

Roof

column #	Mr(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	132	-62.9	300	576	No
2	-139	69.3	600	576	No
3	137	20.5	600	576	No
4	-124	-66.6	300	576	No
5	81.2	35.9	600	576	No
6	-158	37	1200	576	No
7	159	34.4	1200	576	No
8	-62.6	32.9	600	576	No
9	203	13.3	600	576	No
10	-143	15.8	1200	576	No
11	157	20.4	1200	576	No
12	-198	11.3	600	576	No
13	189	4.57	600	576	No
14	-120	-16.3	900	576	No
15	143	9.6	600	576	No
16	-180	12.5	600	576	No
17	60	-4	600	576	No
18	-131	-12.9	1200	576	No
19	155	-67.3	900	576	No
20	-35.4	0.693	600	576	No
21	213	-11.4	600	576	No
22	-104	3.79	1200	576	No
23	153	54.4	900	576	No
24	-198	-5.22	600	576	No
25	210	-30.9	600	576	No
26	-144	-16.8	1200	576	No
27	157	-49.5	1200	576	No
28	-184	-24.9	600	576	No
29	131	74.8	300	576	No
30	-143	32.4	600	576	No
31	153	76.3	600	576	No
32	-117	80.6	300	576	No

## Floors 5-8

column #	Mr(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	254	-146	300	576	No
2	-238	-99.9	600	576	No
3	240	-107	600	576	No
4	-243	-152	300	576	No
5	376	35.1	600	576	No
6	229	28.4	1200	576	No
7	227	27.2	1200	576	No
8	-345	28.4	600	576	No
9	521	10.5	600	576	No
10	-251	37.6	1200	576	No
11	230	145	1200	576	No
12	-485	5.4	600	576	No
13	478	-16	600	576	No
14	-295	4.58	900	576	No
15	355	20.7	600	576	No
16	-470	5.36	600	576	No
17	311	-1.94	600	576	No
18	-301	-32.8	1200	576	No
19	303	-269	900	576	No
20	-363	5.99	600	576	No
21	474	-13.9	600	576	No
22	-254	30.2	1200	576	No
23	297	147	900	576	No
24	-534	-6.78	600	576	No
25	505	-32.2	600	576	No
26	-260	-67.7	1200	576	No
27	245	-97.4	1200	576	No
28	-496	-25.5	600	576	No
29	263	156	300	576	No
30	-239	208	600	576	No
31	255	234	600	576	No
32	-247	158	300	576	No

## Floors 3-4

column #	Mr(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	254	-146	300	784	No
2	-238	-99.9	600	784	No
3	240	-107	600	784	No
4	-243	-152	300	784	No
5	376	35.1	600	784	No
6	229	28.4	1200	784	No
7	227	27.2	1200	784	No
8	-345	28.4	600	784	No
9	521	10.5	600	784	No
10	-251	37.6	1200	784	No
11	230	145	1200	784	No
12	-485	5.4	600	784	No
13	478	-16	600	784	No
14	-295	4.58	900	784	No
15	355	20.7	600	784	No
16	-470	5.36	600	784	No
17	311	-1.94	600	784	No
18	-301	-32.8	1200	784	No
19	303	-269	900	784	No
20	-363	5.99	600	784	No
21	474	-13.9	600	784	No
22	-254	30.2	1200	784	No
23	297	147	900	784	No
24	-534	-6.78	600	784	No
25	505	-32.2	600	784	No
26	-260	-67.7	1200	784	No
27	245	-97.4	1200	784	No
28	-496	-25.5	600	784	No
29	263	156	300	784	No
30	-239	208	600	784	No
31	255	234	600	784	No
32	-247	158	300	784	No

## Floors 2

column #	Ml(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	254	-146	300	1024	No
2	-238	-99.9	600	1024	No
3	240	-107	600	1024	No
4	-243	-152	300	1024	No
5	376	35.1	600	1024	No
6	229	28.4	1200	1024	No
7	227	27.2	1200	1024	No
8	-345	28.4	600	1024	No
9	521	10.5	600	1024	No
10	-251	37.6	1200	1024	No
11	230	145	1200	1024	No
12	-485	5.4	600	1024	No
13	478	-16	600	1024	No
14	-295	4.58	900	1024	No
15	355	20.7	600	1024	No
16	-470	5.36	600	1024	No
17	311	-1.94	600	1024	No
18	-301	-32.8	1200	1024	No
19	303	-269	900	1024	No
20	-363	5.99	600	1024	No
21	474	-13.9	600	1024	No
22	-254	30.2	1200	1024	No
23	297	147	900	1024	No
24	-534	-6.78	600	1024	No
25	505	-32.2	600	1024	No
26	-260	-67.7	1200	1024	No
27	245	-97.4	1200	1024	No
28	-496	-25.5	600	1024	No
29	263	156	300	1024	No
30	-239	208	600	1024	No
31	255	234	600	1024	No
32	-247	158	300	1024	No

