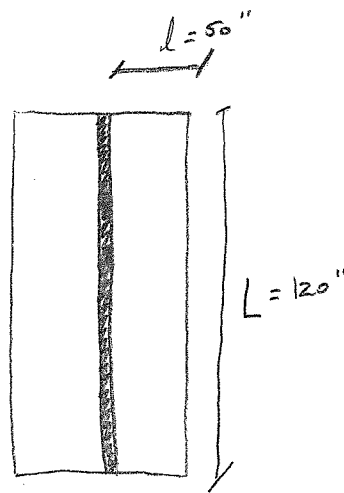
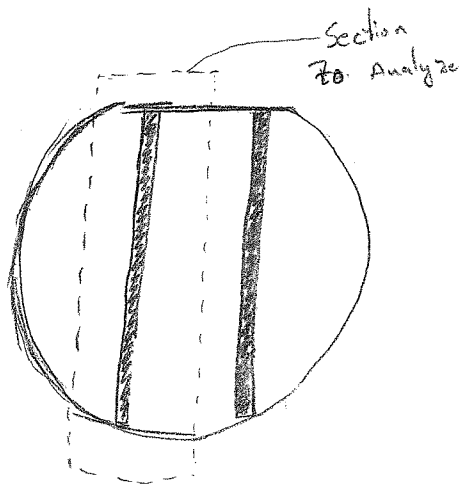


I am thinking now I should use $\frac{1}{2}$ " plate to reduce the amount fabrication and going with 2 stiffeners. By the way vertical so when the water overflows water and air pockets are not trapped in the support Beams, giving the Plate a uniform Pressure for simplicity. ($P = 2.27 \text{ psi}$) The spacing in the stiffeners is 50".

I get :



$$w = Pl = 2.2 \cdot 50$$

$$= 110 \frac{\text{lb}}{\text{in}}$$

$$M = \frac{w L^2}{8} = \frac{110 \cdot 120^2}{8}$$

$$= 198 \text{ kip-in}$$

$$\sigma = \frac{M}{18.8} = 10.64 \text{ in}^3$$