





<b>James G. Pierson, Inc.</b> Consulting Structural Engineers 320 S.W. Stark, Suite 535 Portland, Oregon 97204 Tel: (503) 226-1286 Fax: (503) 226-3130	Project JUNE 30, 07 Modis	Job no.
	Location SW1 & SW2 (1W1, 2W1, BW1 etc)	Date 12/22/05
	Client Hawkins	Sheet no. 1

tributary loads  $W1 = 7.5'$   
 $W2 = 6.75'$

			Total shear	$v$ (3.33')
$P_{ROOF} =$	$151 \# \times 7.5' =$	$1132 \#$	1132 lbs	340 plf (242)
$P_{2ND} =$	$169 \times 7.5' =$	$1267 \#$	2400 lbs	720 plf (515)
$P_{MAIN} =$	$155 \times 7.5' =$	$1162.5 \#$	3562 lbs	1070 plf (765)
$P_{BASE} =$	$136.4 \times 7.5' =$	$1023 \#$	4585 lbs	1377 plf (983)

- TJP - Shearwall  = 460 plf cap.
- 2ND "  = 770 plf cap
- MAIN "  =  $8 \times 15 = 120$  plf
- BASEMENT "   $8 \times 2 = 1540$

Roof to 2ND  
 OTM  $1132 \# \times 8' = 9056 \text{ ft}\cdot\text{lb}$   
 RM  $\frac{2}{3}(120)(3.33)^2/2 = 369 \text{ ft}\cdot\text{lb}$

Tension =  $(9056 - 369) / 2.83' = \underline{\underline{3069 \#}}$  - CMST 14

2ND to MAIN  
 OTM  $1132 \times 19.58' + 1267 \times 11.58' = 36,836 \text{ ft}\cdot\text{lb}$   
 RM  $\frac{2}{3}(230)(3.33)^2/2 = 841 \text{ ft}\cdot\text{lb}$

Tension =  $(36,836 - 841) / 2.83' = \underline{\underline{12,720 \#}}$

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MAIN TO BASEMENT

$$OTM = 1132 \times 28.58' + 1267 \times 20.58' + 1163 \times 9' = 68,895 \text{ ft/lb}$$

$$PM = \frac{2}{3} (330) (3.33)^2 / 2 = 1218 \text{ ft/lb}$$

$$Tension = (68,895 - 1218) / 2.83' = \underline{\underline{23,915 \#}}$$

BASEMENT TO FOUNDATION

$$OTM = 1132 \times 40' + 1267 \times 32' + 1163 \times 20.5' + 1023 \times 11.5' = 121,430 \text{ ft/lb}$$

$$PM = \frac{2}{3} (440) (3.33)^2 / 2 = 1,624 \text{ ft/lb}$$

$$Tension = (121,430 - 1,624) / 2.83' = \underline{\underline{42,334 \#}}$$

- Bring concrete up 24" MIN out of ground

$$OTM = 1132 \times 38 + 1267 \times 30 + 1163 \times 18.5 + 1023 \times 9.5 = 112,260 \text{ ft/lb}$$

$$Tension = 39,000 \text{ lbs}$$

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