\*NOTE\*

All Moments Taken from 24"X24" Column

## Roof

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	300.00	1.00	1	16.0	20.0	0.683	4.0	10.928	150.0	176.49	52.95
2	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
3	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
4	300	300.00	1.00	1	16.0	20.0	0.683	4.0	10.928	150.0	176.49	52.95
5	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
6	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
7	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
8	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
9	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
10	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
11	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
12	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
13	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
14	900	900.00	3.00	1	16.0	20.0	0.500	4.0	8.000	150.0	171.80	154.62
15	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
16	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
17	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
18	1050	1050.00	3.50	1	16.0	20.0	0.481	4.0	7.703	150.0	171.33	179.89
19	900	900.00	3.00	1	16.0	20.0	0.500	4.0	8.000	150.0	171.80	154.62
20	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
21	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
22	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
23	900	900.00	3.00	1	16.0	20.0	0.500	4.0	8.000	150.0	171.80	154.62
24	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
25	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
26	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
27	1200	1200.00	4.00	1	16.0	20.0	0.467	4.0	7.464	150.0	170.94	205.13
28	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
29	300	300.00	1.00	1	16.0	20.0	0.683	4.0	10.928	150.0	176.49	52.95
30	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
31	600	600.00	2.00	1	16.0	20.0	0.556	4.0	8.899	150.0	173.24	103.94
32	300	300.00	1.00	1	16.0	20.0	0.683	4.0	10.928	150.0	176.49	52.95

Floor 9

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	300.00	1.00	1	100	20	0.683	4	68.30	150.0	268.28	133.43
2	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
3	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
4	300	300.00	1.00	1	100	20	0.683	4	68.30	150.0	268.28	133.43
5	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
6	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
7	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
8	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
9	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
10	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
11	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
12	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
13	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
14	900	900.00	3.00	1	100	20	0.500	4	50.00	150.0	239.00	369.72
15	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
16	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
17	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
18	1050	1050.00	3.50	1	100	20	0.481	4	48.15	150.0	236.03	427.73
19	900	900.00	3.00	1	100	20	0.500	4	50.00	150.0	239.00	369.72
20	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
21	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
22	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
23	900	900.00	3.00	1	100	20	0.500	4	50.00	150.0	239.00	369.72
24	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
25	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
26	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
27	1200	1200.00	4.00	1	100	20	0.467	4	46.65	150.0	233.64	485.50
28	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
29	300	300.00	1.00	1	100	20	0.683	4	68.30	150.0	268.28	133.43
30	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
31	600	600.00	2.00	1	100	20	0.556	4	55.62	150.0	247.99	252.74
32	300	300.00	1.00	1	100	20	0.683	4	68.30	150.0	268.28	133.43

Floor 8

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	600.00	1.00	2	100	20	0.556	4	55.62	150.0	247.99	207.83
2	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
3	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
4	300	600.00	1.00	2	100	20	0.556	4	55.62	150.0	247.99	207.83
5	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
6	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
7	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
8	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
9	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
10	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
11	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
12	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
13	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
14	900	1800.00	3.00	2	100	20	0.427	4	42.68	150.0	227.28	574.28
15	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
16	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
17	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
18	1050	2100.00	3.50	2	100	20	0.414	4	41.37	150.0	225.19	664.17
19	900	1800.00	3.00	2	100	20	0.427	4	42.68	150.0	227.28	574.28
20	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
21	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
22	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
23	900	1800.00	3.00	2	100	20	0.427	4	42.68	150.0	227.28	574.28
24	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
25	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
26	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
27	1200	2400.00	4.00	2	100	20	0.403	4	40.31	150.0	223.49	753.69
28	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
29	300	600.00	1.00	2	100	20	0.556	4	55.62	150.0	247.99	207.83
30	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
31	600	1200.00	2.00	2	100	20	0.467	4	46.65	150.0	233.64	392.92
32	300	600.00	1.00	2	100	20	0.556	4	55.62	150.0	247.99	207.83

