

新竹縣原住民族地區建築標準圖說
3-SC-1-2

結構計算書

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目錄

- 1.0 建築概要 / Introduction**
- 2.0 結構系統說明 / Structural System Description**
- 3.0 結構材料 / Structural Materials**
- 4.0 設計載重 / Design Loadings**
 - 4.1 靜載重及活載重 / Dead Loads & Live Loads
 - 4.2 設計地震力及分析結果 / Seismic Loads & Analysis result
 - 4.3 設計風力 / Wind Loads
 - 4.4 載重組合 / Loading Combination
- 5.0 工作載重結構行為限制 / Serviceability Performance**
- 6.0 設計規範 / Design Code**
- 7.0 結構分析程序 / Summary of Structural Analysis Procedures**
 - 7.1 結構模型 / Structural Modeling
 - 7.2 RC 樑結構設計
 - 7.3 RC 柱結構設計
- 9.0 基礎設計 / Foundation Design**
 - 9.1 基礎設計說明
 - 9.2 基礎分析
 - 9.3 基礎結構設計

附錄	參考結構圖說
	ETABS 輸入檔
	ETABS 輸出檔
	SAFE 輸入檔
	SAFE 輸出檔



建築結構設計基本資料表

一、構造種類

- 鋼筋混凝土構造
- 鋼骨構造
- 鋼骨鋼筋混凝土構造
- 其他

二、結構系統之規劃及分析

- 韌性抗彎矩構架系統
- 二元系統
- 其他
具對角斜撐之輕型構架

三、結構材料

1. 混凝土
 $f_c' = 280 \text{ kgf/cm}^2$
2. 鋼筋
#4(D13)以上： $f_y = 4200 \text{ kgf/cm}^2$
(CNS 560 A2006 SD420W)
#3(D10)以下： $f_y = 2800 \text{ kgf/cm}^2$
(CNS 560 A2006 SD280W)
3. 鋼結構
SGC440 3400 kgf/cm^2

四、

活載重 LL		kgf/m ²
1F	住宅	200
PRF	屋頂	60

五、水平側向力、風力檢核分析

(一) 地震力

1. 新竹縣五峰鄉

$$2. S_S^D = 0.7, S_1^D = 0.4$$
$$S_S^M = 0.9, S_1^M = 0.5$$

$$3. I = 1.10$$

$$4. R_x = 3, R_y = 3$$

$$5. \alpha_y = 1.0$$

$$6. \text{建築物基本震動週期 } T_x = 0.05 h_n^{3/4}$$
$$T_y = 0.05 h_n^{3/4}$$

$$7. V_x / W = 0.270$$

$$V_y / W = 0.270$$

(二) 風力

基本設計風速每秒 32.5 公尺區

$$I = 1.1, \text{地況: B}$$

六、層間最大變位與層間變位角

(X-Dir.)

1. 最大層間變位角 = 0.021‰

2. 最大位移 = 0.012cm

(Y-Dir.)

1. 最大層間變位角 = 0.017‰

2. 最大位移 = 0.011cm

七、結構設計

- ASD
- USD
- LRFD

八、基礎設計

- 獨立基腳或聯合基腳
- 筏式基礎
- 樁基礎
- 其他
版式基礎



九、基礎開挖擋土支保措施

- 斜坡明挖
- 預壘排樁
- 地下連續壁
- 其他



1.0 建築概要

本案為標準圖說，工程可能位於新竹縣五峰鄉/尖石鄉/關西鎮，為地上 1 樓之輕型鋼構造，樓高約 4.331 公尺。

建築基地：新竹縣五峰鄉/尖石鄉/關西鎮

建築規模：地上 1 層

開挖深度：0.4m



2.0 結構系統說明

地震力分析：法規靜力分析

基本資料：

建築種類：鋼筋混凝土構造(RC)\鋼骨構造(SS)

結構系統：其他\具對角斜撐之輕型構架

樓層概述：

樓層	高度(cm)	用途
1F	433.1	住宅

樓版厚度：

基礎版 40cm RC 版

PRF 彩浪鋼版

開挖方式：

斜坡明挖

分析程式： ETABS V9.5



3.0 結構材料

3.1 混凝土

材料特性:

波松比	0.2
彈性模數(楊式係數)	$15000 \sqrt{fc'}$ kgf/cm ²
線性熱膨脹係數	1.2×10^{-5} 1/ °C
混凝土規定抗壓強度 fc'	同建築結構設計基本資料表
單位重	2400 kgf/m ³

3.2 鋼筋

彈性模數(楊式係數)	2.04×10^6 kgf/cm ²
鋼筋規定降伏強度 fy	同建築結構設計基本資料表
點焊鋼線網	ASTM A706, $F_y=5000$ kgf/cm ²

3.3 結構鋼

材料特性:

波松比	0.3
彈性模數(楊式係數)	2.04×10^6 kgf/cm ²
線性熱膨脹係數	1.2×10^{-5} 1/ °C
標稱降伏應力 fy	同建築結構設計基本資料表
單位重	7850 kgf/m ³

螺栓及焊材

高拉力螺栓	F10T
錨定螺栓	ASTM A307, ASTM A325
焊材	E80xx



4.0 設計載重

4.1 靜載重及活載重

靜載重

PRF

載重種類	數量	單位重	總重
設備管線	1 式	40 kgf/m ²	40 kgf/m ²

外加靜載重(SDL) 40 kgf/m²

2F~R1F 室內

載重種類	數量	單位重	總重
鋪面裝修	1 式	40 kgf/m ²	40 kgf/m ²

外加靜載重(SDL) 40 kgf/m²

活載重 (kgf/m²)

同建築結構設計基本資料表

樓層載重資料

樓層	面積(m ²)	重量(tf)	單位重(tf/m ²)
PRF	70.20	2.82	0.040



4.2 設計地震力及分析結果

依據「建築物耐震設計規範及解說，內政部」，設計地震力為：

$$V = \frac{I}{1.4\alpha_y} \left(\frac{S_{aD}}{F_u} \right)_m W$$

式中

$$\left(\frac{S_{aD}}{F_u} \right)_m = \begin{cases} \frac{S_{aD}}{F_u} & \frac{S_{aD}}{F_u} \leq 0.3 \\ 0.52 \frac{S_{aD}}{F_u} + 0.144 & 0.3 < \frac{S_{aD}}{F_u} < 0.8 \\ 0.70 \frac{S_{aD}}{F_u} & \frac{S_{aD}}{F_u} \geq 0.8 \end{cases}$$

S_{aD} 工址設計水平譜加速度係數，為工址水平加速度與重力加速度 g 之比值。

W 建築物全部靜載重。活動隔間應計入 75kg/m^2 之重量；一般倉庫、書庫應計入至少四分之一活載重；水箱、水池等容器，應計入全部內容物之重量。

I 用途係數。

α_y 起始降伏地震力放大倍數，依耐震設計規範第一章第 9 節規定，鋼結構採容許應力法設計可取 1.2，採極限設計法取 1.0。就鋼筋混凝土結構而言，以極限強度設計法可採 1.0。

F_u 結構系統地震力折減係數，依耐震設計規範第二章第 9 節規定。

※本案為一般建築物，由於本案為泛用之標準圖說，設立之位置較廣，考量其變異性用途係數保守採用 1.1。

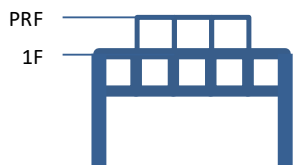


地震力計算詳下表

基地基本資料					斷層資料	
縣市	鄉鎮市區	里	震區種類	地盤種類	附近斷層	距離斷層
新竹縣	五峰鄉	所有里	一般震區	第一類地盤(自行決定地盤種類)	獅潭與神卓山(一般情況)	10(km)

譜加速度係數		近斷層因子		工址放大因子		修正譜加速度係數		分界週期	
S_S^D	0.7	設計	N_a	1	F_a	1	$S_{DS}=F_a \times N_a \times S_S^D$	0.7	$T_0^D=S_{D1}/S_{DS}$
S_1^D	0.4		N_v	1	F_v	1	$S_{D1}=F_v \times N_v \times S_1^D$	0.4	0.571
S_S^M	0.9	最大	N_a	1	F_a	1	$S_{MS}=F_a \times N_a \times S_S^M$	0.9	$T_0^M=S_{M1}/S_{MS}$
S_1^M	0.5		N_v	1	F_v	1	$S_{M1}=F_v \times N_v \times S_1^M$	0.5	0.556

建築基本資料							
屋頂層數	樓層數	地下層數	1F抬高	屋頂高度	建築高度	地下高度	h_n (基面至屋頂)
0 F	1 F	0 F	0(m)	0(m)	4.331(m)	0(m)	4.331(m)



	建築結構系統	
	X方向	Y方向
結構阻尼比	0.02	
結構系統	其他構造	其他構造
T_{code} (法規週期)	$0.05 \times h_n^{3/4} = 0.150(s)$	$0.05 \times h_n^{3/4} = 0.150(s)$
T_{max} (上限週期)	$1.4 \times T_{code} = 0.210(s)$	$1.4 \times T_{code} = 0.210(s)$
I(用途係數)	1.1	
設計規範	鋼構(LRFD)	
α_y	1	

各方向地震力計算		X方向	Y方向
1. 建築結構系統 相關資料	T_{dyna} (動力週期)	0.043(s)	0.039(s)
	T_{design} (設計週期)	0.043(s)	0.039(s)
	R(結構系統韌性容量)	3	3
	R_a (結構系統容許韌性容量)	2.333	2.333



各方向地震力計算		X方向	Y方向
2. 最小設計水平總橫力	S_{aD} (工址設計水平譜加速度)	0.506	0.486
	F_u (系統折減係數)	1.348	1.316
	$(S_{aD}/F_u)_m$	0.339	0.336
	V (最小設計水平總橫力)	0.267	0.264
3. 避免最大考量地震崩塌之設計地震力	S_{aM} (工址最大水平譜加速度)	0.571	0.552
	F_{uM} (系統最大折減係數)	1.483	1.439
	$(S_{aM}/F_{uM})_m$	0.344	0.343
	V_M (最大考量地震水平總橫力)	0.270	0.270
4. 避免中小度地震降伏之設計地震力	V^* (中小度地震水平總橫力)	0.120	0.116
5. 層間相對位移地震力	V_{drift} (層間相對位移地震力)	0.109	0.105

各方向地震力計算		Z方向
6. 垂直地震力	D_{DL+SDL} (垂直自重變位)	0.002(cm)
	T_{ver} (垂直週期) $=2\pi(D_{DL+SDL}/g)^{0.5}$	0.010(s)
	$S_{aD,v}$ (垂直設計譜加速度係數)	0.166
	F_{uv} (垂直地震系統折減係數)	1.078
	$(S_{aD,v}/F_{uv})_m$	0.152
	V_{ZD} (垂直設計地震力)	0.119
	$S_{aM,v}$ (垂直最大加速度係數)	0.204
	$F_{uv,M}$ (垂直最大地震系統折減係數)	1.109
	V_{ZM} (避免最大考量垂直地震崩塌)	0.132
	V_{Z^*} (避免中小度垂直地震降伏)	0.043

地震力統整		X方向	Y方向
1. 水平地震力	$V_{design} = \max(V, V_M, V^*)$	0.270	0.270
2. 層間位移地震力	V_{drift}	0.109	0.105
地震力統整		Z方向	
3. 垂直地震力	$V_{z,Design} = \max(V_{ZD}, V_{ZM}, V_{Z^*})$	0.132	



意外扭矩放大係數

Floor	Load Case	δ_{max} (cm)	δ_{avg} (cm)	$A_x = (\delta_{max}/1.2 \delta_{avg})^2$	備註
PRF	EXP	0.012(節點 69)	0.012	0.768	X 最大值
PRF	EYP	0.011(節點 69)	0.010	0.925	Y 最大值
PRF	EXN	0.012(節點 1)	0.012	0.699	
PRF	EYN	0.010(節點 1)	0.010	0.793	

X 向最大意外扭矩放大係數 A_x 小於 1，故質心偏移比例取 $Ecc=0.05$ 進行分析

Y 向最大意外扭矩放大係數 A_x 小於 1，故質心偏移比例取 $Ecc=0.05$ 進行分析



樓層地震力

(單位 tf)

	EXP	EXP	EYP	EYP	EXN	EXN	EYN	EYN
	VX	VY	VX	VY	VX	VY	VX	VY
PRF	-0.71	0.00	0.00	-0.71	-0.71	0.00	0.00	-0.71
SUM	-0.71	0.00	0.00	-0.71	-0.71	0.00	0.00	-0.71

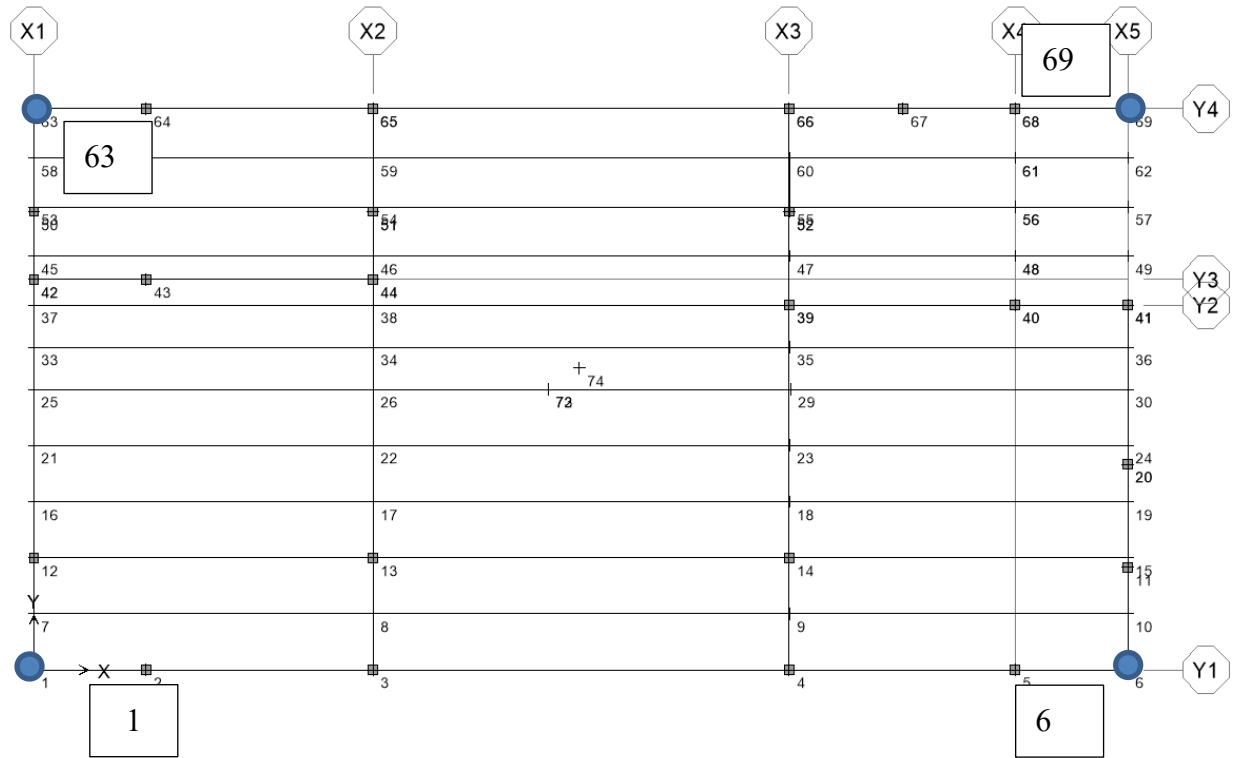
樓層層間變位角

	U _x		U _y	
	EXP	EXN	EYP	EYN
PRF	0.021‰(D22)	0.020‰(D22)	0.017‰(C27-1)	0.013‰(C27-1)



碰撞距離檢討

依建築物耐震設計規範，為避免地震時所引起的變形造成鄰棟建築物間的相互碰撞，建築物應自留設設計地震力作用下產生位移乘以 $0.6 \times 1.4 \times \alpha_y \times R_a$ 倍之距離。



	節點 1		節點 6		節點 69		節點 63	
	X 向	Y 向	X 向	Y 向	X 向	Y 向	X 向	Y 向
475 年地震 側向位移 (cm)	0.011	0.010	0.011	0.011	0.012	0.011	0.012	0.010
安全 碰撞距離 (cm)	0.022	0.020	0.022	0.022	0.023	0.022	0.023	0.020
備註：位移放大倍數 X 向為 1.960，Y 向為 1.960								



4.3 設計風力

依據”建築物耐風設計規範及解說”，本建築基本設計風速為
每秒 37.5 公尺

封閉式建築主抗風系統屋頂風壓計算							
Enclosed Building Main Wind Force Resistance System Design Roof Pressure(TBC2006)							
Job:						Job No.	
						Made by: JWLI	
						Date: 2004/12/13	
1.1 Input data							
尺寸							
Exp=	C		V10=	37.5	m/sec	I=	1.1
Z=	4.331	m	θ =	17	Degree		
T=	0.03	sec	Beta=	0.02		B=	20 m
						L=	30 m
2.1 Basic Constant							
Exposure=	C		α =	0.15		Zg=	300.00 m
Design wind speed=	37.50	m/sec	Building width=	20.00	m	Ave. roof height=	4.33 m
Do=	0.005		Damping ratio=	0.020			
2.2 Wind pressure							
$K(h)=2.774(Z/Zg)^{2\alpha}$	$h>5m$	Average level	=	0.0000			
$K(h)=2.774(5/Zg)^{2\alpha}$	$h<5m$		=	0.8122			
$q(h)=0.0625*K(z)*(IV_{10}(c))^2$			=	86.38	kg/m ²		
2.3 Roof design wind pressure							
Direction	Width	Length	G(h)	Wind ward		Leeward	
				Cp	q(h)G(h)Cp	Cp	q(h)G(h)Cp
Wx	20	30	1.866	-0.46	-74	-0.7	-113
Wy	30	20	1.844	-0.70	-112	-0.7	-112
2.4 Positive pressure under ROOF OVERHANG for main wind force resistance system							
Direction	G(h)	Wind ward		Leeward			
		Cp	q(h)G(h)Cp	Cp	q(h)G(h)Cp		
Wx	1.866	0.8	129	0.5	81		
Wy	1.844	0.8	127	0.5	80		

X 向設計風力為 1.30tf，大於 X 向設計地震力 0.71tf
Y 向設計風力為 2.53tf，大於 Y 向設計地震力 0.71tf



4.4 載重組合

DL=Dead load (include member self weight)

LL=Live load

EXP,EXN=Code static seismic load x-direction (± 0.05 offset)

EYP,EYN=Code static seismic load y-direction (± 0.05 offset)

Ez=Code static vertical seismic load

$E_x = EXP \cdot EXN$

$E_y = EYP \cdot EYN$

W=Wind load

設計

1.4DL

1.2DL+1.6LL

1.2DL+1.0LL \pm 1.0E_x \pm 0.3E_z

1.2DL+1.0LL \pm 1.0E_y \pm 0.3E_z

1.2DL+1.0LL \pm 1.0E_z \pm 0.3E_x

1.2DL+1.0LL \pm 1.0E_z \pm 0.3E_y

0.9DL \pm 1.0E_x \pm 0.3E_z

0.9DL \pm 1.0E_y \pm 0.3E_z

0.9DL \pm 1.0E_z \pm 0.3E_x

0.9DL \pm 1.0E_z \pm 0.3E_y

1.2DL+1.0LL \pm 1.6W

0.9DL \pm 1.6W



	DL	SDL	LL	EXP	EYP	EXN	EYN	EZ	WX	WY
02RC01	1.400	1.400								
02RC02	1.200	1.200	1.600							
02RC03	1.200	1.200	1.000	1.000				0.300		
02RC04	1.200	1.200	1.000	1.000				-0.300		
02RC05	1.200	1.200	1.000		1.000			0.300		
02RC06	1.200	1.200	1.000		1.000			-0.300		
02RC07	1.200	1.200	1.000			1.000		0.300		
02RC08	1.200	1.200	1.000			1.000		-0.300		
02RC09	1.200	1.200	1.000				1.000	0.300		
02RC10	1.200	1.200	1.000				1.000	-0.300		
02RC11	1.200	1.200	1.000	-1.000				0.300		
02RC12	1.200	1.200	1.000	-1.000				-0.300		
02RC13	1.200	1.200	1.000		-1.000			0.300		
02RC14	1.200	1.200	1.000		-1.000			-0.300		
02RC15	1.200	1.200	1.000			-1.000		0.300		
02RC16	1.200	1.200	1.000			-1.000		-0.300		
02RC17	1.200	1.200	1.000				-1.000	0.300		
02RC18	1.200	1.200	1.000				-1.000	-0.300		
02RC19	1.200	1.200	1.000	0.300				1.000		
02RC20	1.200	1.200	1.000	0.300				-1.000		
02RC21	1.200	1.200	1.000		0.300			1.000		
02RC22	1.200	1.200	1.000		0.300			-1.000		
02RC23	1.200	1.200	1.000			0.300		1.000		
02RC24	1.200	1.200	1.000			0.300		-1.000		
02RC25	1.200	1.200	1.000				0.300	1.000		
02RC26	1.200	1.200	1.000				0.300	-1.000		
02RC27	1.200	1.200	1.000	-0.300				1.000		
02RC28	1.200	1.200	1.000	-0.300				-1.000		
02RC29	1.200	1.200	1.000		-0.300			1.000		
02RC30	1.200	1.200	1.000		-0.300			-1.000		
02RC31	1.200	1.200	1.000			-0.300		1.000		
02RC32	1.200	1.200	1.000			-0.300		-1.000		
02RC33	1.200	1.200	1.000				-0.300	1.000		
02RC34	1.200	1.200	1.000				-0.300	-1.000		
02RC35	0.900	0.900		1.000				0.300		
02RC36	0.900	0.900		1.000				-0.300		
02RC37	0.900	0.900			1.000			0.300		
02RC38	0.900	0.900			1.000			-0.300		
02RC39	0.900	0.900				1.000		0.300		
02RC40	0.900	0.900				1.000		-0.300		



02RC41	0.900	0.900					1.000	0.300		
02RC42	0.900	0.900					1.000	-0.300		
02RC43	0.900	0.900		-1.000				0.300		
02RC44	0.900	0.900		-1.000				-0.300		
02RC45	0.900	0.900			-1.000			0.300		
02RC46	0.900	0.900			-1.000			-0.300		
02RC47	0.900	0.900				-1.000		0.300		
02RC48	0.900	0.900				-1.000		-0.300		
02RC49	0.900	0.900					-1.000	0.300		
02RC50	0.900	0.900					-1.000	-0.300		
02RC51	0.900	0.900		0.300				1.000		
02RC52	0.900	0.900		0.300				-1.000		
02RC53	0.900	0.900			0.300			1.000		
02RC54	0.900	0.900			0.300			-1.000		
02RC55	0.900	0.900				0.300		1.000		
02RC56	0.900	0.900				0.300		-1.000		
02RC57	0.900	0.900					0.300	1.000		
02RC58	0.900	0.900					0.300	-1.000		
02RC59	0.900	0.900		-0.300				1.000		
02RC60	0.900	0.900		-0.300				-1.000		
02RC61	0.900	0.900			-0.300			1.000		
02RC62	0.900	0.900			-0.300			-1.000		
02RC63	0.900	0.900				-0.300		1.000		
02RC64	0.900	0.900				-0.300		-1.000		
02RC65	0.900	0.900					-0.300	1.000		
02RC66	0.900	0.900					-0.300	-1.000		
02RC67	1.200	1.200	1.000						1.600	
02RC68	1.200	1.200	1.000							1.600
02RC69	1.200	1.200	1.000						-1.600	
02RC70	1.200	1.200	1.000							-1.600
02RC71	0.900	0.900							1.600	
02RC72	0.900	0.900								1.600
02RC73	0.900	0.900							-1.600	
02RC74	0.900	0.900								-1.600



5.0 工作載重結構行為限制

A. 梁變形限制

靜載重加活載重 L/240

活載重 L/360

B. 地震力側向變形角限制

最大變形角 5/1000

C. 結構受風力側向加速度限制

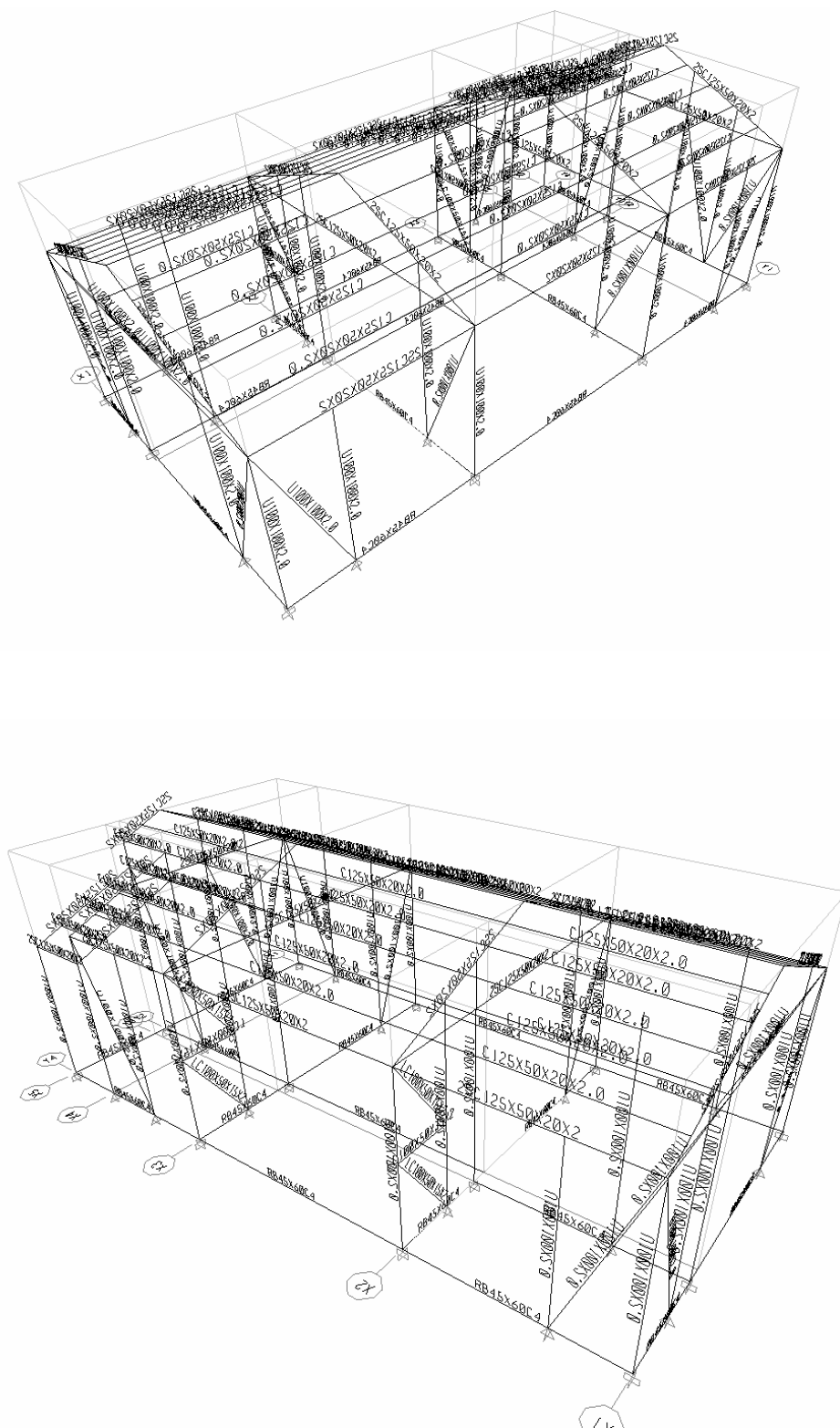
最大加速度 0.005g (0.05 m/sec²)

