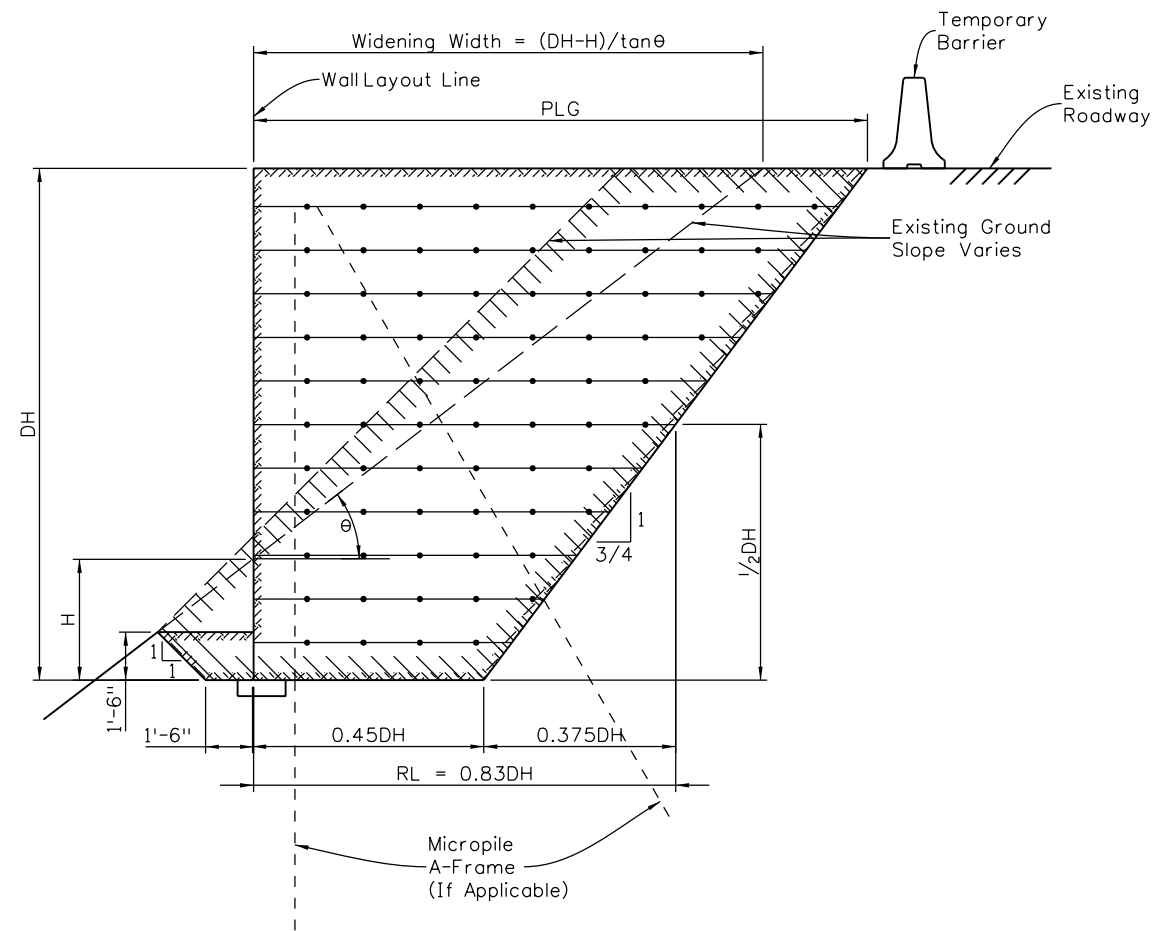


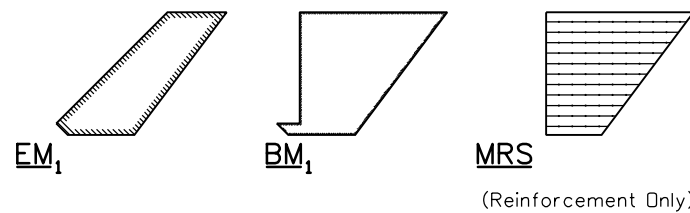
**NOTES:**

1. Template with minimum 1'-6" toe cover is based on wall at its layout line, and may be used for taking sections perpendicular to roadway center line with offsets.
2. Quantity of structure excavation ( $EM_1$ ) may be calculated either by formulae with average H and  $\theta$  at wall layout line or by actual area from graphic model.
3. Earth removal, outside the boundaries as defined shall be managed under roadway quantities and paid as unclassified excavation.
4. Micropile A-Frame is an option only for anchoring bridge rail and meeting slope stability with F.S.  $\geq 1.3$ .
5. Existing slope and widening width may be varied depending upon site geometry



$\theta$  = Average Angle of Existing Ground Line  
Note: Widening width may vary

**SECTION VIEW**



(Reinforcement Only)

CONDITION:  $H \geq 1.5 + 3 \tan(\theta)$   
 $EM_1 = [ 0.825(DH)^2 - 0.5(DH-H)^2/\tan\theta + 3.375 + 4.5\tan\theta ] / 27$   
 $BM_1 = [ 3.375 + (RL)(DH) ] / 27$   
 $MRS = [ (DH)(RL) ] / 27$   
 $PLG = [ 1.2 DH ]$   
 $H = 1.5 + 3\tan\theta$

Example:

Inputs - DH=16'; Average RL=0.83DH=13.28';  $\theta=45^\circ$   
 Outputs - H=4.5';  $EM_1=6.3$  (CY/Ft.);  $BM_1=8.0$  (CY/Ft.); MRS=7.8 (CY/Ft.); PLG=19.2 (ft./ft.)

Revision Dates (Preliminary Stage Only)	
09-16	

Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE

Print Date: 9/6/2016	<b>Sheet Revisions</b>			Colorado Department of Transportation 4201 East Arkansas Avenue Room 107 Denver, CO 80222 Phone: 303-757-9309 FAX: 303-757-9197	<b>As Constructed</b>		<b>Pay Items For Truncated Base With or Without A-Frame MSE Wall With 3/4:1 Soil Excavation</b>		<b>Project No./Code</b>	
File Name: Sheet_LB-504-Q6.dgn	Date:	Comments:	Init.		No Revisions:	Designer: XXXXXXXX Structure Wall-X-XX-XX		Project Number		
Horiz. Scale: 1:4 Vert. Scale: As Noted				Revised:	Detailer: XXXXXXXX Structure Numbers Wall-X-XX-XX		Code			
Staff Bridge Branch-Unit OXXX Unit Leader Initials				Void:	Sheet Subset: Wall Subset Sheets: WXX of XXX		Sheet Number			