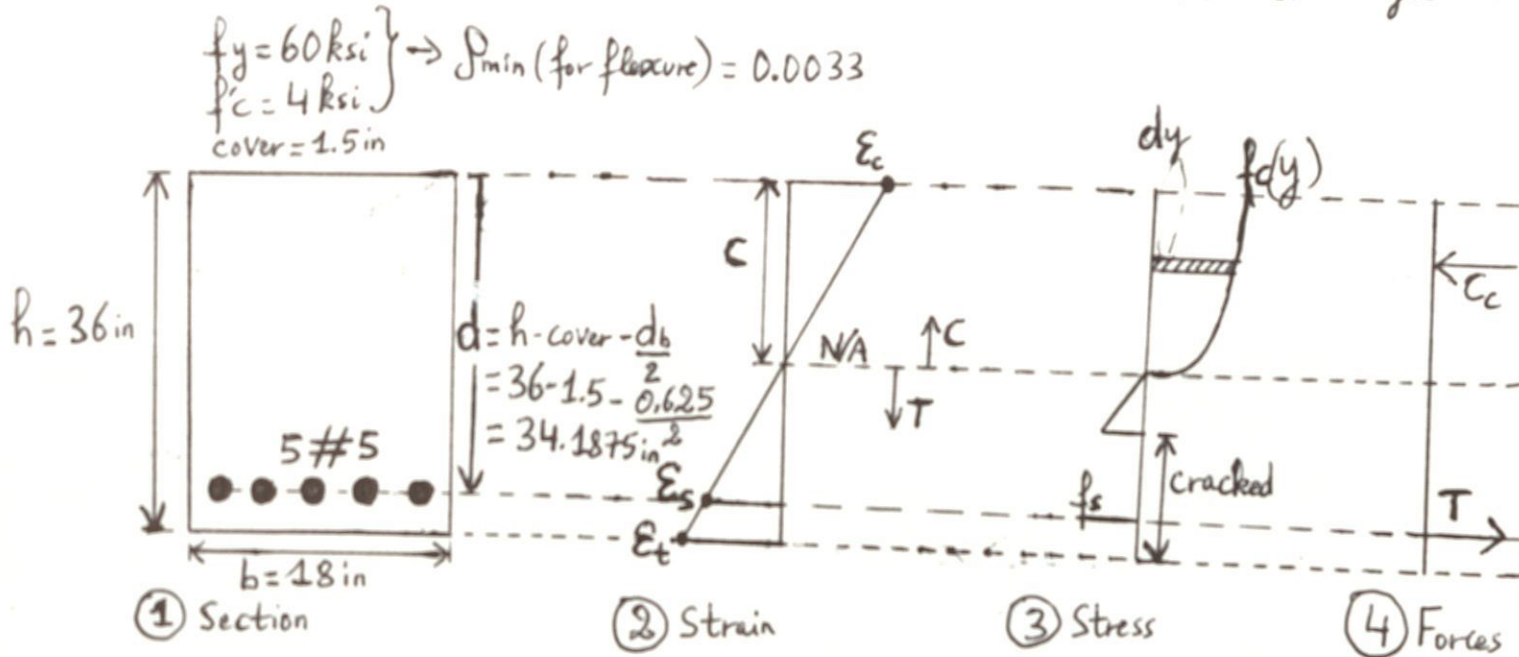


Date: 23rd January 2019



#5 $\rightarrow A_b = 0.31 \text{ in}^2$; $d_b = 0.625 \text{ in}$

$A_s = (5)A_b = 5(0.31 \text{ in}^2) = 1.55 \text{ in}^2$

$A_{s,\min} = \rho_{\min} b d = (0.0033)(18 \text{ in})(34.1875 \text{ in}) = 2.031 \text{ in}^2$

$A_s = 1.55 \text{ in}^2 < A_{s,\min} = 2.031 \text{ in}^2 \rightarrow \text{Not Good}$

Beam is under-reinforced