Floor 7

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	900.00	1.00	3	100	20	0.500	4	50.00	150.0	239.00	279.53
2	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
3	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
4	300	900.00	1.00	3	100	20	0.500	4	50.00	150.0	239.00	279.53
5	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
6	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
7	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
8	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
9	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
10	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
11	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
12	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
13	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
14	900	2700.00	3.00	3	100	20	0.400	4	40.00	150.0	223.00	774.98
15	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
16	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
17	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
18	1050	3150.00	3.50	3	100	20	0.400	4	40.00	150.0	223.00	898.32
19	900	2700.00	3.00	3	100	20	0.400	4	40.00	150.0	223.00	774.98
20	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
21	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
22	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
23	900	2700.00	3.00	3	100	20	0.400	4	40.00	150.0	223.00	774.98
24	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
25	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
26	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
27	1200	3600.00	4.00	3	100	20	0.400	4	40.00	150.0	223.00	1021.29
28	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
29	300	900.00	1.00	3	100	20	0.500	4	50.00	150.0	239.00	279.53
30	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
31	600	1800.00	2.00	3	100	20	0.427	4	42.68	150.0	227.28	529.29
32	300	900.00	1.00	3	100	20	0.500	4	50.00	150.0	239.00	279.53



Floor 6

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	1200.00	1.00	4	100	20	0.467	4	46.65	150.0	233.64	349.62
2	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
3	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
4	300	1200.00	1.00	4	100	20	0.467	4	46.65	150.0	233.64	349.62
5	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
6	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
7	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
8	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
9	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
10	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
11	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
12	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
13	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
14	900	3600.00	3.00	4	100	20	0.400	4	40.00	150.0	223.00	975.68
15	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
16	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
17	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
18	1050	4200.00	3.50	4	100	20	0.400	4	40.00	150.0	223.00	1132.47
19	900	3600.00	3.00	4	100	20	0.400	4	40.00	150.0	223.00	975.68
20	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
21	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
22	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
23	900	3600.00	3.00	4	100	20	0.400	4	40.00	150.0	223.00	975.68
24	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
25	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
26	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
27	1200	4800.00	4.00	4	100	20	0.400	4	40.00	150.0	223.00	1288.89
28	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
29	300	1200.00	1.00	4	100	20	0.467	4	46.65	150.0	233.64	349.62
30	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
31	600	2400.00	2.00	4	100	20	0.403	4	40.31	150.0	223.49	663.39
32	300	1200.00	1.00	4	100	20	0.467	4	46.65	150.0	233.64	349.62

Floor 5

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	1500.00	1.00	5	100	20	0.444	4	44.36	150.0	229.98	418.61
2	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
3	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
4	300	1500.00	1.00	5	100	20	0.444	4	44.36	150.0	229.98	418.61
5	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
6	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
7	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
8	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
9	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
10	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
11	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
12	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
13	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
14	900	4500.00	3.00	5	100	20	0.400	4	40.00	150.0	223.00	1176.38
15	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
16	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
17	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
18	1050	5250.00	3.50	5	100	20	0.400	4	40.00	150.0	223.00	1366.62
19	900	4500.00	3.00	5	100	20	0.400	4	40.00	150.0	223.00	1176.38
20	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
21	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
22	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
23	900	4500.00	3.00	5	100	20	0.400	4	40.00	150.0	223.00	1176.38
24	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
25	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
26	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
27	1200	6000.00	4.00	5	100	20	0.400	4	40.00	150.0	223.00	1556.49
28	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
29	300	1500.00	1.00	5	100	20	0.444	4	44.36	150.0	229.98	418.61
30	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
31	600	3000.00	2.00	5	100	20	0.400	4	40.00	150.0	223.00	797.19
32	300	1500.00	1.00	5	100	20	0.444	4	44.36	150.0	229.98	418.61

## Floor 4

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	1800.00	1.00	6	100	20	0.427	4	42.68	150.0	227.28	486.80
2	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
3	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
4	300	1800.00	1.00	6	100	20	0.427	4	42.68	150.0	227.28	486.80
5	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
6	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
7	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
8	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
9	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
10	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
11	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
12	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
13	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
14	900	5400.00	3.00	6	100	20	0.400	4	40.00	150.0	223.00	1377.08
15	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
16	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
17	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
18	1050	6300.00	3.50	6	100	20	0.400	4	40.00	150.0	223.00	1600.77
19	900	5400.00	3.00	6	100	20	0.400	4	40.00	150.0	223.00	1377.08
20	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
21	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
22	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
23	900	5400.00	3.00	6	100	20	0.400	4	40.00	150.0	223.00	1377.08
24	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
25	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
26	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
27	1200	7200.00	4.00	6	100	20	0.400	4	40.00	150.0	223.00	1824.09
28	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
29	300	1800.00	1.00	6	100	20	0.427	4	42.68	150.0	227.28	486.80
30	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
31	600	3600.00	2.00	6	100	20	0.400	4	40.00	150.0	223.00	930.99
32	300	1800.00	1.00	6	100	20	0.427	4	42.68	150.0	227.28	486.80