6.0 設計規範

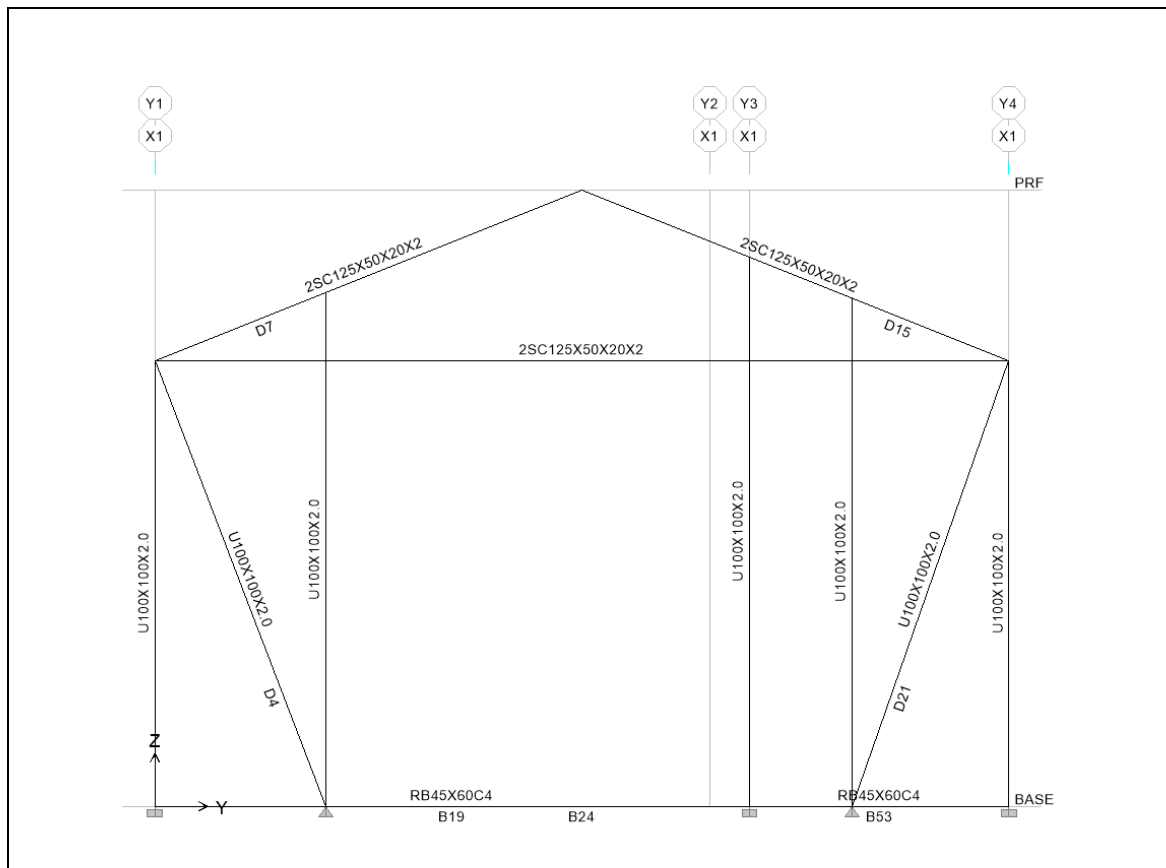
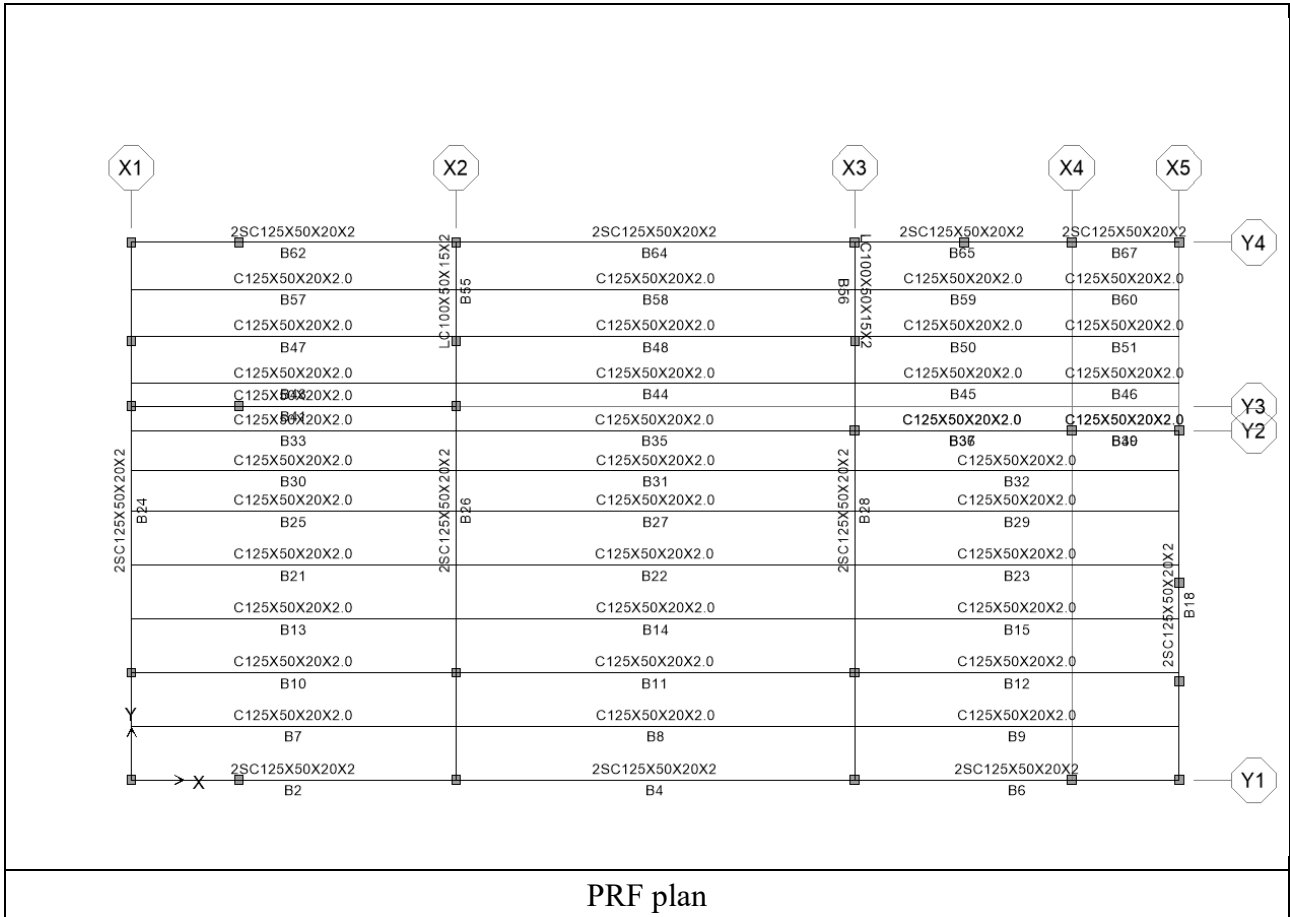
- (1) 建築技術規則, 內政部, 最新版。
- (2) 建築物耐震設計規範及解說, 內政部, 2011/07。
- (3) 建築物基礎構造設計規範, 內政部, 2001/10。
- (4) 混凝土結構設計規範, 內政部, 2011/07。
- (5) 建築物耐風設計規範及解說, 內政部, 2017/01。
- (6) 冷軋型鋼構造建築物結構設計規範及解說, 內政部, 2015/10
- (7) ACI 318-05。

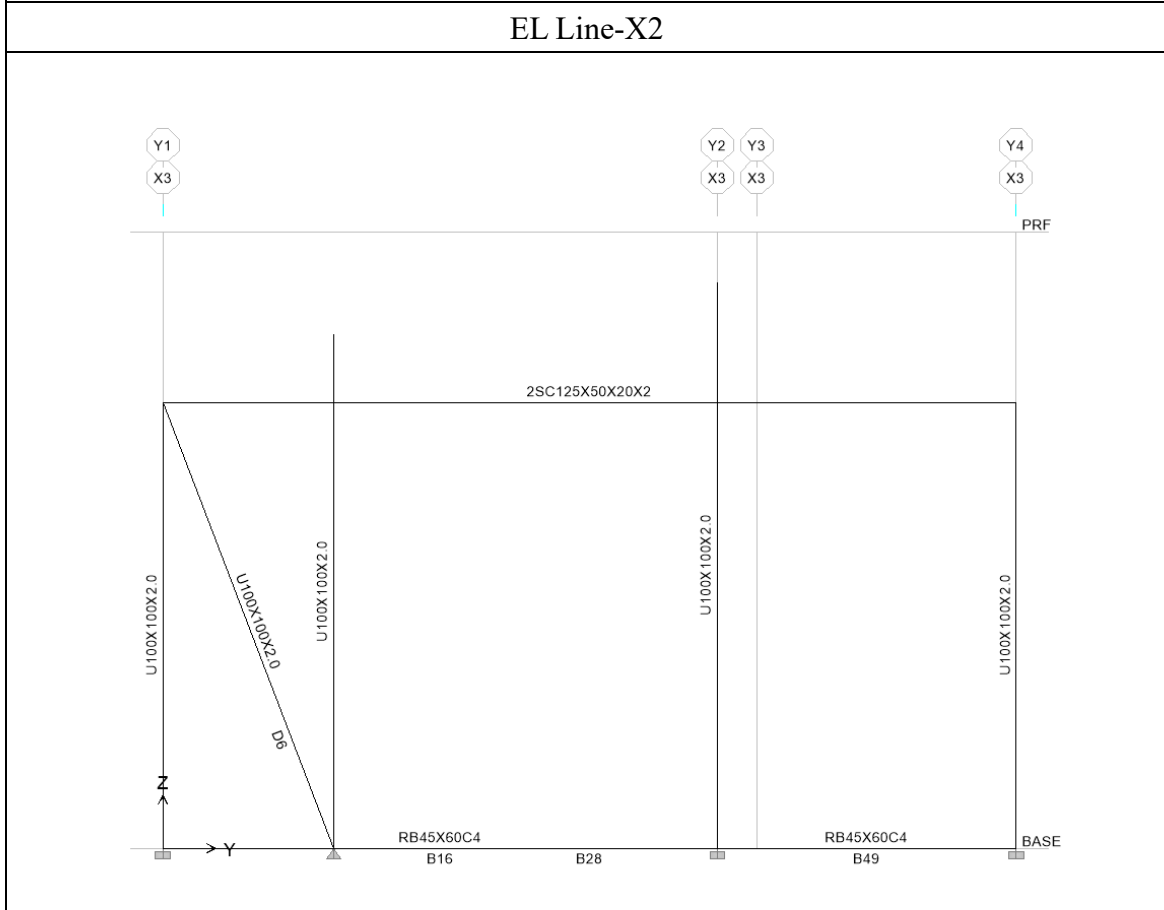
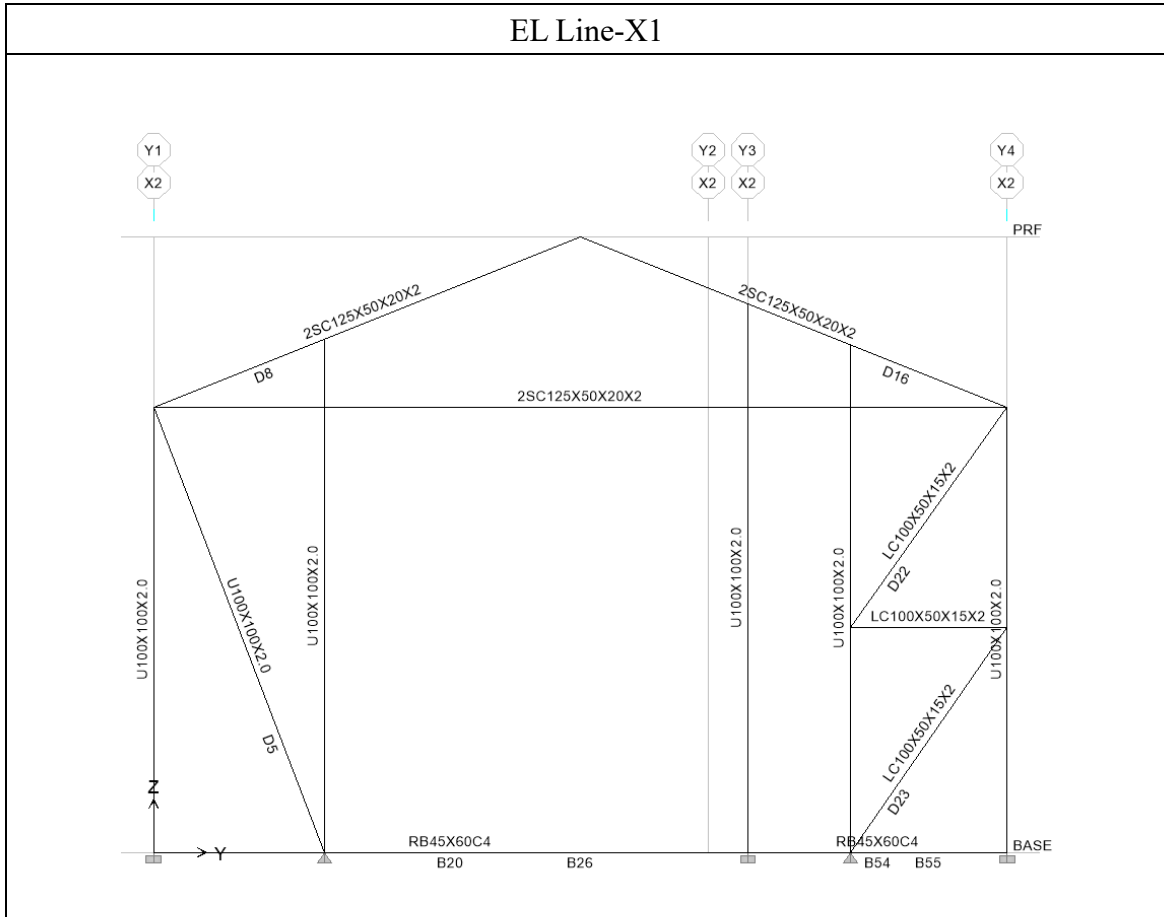
7.0 結構分析程序

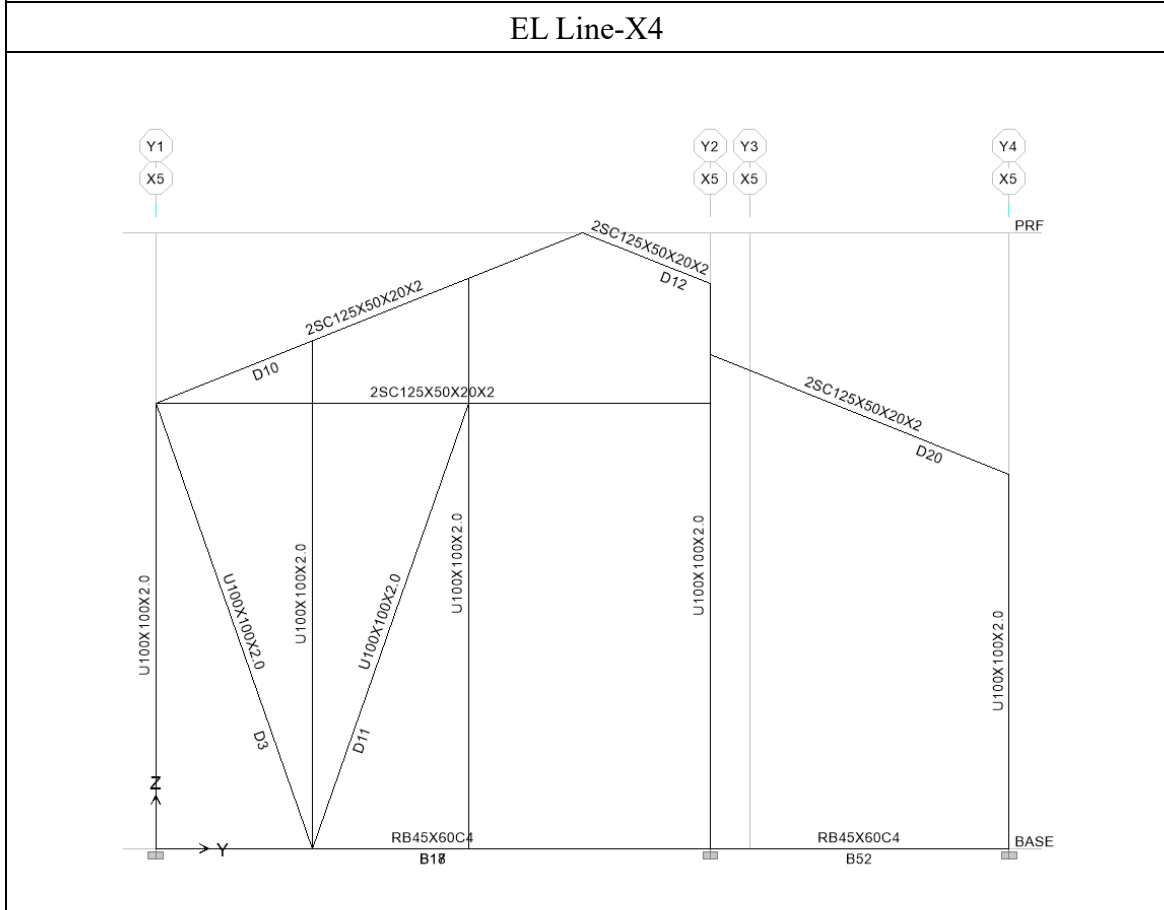
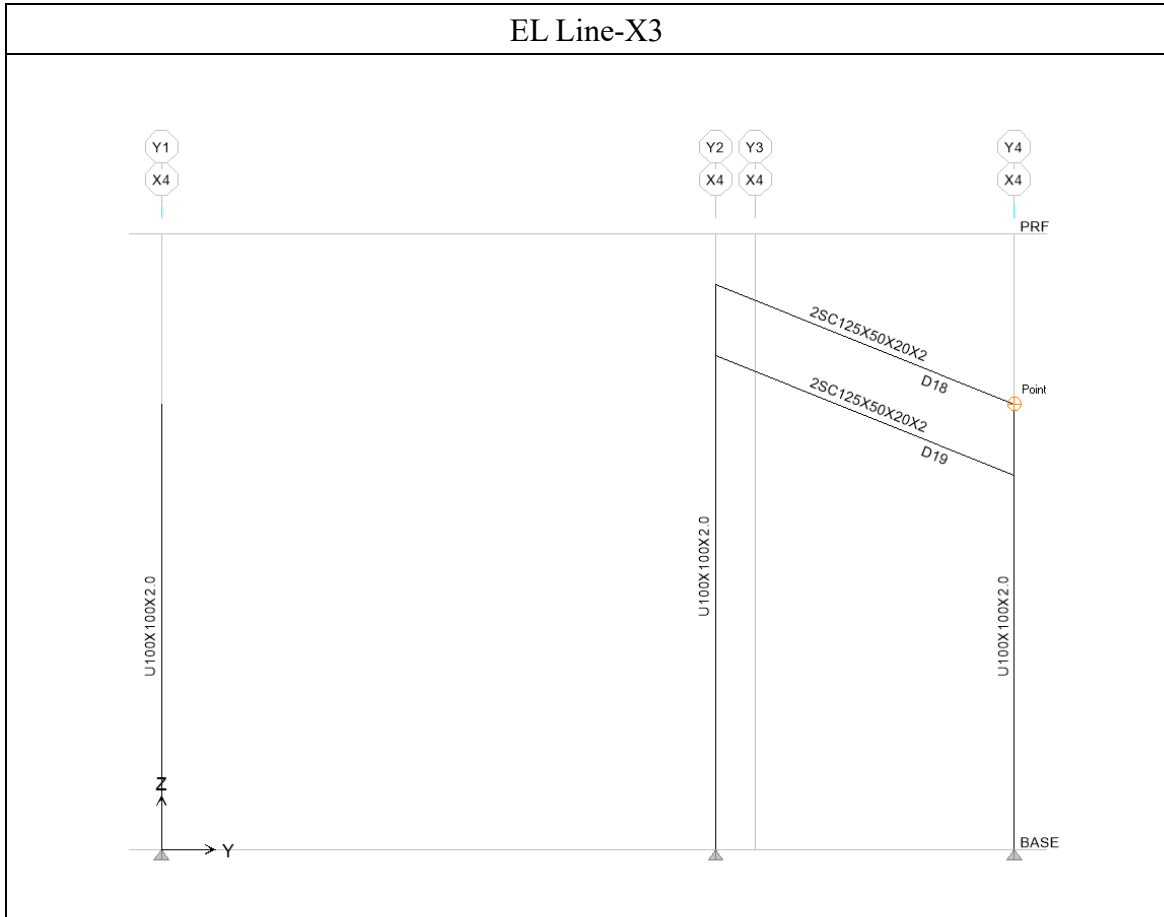
7.1 結構模型

