

Pad Strength Capacity

β :	0.85 ACI318-05 - 10.2.7.3
Lower Pad Flexural Reinforcement Ratio:	0.0046 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0000 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Lower Pad Flexural Reinforcement Spacing:	13 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Flexural Reinforcement Spacing:	0 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
One Way Design Shear (V_u):	75.2 k
One Way Shear Capacity (ϕV_c):	162.2 k - ACI318-05 - 11.3.1.1
$V_u / \phi V_c$:	0.46 Result: OK
Punching Design Shear (V_u):	288.0 k
Nominal Punching Shear Capacity ($\phi_c V_n$):	467.8 k - ACI318-05 - 11.12.2.1
$V_u / \phi V_c$:	0.62 Result: OK
Flexural Loading Due to Soil Pressure (M_u):	201.0 k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	536.7 k-ft - ACI318-05 - 10.3
$M_u / \phi M_n$:	0.37 Result: OK
Flexural Loading Due to Uplift (M_u):	0.0 k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	0.0 k-ft - ACI318-05 - 10.3
$M_u / \phi M_n$:	0.00 Result: OK

Pier Strength Capacity

Design Moment (M_u):	0.5 k-ft
Nominal Moment Capacity ($\phi_B M_n$):	315.5 k-ft - ACI318-005 - 10.2
$M_u / \phi_B M_n$:	0.00 Result: OK
Design Shear (V_u):	0.6 k
Nominal Shear Capacity ($\phi_V V_n$):	199.9 k - ACI318-05 - 11.3.1.1 or 11.5.7.2
$V_u / \phi_V V_n$:	0.00 Result: OK
Design Tension (T_u):	0.0 k
Nominal Tension Capacity ($\phi_T T_n$):	190.1 k - ACI318-05 - 10.2
$T_u / \phi_T T_n$:	0.00 Result: OK
Design Compression (P_u):	351.5 k
Nominal Compression Capacity ($\phi_P P_n$):	2394.8 k - ACI318-05 - 10.3.6.2
$P_u / \phi_P P_n$:	0.15 Result: OK
Pier Reinforcement Ratio:	0.002 Reinforcement Ratio under required values - ACI318-05 - 10.8.4
$M_u / \phi_B M_n + T_u / \phi_T T_n$:	0.00 Result: OK

Nominal and Factored Moment Capacity and Factored Design Loads

