARTMENT OF HIGHWAYS	
RETAINING WALL GRAVITY TYPE NON - REINFORCED	
STANDARD DRAWING NO. RGX-002-08	
SUBMITTED: <i>Ben W. Stans</i>	12-2-02
<small>DIRECTOR DIVISION OF DESIGN</small>	
APPROVED: <i>J. M. Yourell</i>	12-2-02
<small>STATE HIGHWAY ENGINEER</small>	