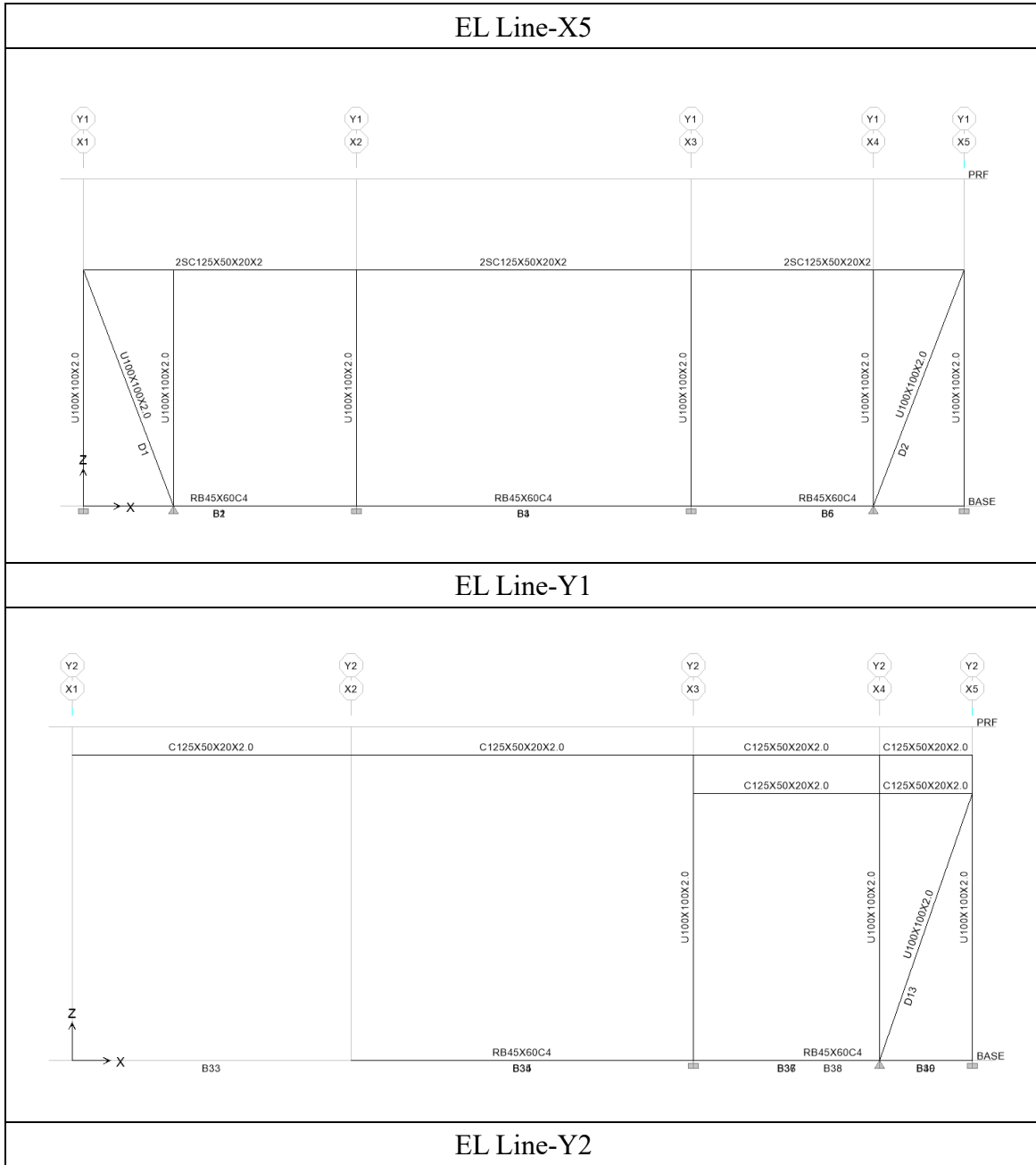


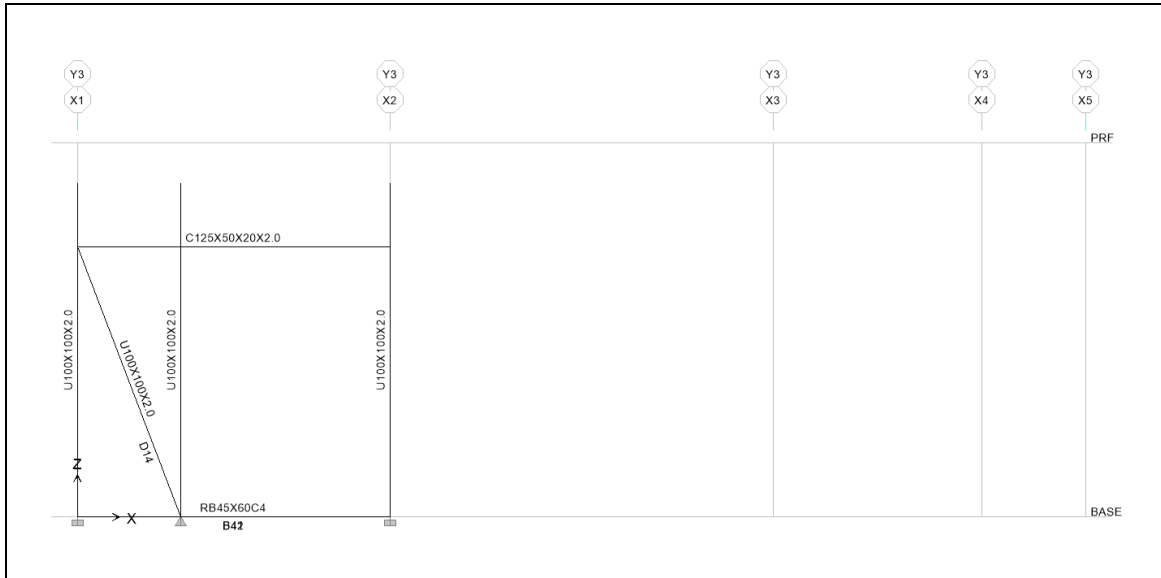
3D view



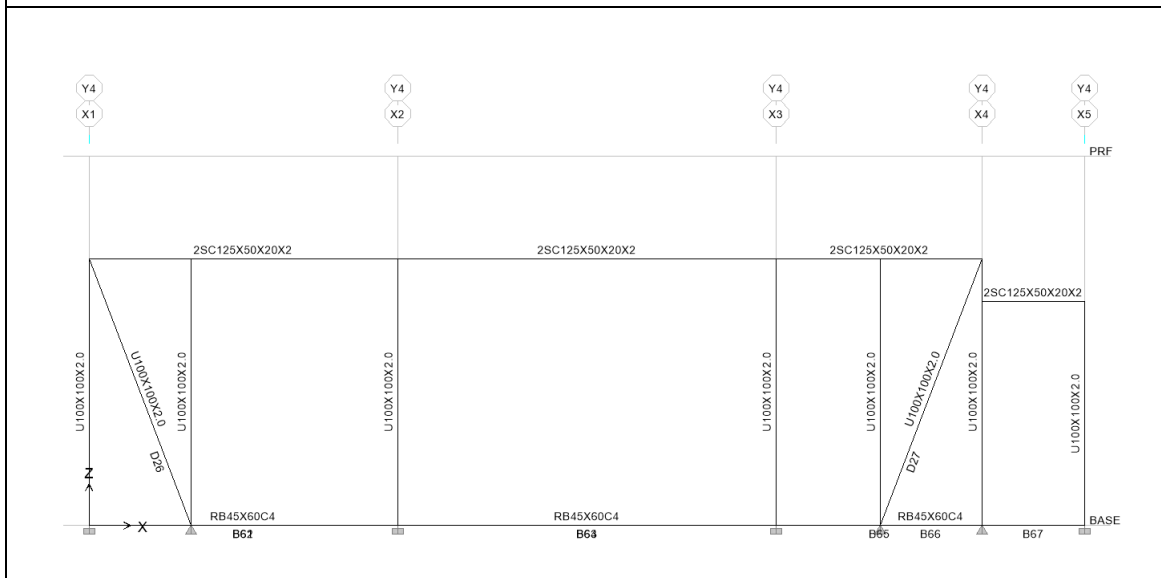








EL Line-Y3

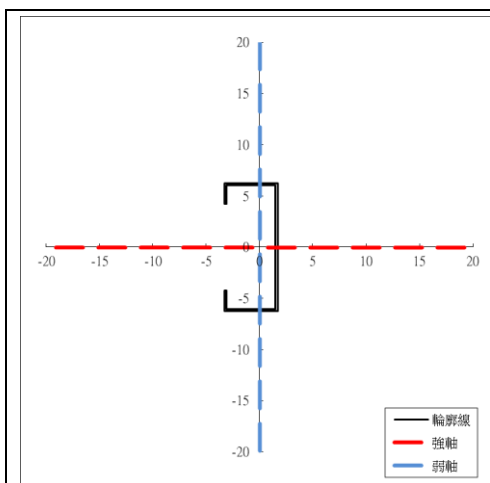


EL Line-Y4



斷面性質

C125x50x20x2.0



斷面積： $A= 5.140 \text{ (cm}^2\text{)}$

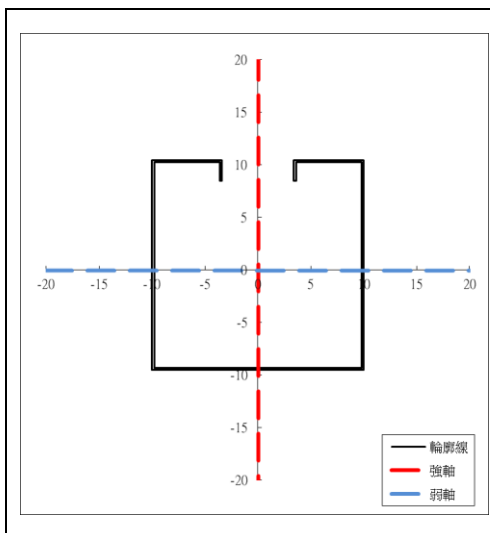
慣性矩： $I_x= 124.468 \text{ (cm}^4\text{)}$

$I_y= 19.025 \text{ (cm}^4\text{)}$

斷面模數： $S_x= 19.915 \text{ (cm}^3\text{)}$

$S_y= 5.776 \text{ (cm}^3\text{)}$

U100x100x2.0



斷面積： $A= 15.200 \text{ (cm}^2\text{)}$

慣性矩： $I_x= 955.743 \text{ (cm}^4\text{)}$

$I_y= 1038.673 \text{ (cm}^4\text{)}$

斷面模數： $S_x= 91.334 \text{ (cm}^3\text{)}$

$S_y= 103.867 \text{ (cm}^3\text{)}$

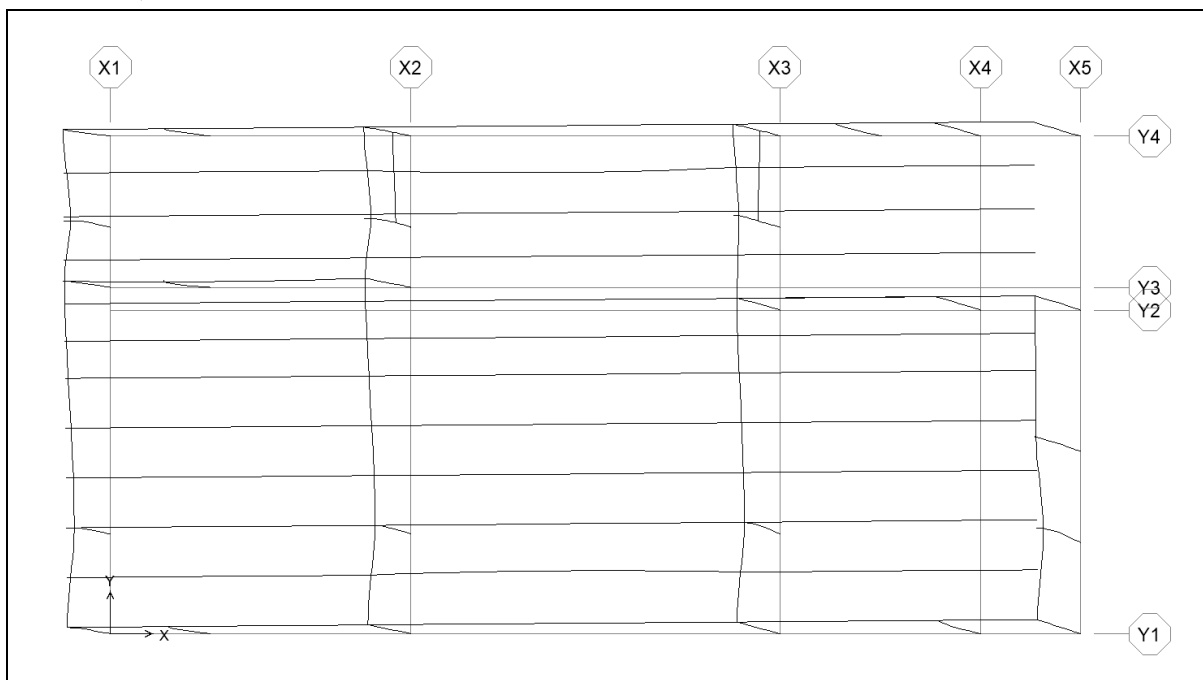


2-C125x50x20x2.0

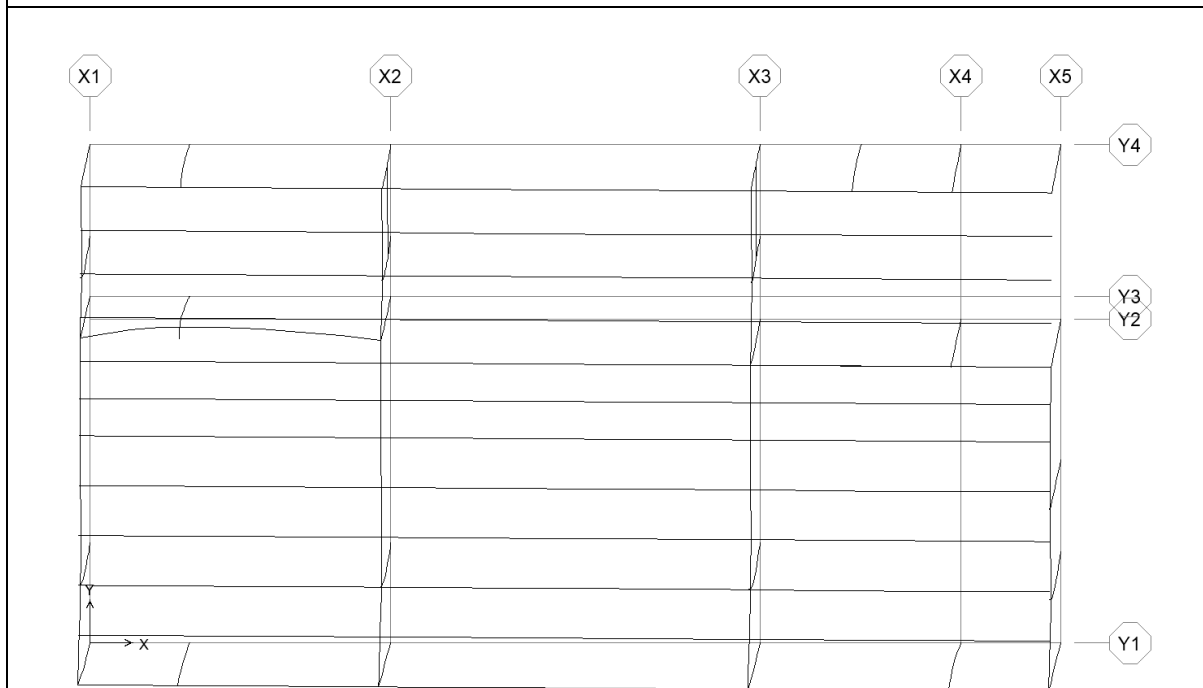
	<p>彈性係數：</p> $E = 2100000 \quad (\text{kgf/cm}^2)$ <p>斷面積：</p> $A = \frac{\Sigma E \cdot A}{E} = 10.280 \quad (\text{cm}^2)$ <p>慣性矩：</p> $I_x = \frac{\Sigma E \cdot I_x}{E} = 248.937 \quad (\text{cm}^4)$ $I_y = \frac{\Sigma E \cdot I_y}{E} = 38.050 \quad (\text{cm}^4)$ <p>斷面模數：</p> $S_x = \frac{\Sigma E \cdot I_x}{E_i \cdot y_i} = 39.830 \quad (\text{cm}^3)$ $S_y = \frac{\Sigma E \cdot I_y}{E_i \cdot x_i} = 11.552 \quad (\text{cm}^3)$
--	--



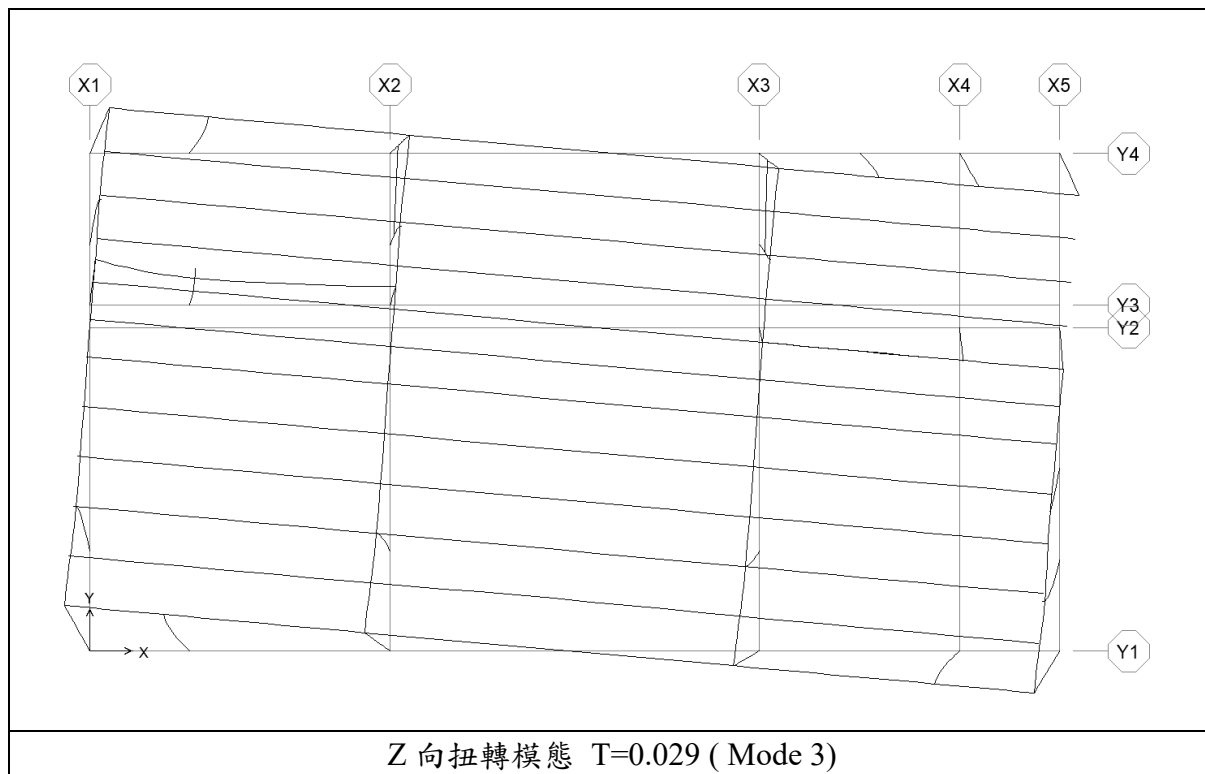
7.2 模態分析



X 向位移模態 $T=0.043$ (Mode 1)



Y 向位移模態 $T=0.039$ (Mode 2)



有效累積振態質量

Mode	Period	UX	UY	RZ	SumUX	SumUY	SumRZ	Remark
1	0.043	94.739	4.903	0.957	94.739	4.903	0.957	X-Dir
2	0.039	5.031	94.753	0.107	99.770	99.656	1.064	Y-Dir
3	0.029	0.230	0.344	98.936	100.000	100.000	100.000	Z-Tor



7.2 鋼結構設計：

根據鋼構造建築物鋼結構設計技術規範，鋼結構極限設計法之相關規定，對稱構材承受彎矩及軸力交互作用時，須滿足公式(8.2-1a)或(8.2-1b)之規定。

當 $\frac{P_u}{\phi P_n} \geq 0.2$ 時

$$\frac{P_u}{\phi P_n} + \frac{8}{9} \left[\frac{M_{ux}}{\phi_b M_{nx}} + \frac{M_{uy}}{\phi_b M_{ny}} \right] \leq 1.0 \quad (8.2-1a)$$

當 $\frac{P_u}{\phi P_n} < 0.2$ 時

$$\frac{P_u}{2\phi P_n} + \left[\frac{M_{ux}}{\phi_b M_{nx}} + \frac{M_{uy}}{\phi_b M_{ny}} \right] \leq 1.0 \quad (8.2-1b)$$

其中

P_u = 所需之軸拉力或軸壓力強度

P_n = 標稱抗拉強度或標稱抗壓強度

M_u = 所需之撓曲強度

M_n = 標稱之撓曲強度

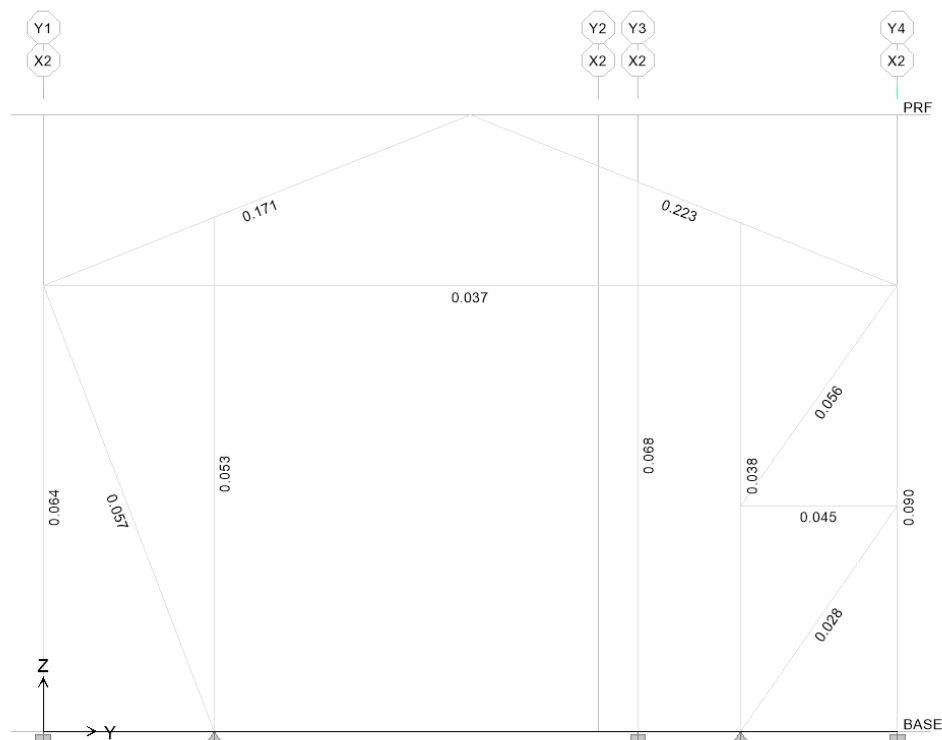
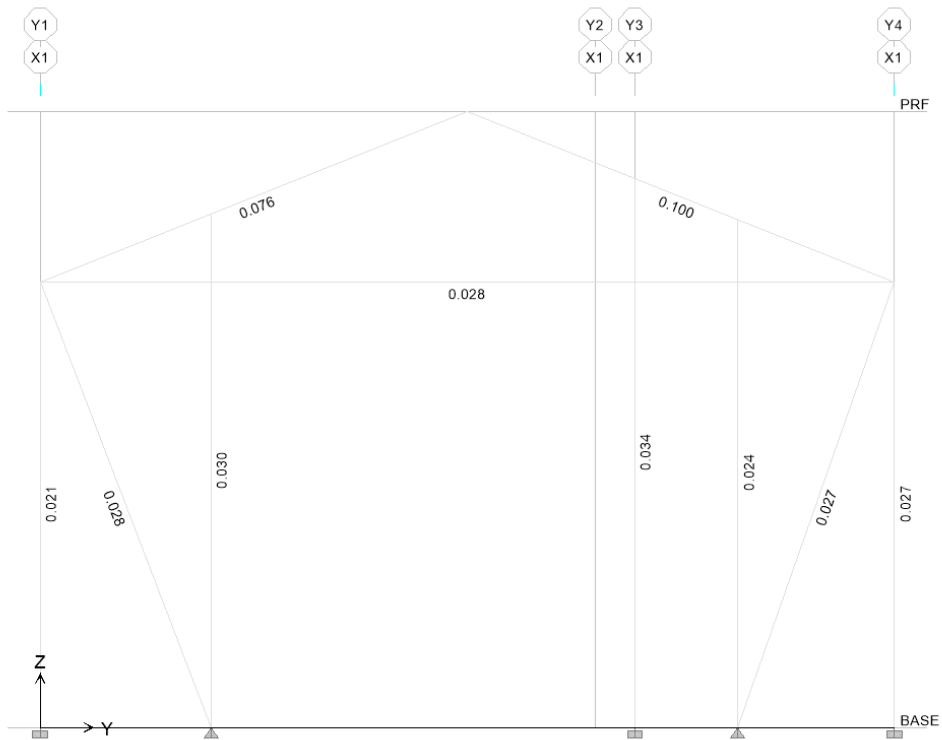
x = 強軸

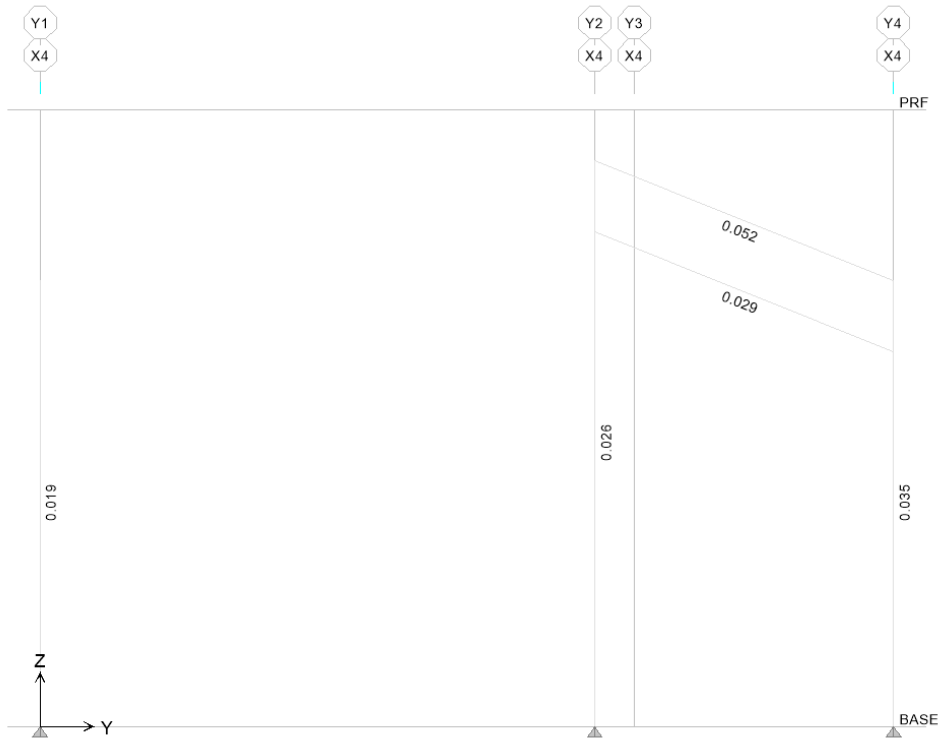
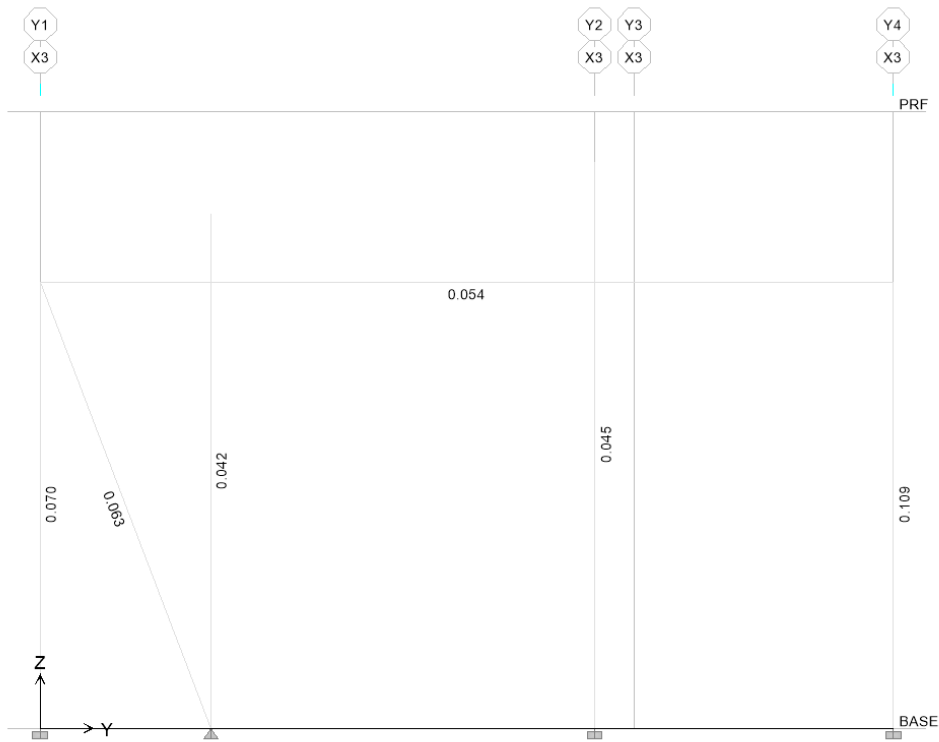
y = 弱軸

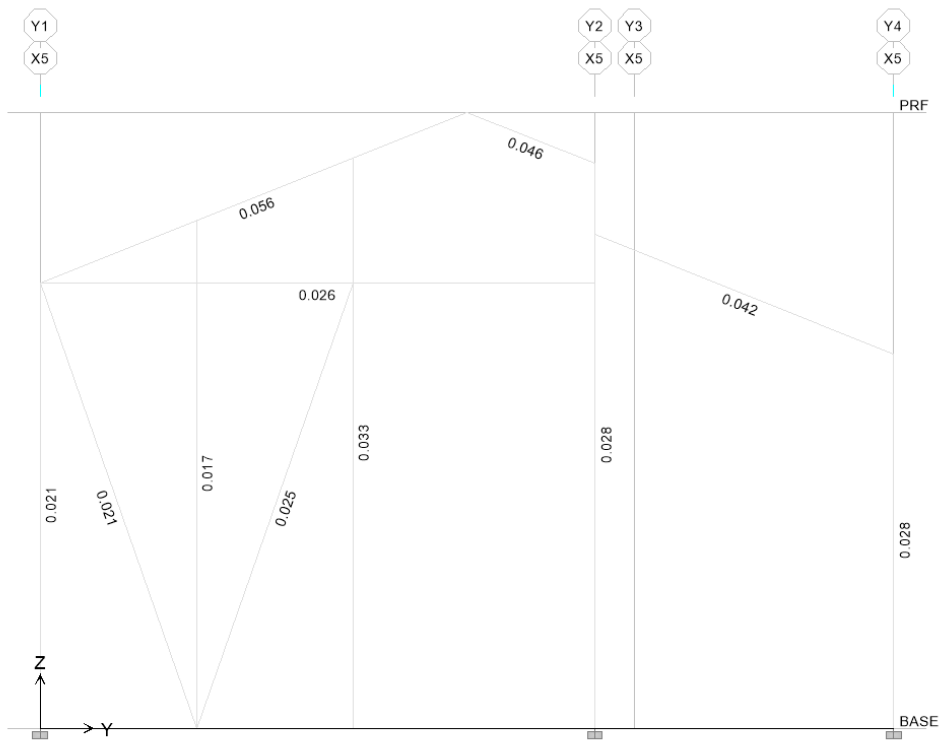
ϕ = 軸力載重下之強度折減係數

ϕ_b = 撓曲載重下之強度折減係數

分析模型各桿件的應力比皆小於1.....OK!









