FOUNDATION SOIL PROPERTIES

Number of soil properties = 1

Soil	Name	Pressure Distribution	Allowable gross pres. Pa T/m2	Increase Pa Combinations incl.EQ & WL (%)	MODULUS OF SUBGRADE REACTION Gravity load Analysis, Kg T/m3	Lateral load Analysis, Ks T/m3
1	Soil1	Linear	15.2	33	300.0	300.0

* Values of subgrade reaction are used only on footings with rotations and/or vert-displac. permitted.

FOOTING DATA

Total number of footings ..... = 4

Footing	Floor	Type	V-Disp	Rotatn	B m	L m	Area m 2	X-Cent m	Y-Cent m	Theta deg	Mat --	Soil --
B-2	1	Spread	Fixed	Fixed	1.00	1.00	1.00	4.04	2.39	90.0	1	1
A-2	1	Spread	Fixed	Fixed	1.00	1.00	1.00	4.04	0.00	90.0	1	1
B-1	1	Spread	Fixed	Fixed	1.00	1.00	1.00	0.00	2.39	90.0	1	1
A-1	1	Spread	Fixed	Fixed	1.00	1.00	1.00	0.00	0.00	90.0	1	1

P-Delta Analysis- Footing Contact Pressures

Footing group		Load	Force (ton)			Moment (ton-m)			Pressure (ton/m2)	
Group	Floor	LdCase	Rx	Ry	Rz	Mx	My	Mz	PcMax	PcMin
B-2	1	D0	-0.17	-0.04	1.50	-0.05	0.06	0.00	2.16	0.84
		DL	-0.44	-0.07	1.59	0.05	-0.34	0.00	3.97	-0.79
		LL	-0.13	-0.02	0.48	0.02	-0.10	0.00	1.20	-0.24
		EQX	0.42	-0.02	-0.24	0.02	0.53	0.00	3.05	-3.53
		EQY	0.02	0.44	-0.44	-0.52	0.02	0.00	2.82	-3.69
		WLX	0.15	-0.08	-0.04	0.00	0.09	0.00	0.54	-0.63
		WLY	-0.08	0.21	-0.15	-0.17	0.01	0.00	0.94	-1.24
A-2	1	D0	-0.17	0.04	1.50	0.05	0.06	0.00	2.16	0.84
		DL	-0.44	0.07	1.59	-0.05	-0.34	0.00	3.97	-0.79
		LL	-0.13	0.02	0.48	-0.02	-0.10	0.00	1.20	-0.24
		EQX	0.42	-0.02	-0.24	0.02	0.53	0.00	3.05	-3.53
		EQY	-0.02	0.44	0.44	-0.52	-0.02	0.00	3.69	-2.82
		WLX	0.15	0.07	-0.04	0.00	0.09	0.00	0.54	-0.63
		WLY	-0.09	0.21	0.15	-0.17	-0.01	0.00	1.24	-0.94
B-1	1	D0	0.17	-0.04	1.50	-0.05	-0.06	0.00	2.16	0.84
		DL	0.44	-0.07	1.59	0.05	0.34	0.00	3.97	-0.79
		LL	0.13	-0.02	0.48	0.02	0.10	0.00	1.20	-0.24
		EQX	0.42	-0.02	0.24	0.02	0.53	0.00	3.53	-3.05
		EQY	-0.02	0.44	-0.44	-0.52	-0.02	0.00	2.82	-3.69
		WLX	0.15	-0.08	0.04	0.00	0.09	0.00	0.63	-0.54
		WLY	0.08	0.21	-0.15	-0.17	-0.01	0.00	0.94	-1.24
A-1	1	D0	0.17	0.04	1.50	0.05	-0.06	0.00	2.16	0.84
		DL	0.44	0.07	1.59	-0.05	0.34	0.00	3.97	-0.79
		LL	0.13	0.02	0.48	-0.02	0.10	0.00	1.20	-0.24
		EQX	0.42	-0.02	0.24	0.02	0.53	0.00	3.53	-3.05
		EQY	0.02	0.44	0.44	-0.52	0.02	0.00	3.69	-2.82
		WLX	0.15	0.07	0.04	0.00	0.09	0.00	0.63	-0.54
		WLY	0.09	0.21	0.15	-0.17	0.01	0.00	1.24	-0.94

P-Delta Analysis- Footing Envelopes

Load combinations : Service
Type of contact pressure: Linear, Pmax|Pmin = Rz/A (1 ± eb/S3 ± el/S2)
Self weight of footing: 0.10 Rz (D0 + DL + LL)

Group	Floor	Rz max ton	Rz min ton	Pc max ton/m2	Pc min ton/m2	Pc/Pa max	Pc/Pa min
B-2	1	4.04	1.91	8.03	1.21	0.52	0.08
A-2	1	4.04	1.91	8.03	1.21	0.52	0.08
B-1	1	4.04	1.91	8.03	1.21	0.52	0.08
A-1	1	4.04	1.91	8.03	1.21	0.52	0.08

Design results - Footings

Footing	Floor	Mat	B m	L m	h cm	Vu1/ØVc1 Vu2/ØVc2	Dir -	Reinforcem	As cm2	Mu ton-m
B-2	1	1	1.00	1.00	35	0.09	B	5#4@21 cm	6.300	0.56
						0.12	L	5#4@21 cm	6.300	0.68
A-2	1	1	1.00	1.00	35	0.09	B	5#4@21 cm	6.300	0.57
						0.12	L	5#4@21 cm	6.300	0.68
B-1	1	1	1.00	1.00	35	0.09	B	5#4@21 cm	6.300	0.57
						0.13	L	5#4@21 cm	6.300	0.68
A-1	1	1	1.00	1.00	35	0.09	B	5#4@21 cm	6.300	0.56
						0.12	L	5#4@21 cm	6.300	0.68