

PLATFORM FRAMING — SIDL-LOUSIANNA

LOADS:

D.C.	DECKING	10 #/ft
	Beams &	
	Girders	6
	MISC	4

$$\Sigma D.L. = 20 \text{ #/ft}, \quad L.L. = 50 \text{ #/ft}$$



B-1

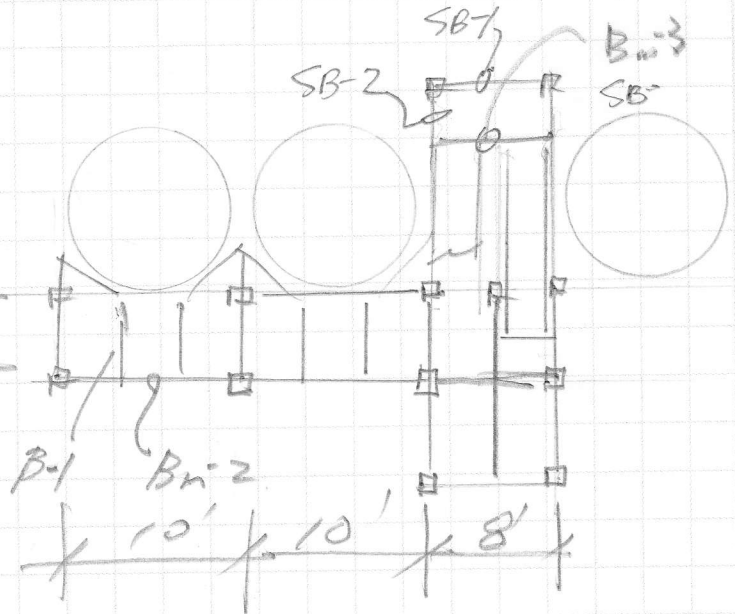
$$l = 5'$$

$$W = (20 + 50) \times 3.5' = 245 \text{ #/ft}$$

$$M = 766 \text{ #ft}, \quad R = .613 \text{ #/ft}$$

$$S_x = .46 \text{ in}^3$$

USE L-4x4x1/4



Bm-2

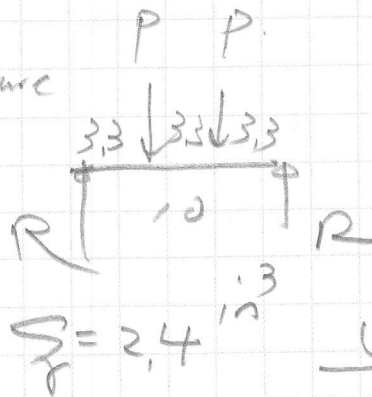
$$l = 10'$$

$$P = 613 \times 2 \text{ Future}$$

$$= 1225 \text{ #}$$

$$R = 1225 \text{ #}$$

$$M = 4079 \text{ #ft}$$



$$S_x = 2.4 \text{ in}^3$$

USE W8x10

Pr3

$P = 720$ Stringers.

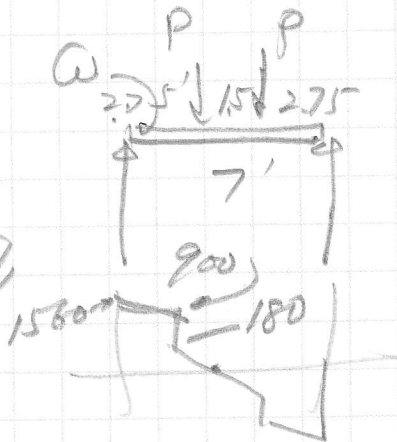
$$W = (20 + 100) \times 2 = 240$$

$$R = 1560$$

$$M = 3451$$

$$S_r = 2.1 \text{ in}^3$$

USE MC 12x10.6. or CBx11.5
 $S_r = 8.1 \text{ in}^3$



Stair stringers . $w_k = 100 \text{ lb/ft}$

SB-1 $l = 8'$

$$W = (20 + 100) \times 1.5 = 180 \text{ lb/ft}$$

$$M = 1440 \text{ lb-ft}, \quad S_x = 0.86 \text{ in}^3$$

$$R = 720 \text{ lb}$$

USE MC12X10.6
 $S_x = 9.2$

SB-2

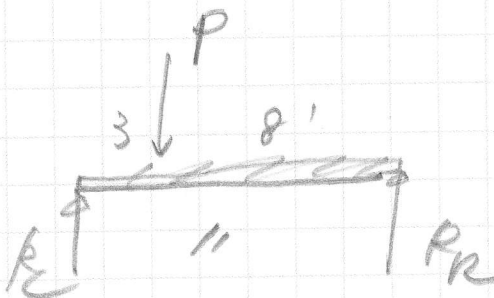
$$P = 720 \text{ lb}$$

$$W = (20 + 100) \times 1.5 = 180 \text{ lb/ft}$$

$$R_L = 1514, \quad R_R = 1186 \text{ lb}$$

$$M = 3907 \text{ lb-ft}, \quad S_x = 2.9 \text{ in}^3$$

USE MC12X10.6



Col.

$$V = C_s W$$

$$C_s = \frac{S_{DS}}{R/I}$$

$$S_{DS} = 1.27$$

$$R = 1.25$$

$$I = 1$$

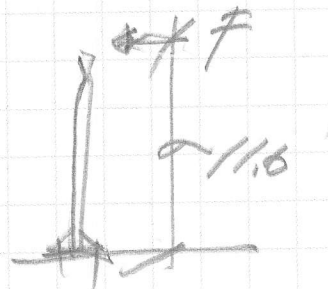
$$C_s = 1$$

$$V = .7 W$$

$$F = .7 (20 \times 10' \times 5')$$

$$= 700 \text{ k}$$

$$M = 81 \text{ k}, \quad S_x = 4.8' \text{ } ^3$$



USE TS 6x6x4

$$S_x = 10.1' \text{ } ^3$$

Base Connection

$$T = C = \frac{8000 \times 12}{9} = 10667 \text{ k}$$

3" ϕ EPOXY BOLTS

Conterminous 48 States
 2005 ASCE 7 Standard
 Latitude = 30.4788
 Longitude = -90.1885
 Spectral Response Accelerations S_s and S_1
 S_s and S_1 = Mapped Spectral Acceleration Values
 Site Class B - $F_a = 1.0$, $F_v = 1.0$
 Data are based on a 0.05000000074505806 deg grid spacing

Period	S_a
(sec)	(g)
0.2	0.119 (S_s , Site Class B)
1.0	0.053 (S_1 , Site Class B)

Conterminous 48 States
 2005 ASCE 7 Standard
 Latitude = 30.4788
 Longitude = -90.1885
 Spectral Response Accelerations S_M s and S_{M1}
 S_M s = $F_a \times S_s$ and $S_{M1} = F_v \times S_1$
 Site Class D - $F_a = 1.6$, $F_v = 2.4$

Period	S_a
(sec)	(g)
0.2	0.190 (S_M s, Site Class D)
1.0	0.128 (S_{M1} , Site Class D)

Conterminous 48 States
 2005 ASCE 7 Standard
 Latitude = 30.4788
 Longitude = -90.1885
 Design Spectral Response Accelerations S_D s and S_{D1}
 S_D s = $2/3 \times S_M$ s and $S_{D1} = 2/3 \times S_{M1}$
 Site Class D - $F_a = 1.6$, $F_v = 2.4$

Period	S_a
(sec)	(g)
0.2	0.127 (S_D s, Site Class D)
1.0	0.085 (S_{D1} , Site Class D)