9.0 基礎設計 / Foundation Design

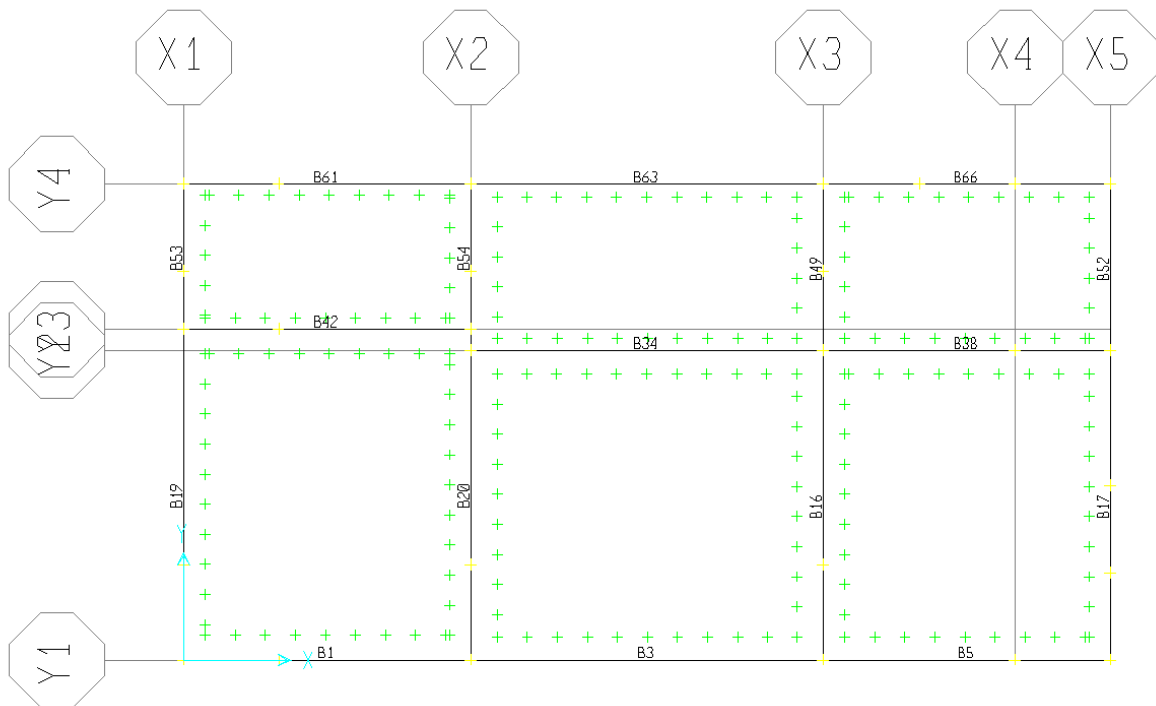
9.1 基礎設計說明

本案基礎設計採 CSI 公司之 2-D 分析軟體”SAFE V8.01”，分析元素包含基礎版、及地梁，版元素下方承受地下水壓上舉水浮力，版元素上方則於柱位置處承受結構傳遞之垂直載重，包含靜載重、活載重及地震力等。將基礎為一柔性體，應用土壤彈簧（Soil Spring）之觀念，將土壤模擬成無受拉彈簧，同時合併基礎地梁、版之勁度進行分析並設計。

9.1.1 分析基本資料

依據鄰近地質鑽探報告，各設計數據如下：

地盤垂直反力係數	$K_v = 1000(\text{tf}/\text{m}^3)$
常時水位(WAN)	GL -10m
高水位(WAH)	GL -7m
土壤容許乘載力	$q_a > 10 (\text{tf}/\text{m}^2)$



基礎結構平面圖



9.1.2 基礎設計載重組合

地震力分析採用法規靜力地震力，將上部結構桿件力傳至基礎。配筋設計採用設計地震力之 $1.4\alpha y$ 倍作為設計載重。分析及配筋設計之載重組合如下：

DL：靜載重(包含自重)

LL：活載重

E：法規地震載重 (EXP、EXN、EYP、EYN)

EXP、EXN：X 向法規靜力地震載重(含正負 5% 質心偏移，P 為正，N 為負)

EYP、EYN：Y 向法規靜力地震載重(含正負 5% 質心偏移，P 為正，N 為負)

WA：水浮力 (WAH、WAN)

WAH：高水位時之水浮力

WAN：常時水位之水浮力

檢核(乘載力檢核)

$$1.0DL+1.0WA$$

$$1.0DL+1.0LL+1.0WA$$

$$1.0DL+1.0LL\pm 1.0E+1.0WA$$

設計

$$1.4DL+1.4WA$$

$$1.2DL+1.6LL+1.2WA$$

$$1.2DL+1.0LL\pm 1.4E$$

$$0.9DL\pm 1.4E$$



	DL	SDL	LL	EXP	EYP	EXN	EYN	WAH	WAN	備註
BASE01	1.000	1.000						1.000		檢核(乘載力檢核)
BASE02	1.000	1.000							1.000	
BASE03	1.000	1.000	1.000					1.000		
BASE04	1.000	1.000	1.000						1.000	
BASE05	1.000	1.000	1.000	1.000				1.000		
BASE06	1.000	1.000	1.000	1.000					1.000	
BASE07	1.000	1.000	1.000		1.000			1.000		
BASE08	1.000	1.000	1.000		1.000				1.000	
BASE09	1.000	1.000	1.000			1.000		1.000		
BASE10	1.000	1.000	1.000			1.000			1.000	
BASE11	1.000	1.000	1.000				1.000	1.000		
BASE12	1.000	1.000	1.000				1.000		1.000	
BASE13	1.000	1.000	1.000	-1.000				1.000		
BASE14	1.000	1.000	1.000	-1.000					1.000	
BASE15	1.000	1.000	1.000		-1.000			1.000		
BASE16	1.000	1.000	1.000		-1.000				1.000	
BASE17	1.000	1.000	1.000			-1.000		1.000		
BASE18	1.000	1.000	1.000			-1.000			1.000	
BASE19	1.000	1.000	1.000				-1.000	1.000		
BASE20	1.000	1.000	1.000				-1.000		1.000	
BASE21	1.400	1.400						1.400		設計
BASE22	1.400	1.400							1.400	
BASE23	1.200	1.200	1.600					1.200		
BASE24	1.200	1.200	1.600						1.200	
BASE25	1.200	1.200	1.000	1.400						
BASE26	1.200	1.200	1.000		1.400					
BASE27	1.200	1.200	1.000			1.400				
BASE28	1.200	1.200	1.000				1.400			
BASE29	1.200	1.200	1.000	-1.400						
BASE30	1.200	1.200	1.000		-1.400					
BASE31	1.200	1.200	1.000			-1.400				
BASE32	1.200	1.200	1.000				-1.400			
BASE33	0.900	0.900		1.400						
BASE34	0.900	0.900			1.400					
BASE35	0.900	0.900				1.400				
BASE36	0.900	0.900					1.400			



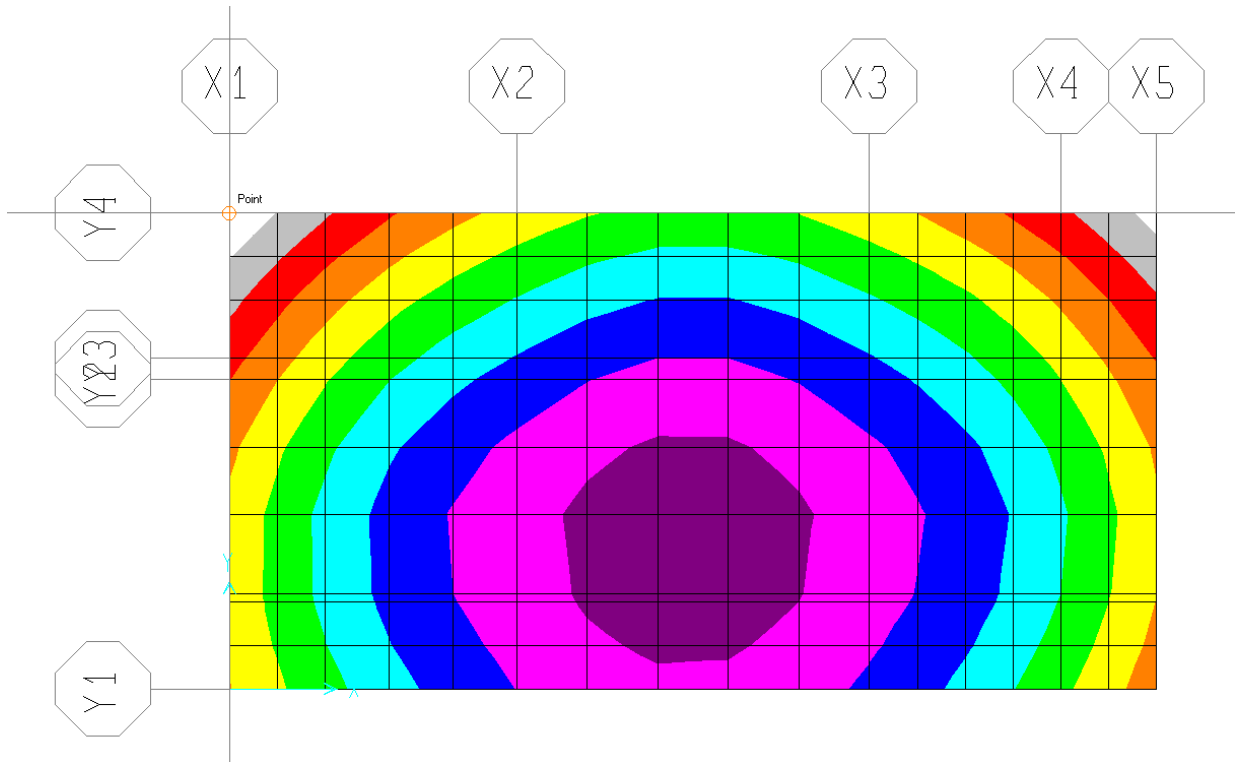
BASE37	0.900	0.900		-1.400					
BASE38	0.900	0.900			-1.400				
BASE39	0.900	0.900				-1.400			
BASE40	0.900	0.900					-1.400		

9.2 基礎分析

9.2.1 分析基本資料

1. 容許承载力檢核：

承载力檢核考慮載重組合為 BASE04



土壤最大反力為 $3.421(\text{tf}/\text{m}^2) < q_a = 10(\text{tf}/\text{m}^2) \dots \text{OK}$



2. 角變量檢核：

載重組合	基礎最大角變量 η	最大角變量桿件	檢核角變量 η
BASE01	1 /12433	B42	$\eta < 1/500 \dots OK$
BASE02	1 /12433	B42	$\eta < 1/500 \dots OK$
BASE03	1 /11868	B42	$\eta < 1/500 \dots OK$
BASE04	1 /11868	B42	$\eta < 1/500 \dots OK$
BASE05	1 /12620	B42	$\eta < 1/333 \dots OK$
BASE06	1 /12620	B42	$\eta < 1/333 \dots OK$
BASE07	1 /11765	B42	$\eta < 1/333 \dots OK$
BASE08	1 /11765	B42	$\eta < 1/333 \dots OK$
BASE09	1 /12612	B42	$\eta < 1/333 \dots OK$
BASE10	1 /12612	B42	$\eta < 1/333 \dots OK$
BASE11	1 /11778	B42	$\eta < 1/333 \dots OK$
BASE12	1 /11778	B42	$\eta < 1/333 \dots OK$
BASE13	1 /11200	B42	$\eta < 1/333 \dots OK$
BASE14	1 /11200	B42	$\eta < 1/333 \dots OK$
BASE15	1 /11972	B42	$\eta < 1/333 \dots OK$
BASE16	1 /11972	B42	$\eta < 1/333 \dots OK$
BASE17	1 /11206	B42	$\eta < 1/333 \dots OK$
BASE18	1 /11206	B42	$\eta < 1/333 \dots OK$
BASE19	1 /11958	B42	$\eta < 1/333 \dots OK$
BASE20	1 /11958	B42	$\eta < 1/333 \dots OK$



3. 基礎最大沉陷量檢核

載重組合	基礎最大沉陷變位 δ (cm)	最大沉陷點	檢核沉陷變位
BASE01	-0.232	63	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE02	-0.232	63	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE03	-0.342	63	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE04	-0.342	63	$\delta < 5.000(\text{cm}) \dots \text{OK}$
BASE05	-0.342	69	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE06	-0.342	69	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE07	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE08	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE09	-0.342	69	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE10	-0.342	69	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE11	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE12	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE13	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE14	-0.345	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE15	-0.339	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE16	-0.339	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE17	-0.346	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE18	-0.346	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE19	-0.339	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$
BASE20	-0.339	63	$\delta < 7.500(\text{cm}) \dots \text{OK}$

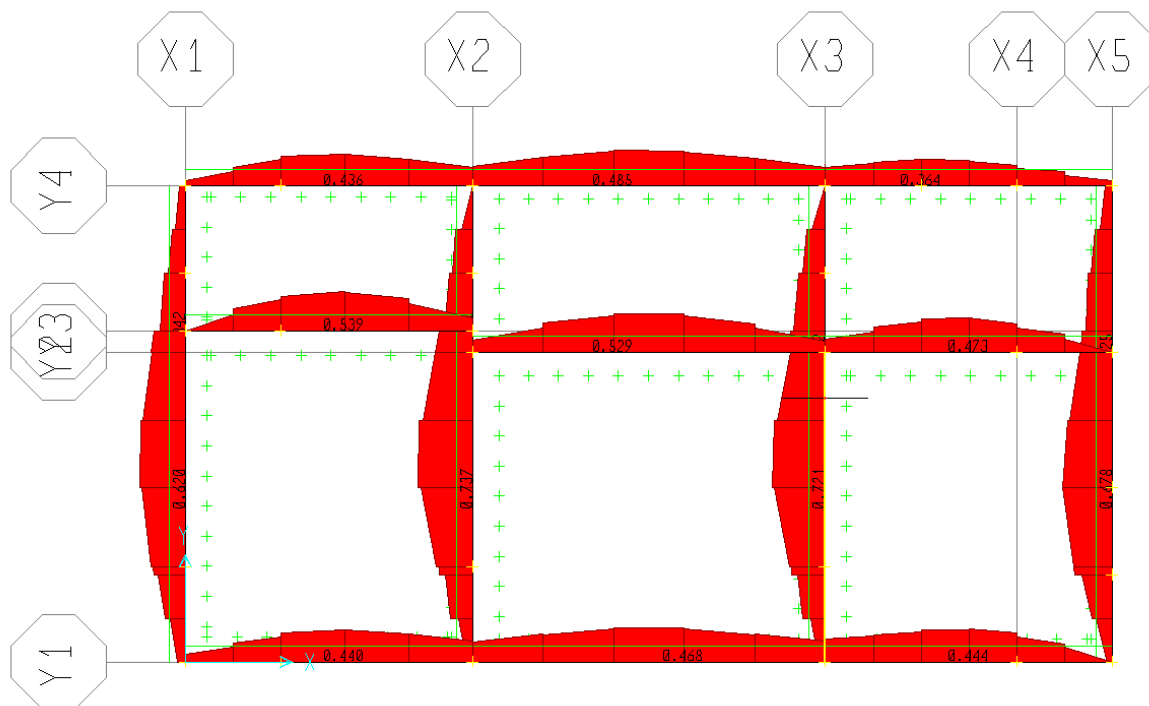


9.3 基礎結構設計

1. 材料強度

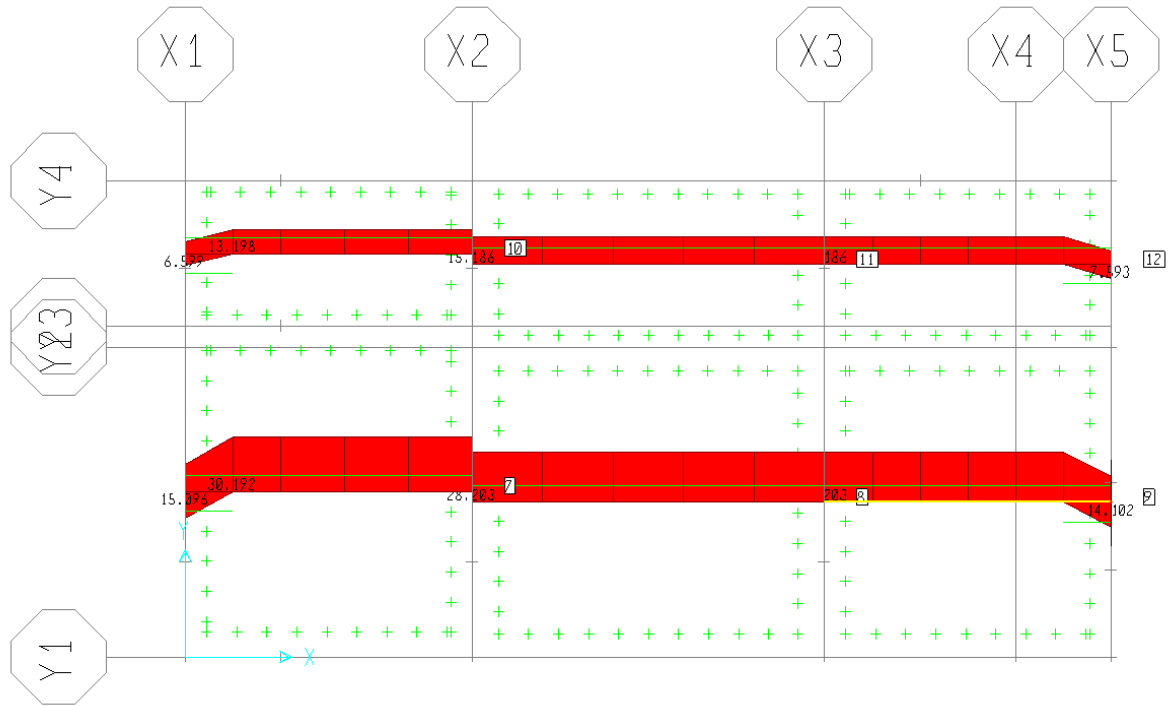
混凝土抗壓強度： 280 kgf/cm²
鋼筋降伏強度： 2800kgf/cm² (#3 及以下)
4200kgf/cm² (#4 及以上)

2. 地樑設計



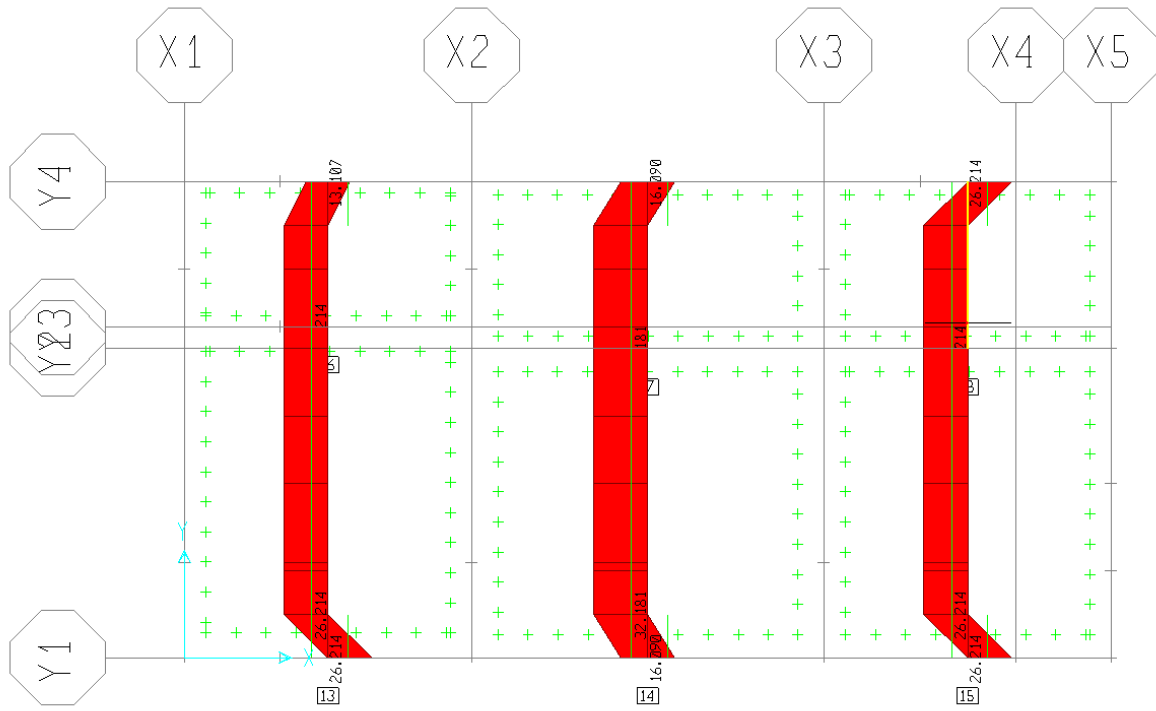


3. 基版 X 向鋼筋需求





4. 基版 Y 向鋼筋需求





附錄

\$ PROGRAM INFORMATION

PROGRAM 'ETABS' VERSION '9.5.0'

\$ CONTROLS

UNITS 'KGF' 'CM'
TITLE 'La-Lar Structure Studs'
PREFERENCE MERGETOL 0.1
RLIF METHOD 'TRIBAREAUC93' USEDEFAULTMAIN 'YES'

\$ STORES - IN SEQUENCE FROM TOP

STORY 'PRF' HEIGHT 433.1 MASTERSTORY 'Yes'
STORY 'BASE' ELEV 0

\$ DIAPHRAGM NAMES

DIAPHRAGM 'D1' TYPE RIGID
DIAPHRAGM 'D2' TYPE RIGID
DIAPHRAGM 'D3' TYPE RIGID

\$ CREDS

COORDSYSTEM 'GLOBAL' TYPE 'CARTESIAN' BUBBLELEO 50
GRID 'GLOBAL' LABEL 'X1' DIR 'X' COORD 0 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'X2' DIR 'X' COORD 362.3 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'X3' DIR 'X' COORD 807.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'X4' DIR 'X' COORD 1049.5 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'X5' DIR 'X' COORD 1170 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'Y1' DIR 'Y' COORD 0 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'Y2' DIR 'Y' COORD 390 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'Y3' DIR 'Y' COORD 4175 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'
GRID 'GLOBAL' LABEL 'Y4' DIR 'Y' COORD 600 GRIDTYPE 'PRIMARY' BUBBLELOC 'DEFAULT' GRIDHIDE 'NO'

\$ MATERIAL PROPERTIES

MATERIAL 'STEEL' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 204000 U 0.3 A 1.16999999590917E-05
MATERIAL 'STEEL' DESKNTYPE 'STEEL' FY 2300 FU 4000 PRICE 35
MATERIAL 'CONC' M 2.44801E+06 W 0.0024 TYPE 'ISOTROPIC' E 250998 U 0.2 A 9.9999998542412E-06
MATERIAL 'CONC' DESKNTYPE 'CONCRETE' FY 4200 FC 280 FYS 2800
MATERIAL 'OTHER' M 7.324016E+12 W 2.83E-07 TYPE 'ISOTROPIC' E 2900 U 0.3 A 6.49999992674566E-06
MATERIAL 'OTHER' DESKNTYPE 'OTHER'
MATERIAL 'SGC440' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'SGC440' DESKNTYPE 'STEEL' FY 3400 FU 4000 PRICE 45
MATERIAL 'GR50' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'GR50' DESKNTYPE 'STEEL' FY 3500 FU 4000 PRICE 45
MATERIAL '60635T' M 2.75E+06 W 0.0027 TYPE 'ISOTROPIC' E 73000 U 0.3 A 1.16999999590917E-05
MATERIAL '60635T' DESKNTYPE 'STEEL' FY 1120 FU 4000 PRICE 45
MATERIAL 'C280' M 2.44801E+06 W 0.0024 TYPE 'ISOTROPIC' E 250998 U 0.2 A 9.99999974737875E-06
MATERIAL 'C280' DESKNTYPE 'CONCRETE' FY 4200 FC 280 FYS 4200
MATERIAL 'MAT1' M 8.01E+06 W 0.00785 TYPE 'ISOTROPIC' E 210000 U 0.3 A 1.16999999590917E-05
MATERIAL 'MAT1' DESKNTYPE 'STEEL' FY 2400 FU 4000 PRICE 45

\$ FRAME SECTIONS

FRAMESECTION 'RB30X60C' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 30
FRAMESECTION 'RC40X60C40610' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 60
FRAMESECTION 'RC40X60C40614' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 60
FRAMESECTION 'RC40X60C40618' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 60
FRAMESECTION 'RC40X60C40622' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 60
FRAMESECTION 'RB45X60C4' MATERIAL 'C280' SHAPE 'Rectangular' D 40 B 45
FRAMESECTION '2SC125X50X20X2' MATERIAL 'SGC440' SHAPE 'General' D 12.5 B 20 AREA 10.28 TORSION 38.0499 I23 248.9366 I22 38.0499 AS2 2.5
FRAMESECTION 'U100X100X2.0' MATERIAL 'SGC440' SHAPE 'General' D 10 B 10 AREA 15.2 TORSION 955.7432 I33 955.7432 I22 1038.673 AS2 4 AS3 4
FRAMESECTION 'C125X50X20X2.0' MATERIAL 'SGC440' SHAPE 'General' D 12.5 B 5 AREA 5.14 TORSION 19.02493 I33 124.4683 I22 19.02493 AS2 2.5
FRAMESECTION 'L100X50X10X2' MATERIAL 'SGC440' SHAPE 'General' D 5 B 10 AREA 4.44 TORSION 15.6865 I33 15.6865 I22 71.8012 AS2 2 AS3 2

\$ REBAR DEFINITIONS

REBARDEFINITION 'R3' AREA 0.7133 DIA 9.53
REBARDEFINITION 'R4' AREA 1.267 DIA 1.27
REBARDEFINITION 'R5' AREA 1.986 DIA 1.59
REBARDEFINITION 'R6' AREA 2.865 DIA 1.91
REBARDEFINITION 'R7' AREA 3.871 DIA 2.22
REBARDEFINITION 'R8' AREA 5.067 DIA 2.54
REBARDEFINITION 'R10' AREA 8.143 DIA 3.22

