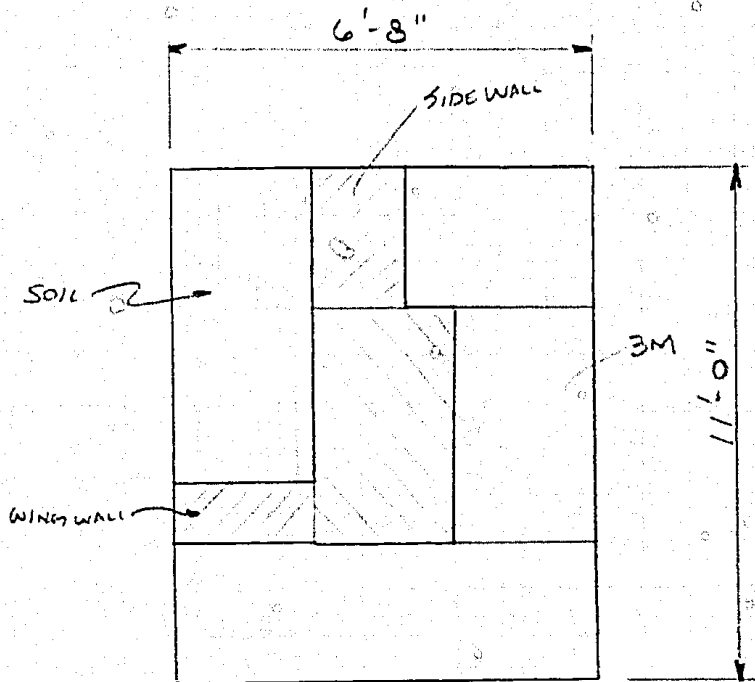


TRY 3 FT PROJECTION



$$\text{SIDE WALL} - (38.9 + 4) 3 = 128.7$$

$$\text{SOIL} - 20(0.100)(\frac{3}{2})(3-5-1.25) = 40.5$$

$$\text{WING WALL} - 0.150(20.5)(1.25)(3) = 11.5$$

$$\text{BEAM} \approx 0.150(3)(2)(3) = 4.5$$

$$\text{FL SLAB} - 0.25(\frac{3}{2})(4) + 0.25(3)(8.67) = 9.5$$

$$\underline{194.7 \text{ K}}$$

$$\text{TOTAL LOAD} - 482.2 + 194.7 = 676.9$$

SOIL PRESSURE

$$f = \frac{676.9}{6.67(11)} = 9.23 \text{ K/ft}^2 < \text{Allow} = 9.625 \text{ K/ft}^2$$

BY MWD DATE 5/4/78 PROJECT NAVY MAG TYPE I SHEET NO. 257 OF 257  
 CKD. BY \_\_\_\_\_ DATE \_\_\_\_\_ SUBJECT PILASTER ETG EXTERIOR PILASTER

DESIGN FOR SHEAR

$$\text{FOR } T = 2'-0" \quad - \quad d = 24 - 3 - 0.5 = 20.5"$$

$$\text{MAX SHEAR } \approx 0.15L$$

$$V = 9.23(0.35)(3) = 23.54 \text{ k/ft}$$

$$\tau = \frac{V}{bd} = \frac{23.54}{12(20.5)} = 96 \text{ psi} < \text{Allow} = 108 \text{ psi}$$

FLEXURE DESIGN

$$M_{\text{MAX}} = \frac{9.23(3)^2}{2} = 41.5 \text{ ft-k/ft}$$

$$\rho_{\text{MIN}} = 0.00455$$

$$A_s = 0.00455(12)(20.5) = 1.12 \text{ in}^2/\text{ft} \quad \# 8 @ 8 \quad (1.19)$$

$$a = \frac{A_s f_{ty}}{0.35 b f_c} = \frac{1.19(44)}{0.35(12)(3)} = 1.027"$$

$$M_u = \frac{A_s f_{ty}}{b} (d - \frac{a}{2}) = \frac{1.19(44,000)}{12} (20.5 - \frac{1.027}{2}) = 37,200 \text{ ft-k/ft}$$

LISE 3 FT PROTECTION AROUND PILASTER  
 (3'-3" x 11' x 0"  
 T = 2'-0"  
 # 8 @ 8 E.W. BOT

**E N D**

**MICROPHOTOGRAPHER**

*Taylor*

**DATE**

*12-14-79*



**MICROFILM SECTION**

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