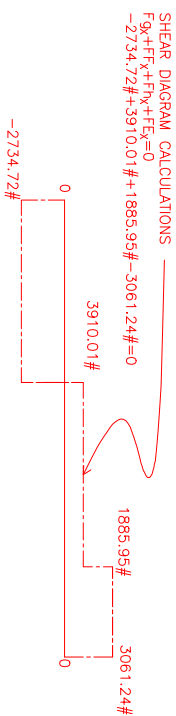
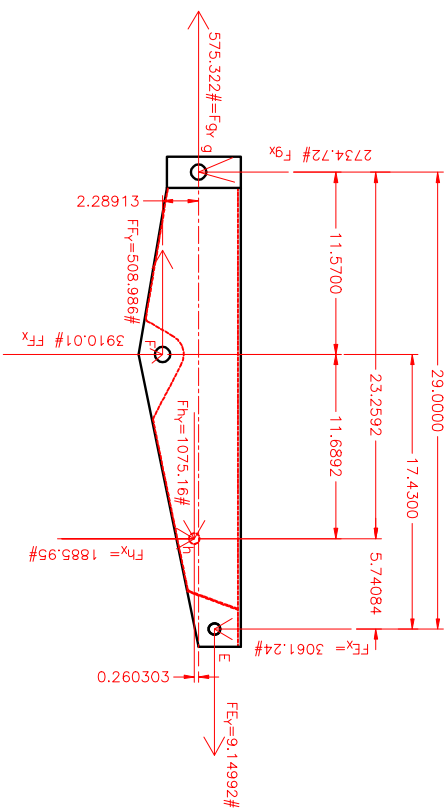


$$\begin{aligned} \sum M_G^F &= +(F_{Ex} \cdot 29.0000'') + F_{Ey} \cdot 1.00000 - (F_{Dx} \cdot 11.0486'') + (F_{Dy} \cdot 20.8304'') = 0 \\ M_G^F &= +(3061.24 \cdot 29.0000'') + 9.14992 \cdot 1.00000 - (3943.00 \cdot 11.0486'') + (2170.89 \cdot 20.8304'') = 0 \\ 2170.89 &= F_{Dy} \end{aligned}$$

$$\begin{aligned} \sum F_x^F &= +F_{Ex} - F_{Dx} \cos 7.4168^\circ + h_j \cos 29.6870^\circ - F_{Gx} = 0 \\ +3061.24 - 3943.00 \cos 7.4168^\circ - 2170.89 \cos 29.6870^\circ + F_{Gx} &= 0 \\ 2734.72 &= F_{Gx} \end{aligned}$$

$$\begin{aligned} \sum F_y^F &= +F_{Ey} - F_{Dy} \sin 7.41678^\circ + h_j \sin 29.6870^\circ - F_{Gy} = 0 \\ +9.14992 - 3943.00 \sin 7.4168^\circ + 2170.89 \sin 29.6870^\circ - F_{Gy} &= 0 \\ 575.321 &= F_{Gy} \end{aligned}$$



MOMENT CALCULATIONS

$$\begin{aligned} M_{1.5700} &= -2734.72 \cdot 11.5700 = -31640.7'' \\ M_{1.5700} &+ = -2734.72 \cdot 11.5700 + (508.986 \cdot 2.28913) = -30475.6'' \\ M_{23.2592} &= -2734.72 \cdot 23.2592 + (508.986 \cdot 2.28913) + 3910.01 \cdot 11.6892 = -16737.4'' \\ M_{23.2592} &+ = -2734.72 \cdot 23.2592 + (508.986 \cdot 2.28913) + 3910.01 \cdot 11.6892 - (1075.16 \cdot 0.260303) = -17017.2'' \\ M_{29.0000} &= -2734.72 \cdot 29.0000 + (508.986 \cdot 2.28913) + 3910.01 \cdot 17.4300 - (1075.16 \cdot 0.260303) + 1885.95 \cdot 5.74084 = -556.799'' \end{aligned}$$