

CANTILEVER RETAINING WALL DESIGN

Project: **Example 2.1**

Date: **12/15/2012**

By: **LAA**

Stem Ht:	6.75	ft
Ftng Thick.	1.25	ft
Total Ht:	8.00	ft
Surcharge	50.00	psf
GWT	4.00	ft
Slope	18.00	°
Kh	0.00	g

INPUT

Layer #	Layer Top	Layer Bott.	Material	USCS	Consistency	Frict. Angle	Unit Wt.	Ka
1	0.00	2.00	GRANULAR	SM	loose	28	118	0.45
2	2.00	3.00	CLAY	CL	firm	24	105	0.55
3	3.00	5.00	GRANULAR	SW	med-den	31	122	0.40
4	5.00	6.75	BEDROCK	BR #1	dense	35	130	0.35
5	6.75	8.00	BEDROCK	BR #1	dense	35	130	0.35

RESULTS

Layer #	Layer Top	Layer Bott.	TOT. LAT. STR.	PORE WATER	EFF. STRESS	SURCHARGE	SEISMIC	TOTAL
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
1	0.00	2.00	236.00	0.00	236.00	22.50	0.00	236.00
2	2.00	3.00	341.00	0.00	341.00	27.50	0.00	341.00
3	3.00	5.00	585.00	62.42	522.58	20.00	0.00	585.00
4	5.00	6.75	812.50	171.66	640.84	17.50	0.00	812.50
5	6.75	8.00	975.00	249.68	725.32	17.50	0.00	975.00

EARTH PRESSURE ENVELOPE