\$ CONCRETE SECTIONS

CONCRETESECTION 'RC40X60C40610' TYPE 'COLUMN' PATTERN 'R-3-4' TRANSREIN 'TIES' COVER 6 REBAR 'R6' DESKINCHECK 'CHECK'
CONCRETESECTION 'RC40X60C40614' TYPE 'COLUMN' PATTERN 'R-4-5' TRANSREIN 'TIES' COVER 6 REBAR 'R6' DESKINCHECK 'CHECK'
CONCRETESECTION 'RC40X60C40618' TYPE 'COLUMN' PATTERN 'R-4-7' TRANSREIN 'TIES' COVER 6 REBAR 'R6' DESKINCHECK 'CHECK'
CONCRETESECTION 'RC40X60C40622' TYPE 'COLUMN' PATTERN 'R-5-8' TRANSREIN 'TIES' COVER 6 REBAR 'R6' DESKINCHECK 'CHECK'
CONCRETESECTION 'RB30X60C4' TYPE 'BEAM' COVER TOP 7 COVER BOTTOM 7 ATT0 AB10 ATT0 AB10
CONCRETESECTION 'RB45X60C4' TYPE 'BEAM' COVER TOP 9 COVER BOTTOM 9 ATT0 AB10 ATT0 AB10

\$ WALL/SLAB/DECK PROPERTIES

SHELLPROP 'S15' MATERIAL 'C280' PROPTYPE 'SLAB' TYPE 'MEMBRANE' TM 15 TB 15
SHELLPROP 'S40' MATERIAL 'C280' PROPTYPE 'SLAB' TYPE 'MEMBRANE' TM 40 TB 40

\$ PIER/SPANDREL NAMES

PIERNAME 'P1'
SPANDRELNAME 'S1'

\$ POINT COORDINATES

POINT '1' 0 0
POINT '1-1' 0 0 120.2
POINT '2' 120 0
POINT '2-1' 120 0 120.2
POINT '3' 362.5 0
POINT '3-1' 362.5 0 120.2
POINT '4' 807.5 0
POINT '4-1' 807.5 0 120.2
POINT '5' 1049.5 0
POINT '5-1' 1049.5 0 120.2
POINT '6' 1170 0
POINT '6-1' 1170 0 120.2
POINT '7' 0 60.0000023841858
POINT '7-1' 0 60.0000023841858 96.16
POINT '8' 362.5 60.0000023841858
POINT '8-1' 362.5 60.0000023841858 96.16
POINT '9' 808.1 60.0000023841858
POINT '9-1' 808.1 60.0000023841858 96.16
POINT '10' 1170 60.0000023841858
POINT '10-1' 1170 60.0000023841858 96.16
POINT '11' 1170 110.000002384186
POINT '11-1' 1170 110.000002384186 76.12666
POINT '12' 0 120.000004768372
POINT '12-1' 0 120.000004768372 72.12
POINT '13' 362.5 120.000004768372
POINT '13-1' 362.5 120.000004768372 72.12
POINT '14' 807.5 120.000004768372
POINT '14-1' 807.5 120.000004768372 72.12
POINT '15' 1170 120.000004768372
POINT '15-1' 1170 120.000004768372 72.12
POINT '16' 0 179.99995231628
POINT '16-1' 0 179.99995231628 48.08
POINT '17' 362.5 179.99995231628
POINT '17-1' 362.5 179.99995231628 48.08
POINT '18' 808.3 179.99995231628
POINT '18-1' 808.3 179.99995231628 48.08
POINT '19' 1170 179.99995231628
POINT '19-1' 1170 179.99995231628 48.08
POINT '20' 1170 220.000004768372
POINT '20-1' 1170 220.000004768372 32.05333
POINT '20-2' 1170 220.000004768372 120.2
POINT '21' 0 240.000009536743
POINT '21-1' 0 240.000009536743 24.04
POINT '22' 362.5 240.000009536743
POINT '22-1' 362.5 240.000009536743 24.04
POINT '23' 808 240.000009536743
POINT '23-1' 808 240.000009536743 24.04
POINT '24' 1170 240.000009536743
POINT '24-1' 1170 240.000009536743 24.04
POINT '25' 0 300
POINT '26' 362.5 300
POINT '29' 809 300
POINT '30' 1170 300
POINT '33' 0 345.000004768372
POINT '33-1' 0 345.000004768372 18.03
POINT '34' 362.5 345.000004768372
POINT '34-1' 362.5 345.000004768372 18.03
POINT '35' 808.425 345.000004768372
POINT '35-1' 808.425 345.000004768372 18.03
POINT '36' 1170 345.000004768372
POINT '36-1' 1170 345.000004768372 18.03
POINT '37' 0 390.000009536743
POINT '37-1' 0 390.000009536743 36.06
POINT '38' 362.5 390.000009536743
POINT '38-1' 362.5 390.000009536743 36.06
POINT '39' 807.5 390.000009536743
POINT '39-1' 807.5 390.000009536743 36.06
POINT '39-2' 807.5 390.000009536743 86.06

POINT '40' 1049.5 390.000009536743
POINT '40-1' 1049.5 390.000009536743 36.06
POINT '40-2' 1049.5 390.000009536743 86.06
POINT '41' 1170 390.000009536743
POINT '41-1' 1170 390.000009536743 36.06
POINT '41-2' 1170 390.000009536743 86.06
POINT '41-3' 1170 390.000009536743 120.2
POINT '42' 0 417.500019073486
POINT '42-1' 0 417.500019073486 47.07833
POINT '42-2' 0 417.500019073486 120.2
POINT '43' 120 417.500019073486
POINT '43-1' 120 417.500019073486 47.07833
POINT '44' 362.5 417.500019073486
POINT '44-1' 362.5 417.500019073486 47.07833
POINT '44-2' 362.5 417.500019073486 120.2
POINT '45' 0 442.500019073486
POINT '45-1' 0 442.500019073486 57.095
POINT '46' 362.5 442.500019073486
POINT '46-1' 362.5 442.500019073486 57.095
POINT '47' 808.2625 442.500019073486
POINT '47-1' 808.2625 442.500019073486 57.095
POINT '48' 1049.5 442.500019073486
POINT '48-1' 1049.5 442.500019073486 57.095
POINT '48-2' 1049.5 442.500019073486 107.095
POINT '49' 1170 442.500019073486
POINT '49-1' 1170 442.500019073486 107.095
POINT '50' 0 490.000009536743
POINT '50-1' 0 490.000009536743 76.12666
POINT '51' 362.5 490.000009536743
POINT '51-1' 362.5 490.000009536743 76.12666
POINT '52' 362.5 490.000009536743 274.9
POINT '52-2' 362.5 490.000009536743 76.12666
POINT '53' 808.490 490.000009536743 274.9
POINT '53-1' 808.490 490.000009536743 76.12666
POINT '54' 362.5 494.99998926514 78.13
POINT '54-1' 362.5 494.99998926514 78.13
POINT '55' 808.175 494.99998926514
POINT '55-1' 808.175 494.99998926514 78.13
POINT '56' 1049.5 494.99998926514
POINT '56-1' 1049.5 494.99998926514 78.13
POINT '56-2' 1049.5 494.99998926514 128.13
POINT '57' 1170 494.99998926514
POINT '57-1' 1170 494.99998926514 128.13
POINT '58' 0 547.499990463257
POINT '58-1' 0 547.499990463257 99.165
POINT '59' 362.5 547.499990463257
POINT '59-1' 362.5 547.499990463257 99.165
POINT '60' 808.0875 547.499990463257
POINT '60-1' 808.0875 547.499990463257 99.165
POINT '61' 1049.5 547.499990463257
POINT '61-1' 1049.5 547.499990463257 99.165
POINT '62' 1170 547.499990463257 149.165
POINT '62-1' 1170 547.499990463257 149.165
POINT '63' 0 600
POINT '63-1' 0 600 120.2
POINT '64' 120 600
POINT '65' 362.5 600
POINT '65-1' 362.5 600 120.2
POINT '65-2' 362.5 600 274.9
POINT '66' 807.5 600
POINT '66-1' 807.5 600 120.2
POINT '66-2' 807.5 600 274.9
POINT '67' 929.5 600
POINT '67-1' 929.5 600 120.2
POINT '68' 1049.5 600
POINT '68-1' 1049.5 600 120.2
POINT '68-2' 1049.5 600 170.2
POINT '69' 1170 600
POINT '69-1' 1170 600 170.2

\$ LINE CONNECTIVITIES

LINE 'C1' COLUMN '1' '1-1' 1
LINE 'C1-1' COLUMN '1' '1-1' 1
LINE 'C2' COLUMN '2' '2-1' 1
LINE 'C2-1' COLUMN '2' '2-1' 1
LINE 'C3' COLUMN '3' '3-1' 1
LINE 'C3-1' COLUMN '3' '3-1' 1
LINE 'C4' COLUMN '4' '4-1' 1
LINE 'C4-1' COLUMN '4' '4-1' 1
LINE 'C5' COLUMN '5' '5-1' 1
LINE 'C5-1' COLUMN '5' '5-1' 1
LINE 'C6' COLUMN '6' '6-1' 1
LINE 'C6-1' COLUMN '6' '6-1' 1
LINE 'C7' COLUMN '7' '7-1' 1
LINE 'C7-1' COLUMN '7' '7-1' 1
LINE 'C8' COLUMN '8' '8-1' 1
LINE 'C8-1' COLUMN '8' '8-1' 1
LINE 'C9' COLUMN '9' '9-1' 1
LINE 'C9-1' COLUMN '9' '9-1' 1
LINE 'C10' COLUMN '10' '10-1' 1
LINE 'C10-1' COLUMN '10' '10-1' 1
LINE 'C11' COLUMN '11' '11-1' 1
LINE 'C11-1' COLUMN '11' '11-1' 1
LINE 'C12' COLUMN '12' '12-1' 1
LINE 'C12-1' COLUMN '12' '12-1' 1
LINE 'C13' COLUMN '13' '13-1' 1
LINE 'C13-1' COLUMN '13' '13-1' 1
LINE 'C14' COLUMN '14' '14-1' 1
LINE 'C14-1' COLUMN '14' '14-1' 1
LINE 'C15' COLUMN '15' '15-1' 1
LINE 'C15-1' COLUMN '15' '15-1' 1
LINE 'C16' COLUMN '16' '16-1' 1
LINE 'C16-1' COLUMN '16' '16-1' 1
LINE 'C17' COLUMN '17' '17-1' 1
LINE 'C17-1' COLUMN '17' '17-1' 1
LINE 'C18' COLUMN '18' '18-1' 1
LINE 'C18-1' COLUMN '18' '18-1' 1
LINE 'C19' COLUMN '19' '19-1' 1
LINE 'C19-1' COLUMN '19' '19-1' 1
LINE 'C20' COLUMN '20' '20-1' 1
LINE 'C20-1' COLUMN '20' '20-1' 1
LINE 'C21' COLUMN '21' '21-1' 1
LINE 'C21-1' COLUMN '21' '21-1' 1
LINE 'C22' COLUMN '22' '22-1' 1
LINE 'C22-1' COLUMN '22' '22-1' 1
LINE 'C23' COLUMN '23' '23-1' 1
LINE 'C23-1' COLUMN '23' '23-1' 1
LINE 'C24' COLUMN '24' '24-1' 1
LINE 'C24-1' COLUMN '24' '24-1' 1
LINE 'C25' COLUMN '25' '25-1' 1
LINE 'C25-1' COLUMN '25' '25-1' 1
LINE 'C26' COLUMN '26' '26-1' 1
LINE 'C26-1' COLUMN '26' '26-1' 1
LINE 'C27' COLUMN '27' '27-1' 1
LINE 'C27-1' COLUMN '27' '27-1' 1
LINE 'B1' BEAM '1' '1-1' 0
LINE 'B2' BEAM '1' '1-1' 0
LINE 'B3' BEAM '3' '3-1' 0
LINE 'B4' BEAM '3' '3-1' 0
LINE 'B5' BEAM '4' '4-1' 0
LINE 'B6' BEAM '4-1' '6-1' 0
LINE 'B7' BEAM '7-1' '8-1' 0
LINE 'B8' BEAM '8-1' '9-1' 0
LINE 'B9' BEAM '8-1' '10-1' 0
LINE 'B10' BEAM '12-1' '13-1' 0
LINE 'B11' BEAM '13-1' '14-1' 0
LINE 'B12' BEAM '14-1' '15-1' 0
LINE 'B13' BEAM '16-1' '17-1' 0
LINE 'B14' BEAM '17-1' '18-1' 0
LINE 'B15' BEAM '18-1' '19-1' 0
LINE 'B16' BEAM '4' '39' 0
LINE 'B17' BEAM '6' '41' 0
LINE 'B18' BEAM '6-1' '41-3' 0
LINE 'B19' BEAM '1' '42' 0
LINE 'B20' BEAM '3' '44' 0
LINE 'B21' BEAM '2-1' '23-1' 0
LINE 'B22' BEAM '22-1' '23-1' 0
LINE 'B23' BEAM '23-1' '24-1' 0
LINE 'B24' BEAM '1-1' '63-1' 0
LINE 'B25' BEAM '25' '26' 0
LINE 'B26' BEAM '3-1' '65-1' 0
LINE 'B27' BEAM '26' '29' 0

COMBO 'DSTLS11' LOAD 'DL' SF 0.9
COMBO 'DSTLS11' LOAD 'SDL' SF 0.9
COMBO 'DSTLS11' LOAD 'WX' SF 1.3
COMBO 'DSTLS12' TYPE 'ADD'
COMBO 'DSTLS12' LOAD 'DL' SF 0.9
COMBO 'DSTLS12' LOAD 'SDL' SF 0.9
COMBO 'DSTLS12' LOAD 'WX' SF -1.3
COMBO 'DSTLS13' TYPE 'ADD'
COMBO 'DSTLS13' LOAD 'DL' SF 0.9
COMBO 'DSTLS13' LOAD 'SDL' SF 0.9
COMBO 'DSTLS13' LOAD 'WX' SF 1.3
COMBO 'DSTLS14' TYPE 'ADD'
COMBO 'DSTLS14' LOAD 'DL' SF 0.9
COMBO 'DSTLS14' LOAD 'SDL' SF 0.9
COMBO 'DSTLS14' LOAD 'WX' SF -1.3
COMBO 'DSTLS15' TYPE 'ADD'
COMBO 'DSTLS15' LOAD 'DL' SF 1.4
COMBO 'DSTLS15' LOAD 'SDL' SF 1.4
COMBO 'DSTLS15' LOAD 'LL' SF 0.5
COMBO 'DSTLS15' LOAD 'EXP' SF 1.5
COMBO 'DSTLS16' TYPE 'ADD'
COMBO 'DSTLS16' LOAD 'DL' SF 1.4
COMBO 'DSTLS16' LOAD 'SDL' SF 1.4
COMBO 'DSTLS16' LOAD 'LL' SF 0.5
COMBO 'DSTLS16' LOAD 'EXP' SF -1.5
COMBO 'DSTLS17' TYPE 'ADD'
COMBO 'DSTLS17' LOAD 'DL' SF 1.4
COMBO 'DSTLS17' LOAD 'SDL' SF 1.4
COMBO 'DSTLS17' LOAD 'LL' SF 0.5
COMBO 'DSTLS17' LOAD 'EXP' SF 1.5
COMBO 'DSTLS18' TYPE 'ADD'
COMBO 'DSTLS18' LOAD 'DL' SF 1.4
COMBO 'DSTLS18' LOAD 'SDL' SF 1.4
COMBO 'DSTLS18' LOAD 'LL' SF 0.5
COMBO 'DSTLS18' LOAD 'EXP' SF -1.5
COMBO 'DSTLS19' TYPE 'ADD'
COMBO 'DSTLS19' LOAD 'DL' SF 1.4
COMBO 'DSTLS19' LOAD 'SDL' SF 1.4
COMBO 'DSTLS19' LOAD 'LL' SF 0.5
COMBO 'DSTLS19' LOAD 'EXN' SF 1.5
COMBO 'DSTLS20' TYPE 'ADD'
COMBO 'DSTLS20' LOAD 'DL' SF 1.4
COMBO 'DSTLS20' LOAD 'SDL' SF 1.4
COMBO 'DSTLS20' LOAD 'LL' SF 0.5
COMBO 'DSTLS20' LOAD 'EXN' SF -1.5
COMBO 'DSTLS21' TYPE 'ADD'
COMBO 'DSTLS21' LOAD 'DL' SF 1.4
COMBO 'DSTLS21' LOAD 'SDL' SF 1.4
COMBO 'DSTLS21' LOAD 'LL' SF 0.5
COMBO 'DSTLS21' LOAD 'EYN' SF 1.5
COMBO 'DSTLS22' TYPE 'ADD'
COMBO 'DSTLS22' LOAD 'DL' SF 1.4
COMBO 'DSTLS22' LOAD 'SDL' SF 1.4
COMBO 'DSTLS22' LOAD 'LL' SF 0.5
COMBO 'DSTLS22' LOAD 'EYN' SF -1.5
COMBO 'DSTLS23' TYPE 'ADD'
COMBO 'DSTLS23' LOAD 'DL' SF 1.4
COMBO 'DSTLS23' LOAD 'SDL' SF 1.4
COMBO 'DSTLS23' LOAD 'EXP' SF 1.5
COMBO 'DSTLS24' TYPE 'ADD'
COMBO 'DSTLS24' LOAD 'DL' SF 1.4
COMBO 'DSTLS24' LOAD 'SDL' SF 1.4
COMBO 'DSTLS24' LOAD 'EXP' SF -1.5
COMBO 'DSTLS25' TYPE 'ADD'
COMBO 'DSTLS25' LOAD 'DL' SF 1.4
COMBO 'DSTLS25' LOAD 'SDL' SF 1.4
COMBO 'DSTLS25' LOAD 'EYP' SF 1.5
COMBO 'DSTLS26' TYPE 'ADD'
COMBO 'DSTLS26' LOAD 'DL' SF 1.4
COMBO 'DSTLS26' LOAD 'SDL' SF 1.4
COMBO 'DSTLS26' LOAD 'EYP' SF -1.5
COMBO 'DSTLS27' TYPE 'ADD'
COMBO 'DSTLS27' LOAD 'DL' SF 1.4
COMBO 'DSTLS27' LOAD 'SDL' SF 1.4
COMBO 'DSTLS27' LOAD 'EXN' SF 1.5
COMBO 'DSTLS28' TYPE 'ADD'
COMBO 'DSTLS28' LOAD 'DL' SF 1.4
COMBO 'DSTLS28' LOAD 'SDL' SF 1.4
COMBO 'DSTLS28' LOAD 'EXN' SF -1.5
COMBO 'DSTLS29' TYPE 'ADD'
COMBO 'DSTLS29' LOAD 'DL' SF 1.4
COMBO 'DSTLS29' LOAD 'SDL' SF 1.4
COMBO 'DSTLS29' LOAD 'EXN' SF 1.5
COMBO 'DSTLS30' TYPE 'ADD'
COMBO 'DSTLS30' LOAD 'DL' SF 1.4
COMBO 'DSTLS30' LOAD 'SDL' SF 1.4
COMBO 'DSTLS30' LOAD 'EYN' SF -1.5
COMBO 'DSTLS31' TYPE 'ADD'
COMBO 'DSTLS31' LOAD 'DL' SF 0.7
COMBO 'DSTLS31' LOAD 'SDL' SF 0.7
COMBO 'DSTLS31' LOAD 'EXP' SF 1.5
COMBO 'DSTLS32' TYPE 'ADD'
COMBO 'DSTLS32' LOAD 'DL' SF 0.7
COMBO 'DSTLS32' LOAD 'SDL' SF 0.7
COMBO 'DSTLS32' LOAD 'EXP' SF -1.5
COMBO 'DSTLS33' TYPE 'ADD'
COMBO 'DSTLS33' LOAD 'DL' SF 0.7
COMBO 'DSTLS33' LOAD 'SDL' SF 1.5
COMBO 'DSTLS33' LOAD 'EYP' SF 1.5
COMBO 'DSTLS34' TYPE 'ADD'
COMBO 'DSTLS34' LOAD 'DL' SF 0.7
COMBO 'DSTLS34' LOAD 'SDL' SF 0.7
COMBO 'DSTLS34' LOAD 'EYP' SF -1.5
COMBO 'DSTLS35' TYPE 'ADD'
COMBO 'DSTLS35' LOAD 'DL' SF 0.7
COMBO 'DSTLS35' LOAD 'SDL' SF 0.7
COMBO 'DSTLS35' LOAD 'EXN' SF 1.5
COMBO 'DSTLS36' TYPE 'ADD'
COMBO 'DSTLS36' LOAD 'DL' SF 0.7
COMBO 'DSTLS36' LOAD 'SDL' SF 0.7
COMBO 'DSTLS36' LOAD 'EXN' SF -1.5
COMBO 'DSTLS37' TYPE 'ADD'
COMBO 'DSTLS37' LOAD 'DL' SF 0.7
COMBO 'DSTLS37' LOAD 'SDL' SF 0.7
COMBO 'DSTLS37' LOAD 'EYN' SF 1.5
COMBO 'DSTLS38' TYPE 'ADD'
COMBO 'DSTLS38' LOAD 'DL' SF 0.7
COMBO 'DSTLS38' LOAD 'SDL' SF 0.7
COMBO 'DSTLS38' LOAD 'EYN' SF -1.5
COMBO 'DCON1' TYPE 'ADD'
COMBO 'DCON1' LOAD 'TL' SF 1.4
COMBO 'DCON1' LOAD 'SDL' SF 1.4
COMBO 'DCON2' TYPE 'ADD'
COMBO 'DCON2' LOAD 'DL' SF 1.2
COMBO 'DCON2' LOAD 'LL' SF 1.6
COMBO 'DCON3' TYPE 'ADD'
COMBO 'DCON3' LOAD 'DL' SF 1.2
COMBO 'DCON3' LOAD 'TL' SF 1
COMBO 'DCON3' LOAD 'WX' SF 1.6
COMBO 'DCON4' TYPE 'ADD'
COMBO 'DCON4' LOAD 'DL' SF 1.2
COMBO 'DCON4' LOAD 'TL' SF 1
COMBO 'DCON4' LOAD 'WX' SF -1.6
COMBO 'DCON5' TYPE 'ADD'
COMBO 'DCON5' LOAD 'TL' SF 1.2
COMBO 'DCON5' LOAD 'SDL' SF 1.2
COMBO 'DCON5' LOAD 'WX' SF 1.6
COMBO 'DCON6' TYPE 'ADD'
COMBO 'DCON6' LOAD 'DL' SF 1.2
COMBO 'DCON6' LOAD 'SDL' SF 1.2
COMBO 'DCON6' LOAD 'LL' SF 1
COMBO 'DCON6' LOAD 'WY' SF -1.6
COMBO 'DCON7' TYPE 'ADD'
COMBO 'DCON7' LOAD 'DL' SF 1.2
COMBO 'DCON7' LOAD 'SDL' SF 1.2
COMBO 'DCON7' LOAD 'WX' SF 0.8
COMBO 'DCON8' TYPE 'ADD'
COMBO 'DCON8' LOAD 'DL' SF 1.2
COMBO 'DCON8' LOAD 'SDL' SF 1.2
COMBO 'DCON8' LOAD 'WX' SF -0.8
COMBO 'DCON9' TYPE 'ADD'
COMBO 'DCON9' LOAD 'DL' SF 1.2
COMBO 'DCON9' LOAD 'WY' SF 0.8
COMBO 'DCON10' TYPE 'ADD'
COMBO 'DCON10' LOAD 'DL' SF 1.2
COMBO 'DCON10' LOAD 'SDL' SF 1.2
COMBO 'DCON10' LOAD 'WY' SF -0.8
COMBO 'DCON11' TYPE 'ADD'
COMBO 'DCON11' LOAD 'DL' SF 0.9
COMBO 'DCON11' LOAD 'SDL' SF 0.9
COMBO 'DCON11' LOAD 'WX' SF 1.6
COMBO 'DCON12' TYPE 'ADD'
COMBO 'DCON12' LOAD 'DL' SF 0.9
COMBO 'DCON12' LOAD 'SDL' SF 0.9
COMBO 'DCON12' LOAD 'WX' SF -1.6
COMBO 'DCON13' TYPE 'ADD'
COMBO 'DCON13' LOAD 'DL' SF 0.9
COMBO 'DCON13' LOAD 'WY' SF 1.6
COMBO 'DCON14' TYPE 'ADD'
COMBO 'DCON14' LOAD 'DL' SF 0.9
COMBO 'DCON14' LOAD 'WY' SF -1.6
COMBO 'DCON15' TYPE 'ADD'
COMBO 'DCON15' LOAD 'DL' SF 1.4
COMBO 'DCON15' LOAD 'SDL' SF 1.4
COMBO 'DCON15' LOAD 'TL' SF 1
COMBO 'DCON15' LOAD 'EXP' SF 1.5
COMBO 'DCON16' TYPE 'ADD'
COMBO 'DCON16' LOAD 'DL' SF 1.4
COMBO 'DCON16' LOAD 'SDL' SF 1.4
COMBO 'DCON16' LOAD 'LL' SF 1
COMBO 'DCON16' LOAD 'EXP' SF -1.5
COMBO 'DCON17' TYPE 'ADD'
COMBO 'DCON17' LOAD 'DL' SF 1.4
COMBO 'DCON17' LOAD 'SDL' SF 1.4
COMBO 'DCON17' LOAD 'LL' SF 1
COMBO 'DCON17' LOAD 'EYP' SF 1.5
COMBO 'DCON18' TYPE 'ADD'
COMBO 'DCON18' LOAD 'DL' SF 1.4
COMBO 'DCON18' LOAD 'SDL' SF 1.4
COMBO 'DCON18' LOAD 'LL' SF 1
COMBO 'DCON18' LOAD 'EYP' SF -1.5
COMBO 'DCON19' TYPE 'ADD'
COMBO 'DCON19' LOAD 'DL' SF 1.4
COMBO 'DCON19' LOAD 'EXN' SF -1.5
COMBO 'DCON20' TYPE 'ADD'
COMBO 'DCON20' LOAD 'DL' SF 1.4
COMBO 'DCON20' LOAD 'LL' SF 1
COMBO 'DCON20' LOAD 'EXN' SF -1.5
COMBO 'DCON21' TYPE 'ADD'
COMBO 'DCON21' LOAD 'DL' SF 1.4
COMBO 'DCON21' LOAD 'TL' SF 1
COMBO 'DCON21' LOAD 'SDL' SF 1.4
COMBO 'DCON22' TYPE 'ADD'
COMBO 'DCON22' LOAD 'DL' SF 1.4
COMBO 'DCON22' LOAD 'TL' SF 1
COMBO 'DCON22' LOAD 'EYN' SF -1.5
COMBO 'DCON23' TYPE 'ADD'
COMBO 'DCON23' LOAD 'DL' SF 1.4
COMBO 'DCON23' LOAD 'SDL' SF 1.4
COMBO 'DCON23' LOAD 'EXP' SF 1.5
COMBO 'DCON24' TYPE 'ADD'
COMBO 'DCON24' LOAD 'DL' SF 1.4
COMBO 'DCON24' LOAD 'EXP' SF -1.5
COMBO 'DCON25' TYPE 'ADD'
COMBO 'DCON25' LOAD 'DL' SF 1.4
COMBO 'DCON25' LOAD 'EYP' SF 1.5
COMBO 'DCON26' TYPE 'ADD'
COMBO 'DCON26' LOAD 'DL' SF 1.4
COMBO 'DCON26' LOAD 'EYP' SF -1.5
COMBO 'DCON27' TYPE 'ADD'
COMBO 'DCON27' LOAD 'DL' SF 1.4
COMBO 'DCON27' LOAD 'EXN' SF 1.5
COMBO 'DCON28' TYPE 'ADD'
COMBO 'DCON28' LOAD 'DL' SF 1.4
COMBO 'DCON28' LOAD 'EXN' SF -1.5
COMBO 'DCON29' TYPE 'ADD'
COMBO 'DCON29' LOAD 'DL' SF 1.4
COMBO 'DCON29' LOAD 'EYN' SF 1.5
COMBO 'DCON30' TYPE 'ADD'
COMBO 'DCON30' LOAD 'DL' SF 1.4
COMBO 'DCON30' LOAD 'EYN' SF -1.5
COMBO 'DCON31' TYPE 'ADD'
COMBO 'DCON31' LOAD 'DL' SF 0.7
COMBO 'DCON31' LOAD 'SDL' SF 0.7
COMBO 'DCON31' LOAD 'EXP' SF 1.5
COMBO 'DCON32' TYPE 'ADD'
COMBO 'DCON32' LOAD 'DL' SF 0.7
COMBO 'DCON32' LOAD 'EXP' SF -1.5
COMBO 'DCON33' TYPE 'ADD'
COMBO 'DCON33' LOAD 'DL' SF 0.7
COMBO 'DCON33' LOAD 'EYP' SF 1.5
COMBO 'DCON34' TYPE 'ADD'
COMBO 'DCON34' LOAD 'DL' SF 0.7
COMBO 'DCON34' LOAD 'EYP' SF -1.5
COMBO 'DCON35' TYPE 'ADD'
COMBO 'DCON35' LOAD 'DL' SF 0.7
COMBO 'DCON35' LOAD 'EXN' SF 1.5
COMBO 'DCON36' TYPE 'ADD'
COMBO 'DCON36' LOAD 'DL' SF 0.7
COMBO 'DCON36' LOAD 'EXN' SF -1.5
COMBO 'DCON37' TYPE 'ADD'
COMBO 'DCON37' LOAD 'DL' SF 0.7
COMBO 'DCON37' LOAD 'EYN' SF 1.5
COMBO 'DCON38' TYPE 'ADD'
COMBO 'DCON38' LOAD 'DL' SF 0.7
COMBO 'DCON38' LOAD 'EYN' SF -1.5

