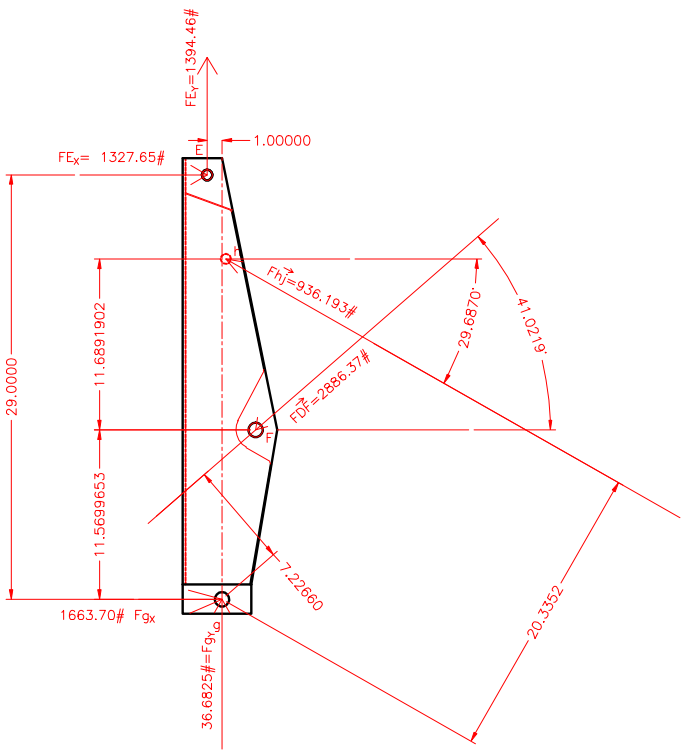
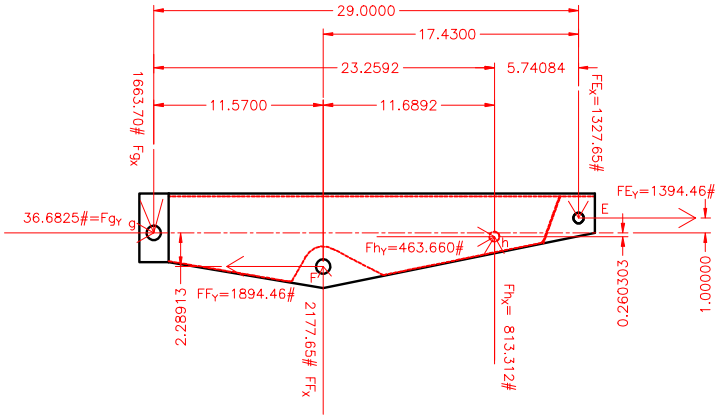
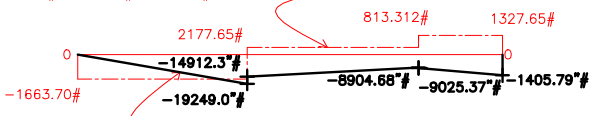




SHEAR DIAGRAM CALCULATIONS

$Fg_X+FF_X+Fh_X+FE_X=0$

$-1663.70\#+2177.65\#+813.312\#-1327.65\#=0$



MOMENT CALCULATIONS

$M_{11.5700}=-1663.70\#*11.5700"=-19249.0"\#$

$M_{11.5700}+=-1663.70\#*11.5700"+(1894.46\#*2.28913")=-14912.3"\#$

$M_{23.2592}=-1663.70\#*23.2592"+(1894.46\#*2.28913")+2177.65\#*11.6892"=-8904.68"\#$

$M_{23.2592}+=-1663.70\#*23.2592"+(1894.46\#*2.28913")+2177.65\#*11.6892"-(463.660\#*0.260303)=-9025.37"\#$

$M_{29.0000}=-1663.70\#*29.0000"+(1894.46\#*2.28913")+2177.65\#*17.4300"-(463.660\#*0.260303")+813.312\#*5.74084"=-1405.79"\#$

$M_{29.0000}+=-1663.70\#*29.0000"+(1894.46\#*2.28913")+2177.65\#*17.4300"-(463.660\#*0.260303")+813.312\#*5.74084"+1394.46*1.00000=-11.3333"\#$

$\Sigma M_G^{\circlearrowleft}=+(FE_X*29.0000")+FE_Y*1.00000-(FFD"*7.22660"\#)+(Fjh*20.3352")=0$

$M_G^{\circlearrowleft}=+(1327.65*29.0000")+1394.46*1.00000"-(2886.37\#*7.22660")-(Fjh*20.3352")=0$

$936.193=Fhj$

$\Sigma F_X^{\rightarrow}=+FE_X-FDF\ COS41.0219°+hj\ COS29.6870°-Fg_X=0$

$+1327.65\#-2886.89\#*COS41.0219°-936.193\#*COS29.6870°+Fg_X=0$

$1663.70\#=Fg_X$

$\Sigma F_Y^{\uparrow}=+FE_Y-FDF\ SIN41.0219°+hj\ SIN29.6870°-Fg_Y=0$

$+1394.46\#-2886.89\#*SIN41.0219°+936.193\#*SIN29.6870°+Fg_Y=0$

$36.6825\#=Fg_Y$