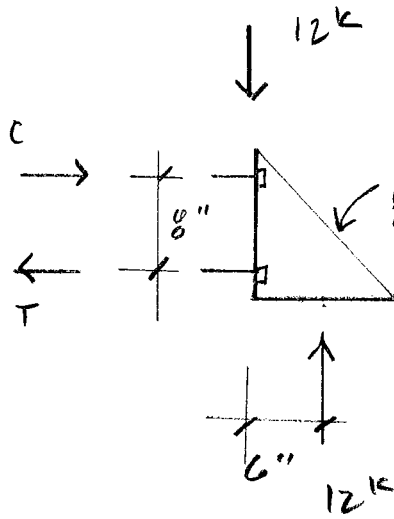


CHECK PILE BRACKET FOR MOMENT



$M = 12 \text{ k} \times 6 \text{ \"} = 6 \text{ k} \cdot \text{ft}$

$T = C = 6 \text{ k} \cdot \text{ft} \div 8 \text{ \"} = 9 \text{ k}$

4.5 k PERL BOLT

(2) BOLTS TOP & BOTTOM

3/4 \" of TITANUM HD

Nh

TRY ADDING BENDIM TO PILE, 3\" SCH. 40

$F_y = 35 \text{ ksi}$

$M_u = M_d \cdot F_y \cdot z = 76.7 \text{ k} \cdot \text{in}$

$z = 2.19 \text{ in}^3$

$\frac{M_u}{z} = 3.83 \text{ k} \cdot \text{ft} \quad Nh$

TRY XX SIKEMA PIPE, $z = 4.89$

$\frac{M_u}{z} = 8.5 \text{ k} \quad \underline{OK} \Rightarrow DCR = \frac{6}{8.5} = .71$

CHECK AXIAL w/ UNBRIEDED LENGTH = 6', 2x OVER-EXTRACTION REQ'D IN SOILS REPORT

$\frac{K L}{r} = \frac{.7(6')}{1.06} = 47.5 \Rightarrow \frac{F_{cr}}{z} = 18.6 \text{ ksi}$

$F_{cr} = 31.1 \text{ ksi}$

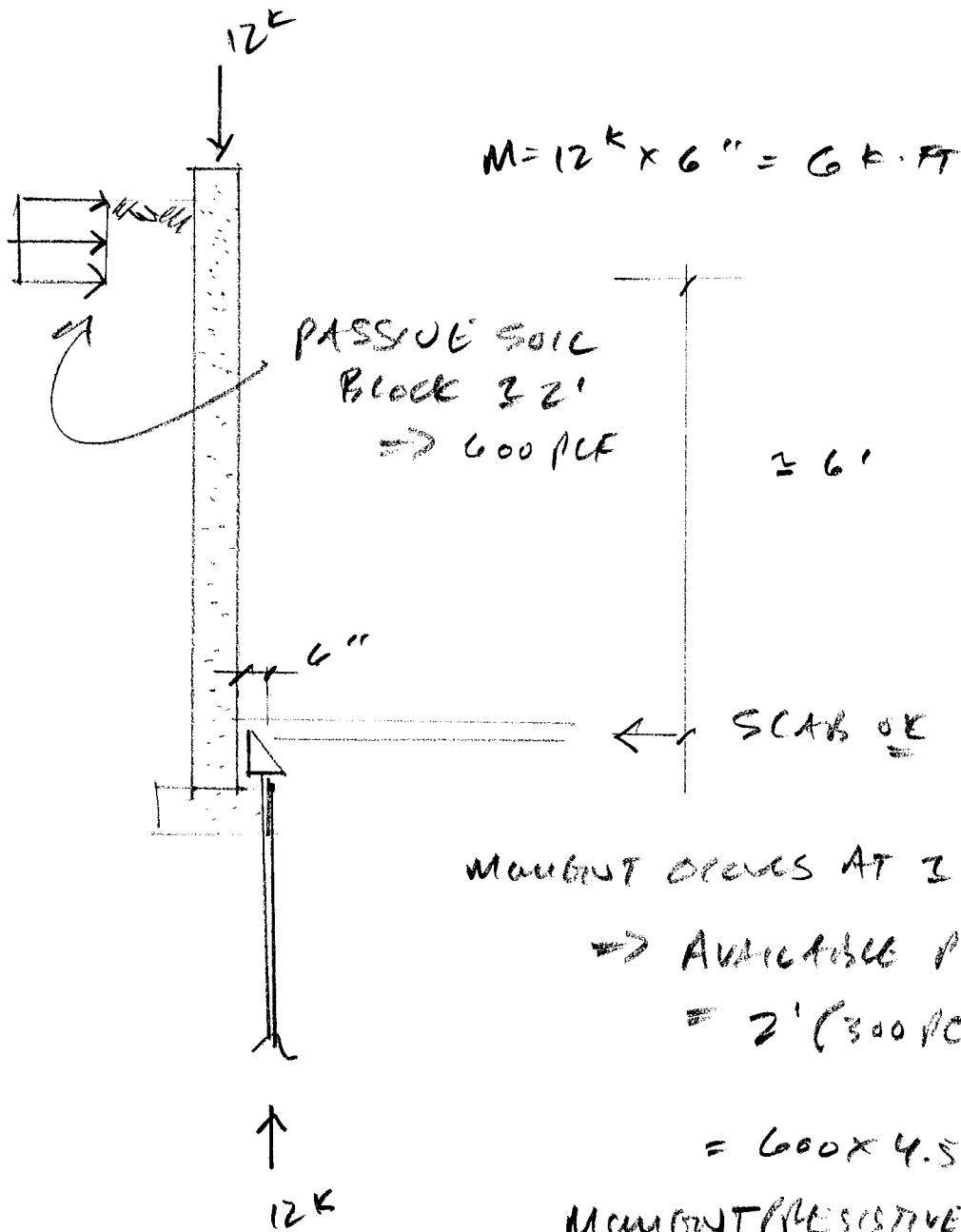
$P_n = F_{cr} A_g = 31.1(5.10)$

$= 160 \text{ k} \Rightarrow \frac{P_n}{z} = 96 \text{ k}$

WELDED

11/24/20

$DCR = .125$



$$M = 12^k \times 6'' = 6^k \cdot \text{FT}$$

PASSIVE SOIL
Block 32'
⇒ 600 pcf

≈ 6'

SCAB 0k

MOMENT OCCURS AT 34.5' OL

⇒ AVAILABLE PASSIVE

$$= 2' (300 \text{ pcf}) (2) \times \frac{4.5'}{2}$$

$$= 600 \times 4.5' = 2.7^k$$

MOMENT (RESISTIVE)

$$= 6' \times 2.7^k = 16.2^k \cdot \text{FT}$$

$$16.2^k \cdot \text{FT} > 6^k \cdot \text{FT}$$

MINIMUM MOMENT AREA =

$$x (2.7^k) = 6^k \cdot \text{FT}$$

$$x = 2.2'$$

MIN. SOIL HT =

$$2.2' + 2' = 4.2'$$

WELLS

11/24/20

IF SOIL IS LOWER

ALTERNATE SIDES OF WATER