COMBO 'DCON9' LOAD 'SDL' SF 1.2
COMBO 'DCON9' LOAD 'WY' SF 0.8
COMBO 'DCON10' TYPE 'ADD'
COMBO 'DCON10' LOAD 'DL' SF 1.2
COMBO 'DCON10' LOAD 'SDL' SF 1.2
COMBO 'DCON10' LOAD 'WY' SF -0.8
COMBO 'DCON11' TYPE 'ADD'
COMBO 'DCON11' LOAD 'DL' SF 0.9
COMBO 'DCON11' LOAD 'SDL' SF 0.9
COMBO 'DCON11' LOAD 'WX' SF 1.6
COMBO 'DCON12' TYPE 'ADD'
COMBO 'DCON12' LOAD 'DL' SF 0.9
COMBO 'DCON12' LOAD 'SDL' SF 0.9
COMBO 'DCON12' LOAD 'WX' SF -1.6
COMBO 'DCON13' TYPE 'ADD'
COMBO 'DCON13' LOAD 'DL' SF 0.9
COMBO 'DCON13' LOAD 'WY' SF 1.6
COMBO 'DCON14' TYPE 'ADD'
COMBO 'DCON14' LOAD 'DL' SF 0.9
COMBO 'DCON14' LOAD 'WY' SF -1.6
COMBO 'DCON15' TYPE 'ADD'
COMBO 'DCON15' LOAD 'DL' SF 1.4
COMBO 'DCON15' LOAD 'SDL' SF 1.4
COMBO 'DCON15' LOAD 'TL' SF 1
COMBO 'DCON15' LOAD 'EXP' SF 1.5
COMBO 'DCON16' TYPE 'ADD'
COMBO 'DCON16' LOAD 'DL' SF 1.4
COMBO 'DCON16' LOAD 'SDL' SF 1.4
COMBO 'DCON16' LOAD 'LL' SF 1
COMBO 'DCON16' LOAD 'EXP' SF -1.5
COMBO 'DCON17' TYPE 'ADD'
COMBO 'DCON17' LOAD 'DL' SF 1.4
COMBO 'DCON17' LOAD 'SDL' SF 1.4
COMBO 'DCON17' LOAD 'LL' SF 1
COMBO 'DCON17' LOAD 'EYP' SF 1.5
COMBO 'DCON18' TYPE 'ADD'
COMBO 'DCON18' LOAD 'DL' SF 1.4
COMBO 'DCON18' LOAD 'SDL' SF 1.4
COMBO 'DCON18' LOAD 'LL' SF 1
COMBO 'DCON18' LOAD 'EYP' SF -1.5
COMBO 'DCON19' TYPE 'ADD'
COMBO 'DCON19' LOAD 'DL' SF 1.4
COMBO 'DCON19' LOAD 'EXN' SF -1.5
COMBO 'DCON20' TYPE 'ADD'
COMBO 'DCON20' LOAD 'DL' SF 1.4
COMBO 'DCON20' LOAD 'LL' SF 1
COMBO 'DCON20' LOAD 'EXN' SF -1.5
COMBO 'DCON21' TYPE 'ADD'
COMBO 'DCON21' LOAD 'DL' SF 1.4
COMBO 'DCON21' LOAD 'TL' SF 1
COMBO 'DCON21' LOAD 'SDL' SF 1.4
COMBO 'DCON22' TYPE 'ADD'
COMBO 'DCON22' LOAD 'DL' SF 1.4
COMBO 'DCON22' LOAD 'TL' SF 1
COMBO 'DCON22' LOAD 'EYN' SF -1.5
COMBO 'DCON23' TYPE 'ADD'
COMBO 'DCON23' LOAD 'DL' SF 1.4
COMBO 'DCON23' LOAD 'SDL' SF 1.4
COMBO 'DCON23' LOAD 'EXP' SF 1.5
COMBO 'DCON24' TYPE 'ADD'
COMBO 'DCON24' LOAD 'DL' SF 1.4
COMBO 'DCON24' LOAD 'EXP' SF -1.5
COMBO 'DCON25' TYPE 'ADD'
COMBO 'DCON25' LOAD 'DL' SF 1.4
COMBO 'DCON25' LOAD 'EYP' SF 1.5
COMBO 'DCON26' TYPE 'ADD'
COMBO 'DCON26' LOAD 'DL' SF 1.4
COMBO 'DCON26' LOAD 'EYP' SF -1.5
COMBO 'DCON27' TYPE 'ADD'
COMBO 'DCON27' LOAD 'DL' SF 1.4
COMBO 'DCON27' LOAD 'EXN' SF 1.5
COMBO 'DCON28' TYPE 'ADD'
COMBO 'DCON28' LOAD 'DL' SF 1.4
COMBO 'DCON28' LOAD 'EXN' SF -1.5
COMBO 'DCON29' TYPE 'ADD'
COMBO 'DCON29' LOAD 'DL' SF 1.4
COMBO 'DCON29' LOAD 'EYN' SF 1.5
COMBO 'DCON30' TYPE 'ADD'
COMBO 'DCON30' LOAD 'DL' SF 1.4
COMBO 'DCON30' LOAD 'EYN' SF -1.5
COMBO 'DCON31' TYPE 'ADD'
COMBO 'DCON31' LOAD 'DL' SF 0.7
COMBO 'DCON31' LOAD 'SDL' SF 0.7
COMBO 'DCON31' LOAD 'EXP' SF 1.5
COMBO 'DCON32' TYPE 'ADD'
COMBO 'DCON32' LOAD 'DL' SF 0.7
COMBO 'DCON32' LOAD 'EXP' SF -1.5
COMBO 'DCON33' TYPE 'ADD'
COMBO 'DCON33' LOAD 'DL' SF 0.7
COMBO 'DCON33' LOAD 'EYP' SF 1.5
COMBO 'DCON34' TYPE 'ADD'
COMBO 'DCON34' LOAD 'DL' SF 0.7
COMBO 'DCON34' LOAD 'EYP' SF -1.5
COMBO 'DCON35' TYPE 'ADD'
COMBO 'DCON35' LOAD 'DL' SF 0.7
COMBO 'DCON35' LOAD 'EXN' SF 1.5
COMBO 'DCON36' TYPE 'ADD'
COMBO 'DCON36' LOAD 'DL' SF 0.7
COMBO 'DCON36' LOAD 'EXN' SF -1.5
COMBO 'DCON37' TYPE 'ADD'
COMBO 'DCON37' LOAD 'DL' SF 0.7
COMBO 'DCON37' LOAD 'EYN' SF 1.5
COMBO 'DCON38' TYPE 'ADD'
COMBO 'DCON38' LOAD 'DL' SF 0.7
COMBO 'DCON38' LOAD 'EYN' SF -1.5

§ STEEL DESIGN PREFERENCES
STEELREFERENCE CODE 'AISC-LRF03'
STEELREFERENCE PBI1LRF0.9 PHCLRF0.85 PHITLRF0.9 PHVLRF0.9 PHCANGLERLF0.9
STEELREFERENCE PBI1LRF0.9 PHCLRF0.85 PHITLRF0.9 PHVLRF0.9 PHCANGLERLF0.9
STEELREFERENCE CONSIDERDEFLECTION 'NO'
STEELREFERENCE DFLDEFLECTIONLIMIT 120 SLDDEFLECTIONLIMIT 120 LLDDEFLECTIONLIMIT 360 TLMDEFLECTIONLIMIT 240
STEELREFERENCE DFLDEFLECTIONLIMITABS 2.54 LLDDEFLECTIONLIMITABS 2.54 TLMDEFLECTIONLIMITABS 2.54
STEELREFERENCE CALCLULTECAMBER 'NO'
STEELREFERENCE CAMBERABSMAXLIMIT 10.16 CAMBERINTERVAL 0.635 CAMBERRELAXMAX 180 CAMBERINTERVAL 1.905
STEELREFERENCE PATTERNLFF 0.75 MAXITERATION 1 SRLLIMIT 1.05

§ CONCRETE DESIGN PREFERENCES
CONCRETEREFERENCE CODE 'ACI 318-02'
CONCRETEREFERENCE NUMINTERPOINTS 11
CONCRETEREFERENCE SDI 'D'
CONCRETEREFERENCE PHICOMPRESSIONCTRLTED 0.65
CONCRETEREFERENCE PHICOMPRESSIONCTRLSPIRAL 0.7
CONCRETEREFERENCE PHISHEARTORTION

§ COMPOSITE DESIGN PREFERENCES
COMPOSITEREFERENCE CODE 'AISC-LRF03'
COMPOSITEREFERENCE PHB 0.9 PHBCNP 0.85 PHBCPE 0.9 PHBCPP 0.85 PHV 0.9
COMPOSITEREFERENCE SHREWED 'NO'
COMPOSITEREFERENCE DFLIMIT 340 LLLIMIT 340 TLLIMIT 340 CREPEFACTOR 1
COMPOSITEREFERENCE DFLCAMBER 100 CAMBERNORE 1.905 CAMBERABSMAX 10.16 CAMBERRELAX 180 CAMBERINTERVAL 0.635
COMPOSITEREFERENCE %BILL 25 CONSIDERFREQ 'NO'
COMPOSITEREFERENCE OPTIMIZEPRICE 'NO'
COMPOSITEREFERENCE CONNECTORPRICE 0

§ WALL DESIGN PREFERENCES
WALLREFERENCE CODE 'UBC97'
WALLREFERENCE REBARUNIT 'm2'
WALLREFERENCE REBARLENGTHS 'm2/8'
WALLREFERENCE PHB 0.9 PHC 0.7 PHV 0.85 PHVS 0.6 PHAIAFACTOR 0.8

WALLREFERENCE NUMCURVES 24 NUMPOINTS 11
WALLREFERENCE PTMAX 0.06 PCMAX 0.04 IPMAX 0.02 IPMIN 0.0025
WALLREFERENCE UPLIMIT 0.95

S DIMENSION LINES

S LOG

START COMMENTS

ETABS Display 9.5.0 File imported from E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.SET at 2022/8/4 上午 11:12:12
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 上午 11:22:48
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:39:27
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:40:26
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:41:18
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:42:28
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:44:15
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:47:36
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:49:25
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:50:36
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:51:35
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:51:47
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-1\220804\2208A\SC1-1-220804-001.EDB at 2022/8/4 下午 05:56:02
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:25:15
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:25:38
ETABS Display 9.5.0 File imported from E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.SET at 2022/8/4 下午 09:25:46
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:25:53
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:28:29
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:28:41
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:29:08
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:31:27
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/4 下午 09:31:36
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/13 上午 10:42:39
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/13 上午 11:12:09
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/13 上午 11:28:40
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/14 下午 09:22:43
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/14 下午 09:23:18
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/14 下午 09:23:28
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/14 下午 09:52:37
ETABS Nonlinear 9.5.0 File saved as E:\WORK\2022\2208A\MODEL\ETABS\SC1-2\220804\2208A\SC1-2-220804-001.EDB at 2022/8/14 下午 10:29:58

END COMMENTS

END

S END OF MODEL FILE

STEEL CODE PREFERENCES

Steel Design Code : AISC-LRF093
Time History Type : Step-by-Step
Frame Type : Moment Frame
Phi(Bending) : 0.9
Phi(Compression) : 0.85
Phi(Tension) : 0.9
Phi(Shear) : 0.9
Phi(Compression, Angle) : 0.9
Consider Deflection? : No
Deflection Check Type : Ratio
DL Limit, L/ : 120
Super DL+LL Limit, L/ : 120
Live Load Limit, L/ : 360
Total Load Limit, L/ : 240
Total+Camber Limit, L/ : 240
DL Limit, abs : 2.54
Super DL+LL Limit, abs : 2.54
Live Load Limit, abs : 2.54
Total Load Limit, abs : 2.54
Total+Camber Limit, abs : 2.54
Pattern Live Load Factor : 0.75
Stress Ratio Limit : 1.05
Maximum Auto Iteration : 1

COLUMN STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY COLUMN SECTION, FRAMING RLLF, RATIO, RATIO, K, K, LEVEL, LINE ID, TYPE FACTOR, MAJOR MINOR MAJOR MINOR. Contains data for various column sections like PRF C1-1, C2-1, etc.

BEAM STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY BEAM SECTION, FRAMING RLLF, RATIO, RATIO, K, K, LEVEL, BAY ID, TYPE FACTOR, MAJOR MINOR MAJOR MINOR. Contains data for various beam sections like PRF B2, B3, B4, etc.

BRACE STEEL STRESS CHECK ELEMENT INFORMATION (AISC-LRF093)

Table with columns: STORY BRACE SECTION, FRAMING RLLF, RATIO, RATIO, K, K, LEVEL, BAY ID, TYPE FACTOR, MAJOR MINOR MAJOR MINOR. Contains data for various brace sections like PRF D1, D2, D3, etc.

COLUMN STEEL STRESS CHECK OUTPUT (AISC-LRF093)

STORY COLUMN SECTION /-----MOMENT INTERACTION CHECK-----/---SHEAR22---/---SHEAR33---/
LEVEL LINE ID COMBO RATIO = AXL + B33 + B22 COMBO RATIO COMBO RATIO

Table with columns: PRF, STORY COLUMN SECTION, MOMENT INTERACTION CHECK, SHEAR22, SHEAR33. Contains data for various column sections like PRF C1-1, C2-1, C3-1, etc.

BEAM STEEL STRESS CHECK OUTPUT (AISC-LRF093)

STORY BEAM SECTION /-----MOMENT INTERACTION CHECK-----/---SHEAR22---/---SHEAR33---/
LEVEL BAY ID COMBO RATIO = AXL + B33 + B22 COMBO RATIO COMBO RATIO

Table with columns: PRF, STORY BEAM SECTION, MOMENT INTERACTION CHECK, SHEAR22, SHEAR33. Contains data for various beam sections like PRF B2, B3, B4, etc.

PRF B33 C125X50X20X2.0 02RC71 0.096 02RC72 0.000
02RC71(T) 0.657 = 0.000 + 0.657 + 0.000
PRF B35 C125X50X20X2.0 02RC71 0.117 02RC72 0.000
02RC71(T) 0.955 = 0.000 + 0.955 + 0.000
PRF B36 C125X50X20X2.0 02RC71 0.501 02RC71 1.065
02RC71(C) 0.255 = 0.000 + 0.240 + 0.015
02RC71(T) 0.096 = 0.000 + 0.090 + 0.006
PRF B37 C125X50X20X2.0 02RC71 0.064 02RC72 0.000
02RC71(T) 0.281 = 0.000 + 0.281 + 0.000
PRF B39 C125X50X20X2.0 02RC71 0.029 02RC72 0.000
02RC71(T) 0.054 = 0.000 + 0.054 + 0.000
PRF B40 C125X50X20X2.0 02RC71 0.032 02RC72 0.000
02RC71(T) 0.064 = 0.000 + 0.064 + 0.000
PRF B41 C125X50X20X2.0 02RC71 0.081 02RC72 0.001
02RC71(C) 0.092 = 0.005 + 0.087 + 0.000
02RC71(T) 0.296 = 0.000 + 0.295 + 0.000
PRF B43 C125X50X20X2.0 02RC71 0.096 02RC72 0.000
02RC71(T) 0.657 = 0.000 + 0.657 + 0.000
PRF B44 C125X50X20X2.0 02RC71 0.118 02RC72 0.000
02RC71(T) 0.980 = 0.000 + 0.980 + 0.000
PRF B45 C125X50X20X2.0 02RC71 0.064 02RC72 0.000
02RC71(T) 0.279 = 0.000 + 0.279 + 0.000
PRF B46 C125X50X20X2.0 02RC71 0.032 02RC72 0.000
02RC71(T) 0.064 = 0.000 + 0.064 + 0.000
PRF B47 C125X50X20X2.0 02RC71 0.096 02RC72 0.000
02RC71(T) 0.657 = 0.000 + 0.657 + 0.000
PRF B48 C125X50X20X2.0 02RC71 0.118 02RC72 0.000
02RC71(T) 0.980 = 0.000 + 0.980 + 0.000
PRF B50 C125X50X20X2.0 02RC71 0.064 02RC72 0.000
02RC71(T) 0.279 = 0.000 + 0.279 + 0.000
PRF B51 C125X50X20X2.0 02RC71 0.032 02RC72 0.000
02RC71(T) 0.064 = 0.000 + 0.064 + 0.000
PRF B55 LC100X50X15X2 02RC68 0.005 02RC71 0.005
02RC68(C) 0.100 = 0.036 + 0.058 + 0.006
02RC68(T) 0.014 = 0.002 + 0.005 + 0.007
PRF B56 LC100X50X15X2 02RC68 0.004 02RC71 0.003
02RC68(C) 0.100 = 0.040 + 0.056 + 0.004
02RC68(T) 0.012 = 0.000 + 0.007 + 0.004
PRF B57 C125X50X20X2.0 02RC71 0.096 02RC72 0.000
02RC71(T) 0.657 = 0.000 + 0.657 + 0.000
PRF B58 C125X50X20X2.0 $klr > 200$ 02RC71 0.130 02RC71 0.374
02RC71(C) 0.850 = 0.000 + 0.800 + 0.049
02RC71(T) 0.318 = 0.000 + 0.300 + 0.018
PRF B59 C125X50X20X2.0 02RC71 0.064 02RC72 0.000
02RC71(T) 0.280 = 0.000 + 0.280 + 0.000
PRF B60 C125X50X20X2.0 02RC71 0.032 02RC72 0.000
02RC71(T) 0.064 = 0.000 + 0.064 + 0.000
PRF B62 25C125X50X20X2 02RC71 0.065 02RC72 0.000
02RC71(T) 0.112 = 0.000 + 0.112 + 0.000
PRF B64 25C125X50X20X2 02RC71 0.116 02RC72 0.000
02RC71(T) 0.308 = 0.000 + 0.308 + 0.000
PRF B65 25C125X50X20X2 02RC71 0.073 02RC72 0.000
02RC71(T) 0.151 = 0.000 + 0.151 + 0.000
PRF B67 25C125X50X20X2 02RC71 0.051 02RC72 0.000
02RC71(T) 0.060 = 0.000 + 0.060 + 0.000

ETABS v9.5.0 File:2208A-SCI-2-220804-001 Units:Kgf-cm August 14, 2022 22:29 PAGE 7

BRACE STEEL STRESS CHECK OUTPUT (AISC-LRFD93)

STORY BRACE SECTION /-----MOMENT INTERACTION CHECK-----/---SHEAR2---/---SHEAR3---/
LEVEL BAY ID COMBO RATIO = AXL + B33 + B22 COMBO RATIO COMBO RATIO

PRF D1 U100X100X2.0 02RC67 0.004 02RC72 0.006
02RC71(C) 0.042 = 0.024 + 0.017 + 0.001
02RC72(T) 0.050 = 0.016 + 0.003 + 0.031
PRF D2 U100X100X2.0 02RC67 0.004 02RC72 0.006
02RC13(C) 0.012 = 0.005 + 0.005 + 0.002
02RC67(T) 0.045 = 0.021 + 0.021 + 0.003
PRF D3 U100X100X2.0 02RC72 0.005 02RC67 0.003
02RC72(C) 0.061 = 0.035 + 0.025 + 0.000
02RC13(T) 0.017 = 0.006 + 0.010 + 0.001
PRF D4 U100X100X2.0 02RC72 0.005 02RC67 0.003
02RC72(C) 0.076 = 0.045 + 0.028 + 0.002
02RC67(T) 0.033 = 0.011 + 0.003 + 0.019
PRF D5 U100X100X2.0 02RC72 0.006 02RC71 0.010
02RC68(C) 0.073 = 0.041 + 0.024 + 0.009
02RC71(T) 0.062 = 0.009 + 0.010 + 0.043
PRF D6 U100X100X2.0 02RC72 0.006 02RC71 0.005
02RC68(C) 0.071 = 0.041 + 0.025 + 0.005
02RC71(T) 0.058 = 0.009 + 0.013 + 0.035
PRF D7 25C125X50X20X2 02RC72 0.026 02RC67 0.004
02RC68(C) 0.081 = 0.026 + 0.053 + 0.002
02RC71(T) 0.090 = 0.038 + 0.041 + 0.011
PRF D8 25C125X50X20X2 02RC71 0.047 02RC71 0.003
02RC68(C) 0.081 = 0.038 + 0.038 + 0.005
02RC71(T) 0.180 = 0.081 + 0.085 + 0.013
PRF D9 25C125X50X20X2 02RC71 0.042 02RC71 0.073
02RC68(C) 0.150 = 0.040 + 0.094 + 0.016
02RC71(T) 0.365 = 0.074 + 0.011 + 0.280
PRF D10 25C125X50X20X2 02RC71 0.035 02RC67 0.031
02RC68(C) 0.085 = 0.036 + 0.047 + 0.002
02RC71(T) 0.057 = 0.016 + 0.015 + 0.026
PRF D11 U100X100X2.0 02RC72 0.008 02RC67 0.005
02RC13(C) 0.012 = 0.005 + 0.006 + 0.001
02RC72(T) 0.067 = 0.028 + 0.038 + 0.001
PRF D12 25C125X50X20X2 02RC71 0.022 02RC71 0.000
02RC68(C) 0.058 = 0.028 + 0.030 + 0.000
02RC71(T) 0.054 = 0.025 + 0.028 + 0.001
PRF D13 U100X100X2.0 02RC67 0.006 02RC68 0.009
02RC68(C) 0.048 = 0.007 + 0.004 + 0.038
02RC67(T) 0.049 = 0.019 + 0.028 + 0.002
PRF D14 U100X100X2.0 02RC67 0.005 02RC72 0.009
02RC68(C) 0.048 = 0.002 + 0.006 + 0.040
02RC72(T) 0.033 = 0.000 + 0.000 + 0.032
PRF D15 25C125X50X20X2 02RC71 0.053 02RC67 0.037
02RC71(C) 0.055 = 0.017 + 0.020 + 0.019
02RC71(T) 0.095 = 0.043 + 0.051 + 0.002
PRF D16 25C125X50X20X2 02RC71 0.115 02RC67 0.030
02RC68(C) 0.089 = 0.042 + 0.047 + 0.000
02RC71(T) 0.223 = 0.099 + 0.124 + 0.001
PRF D17 25C125X50X20X2 02RC71 0.092 02RC71 0.182
02RC71(C) 0.272 = 0.030 + 0.018 + 0.223
02RC71(T) 0.239 = 0.050 + 0.001 + 0.189
PRF D18 25C125X50X20X2 02RC71 0.018 02RC71 0.002
02RC68(C) 0.039 = 0.006 + 0.032 + 0.001
02RC71(T) 0.062 = 0.027 + 0.029 + 0.006
PRF D19 25C125X50X20X2 02RC68 0.021 02RC67 0.001
02RC68(C) 0.043 = 0.003 + 0.040 + 0.000
02RC71(T) 0.038 = 0.017 + 0.017 + 0.004
PRF D20 25C125X50X20X2 02RC68 0.042 02RC71 0.005
02RC71(C) 0.034 = 0.015 + 0.016 + 0.003
02RC68(T) 0.088 = 0.001 + 0.085 + 0.002
PRF D21 U100X100X2.0 02RC68 0.006 02RC71 0.003
02RC11(C) 0.008 = 0.004 + 0.002 + 0.003
02RC72(T) 0.067 = 0.033 + 0.034 + 0.000
PRF D22 LC100X50X15X2 02RC68 0.001 02RC71 0.004
02RC17(C) 0.026 = 0.011 + 0.003 + 0.011
02RC68(T) 0.009 = 0.048 + 0.008 + 0.013
PRF D23 LC100X50X15X2 02RC01 0.001 02RC71 0.001
02RC17(C) 0.020 = 0.012 + 0.005 + 0.003
02RC68(T) 0.062 = 0.046 + 0.013 + 0.003
PRF D24 LC100X50X15X2 02RC67 0.001 02RC71 0.002
02RC13(C) 0.025 = 0.008 + 0.003 + 0.013
02RC68(T) 0.066 = 0.046 + 0.006 + 0.015
PRF D25 LC100X50X15X2 02RC68 0.001 02RC71 0.001
02RC13(C) 0.016 = 0.009 + 0.006 + 0.001
02RC68(T) 0.071 = 0.050 + 0.020 + 0.001
PRF D26 U100X100X2.0 02RC67 0.004 02RC68 0.006
02RC68(C) 0.054 = 0.017 + 0.005 + 0.032
02RC11(T) 0.009 = 0.002 + 0.006 + 0.000
PRF D27 U100X100X2.0 02RC67 0.006 02RC68 0.010
02RC68(C) 0.048 = 0.004 + 0.001 + 0.045
02RC71(T) 0.051 = 0.024 + 0.027 + 0.000

