

John Shively PE

Surcharge

No.	Type	Type of action	Location z [ft]	Origin x [ft]	Length l [ft]	Width b [ft]	Slope α [°]	Magnitude		
								q, q ₁ , f, F, x	q ₂ , z	unit
1	strip	permanent	on terrain	x = 5.00	l = 30.00		0.00	125.0		lbf/ft ²

Surcharges

No.	Name
1	Parking Lot

Water

Water type : No water

Tensile crack

Tensile crack not input.

EarthquakeHorizontal seismic coefficient : $K_h = 0.1100$ Vertical seismic coefficient : $K_v = 0.0000$ **Settings of the stage of construction**

Design situation : seismic

Results (Stage of construction 1)**Analysis 1****Circular slip surface**

Slip surface parameters							
Center :	x =	-14.88	[ft]	Angles :	$\alpha_1 =$	-9.24	[°]
	z =	21.23	[ft]		$\alpha_2 =$	53.39	[°]
Radius :	R =	34.34	[ft]				
The slip surface after optimization.							

Slope stability verification (Spencer)

Factor of safety = 1.09 > 1.00

Slope stability ACCEPTABLE