

▷ PRECAST BACKWALLS

$$f'_{ci} = 3500 \text{ PSI} \quad f'_c = 5000 \text{ PSI}$$

$$W_{\text{MAX}} = 14.56 \text{ T}$$

TWO (2) LIFT LOCATIONS & BASED ON A 60° MINIMUM SUNG
ANGLE WITH THE HORIZONTAL,

$$\text{DESIGN LOAD / LIFT LOCATION} = \frac{14.56 \text{ T} \times 2}{(2)(0.866)} = 16.8 \text{ KIPS}$$

FROM ATTACHED PRODUCT INFORMATION, USE 20 TAN $\times$ 19 $\frac{3}{4}$ " SWIFT

$$\text{LIFT ANCHORS, SWL (4:1 S.F.)} = 40,000 \text{ LB, OK}$$

ALSO CHECK ANCHORS USING PCI FIGURE 6.15.7A, CASE 3 (ANCHORED)
FOR FREE EDGES ON (2) OPPOSITE SIDES:

$$\begin{aligned} \phi P_c &= \phi 2.67 \times \sqrt{f'_c} (x_1)(y_1 + 2d_e) \\ &= (0.85)(2.67)(1.0)(3500)^{0.5} (27)(0 + 2(20 \frac{5}{16})) / 1000 \\ &= 147.3 \text{ K} \end{aligned}$$

$$\text{WHERE } \phi = 0.85$$

$$\lambda = 1.0$$

$$f'_c = 3500 \text{ PSI}$$

$$x_1 = 27"$$

$$y_1 = 0$$

$$d_e = 19 \frac{3}{4} + \frac{9}{16} = 20 \frac{3}{16}"$$

$$\text{FOR SWL (4:1 S.F.)} = \frac{147.3}{4} = 36.8 \text{ K} > 16.8 \text{ K}$$

OK ✓