

John Shively PE

Safety factor = 6.34 &gt; 1.00

**Joint for overturning stability is SATISFACTORY****Check for slip**Resisting horizontal force  $H_{res} = 6559.10$  lbf/ftActive horizontal force  $H_{act} = 126.63$  lbf/ft

Safety factor = 51.80 &gt; 1.00

**Joint for verification is SATISFACTORY****Bearing capacity of foundation soil (Stage of construction 2)****Design load acting at the center of footing bottom**

No.	Moment [lbfft/ft]	Norm. force [lbf/ft]	Shear Force [lbf/ft]	Eccentricity [-]	Stress [psf]
1	2793.5	3627.47	1343.54	0.181	1338.6

**Service load acting at the center of footing bottom**

No.	Moment [lbfft/ft]	Norm. force [lbf/ft]	Shear Force [lbf/ft]
1	2793.5	3627.47	1343.54

**Verification of foundation soil**

Stress in the footing bottom : rectangle

**Eccentricity verification**Max. eccentricity of normal force  $e = 0.181$ Maximum allowable eccentricity  $e_{alw} = 0.333$ **Eccentricity of the normal force is SATISFACTORY****Verification of bearing capacity**Max. stress at footing bottom  $\sigma = 1338.6$  psfBearing capacity of foundation soil  $R_d = 6000.0$  psf

Safety factor = 4.48 &gt; 1.00

**Bearing capacity of foundation soil is SATISFACTORY****Overall verification - bearing capacity of found. soil is SATISFACTORY**