## Floor3

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	2100.00	1.00	7	100	20	0.414	4	41.37	150.0	225.19	554.36
2	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
3	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
4	300	2100.00	1.00	7	100	20	0.414	4	41.37	150.0	225.19	554.36
5	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
6	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
7	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
8	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
9	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
10	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
11	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
12	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
13	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
14	900	6300.00	3.00	7	100	20	0.400	4	40.00	150.0	223.00	1577.78
15	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
16	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
17	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
18	1050	7350.00	3.50	7	100	20	0.400	4	40.00	150.0	223.00	1834.92
19	900	6300.00	3.00	7	100	20	0.400	4	40.00	150.0	223.00	1577.78
20	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
21	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
22	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
23	900	6300.00	3.00	7	100	20	0.400	4	40.00	150.0	223.00	1577.78
24	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
25	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
26	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
27	1200	8400.00	4.00	7	100	20	0.400	4	40.00	150.0	223.00	2091.69
28	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
29	300	2100.00	1.00	7	100	20	0.414	4	41.37	150.0	225.19	554.36
30	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
31	600	4200.00	2.00	7	100	20	0.400	4	40.00	150.0	223.00	1064.79
32	300	2100.00	1.00	7	100	20	0.414	4	41.37	150.0	225.19	554.36

Floor 2

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	Reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(pcf)	Total load(pcf)	Axial Load(k)
1	300	2400.00	1.00	8	100	20	0.403	4	40.31	150.0	223.49	621.40
2	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
3	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
4	300	2400.00	1.00	8	100	20	0.403	4	40.31	150.0	223.49	621.40
5	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
6	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
7	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
8	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
9	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
10	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
11	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
12	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
13	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
14	900	7200.00	3.00	8	100	20	0.400	4	40.00	150.0	223.00	1778.48
15	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
16	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
17	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
18	1050	8400.00	3.50	8	100	20	0.400	4	40.00	150.0	223.00	2069.07
19	900	7200.00	3.00	8	100	20	0.400	4	40.00	150.0	223.00	1778.48
20	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
21	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
22	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
23	900	7200.00	3.00	8	100	20	0.400	4	40.00	150.0	223.00	1778.48
24	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
25	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
26	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
27	1200	9600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.00	2359.29
28	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
29	300	2400.00	1.00	8	100	20	0.403	4	40.31	150.0	223.49	621.40
30	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
31	600	4800.00	2.00	8	100	20	0.400	4	40.00	150.0	223.00	1198.59
32	300	2400.00	1.00	8	100	20	0.403	4	40.31	150.0	223.49	621.40

By Column 1,4,29,32

Floor	Axial Load
R	52.946
9	133.43
8	207.83
7	279.53
6	349.62
5	418.61
4	486.80
3	554.36
2	621.40

2,3,5,8,9,12,13,15,16,17,20,21,24,25,28,30,31

Floor	Axial Load
R	103.943
9	252.74
8	392.92
7	529.29
6	663.39
5	797.19
4	930.99
3	1064.79
2	1198.59

6,7,10,11,22,26,27

Floor	Axial Load
R	205.131
9	485.50
8	753.69
7	1021.29
6	1288.89
5	1556.49
4	1824.09
3	2091.69
2	2359.29

14,19,23

Floor	Axial Load
R	154.620
9	369.72
8	574.28
7	773.43
6	975.68
5	1176.38
4	1377.08
3	1577.78
2	1778.48

18

Floor	Axial Load
R	179.892
9	427.73
8	664.17
7	898.32
6	1132.47
5	1366.62
4	1600.77
3	1834.92
2	2069.07

