

**ReCon Walls**  
ReCon Retaining Walls, Inc version 2.1

Project: Jamaica - ER-BRF 013-1(16)  
Location: Jamaica, Vermont  
Designer: R&M Engineering Consultants  
Date: 5/2/2013

Section: Section 3  
Design Method: AASHTO\_LRFD  
Seismic Acc: 0.120

SOIL PARAMETERS

	Phi	coh	Gamma
Retained Soil:	34 deg	0 psf	140 pcf
Foundation Soil:	32 deg	0 psf	125 pcf

Leveling Pad: Crushed Stone

GEOMETRY

Design Height:	6.67 ft	Live Load:	280 psf
Wall Batter/Tilt:	3.58/ 0.00 deg	Live Load Offset:	6.00 ft
Embedment:	5.33 ft	Live Load Width:	24 ft
Leveling Pad Depth:	0.50 ft	Dead Load:	0 psf
Slope Angle:	0 deg	Dead Load Offset:	0 ft
Slope Length:	0 ft	Dead Load Width:	0 ft
Slope Toe Offset:	0 ft	Leveling Pad Width:	4.25 ft

LOAD FACTORS

Load Case:	Str max(d)	Str min(r)	Seis max(sd)	Seis min(sr)	Service(serv)
Dead Load (DC)	1.25	0.90	1.25	0.90	1.00
Dead Load Driving (EH)	1.50	0.90	1.50	0.90	1.00
Vertical Earth load (EV)	1.35	1.00	1.35	1.00	1.00
Live Load (LL, PL, LS)	1.75	0.00	0.50	0.00	1.00

RESISTANCE FACTORS

Resistance Case:	Reduction Factor
Bearing Resistance(RFbr)	0.45
Sliding Concrete to Stone(RFsl_c)	0.90
Sliding Stone to Soil(RFsl_s)	0.90

RESULTS (Static / Seismic)

CDR Sliding:	1.64 (lvpd) / 1.19	CDR Bearing:	7.21 / 7.21
CDR Eccentricity:	L/ 4.98 / L/ 4.92	Bearing	1396.71 / 125.71

Name	Elev.	FSsl	L/e	siesFSsl	Seis L/e
TC	5.33	146.94	78.98	81.20	131.18
39	4.00	39.29	39.51	23.17	37.22
39	2.67	18.23	15.41	11.99	14.94
39	1.33	10.62	8.12	7.43	7.97
39	0.00	1.64	4.98	1.19	4.92

