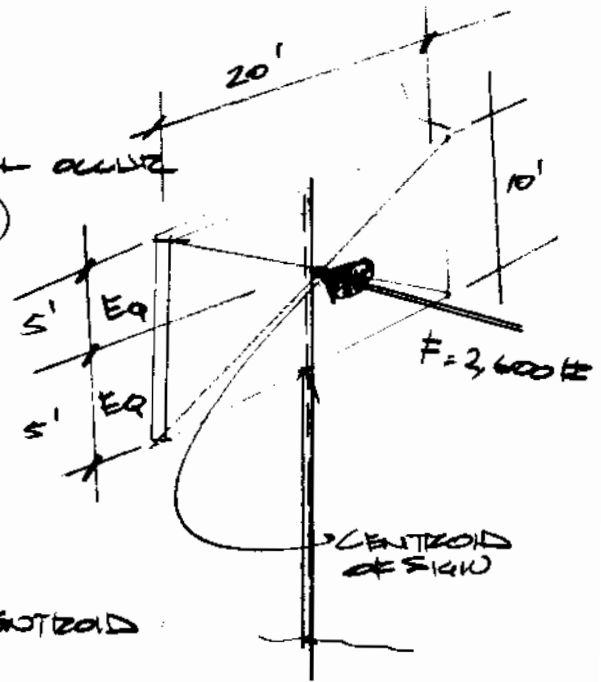
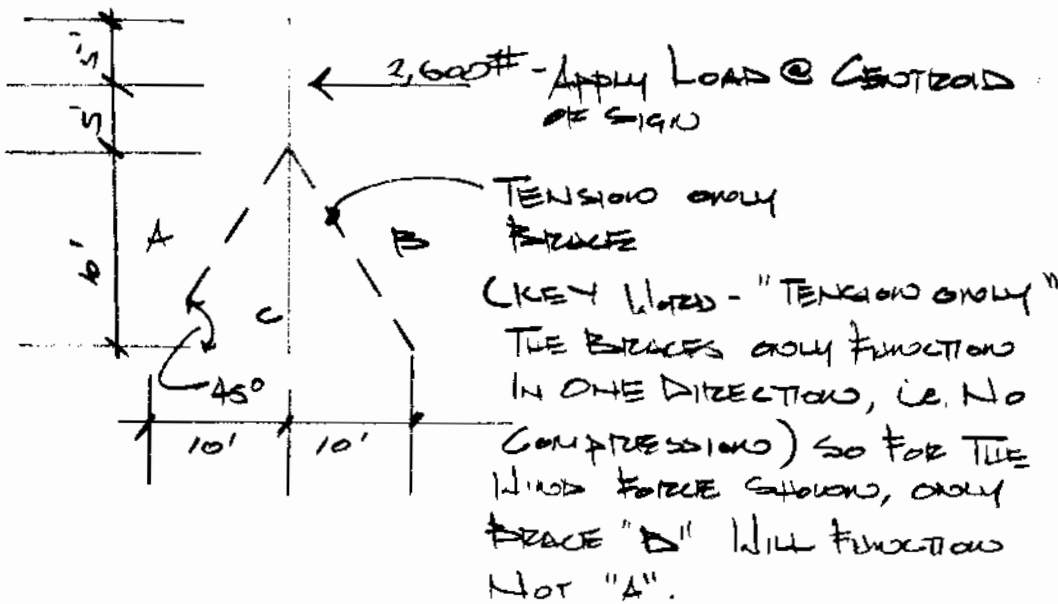


- 1 - FIND THE FORCE ON THE SIGN.
 (NOTE THE RESULTANT FORCE WILL OCCUR @ THE CENTROID OF THE SIGN)

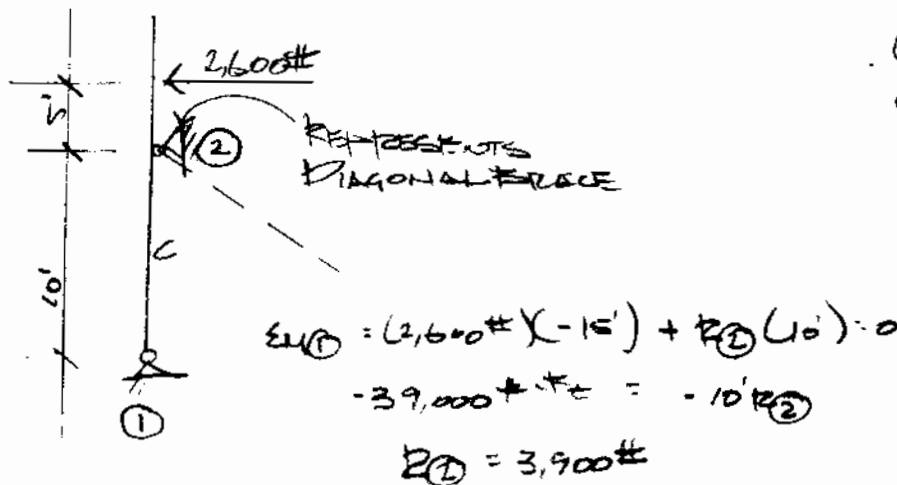
$$F = (13\text{psf}) \underbrace{(10') \times (20')}_{\text{AREA OF SIGN}} = 2,600\text{#}$$



- 2) NOW MODEL THE STRUCTURE



- 3) LOOK @ MEMBER C AS A SIMPLY SUPPORTED BEAM WITH A CANTILEVERED END & FIND THE REACTIONS.



- 4) NOW THAT YOU KNOW THE HORIZONTAL COMPONENT IN THE BRACE & THE ANGLE THE FORCE IN THE BRACE CAN BE FOUND.

$$3,900\text{#} \sin 45^\circ = \frac{3,900\text{#}}{B}$$

$$B = \frac{3,900\text{#}}{\sin 45^\circ}$$

$B = 5,515\text{#}$