S File E:\WORK\2022\208A\MODELS\SAFE\SC1-2\208A.SCI-2.2208A.001.103 saved 8/14/22 22:29:36 in Kgf.cm
SAFE 8.1.0
UNITS Kgf cm
\$ TITLES
TITLE1 "Lo-Lat Structure Studio"
TITLE2 ""
\$ GRIDS
GRID "GLOBAL_X" X "X1" 0
GRID "GLOBAL_X" X "X2" 362.5
GRID "GLOBAL_X" X "X3" 807.5
GRID "GLOBAL_X" X "X4" 1050
GRID "GLOBAL_X" X "X5" 1170
GRID "GLOBAL_Y" Y "Y1" 0
GRID "GLOBAL_Y" Y "Y2" 390
GRID "GLOBAL_Y" Y "Y3" 417.5
GRID "GLOBAL_Y" Y "Y4" 600
MESH MAX 100
\$ BEAM PROPERTIES
BEAMPROP "RB45X60C4" E 250998 U 0.2 W 0.0024
BEAMPROP "RB45X60C4" TYPE R B 4 5 D 60
BEAMPROP "RB45X60C4" DDESIGN 0
BEAMPROP "RB45X60C4" BDESIGN 45 DDESIGN 60
BEAMPROP "RB45X60C4" CT 6 CB 6
BEAMPROP "RB45X60C4" FC 280 FY 4200 FYS 4200 FCS 280
\$ SLAB PROPERTIES
SLABPROP "S40" E 250998 U 0.2 W 0.0024
SLABPROP "S40" T40 TYPE THICK
SLABPROP "S40" CTS1 CTS2 CTS3 CTS4 CTS5
SLABPROP "S40" FC 280 FY 4200
SLABPROP "Col_Slab" E 250998 U 0.2 W 0.0024
SLABPROP "Col_Slab" T200 TYPE THICK
SLABPROP "Col_Slab" DESIGN NO
\$ COLUMN PROPERTIES
\$ WALL PROPERTIES
\$ SOIL PROPERTIES
SOILPROP "F3" K 1
SOILPROP "F1" K 1
SOILPROP "F2" K 1
SOILPROP "F4" K 1
SOILPROP "F5" K 1
\$ POINT COORDINATES
POINT "1" 0 0
POINT "2" 362.5 0
POINT "3" 807.5 0
POINT "4" 1050 0
POINT "5" 1170 0
POINT "6" 1170 390
POINT "7" 1170 417.5
POINT "8" 1170 600
POINT "9" 1170 390
POINT "10" 1170 0
POINT "11" 1170 0
POINT "12" 0 390
POINT "13" 0 417.5
POINT "14" 0 600
POINT "15" 0 390
POINT "16" 0 0
POINT "17" 362.5 390
POINT "18" 807.5 390
POINT "19" 1050 390
POINT "20" 1170 390
POINT "21" 0 0
POINT "22" 0 0
POINT "23" 120 0
POINT "24" 120 417.5
POINT "25" 120 600
POINT "26" 929.5 600
\$ LINE CONNECTIVITY
LINE "B1" 0 0 362.5 0
LINE "B3" 362.5 0 807.5 0
LINE "B5" 807.5 0 1170 0
LINE "B19" 0 0 417.5
LINE "B42" 0 417.5 362.5 417.5
LINE "B34" 362.5 390 807.5 390
LINE "B38" 807.5 390 1170 390
LINE "B53" 0 417.5 0 600
LINE "B61" 0 600 362.5 600
LINE "B63" 362.5 600 807.5 600
LINE "B66" 807.5 600 1170 600
LINE "B20" 362.5 0 362.5 417.5
LINE "B54" 362.5 417.5 362.5 600
LINE "B16" 807.5 0 807.5 390
LINE "B49" 807.5 390 807.5 600
LINE "B17" 1170 0 1170 390
LINE "B52" 1170 390 1170 600
\$ AREA CONNECTIVITY
AREA "F3" 4 0 362.5 0 362.5 417.5
AREA "F1" 4 362.5 0 807.5 390 362.5 390
AREA "F2" 4 807.5 0 1170 0 1170 390 807.5 390
AREA "F6" 4 0 417.5 362.5 417.5 362.5 600 0 600
AREA "F4" 4 362.5 390 807.5 390 807.5 600 362.5 600
AREA "F5" 4 807.5 390 1170 390 1170 600 807.5 600
\$ BEAM ASSIGNS
BEAM "B1" "RB45X60C4"
BEAM "B3" "RB45X60C4"
BEAM "B5" "RB45X60C4"
BEAM "B19" "RB45X60C4"
BEAM "B42" "RB45X60C4"
BEAM "B34" "RB45X60C4"
BEAM "B38" "RB45X60C4"
BEAM "B53" "RB45X60C4"
BEAM "B61" "RB45X60C4"
BEAM "B63" "RB45X60C4"
BEAM "B66" "RB45X60C4"
BEAM "B20" "RB45X60C4"
BEAM "B54" "RB45X60C4"
BEAM "B16" "RB45X60C4"
BEAM "B49" "RB45X60C4"
BEAM "B17" "RB45X60C4"
BEAM "B52" "RB45X60C4"
\$ SLAB ASSIGNS
SLAB "F3" "S40"
SLAB "F1" "S40"
SLAB "F2" "S40"
SLAB "F6" "S40"
SLAB "F4" "S40"
SLAB "F5" "S40"
\$ COLUMN ASSIGNS
\$ WALL ASSIGNS
\$ SOIL ASSIGNS
SOIL "F3" "F3"
SOIL "F1" "F1"
SOIL "F2" "F2"
SOIL "F6" "F6"
SOIL "F4" "F4"
SOIL "F5" "F5"
\$ RELEASE ASSIGNS
\$ LOADS
LOAD "DL" TYPE DEAD SELFWEIGHT 1 LTFDFACTOR 3
POINTLOAD "DL" "1" F 31.71986 MX 116.8891 MY 119.9543
POINTLOAD "DL" "63" F 42.29966 MX -12.24717 MY -99.23267
POINTLOAD "DL" "50" F 42.29966 MX 12.24717 MY 99.23267
POINTLOAD "DL" "12" F 100.178 MX 15.01166 MY 165.1808
POINTLOAD "DL" "3" F 60.02691 MX -12.13656 MY 41.84135
POINTLOAD "DL" "65" F 93.16744 MX -149.9215 MY -267.6956
POINTLOAD "DL" "51" F 108.9952 MX -134.9346 MY -35.61038
POINTLOAD "DL" "13" F 201.1518 MX 1987.103 MY 827.4454
POINTLOAD "DL" "44" F 123.8861 MX -152.8364 MY 67.86761
POINTLOAD "DL" "4" F 32.24377 MX -138.0818 MY 390.1038
POINTLOAD "DL" "66" F 114.1861 MX -350.8459 MY 365.9522
POINTLOAD "DL" "52" F 84.83176 MX 2.223076 E 14 MY 2.442743 E 14
POINTLOAD "DL" "14" F 225.4736 MX 1265.223 MY 414.5227
POINTLOAD "DL" "39" F 124.8911 MX -325.395 MY 67.75353
POINTLOAD "DL" "68" F 66.8425 MX -509.149 MY 4.93774
POINTLOAD "DL" "40" F 101.1884 MX -401.1084 MY 1236.191
POINTLOAD "DL" "6" F 215.5348 MX -202.2014 MY 482.2433
POINTLOAD "DL" "11" F -41.83714 MX 1966.543 MY 370.0649
POINTLOAD "DL" "20" F -37.87113 MX -861.3784 MY 120.4769
POINTLOAD "DL" "41" F 124.2099 MX -501.5333 MY 84.65174
POINTLOAD "DL" "69" F 60.13242 MX -521.9988 MY 30.76562
POINTLOAD "DL" "5" F 161.2529 MX -365.2663 MY 1252.307
POINTLOAD "DL" "2" F 157.4923 MX 84.94157 MY -617.7457
POINTLOAD "DL" "43" F 138.6926 MX 2.837159 MY -1006.867
POINTLOAD "DL" "42" F 65.33439 MX 16.50336 MY 89.32426

POINTLOAD "DL" "64" F 90.95395 MX -17.1267 MY -842.4331
POINTLOAD "DL" "67" F 101.2997 MX -483.3633 MY 400.6738
LOAD "SD" TYPE DEAD SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "SD" "1" F 24.96463 MX 103.6219 MY 14.22832
POINTLOAD "SD" "63" F 14.354 MX 10.56368 MY -35.72332
POINTLOAD "SD" "50" F 102.3381 MX 57.82071 MY -24.52529
POINTLOAD "SD" "12" F 125.271 MX 388.5757 MY -57.44519
POINTLOAD "SD" "3" F 107.8908 MX 142.8343 MY -498.0289
POINTLOAD "SD" "65" F 130.8395 MX -71.00284 MY -781.1849
POINTLOAD "SD" "51" F 236.3813 MX -27.96907 MY -185.4737
POINTLOAD "SD" "13" F 373.6181 MX 653.9342 MY -651.4344
POINTLOAD "SD" "44" F 303.7885 MX 5.27942 MY 11.55177
POINTLOAD "SD" "4" F 103.4977 MX 143.8003 MY 737.045
POINTLOAD "SD" "66" F 129.239 MX -122.056 MY 1209.682
POINTLOAD "SD" "52" F 217.1063 MX 3.438954 E 14 MY 3.482999 E 13
POINTLOAD "SD" "14" F 371.9858 MX 479.5065 MY 715.7893
POINTLOAD "SD" "6" F 386.7755 MX -60.2339 MY 23.9113
POINTLOAD "SD" "68" F 67.63763 MX -87.83962 MY -35.66156
POINTLOAD "SD" "40" F 180.916 MX -66.42721 MY 197.0955
POINTLOAD "SD" "6" F 59.72916 MX 2.201909 MY 58.17301
POINTLOAD "SD" "11" F 69.15037 MX 561.9489 MY 97.85044
POINTLOAD "SD" "20" F 25.70093 MX -165.2535 MY 25.7715
POINTLOAD "SD" "41" F 68.69841 MX -69.60085 MY 13.39439
POINTLOAD "SD" "69" F 41.32236 MX -113.8332 MY 94.18938
POINTLOAD "SD" "3" F 74.3962 MX -20.9921 MY 365.0195
POINTLOAD "SD" "2" F 80.82896 MX 109.8272 MY -229.6225
POINTLOAD "SD" "43" F 126.5454 MX 67.48324 MY -339.8297
POINTLOAD "SD" "42" F 82.96911 MX 63.43338 MY 10.85223
POINTLOAD "SD" "64" F 51.58552 MX 35.57952 MY -264.7077
POINTLOAD "SD" "67" F 65.88001 MX -84.47336 MY -93.29874
AREALOAD "SD" "E3" W 0.03
AREALOAD "SD" "F1" W 0.03
AREALOAD "SD" "F2" W 0.03
AREALOAD "SD" "F6" W 0.03
AREALOAD "SD" "F4" W 0.03
AREALOAD "SD" "F5" W 0.03
LOAD "LL" TYPE LIVE SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "LL" "1" F 29.36363 MX 158.6085 MY 85.76875
POINTLOAD "LL" "63" F 30.45433 MX 25.42732 MY -62.31751
POINTLOAD "LL" "50" F 154.5156 MX 117.3735 MY -21.02508
POINTLOAD "LL" "12" F 176.3261 MX 964.0791 MY -3.969825
POINTLOAD "LL" "3" F 155.6843 MX 157.1791 MY -662.8635
POINTLOAD "LL" "52" F 201.4895 MX -147.0956 MY -1174.851
POINTLOAD "LL" "51" F 309.5911 MX -74.38089 MY -288.4663
POINTLOAD "LL" "13" F 566.7829 MX 1636.568 MY -1294.452
POINTLOAD "LL" "44" F 455.2467 MX -35.17375 MY 41.41224
POINTLOAD "LL" "4" F 139.1654 MX 132.243 MY 1169.089
POINTLOAD "LL" "66" F 307.1281 MX -291.9452 MY 1816.691
POINTLOAD "LL" "52" F 312.8154 MX -6.971081 E 14 MY 3.64563 E 13
POINTLOAD "LL" "14" F 574.0448 MX 1083.874 MY 1153.569
POINTLOAD "LL" "39" F 459.3916 MX -183.749 MY 59.1662
POINTLOAD "LL" "58" F 101.5552 MX -322.6978 MY -46.2221
POINTLOAD "LL" "40" F 280.6555 MX -332.9714 MY 62.67123
POINTLOAD "LL" "8" F 148.2266 MX -100.9129 MY 128.9904
POINTLOAD "LL" "11" F 29.3796 MX 1546.685 MY 256.7102
POINTLOAD "LL" "20" F -0.8118129 MX -561.0439 MY 81.39012
POINTLOAD "LL" "41" F 123.3129 MX -287.8284 MY 462.118
POINTLOAD "LL" "69" F 65.04506 MX -358.6326 MY 139.6586
POINTLOAD "LL" "5" F 134.3048 MX -193.07 MY 825.434
POINTLOAD "LL" "2" F 140.7299 MX 157.1571 MY -399.1272
POINTLOAD "LL" "43" F 194.7453 MX 102.2336 MY -755.7132
POINTLOAD "LL" "42" F 120.8195 MX 107.4738 MY 56.79384
POINTLOAD "LL" "64" F 76.27451 MX 50.91488 MY -506.8147
POINTLOAD "LL" "67" F 99.19774 MX -309.597 MY -150.5949
AREALOAD "LL" "E3" W 0.1
AREALOAD "LL" "F1" W 0.1
AREALOAD "LL" "F2" W 0.1
AREALOAD "LL" "F6" W 0.1
AREALOAD "LL" "F4" W 0.1
AREALOAD "LL" "F5" W 0.1
LOAD "EXP" TYPE QUAKE SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "EXP" "1" F -134.3153 MX -9.822261 MY 783.4017
POINTLOAD "EXP" "63" F -134.4654 MX -84.71367 MY 863.0354
POINTLOAD "EXP" "50" F -196.2064 MX -59.32262 MY 1481.845
POINTLOAD "EXP" "12" F -127.5627 MX -67.14959 MY 1253.315
POINTLOAD "EXP" "3" F 201.8003 MX 5.328728 MY 411.8984
POINTLOAD "EXP" "65" F 0.3498518 MX 7.300854 MY 972.0579
POINTLOAD "EXP" "51" F 1.581333 MX 9.547846 MY 815.258
POINTLOAD "EXP" "13" F -0.411828 MX 11.43214 MY 130.347
POINTLOAD "EXP" "44" F 0.3079851 MX -1.508253 MY 1164.741
POINTLOAD "EXP" "4" F 12.69475 MX 71.17447 MY 842.3318
POINTLOAD "EXP" "66" F -16.69804 MX 89.07657 MY 1117.343
POINTLOAD "EXP" "52" F 8.772011 MX -4.252105 E 14 MY 6.722033 E 13
POINTLOAD "EXP" "14" F -14.8691 MX 145.8808 MY 126.014
POINTLOAD "EXP" "39" F 0.3529065 MX 90.3761 MY 972.9361
POINTLOAD "EXP" "68" F 183.8687 MX 193.2908 MY 1719.355
POINTLOAD "EXP" "40" F -155.2388 MX 227.4423 MY 1862.812
POINTLOAD "EXP" "6" F 145.8236 MX 80.29466 MY 781.1839
POINTLOAD "EXP" "11" F 126.4486 MX 404.2253 MY 217.252
POINTLOAD "EXP" "20" F -4.878631 MX 141.425 MY 985.6808
POINTLOAD "EXP" "41" F 146.6342 MX 172.4919 MY 1164.991
POINTLOAD "EXP" "69" F 30.54964 MX 148.9101 MY 1437.408
POINTLOAD "EXP" "5" F 238.116 MX 137.1985 MY 1621.429
POINTLOAD "EXP" "2" F 246.7584 MX -23.17053 MY 1623.236
POINTLOAD "EXP" "43" F 232.4064 MX -33.12241 MY 2048.478
POINTLOAD "EXP" "42" F -173.4709 MX -31.59014 MY 1080.154
POINTLOAD "EXP" "64" F 280.0022 MX -82.04544 MY 1775.021
POINTLOAD "EXP" "67" F -223.2964 MX 179.377 MY 216.687
LOAD "EYP" TYPE QUAKE SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "EYP" "1" F -99.29304 MX -68.935 MY 1.305557
POINTLOAD "EYP" "63" F 102.8073 MX -689.2626 MY -62.65141
POINTLOAD "EYP" "50" F -146.9247 MX -146.8181 MY -99.16776
POINTLOAD "EYP" "12" F 172.7141 MX -1421.813 MY -7.851047
POINTLOAD "EYP" "3" F -149.0639 MX -790.3445 MY 45.22251
POINTLOAD "EYP" "65" F 123.7532 MX -932.8675 MY -111.4351
POINTLOAD "EYP" "51" F -117.1757 MX -1126.605 MY -64.53236
POINTLOAD "EYP" "13" F 150.5377 MX -1603.272 MY 29.30567
POINTLOAD "EYP" "44" F -1.953225 MX -1033.079 MY -70.20951
POINTLOAD "EYP" "4" F -167.2709 MX -885.2999 MY 12.33337
POINTLOAD "EYP" "66" F 138.853 MX -1133.557 MY -76.7188
POINTLOAD "EYP" "52" F -133.3794 MX -3.794708 E 14 MY -1.371692 E 14
POINTLOAD "EYP" "14" F 168.967 MX -1785.643 MY 6.083074
POINTLOAD "EYP" "39" F -7.312384 MX -1116.517 MY -52.60225
POINTLOAD "EYP" "68" F -16.56198 MX -1582.908 MY -166.7381
POINTLOAD "EYP" "40" F 15.39495 MX -1448.413 MY -98.41368
POINTLOAD "EYP" "6" F 107.1392 MX -628.3662 MY 54.73907
POINTLOAD "EYP" "11" F 34.37264 MX -2727.409 MY 32.57594
POINTLOAD "EYP" "20" F 142.6514 MX -1178.445 MY -21.35165
POINTLOAD "EYP" "41" F 5.041033 MX -1254.226 MY -63.87109
POINTLOAD "EYP" "69" F 2.576411 MX -1391.705 MY -1401.8867
POINTLOAD "EYP" "5" F -100.8121 MX -1433.115 MY 61.52866
POINTLOAD "EYP" "2" F -72.74824 MX -1115.888 MY -123.296
POINTLOAD "EYP" "43" F -14.66765 MX -1078.244 MY -123.296
POINTLOAD "EYP" "42" F 6.68987 MX -868.3163 MY -65.21654
POINTLOAD "EYP" "64" F 48.33866 MX -1116.507 MY -158.2809
POINTLOAD "EYP" "67" F 24.33247 MX -1619.069 MY -175.19
LOAD "ENX" TYPE QUAKE SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "ENX" "1" F -128.6984 MX 80.22813 MY 827.474
POINTLOAD "ENX" "63" F -139.2662 MX 52.66006 MY 818.5088
POINTLOAD "ENX" "50" F 168.6547 MX 124.5422 MY 1428.104
POINTLOAD "ENX" "12" F -155.481 MX 82.66785 MY 1299.659
POINTLOAD "ENX" "3" F 7.965173 MX 36.67745 MY 886.0913
POINTLOAD "ENX" "65" F -4.612672 MX 54.1323 MY 925.5522
POINTLOAD "ENX" "51" F 62.65993 MX 54.21342 MY 791.1023
POINTLOAD "ENX" "13" F -6.085455 MX 75.06453 MY 1349.923
POINTLOAD "ENX" "44" F 0.6176991 MX 48.50991 MY 1142.638
POINTLOAD "ENX" "4" F 5.279558 MX 32.0849 MY 886.4041
POINTLOAD "ENX" "66" F -0.139846 MX 91.25903 MY 10661.39
POINTLOAD "ENX" "52" F 2.961748 MX -3.303428 E 15 MY -2.35814 E 13
POINTLOAD "ENX" "14" F -7.447965 MX 65.02569 MY 1313.574
POINTLOAD "ENX" "39" F 4.375781 E 02 MX 41.06619 MY 958.6181
POINTLOAD "ENX" "68" F 175.4339 MX 64.17408 MY 1639.379
POINTLOAD "ENX" "40" F 153.1469 MX 64.742751 MY 1835.774
POINTLOAD "ENX" "6" F 141.1552 MX -16.37392 MY 824.8567
POINTLOAD "ENX" "11" F 135.3128 MX 131.2712 MY 2244.163
POINTLOAD "ENX" "20" F 9.431017 MX 22.32234 MY 996.0908
POINTLOAD "ENX" "41" F 145.8258 MX -46.41801 MY 1147.83
POINTLOAD "ENX" "69" F 39.23441 MX 964.0475 MY 265.845
POINTLOAD "ENX" "5" F -259.9033 MX 10.41651 MY 1705.505
POINTLOAD "ENX" "2" F 269.2955 MX -92.79866 MY 1707.959
POINTLOAD "ENX" "43" F 228.115 MX 80.92075 MY 2009.567
POINTLOAD "ENX" "42" F -170.0351 MX 57.41883 MY 1059.663
POINTLOAD "ENX" "64" F 258.4197 MX 34.14501 MY 1688.753
POINTLOAD "ENX" "67" F -212.6882 MX 64.26106 MY 2019.631
LOAD "EYN" TYPE QUAKE SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD "EYN" "1" F -110.2519 MX -864.5332 MY -84.63528

