

LA Federal Credit Union * Norco, LA

128 mph windload pressure calculated by ASCE Chap 29 F= 49.2 psf

Area

Areas	Heighth x	Width	Area	F	P
A ₁	7.20	18.00	129.60	49.20	6376.32
A ₂	4.83	4.50	21.74	49.20	1069.36
A ₃	8.00	2.50	20.00	49.20	984.00
Total =					8429.68 lbs

Moment @ Grade

Moment	Arm x	P	Moment ft-lbs	Moment in-lbs
M ₁	16.50	6376.32	105209.28	1262511.36
M ₂	10.50	1069.36	11228.30	134739.61
M ₃	4.00	984.00	3936.00	47232.00
Total =			120373.58	1444482.97

$$I=0.049087(d_o^4 - d_i^4) \quad 361.5411$$

$$\sigma = Mc / I = 23972.1 \times 1.5 F_s = 35958.14$$

This project shall use HSS 12.75x0.50 (58ksi steel) pipe