POINTLOAD 'EYIN' '63' 'F' 112.1121 MX 865.3743 MY 24.17549
POINTLOAD 'EYIN' '59' 'F' -200.6504 MX -1823.349 MY 4.926241
POINTLOAD 'EYIN' '12' 'F' 227.1817 MX -1772.37 MY -98.22862
POINTLOAD 'EYIN' '3' 'F' -160.669 MX -851.4744 MY -40.95838
POINTLOAD 'EYIN' '65' 'F' 133.4301 MX -1005.042 MY -20.74902
POINTLOAD 'EYIN' '51' 'F' -126.192 MX -1213.703 MY -17.37108
POINTLOAD 'EYIN' '13' 'F' 162.1182 MX -1727.357 MY -61.2778
POINTLOAD 'EYIN' '44' 'F' 8.86991 MX -1113.032 MY -27.19298
POINTLOAD 'EYIN' '4' 'F' -152.8113 MX 809.0752 MY -73.60773
POINTLOAD 'EYIN' '66' 'F' 126.4538 MX -1035.96 MY 23.13371
POINTLOAD 'EYIN' '52' 'F' -122.1494 MX -5.12285E+11 MY 4.065785E-15
POINTLOAD 'EYIN' '14' 'F' 154.4956 MX -1631.875 MY -62.00638
POINTLOAD 'EYIN' '39' 'F' 6.709733 MX -1020.362 MY -24.68216
POINTLOAD 'EYIN' '68' 'F' 0.1140307 MX -1326.337 MY -10.78395
POINTLOAD 'EYIN' '40' 'F' 11.31991 MX -1531.116 MY -45.69887
POINTLOAD 'EYIN' '8' 'F' -98.02883 MX -740.046 MY -30.42287
POINTLOAD 'EYIN' '11' 'F' 17.08735 MX -1394.174 MY -97.90228
POINTLOAD 'EYIN' '20' 'F' 114.7476 MX 946.1951 MY -41.65138
POINTLOAD 'EYIN' '41' 'F' 6.617398 MX -1008.382 MY -30.4062
POINTLOAD 'EYIN' '69' 'F' 3.491119 MX -1120.132 MY -9.65783
POINTLOAD 'EYIN' '5' 'F' 58.32676 MX -1185.985 MY -102.419
POINTLOAD 'EYIN' '2' 'F' -116.6957 MX -1342.028 MY -124.0536
POINTLOAD 'EYIN' '43' 'F' -6.299532 MX -1300.628 MY 47.41942
POINTLOAD 'EYIN' '42' 'F' 2.990061 MX -1080.884 MY -25.258
POINTLOAD 'EYIN' '64' 'F' 91.58653 MX -1343.078 MY 10.02068
POINTLOAD 'EYIN' '67' 'F' 3.821967 MX -1394.593 MY 14.05864
LOAD 'WX' TYPE WIND SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD 'WX' '1' 'F' 443.9678 MX -585.33 MY 1661.188
POINTLOAD 'WX' '63' 'F' -560.0911 MX -47.0164 MY 1772.774
POINTLOAD 'WX' '59' 'F' 1029.596 MX -598.9203 MY 2874.813
POINTLOAD 'WX' '12' 'F' -1201.397 MX -1151.948 MY 3100.212
POINTLOAD 'WX' '3' 'F' -765.3658 MX -1157.111 MY 5430.382
POINTLOAD 'WX' '65' 'F' -903.3076 MX 415.4924 MY 7172.085
POINTLOAD 'WX' '51' 'F' -1663.318 MX 162.0342 MY 2798.401
POINTLOAD 'WX' '13' 'F' -2600.956 MX -1949.857 MY 5825.363
POINTLOAD 'WX' '44' 'F' -2127.115 MX -121.1154 MY 2121.187
POINTLOAD 'WX' '4' 'F' -774.5253 MX -1330.116 MY -3293.41
POINTLOAD 'WX' '66' 'F' -874.4677 MX 521.8772 MY -6483.915
POINTLOAD 'WX' '52' 'F' 1452.043 MX 2.805378E+13 MY -1.702197E+12
POINTLOAD 'WX' '14' 'F' -2557.919 MX 1827.14 MY -2295.448
POINTLOAD 'WX' '39' 'F' -2150.225 MX 30.6829 MY 1690.656
POINTLOAD 'WX' '68' 'F' -148.0099 MX 28.6448 MY 3315.094
POINTLOAD 'WX' '40' 'F' -1513.593 MX -270.6947 MY 3270.572
POINTLOAD 'WX' '8' 'F' 66.86839 MX -422.153 MY 1362.187
POINTLOAD 'WX' '11' 'F' -520.5782 MX 944.2309 MY 3864.837
POINTLOAD 'WX' '20' 'F' -315.9913 MX 28.52505 MY 1815.662
POINTLOAD 'WX' '41' 'F' -134.6634 MX 99.74967 MY 2124.533
POINTLOAD 'WX' '69' 'F' -221.7933 MX 123.0259 MY 1873.9
POINTLOAD 'WX' '5' 'F' 910.6347 MX -427.8618 MY 1629.592
POINTLOAD 'WX' '2' 'F' 0.2328032 MX 652.4201 MY 4526.242
POINTLOAD 'WX' '43' 'F' -445.784 MX 344.6636 MY 5150.696
POINTLOAD 'WX' '42' 'F' -908.0929 MX -278.6099 MY 1943.953
POINTLOAD 'WX' '64' 'F' 116.0882 MX -221.2151 MY 4564.432
POINTLOAD 'WX' '67' 'F' -853.9017 MX 36.87108 MY 4354.88
LOAD 'WY' TYPE WIND SELFWEIGHT 0 LTFDFACTOR 1
POINTLOAD 'WY' '1' 'F' -387.56 MX -2699.145 MY -237.0893
POINTLOAD 'WY' '63' 'F' 395.5791 MX -2971.756 MY 19.18548
POINTLOAD 'WY' '59' 'F' -679.0028 MX 6271.296 MY -63.4279
POINTLOAD 'WY' '12' 'F' 773.7644 MX -6994.364 MY -282.4513
POINTLOAD 'WY' '3' 'F' -568.1893 MX -3011.441 MY 79.97177
POINTLOAD 'WY' '65' 'F' 471.831 MX -3554.553 MY 145.222
POINTLOAD 'WY' '51' 'F' -446.2417 MX -2029.576 MY -99.16527
POINTLOAD 'WY' '13' 'F' 573.4071 MX -6109.149 MY -149.5548
POINTLOAD 'WY' '44' 'F' -30.27206 MX -3936.465 MY -131.3056
POINTLOAD 'WY' '4' 'F' -580.2728 MX -2966.163 MY -197.4705
POINTLOAD 'WY' '66' 'F' 463.9725 MX -3797.79 MY 5.29603
POINTLOAD 'WY' '52' 'F' -447.6748 MX 2.33103E+13 MY 7.657178E-14
POINTLOAD 'WY' '14' 'F' 566.3338 MX -5982.661 MY -228.0915
POINTLOAD 'WY' '39' 'F' -24.57567 MX -3740.784 MY -110.4352
POINTLOAD 'WY' '68' 'F' -13.28586 MX -4968.077 MY -160.2881
POINTLOAD 'WY' '40' 'F' 43.80857 MX -5748.112 MY -205.5432
POINTLOAD 'WY' '8' 'F' -359.2748 MX -2807.424 MY -42.928
POINTLOAD 'WY' '11' 'F' 74.86102 MX -8298.568 MY -250.0443
POINTLOAD 'WY' '20' 'F' -433.9955 MX -3580.392 MY -133.8196
POINTLOAD 'WY' '41' 'F' 25.5457 MX -3814.403 MY -135.3213
POINTLOAD 'WY' '69' 'F' 12.06343 MX -4235.939 MY -136.7385
POINTLOAD 'WY' '5' 'F' -242.6614 MX -4453.48 MY -240.1852
POINTLOAD 'WY' '2' 'F' -385.0003 MX -4645.244 MY -316.9287
POINTLOAD 'WY' '43' 'F' -20.15405 MX -4499.436 MY -229.4986
POINTLOAD 'WY' '42' 'F' 15.96393 MX -3717.012 MY -121.8863
POINTLOAD 'WY' '64' 'F' 295.33 MX -4648.682 MY 95.10425
POINTLOAD 'WY' '67' 'F' 29.71623 MX -5185.287 MY -96.99321
LOAD 'WAH' TYPE OTHER SELFWEIGHT 0 LTFDFACTOR 1
LOAD 'WAN' TYPE OTHER SELFWEIGHT 0 LTFDFACTOR 1
\$LOADING COMBINATIONS
COMBO 'BASE01'
COMBOFACTOR 'BASE01' 'DL' 1
COMBOFACTOR 'BASE01' 'SDL' 1
COMBOFACTOR 'BASE01' 'WAF' 1
COMBO 'BASE02'
COMBOFACTOR 'BASE02' 'DL' 1
COMBOFACTOR 'BASE02' 'SDL' 1
COMBOFACTOR 'BASE02' 'WAN' 1
COMBO 'BASE03'
COMBOFACTOR 'BASE03' 'DL' 1
COMBOFACTOR 'BASE03' 'SDL' 1
COMBOFACTOR 'BASE03' 'LN' 1
COMBOFACTOR 'BASE03' 'WAF' 1
COMBO 'BASE04'
COMBOFACTOR 'BASE04' 'DL' 1
COMBOFACTOR 'BASE04' 'SDL' 1
COMBOFACTOR 'BASE04' 'LN' 1
COMBOFACTOR 'BASE04' 'WAN' 1
COMBO 'BASE05'
COMBOFACTOR 'BASE05' 'DL' 1
COMBOFACTOR 'BASE05' 'SDL' 1
COMBOFACTOR 'BASE05' 'LN' 1
COMBOFACTOR 'BASE05' 'EXP' 1
COMBOFACTOR 'BASE05' 'WAF' 1
COMBO 'BASE06'
COMBOFACTOR 'BASE06' 'DL' 1
COMBOFACTOR 'BASE06' 'SDL' 1
COMBOFACTOR 'BASE06' 'LN' 1
COMBOFACTOR 'BASE06' 'EXP' 1
COMBOFACTOR 'BASE06' 'WAN' 1
COMBO 'BASE07'
COMBOFACTOR 'BASE07' 'DL' 1
COMBOFACTOR 'BASE07' 'SDL' 1
COMBOFACTOR 'BASE07' 'LN' 1
COMBOFACTOR 'BASE07' 'EYP' 1
COMBOFACTOR 'BASE07' 'WAF' 1
COMBO 'BASE08'
COMBOFACTOR 'BASE08' 'DL' 1
COMBOFACTOR 'BASE08' 'SDL' 1
COMBOFACTOR 'BASE08' 'LN' 1
COMBOFACTOR 'BASE08' 'EYP' 1
COMBOFACTOR 'BASE08' 'WAN' 1
COMBO 'BASE09'
COMBOFACTOR 'BASE09' 'DL' 1
COMBOFACTOR 'BASE09' 'SDL' 1
COMBOFACTOR 'BASE09' 'LN' 1
COMBOFACTOR 'BASE09' 'EXN' 1
COMBOFACTOR 'BASE09' 'WAF' 1
COMBO 'BASE10'
COMBOFACTOR 'BASE10' 'DL' 1
COMBOFACTOR 'BASE10' 'SDL' 1
COMBOFACTOR 'BASE10' 'LN' 1
COMBOFACTOR 'BASE10' 'EXN' 1
COMBOFACTOR 'BASE10' 'WAN' 1
COMBO 'BASE11'
COMBOFACTOR 'BASE11' 'DL' 1
COMBOFACTOR 'BASE11' 'SDL' 1
COMBOFACTOR 'BASE11' 'LN' 1
COMBOFACTOR 'BASE11' 'EYN' 1
COMBOFACTOR 'BASE11' 'WAF' 1
COMBO 'BASE12'
COMBOFACTOR 'BASE12' 'DL' 1
COMBOFACTOR 'BASE12' 'SDL' 1
COMBOFACTOR 'BASE12' 'LN' 1
COMBOFACTOR 'BASE12' 'EYN' 1
COMBOFACTOR 'BASE12' 'WAN' 1
COMBO 'BASE13'
COMBOFACTOR 'BASE13' 'DL' 1
COMBOFACTOR 'BASE13' 'SDL' 1
COMBOFACTOR 'BASE13' 'LN' 1
COMBOFACTOR 'BASE13' 'EXP' 1
COMBOFACTOR 'BASE13' 'WAF' 1
COMBO 'BASE14'
COMBOFACTOR 'BASE14' 'DL' 1
COMBOFACTOR 'BASE14' 'SDL' 1
COMBOFACTOR 'BASE14' 'LN' 1
COMBOFACTOR 'BASE14' 'EXP' 1
COMBOFACTOR 'BASE14' 'WAN' 1
COMBO 'BASE15'
COMBOFACTOR 'BASE15' 'DL' 1
COMBOFACTOR 'BASE15' 'SDL' 1
COMBOFACTOR 'BASE15' 'EYN' 1
COMBOFACTOR 'BASE15' 'WAF' 1
COMBO 'BASE16'
COMBOFACTOR 'BASE16' 'DL' 1
COMBOFACTOR 'BASE16' 'SDL' 1
COMBOFACTOR 'BASE16' 'LN' 1
COMBOFACTOR 'BASE16' 'EYP' 1
COMBOFACTOR 'BASE16' 'WAN' 1
COMBO 'BASE17'
COMBOFACTOR 'BASE17' 'DL' 1
COMBOFACTOR 'BASE17' 'SDL' 1
COMBOFACTOR 'BASE17' 'LN' 1
COMBOFACTOR 'BASE17' 'EXN' 1
COMBOFACTOR 'BASE17' 'WAF' 1
COMBO 'BASE18'
COMBOFACTOR 'BASE18' 'DL' 1
COMBOFACTOR 'BASE18' 'SDL' 1
COMBOFACTOR 'BASE18' 'LN' 1
COMBOFACTOR 'BASE18' 'EXN' 1
COMBOFACTOR 'BASE18' 'WAN' 1
COMBO 'BASE19'
COMBOFACTOR 'BASE19' 'DL' 1
COMBOFACTOR 'BASE19' 'SDL' 1
COMBOFACTOR 'BASE19' 'LN' 1
COMBOFACTOR 'BASE19' 'EYN' 1
COMBOFACTOR 'BASE19' 'WAF' 1
COMBO 'BASE20'
COMBOFACTOR 'BASE20' 'DL' 1
COMBOFACTOR 'BASE20' 'SDL' 1
COMBOFACTOR 'BASE20' 'LN' 1
COMBOFACTOR 'BASE20' 'EYN' 1
COMBOFACTOR 'BASE20' 'WAN' 1
COMBO 'BASE21' TYPE DESKIN
COMBOFACTOR 'BASE21' 'DL' 1.2
COMBOFACTOR 'BASE21' 'SDL' 1.2
COMBOFACTOR 'BASE21' 'LN' 1.4
COMBOFACTOR 'BASE21' 'WAF' 1.4
COMBO 'BASE22' TYPE DESKIN
COMBOFACTOR 'BASE22' 'DL' 1.4
COMBOFACTOR 'BASE22' 'SDL' 1.4
COMBOFACTOR 'BASE22' 'LN' 1.4
COMBOFACTOR 'BASE22' 'WAN' 1.4
COMBO 'BASE23' TYPE DESKIN
COMBOFACTOR 'BASE23' 'DL' 1.2
COMBOFACTOR 'BASE23' 'SDL' 1.2
COMBOFACTOR 'BASE23' 'LN' 1.6
COMBOFACTOR 'BASE23' 'WAF' 1.2
COMBO 'BASE24' TYPE DESKIN
COMBOFACTOR 'BASE24' 'DL' 1.2
COMBOFACTOR 'BASE24' 'SDL' 1.2
COMBOFACTOR 'BASE24' 'LN' 1.6
COMBOFACTOR 'BASE24' 'WAN' 1.2
COMBO 'BASE25' TYPE DESKIN
COMBOFACTOR 'BASE25' 'DL' 1.2
COMBOFACTOR 'BASE25' 'SDL' 1.2
COMBOFACTOR 'BASE25' 'LN' 1.6
COMBOFACTOR 'BASE25' 'WAF' 1.2
COMBO 'BASE26' TYPE DESKIN
COMBOFACTOR 'BASE26' 'DL' 1.2
COMBOFACTOR 'BASE26' 'SDL' 1.2
COMBOFACTOR 'BASE26' 'LN' 1.6
COMBOFACTOR 'BASE26' 'WAN' 1.2
COMBOFACTOR 'BASE26' 'EYP' 1.4
COMBO 'BASE27' TYPE DESKIN
COMBOFACTOR 'BASE27' 'DL' 1.2
COMBOFACTOR 'BASE27' 'SDL' 1.2
COMBOFACTOR 'BASE27' 'LN' 1.4
COMBOFACTOR 'BASE27' 'EYN' 1.4
COMBO 'BASE28' TYPE DESKIN
COMBOFACTOR 'BASE28' 'DL' 1.2
COMBOFACTOR 'BASE28' 'SDL' 1.2
COMBOFACTOR 'BASE28' 'LN' 1.2
COMBOFACTOR 'BASE28' 'EYN' 1.2
COMBO 'BASE29' TYPE DESKIN
COMBOFACTOR 'BASE29' 'DL' 1.2
COMBOFACTOR 'BASE29' 'SDL' 1.2
COMBOFACTOR 'BASE29' 'LN' 1
COMBOFACTOR 'BASE29' 'EXP' 1.4
COMBO 'BASE30' TYPE DESKIN
COMBOFACTOR 'BASE30' 'DL' 1.2
COMBOFACTOR 'BASE30' 'SDL' 1.2
COMBOFACTOR 'BASE30' 'LN' 1
COMBOFACTOR 'BASE30' 'EYP' 1.4
COMBO 'BASE31' TYPE DESKIN
COMBOFACTOR 'BASE31' 'DL' 1.2
COMBOFACTOR 'BASE31' 'SDL' 1.2
COMBOFACTOR 'BASE31' 'LN' 1
COMBOFACTOR 'BASE31' 'EXN' 1.4
COMBO 'BASE32' TYPE DESKIN
COMBOFACTOR 'BASE32' 'DL' 1.2
COMBOFACTOR 'BASE32' 'SDL' 1.2
COMBOFACTOR 'BASE32' 'LN' 1
COMBOFACTOR 'BASE32' 'EYN' 1.4
COMBO 'BASE33' TYPE DESKIN
COMBOFACTOR 'BASE33' 'DL' 0.9
COMBOFACTOR 'BASE33' 'SDL' 0.9
COMBOFACTOR 'BASE33' 'LN' 0.9
COMBOFACTOR 'BASE33' 'EXP' 1.4
COMBO 'BASE34' TYPE DESKIN
COMBOFACTOR 'BASE34' 'DL' 0.9
COMBOFACTOR 'BASE34' 'SDL' 0.9
COMBOFACTOR 'BASE34' 'EYP' 1.4
COMBO 'BASE35' TYPE DESKIN
COMBOFACTOR 'BASE35' 'DL' 0.9
COMBOFACTOR 'BASE35' 'SDL' 0.9
COMBOFACTOR 'BASE35' 'EXN' 1.4
COMBO 'BASE36' TYPE DESKIN
COMBOFACTOR 'BASE36' 'DL' 0.9
COMBOFACTOR 'BASE36' 'SDL' 0.9
COMBOFACTOR 'BASE36' 'EYN' 1.4
COMBO 'BASE37' TYPE DESKIN
COMBOFACTOR 'BASE37' 'DL' 0.9
COMBOFACTOR 'BASE37' 'SDL' 0.9
COMBOFACTOR 'BASE37' 'EXP' 1.4
COMBO 'BASE38' TYPE DESKIN
COMBOFACTOR 'BASE38' 'DL' 0.9
COMBOFACTOR 'BASE38' 'SDL' 0.9
COMBOFACTOR 'BASE38' 'EYN' 1.4
COMBO 'BASE39' TYPE DESKIN
COMBOFACTOR 'BASE39' 'DL' 0.9
COMBOFACTOR 'BASE39' 'SDL' 0.9
COMBOFACTOR 'BASE39' 'EXN' 1.4
COMBO 'BASE40' TYPE DESKIN
COMBOFACTOR 'BASE40' 'DL' 0.9
COMBOFACTOR 'BASE40' 'EYN' 1.4
\$STRIP DEFINITIONS
XSTRIP '7' '0' 0 362.5 0 362.5 417.5 0 417.5
XSTRIP '8' 362.5 0 807.5 0 807.5 390 362.5 390
XSTRIP '9' 807.5 0 1170 0 1170 390 807.5 390
XSTRIP '10' 0 417.5 362.5 417.5 362.5 600 0 600
XSTRIP '11' 362.5 390 807.5 390 807.5 600 362.5 600
XSTRIP '12' 807.5 390 1170 390 1170 600 807.5 600
YSTRIP '13' '0' 0 362.5 0 362.5 417.5 0 417.5
YSTRIP '14' 362.5 0 807.5 0 807.5 390 362.5 390
YSTRIP '15' 807.5 0 1170 0 1170 390 807.5 390
YSTRIP '16' 0 417.5 362.5 417.5 362.5 600 0 600
YSTRIP '17' 362.5 390 807.5 390 807.5 600 362.5 600
YSTRIP '18' 807.5 390 1170 390 1170 600 807.5 600
\$GROUPS
END
\$END OF MODEL FILE

August 14,2022 22:29

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X - STRIP REINFORCING (for whole strip in Sq-cm)

X-STRIP STRIP STATION TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR
ID WIDTH X-ORDINATE LEFT OF X RIGHT OF X LEFT OF X RIGHT OF X

10	182.500	0.000	6.599	6.599		
10	182.500	60.000	13.198	13.198	0.000	0.000
10	182.500	120.000	13.198	13.198	0.000	0.000
10	182.500	200.833	13.198	13.198		
10	182.500	281.667	13.198	13.198		
10	182.500	362.500	13.198	13.198	0.000	0.000
12	210.000	807.500	15.186	15.186	0.000	0.000
12	210.000	808.000	15.186	15.186	0.000	0.000
12	210.000	868.750	15.186	15.186	0.000	0.000
12	210.000	929.500	15.186	15.186		
12	210.000	989.500	15.186	15.186		
12	210.000	1049.500	15.186	15.186		
12	210.000	1050.000	15.186	15.186		
12	210.000	1110.000	15.186	15.186		
12	210.000	1170.000	7.593	7.593		
11	210.000	362.500	15.186	15.186	0.000	0.000
11	210.000	451.500	15.186	15.186	0.000	0.000
11	210.000	540.500	15.186	15.186		
11	210.000	629.500	15.186	15.186		
11	210.000	718.500	15.186	15.186	0.000	0.000
11	210.000	807.500	15.186	15.186	0.000	0.000

7	417.500	0.000	15.096	15.096		
7	417.500	60.000	30.192	30.192	0.000	0.000
7	417.500	120.000	30.192	30.192	0.000	0.000
7	417.500	200.833	30.192	30.192		
7	417.500	281.667	30.192	30.192	0.000	0.000
7	417.500	362.500	30.192	30.192	0.000	0.000

9	390.000	807.500	28.203	28.203	0.000	0.000
9	390.000	808.000	28.203	28.203	0.000	0.000
9	390.000	868.750	28.203	28.203	0.000	0.000
9	390.000	929.500	28.203	28.203		
9	390.000	989.500	28.203	28.203		
9	390.000	1049.500	28.203	28.203		
9	390.000	1050.000	28.203	28.203		
9	390.000	1110.000	28.203	28.203	0.000	0.000
9	390.000	1170.000	14.102	14.102		

8	390.000	362.500	28.203	28.203	0.000	0.000
8	390.000	451.500	28.203	28.203	0.000	0.000
8	390.000	540.500	28.203	28.203		
8	390.000	629.500	28.203	28.203		
8	390.000	718.500	28.203	28.203	0.000	0.000
8	390.000	807.500	28.203	28.203	0.000	0.000

August 14,2022 22:29

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Y - STRIP REINFORCING (for whole strip in Sq-cm)

Y-STRIP STRIP STATION TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR
ID WIDTH Y-ORDINATE LEFT OF Y RIGHT OF Y LEFT OF Y RIGHT OF Y

13	362.500	0.000	0.000	26.214		
13	362.500	55.000	26.214	26.214	0.000	0.000
13	362.500	110.000	26.214	26.214		
13	362.500	120.000	26.214	26.214	0.000	0.000
13	362.500	220.000	26.214	26.214		
13	362.500	305.000	26.214	26.214		
13	362.500	390.000	26.214	26.214		
13	362.500	417.500	26.214	26.214		
16	362.500	417.500	26.214	26.214		
16	362.500	490.000	26.214	26.214	0.000	0.000
16	362.500	545.000	26.214	26.214	0.000	0.000
16	362.500	600.000	13.107	13.107		

14	445.000	0.000	16.090	16.090		
14	445.000	55.000	32.181	32.181		
14	445.000	110.000	32.181	32.181		
14	445.000	120.000	32.181	32.181		
14	445.000	220.000	32.181	32.181		
14	445.000	305.000	32.181	32.181		
14	445.000	390.000	32.181	32.181		

17	445.000	390.000	32.181	32.181		
17	445.000	417.500	32.181	32.181		
17	445.000	490.000	32.181	32.181		
17	445.000	545.000	32.181	32.181		
17	445.000	600.000	16.090	16.090		

15	362.500	0.000	0.000	26.214		
15	362.500	55.000	26.214	26.214	0.000	0.000
15	362.500	110.000	26.214	26.214	0.000	0.000
15	362.500	120.000	26.214	26.214	0.000	0.000
15	362.500	220.000	26.214	26.214	0.000	0.000
15	362.500	305.000	26.214	26.214	0.000	0.000
15	362.500	390.000	26.214	26.214	0.000	0.000
18	362.500	390.000	26.214	0.000		
18	362.500	417.500	26.214	26.214	0.000	0.000
18	362.500	490.000	26.214	26.214	0.000	0.000
18	362.500	545.000	26.214	26.214	0.000	0.000
18	362.500	600.000	0.000	26.214		

August 14,2022 22:29

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BEAM REINFORCING (flexural in Sq-cm and shear in Sq-cm/meter)

LINE STATION(S) STATION(S) TOP-REBAR TOP-REBAR BOT-REBAR BOT-REBAR SHEAR-REBAR SHEAR-REBAR
ID X-ORDINATE Y-ORDINATE LEFT OF S RIGHT OF S LEFT OF S RIGHT OF S LEFT OF S RIGHT OF S

B1	0.000	0.000	0.099	0.000	0.000	0.000	
B1	60.000	0.000	0.195	0.261	0.000	0.000	0.000
B1	120.000	0.000	0.338	0.397	0.000	0.000	0.000
B1	200.833	0.000	0.434	0.440	0.000	0.000	0.000
B1	281.667	0.000	0.374	0.374	0.000	0.000	0.000
B1	362.500	0.000	0.280	0.000	0.000	0.000	
B3	362.500	0.000	0.276	0.000	0.000	0.000	
B3	451.500	0.000	0.377	0.371	0.000	0.000	0.000
B3	540.500	0.000	0.453	0.467	0.000	0.000	0.000
B3	629.500	0.000	0.468	0.451	0.000	0.000	0.000
B3	718.500	0.000	0.370	0.376	0.000	0.000	0.000
B3	807.500	0.000	0.277	0.000	0.000	0.000	
B5	807.500	0.000	0.351	0.000	0.000	0.000	
B5	808.000	0.000	0.351	0.311	0.000	0.000	0.000
B5	868.750	0.000	0.349	0.361	0.000	0.000	0.000
B5	929.500	0.000	0.412	0.434	0.000	0.000	0.000
B5	989.500	0.000	0.442	0.444	0.000	0.000	0.000
B5	1049.500	0.000	0.393	0.371	0.000	0.000	0.000
B5	1050.000	0.000	0.371	0.337	0.000	0.000	0.000
B5	1110.000	0.000	0.238	0.195	0.000	0.000	0.000
B5	1170.000	0.000	0.000	0.000	0.000	0.000	
B16	807.500	0.000	0.083	0.000	0.000	0.000	
B16	807.500	55.000	0.194	0.210	0.000	0.000	0.000
B16	807.500	110.000	0.373	0.451	0.000	0.000	0.000
B16	807.500	120.000	0.452	0.487	0.000	0.000	0.000
B16	807.500	220.000	0.692	0.721	0.000	0.000	0.000
B16	807.500	305.000	0.692	0.651	0.000	0.000	0.000

B16 807.500 390.000 0.469 0.000 0.000

B17	1170.000	0.000	0.074	0.000	0.000	0.000
B17	1170.000	55.000	0.215	0.276	0.000	0.000
B17	1170.000	110.000	0.416	0.507	0.000	0.000
B17	1170.000	120.000	0.528	0.518	0.000	0.000
B17	1170.000	220.000	0.675	0.678	0.000	0.000
B17	1170.000	305.000	0.696	0.576	0.000	0.000
B17	1170.000	390.000	0.439	0.000	0.000	0.000

B19	0.000	0.000	0.112	0.000	0.000	0.000
B19	0.000	55.000	0.291	0.281	0.000	0.000
B19	0.000	110.000	0.376	0.428	0.000	0.000
B19	0.000	120.000	0.441	0.475	0.000	0.000
B19	0.000	220.000	0.598	0.620	0.000	0.000
B19	0.000	305.000	0.607	0.584	0.000	0.000
B19	0.000	390.000	0.458	0.463	0.000	0.000
B19	0.000	417.500	0.425	0.000	0.000	0.000

B20	362.500	0.000	0.077	0.000	0.000	0.000
B20	362.500	55.000	0.187	0.205	0.000	0.000
B20	362.500	110.000	0.373	0.451	0.000	0.000
B20	362.500	120.000	0.453	0.496	0.000	0.000
B20	362.500	220.000	0.706	0.737	0.000	0.000
B20	362.500	305.000	0.723	0.675	0.000	0.000
B20	362.500	390.000	0.508	0.507	0.000	0.000
B20	362.500	417.500	0.447	0.000	0.000	0.000

B34	362.500	390.000	0.173	0.000	0.000	0.000
B34	451.500	390.000	0.335	0.403	0.000	0.000
B34	540.500	390.000	0.501	0.529	0.000	0.000
B34	629.500	390.000	0.524	0.496	0.000	0.000
B34	718.500	390.000	0.395	0.337	0.000	0.000
B34	807.500	390.000	0.160	0.000	0.000	0.000

B38	807.500	390.000	0.185	0.000	0.000	0.000
B38	808.000	390.000	0.186	0.183	0.000	0.000
B38	868.750	390.000	0.283	0.342	0.000	0.000
B38	929.500	390.000	0.418	0.462	0.000	0.000
B38	989.500	390.000	0.469	0.473	0.000	0.000
B38	1049.500	390.000	0.394	0.375	0.000	0.000
B38	1050.000	390.000	0.375	0.329	0.000	0.000
B38	1110.000	390.000	0.256	0.178	0.000	0.000
B38	1170.000	390.000	0.000	0.000	0.000	0.000

B42	0.000	417.500	0.000	0.000	0.000	0.000
B42	60.000	417.500	0.218	0.305	0.000	0.000
B42	120.000					

Table with columns: ID, STATION, TOP-MOMENT, TOP-MOMENT, BOT-MOMENT, BOT-MOMENT, WIDTH, Y-ORDINATE, LEFT OF Y, RIGHT OF Y, LEFT OF Y, RIGHT OF Y. Contains data for multiple sections and beam designs.

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BEAM DESIGN MOMENTS & SHEARS

Table with columns: LINE, STATION(S), STATION(S), TOP MOMENT, TOP MOMENT, BOT MOMENT, BOT MOMENT, SHEAR, SHEAR. Contains data for beam design moments and shears.

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