## Floors 1-8

column #	Mr(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	115	-149	825	576	NO
2	8.82	-252	1650	576	NO
3	-0.24	-259	1650	576	NO
4	10.3	-250	1650	576	NO
5	-115	-147	825	576	NO
6	232	17.8	1650	576	NO
7	-20	20.4	3300	576	NO
8	-236	19	1650	576	NO
9	0.949	12.6	3300	576	NO
10	21.3	19.5	3300	576	NO
11	241	-1.64	1650	576	NO
12	-30.4	4.92	3300	576	NO
13	-16.9	125	3300	576	NO
14	60.4	37.6	3300	576	NO
15	-247	-0.662	1650	576	NO
16	253	0.802	1650	576	NO
17	-92.2	11.5	3300	576	NO
18	159	1.57	3300	576	NO
19	-271	0.901	1650	576	NO
20	250	-0.0122	1650	576	NO
21	-85.3	-29.9	3300	576	NO
22	113	-34.3	3300	576	NO
23	-261	-3.99	1650	576	NO
24	5.4	-311	1650	576	NO
25	246	2.93	1650	576	NO
26	-56.3	41	3300	576	NO
27	-127	234	2475	576	NO
28	126	41.7	3300	576	NO
29	-259	5.26	1650	576	NO
30	241	-18.3	1650	576	NO
31	-45.6	-57.3	3300	576	NO
32	1.2	-160	3300	576	NO
33	61.4	-67.9	3300	576	NO
34	-248	-19.1	1650	576	NO
35	124	147	825	576	NO
36	-5.71	262	1650	576	NO
37	-1.68	285	1650	576	NO
38	7.81	262	1650	576	NO
39	-127	145	825	576	NO

9th Floor

column #	Mr(ft k)	Ms(ft k)	Tributary Area (sq ft)	Column area (sq in)	slender column?
1	67.5	-93.4	825	576	NO
2	0.465	-182	1650	576	NO
3	-0.133	-181	1650	576	NO
4	1.94	-181	1650	576	NO
5	-68	-92	825	576	NO
6	137	12.9	1650	576	NO
7	41.2	44.4	3300	576	NO
8	-140	13.7	1650	576	NO
9	0.269	21.1	3300	576	NO
10	-41.4	44.2	3300	576	NO
11	145	-1.92	1650	576	NO
12	15.6	-0.621	3300	576	NO
13	-11.7	79.9	3300	576	NO
14	7.53	23.6	3300	576	NO
15	-150	-1.33	1650	576	NO
16	154	0.692	1650	576	NO
17	-21.3	8.96	3300	576	NO
18	67.9	2.48	3300	576	NO
19	-167	0.629	1650	576	NO
20	152	-0.228	1650	576	NO
21	-16.1	-22.3	3300	576	NO
22	45.4	-25.7	3300	576	NO
23	-162	-2.86	1650	576	NO
24	4.39	-156	1650	576	NO
25	148	2.61	1650	576	NO
26	4.2	33	3300	576	NO
27	-73.4	136	2475	576	NO
28	50.3	32.9	3300	576	NO
29	-158	4.24	1650	576	NO
30	143	-13.6	1650	576	NO
31	25.5	-71.2	3300	576	NO
32	0	-115	3300	576	NO
33	-11	-74.5	3300	576	NO
34	-148	-13.9	1650	576	NO
35	74.8	92.5	825	576	NO
36	0.27	188	1650	576	NO
37	0.988	197	1650	576	NO
38	0.654	188	1650	576	NO
39	-75.8	90.5	825	576	NO



## Roof

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	206.25	1.00	1	16.0	20.0	0.772	4.0	12.356	150.0	178.769	36.871
2	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
3	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
4	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
5	206.25	206.25	1.00	1	16.0	20.0	0.772	4.0	12.356	150.0	178.769	36.871
6	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
7	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
8	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
9	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
10	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
11	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
12	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
13	680.63	680.63	3.30	1	16.0	20.0	0.537	4.0	8.600	150.0	172.759	117.585
14	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
15	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
16	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
17	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
18	713.63	713.63	3.46	1	16.0	20.0	0.531	4.0	8.492	150.0	172.587	123.163
19	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
20	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
21	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
22	767.25	767.25	3.72	1	16.0	20.0	0.521	4.0	8.332	150.0	172.332	132.221
23	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
24	340.31	340.31	1.65	1	16.0	20.0	0.657	4.0	10.505	150.0	175.808	59.829
25	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
26	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
27	206.25	206.25	1.00	1	16.0	20.0	0.772	4.0	12.356	150.0	178.769	36.871
28	748.69	748.69	3.63	1	16.0	20.0	0.524	4.0	8.386	150.0	172.417	129.087
29	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
30	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
31	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
32	686.81	686.81	3.33	1	16.0	20.0	0.536	4.0	8.579	150.0	172.726	118.630
33	825	825.00	4.00	1	16.0	20.0	0.511	4.0	8.178	150.0	172.085	141.970
34	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
35	206.25	206.25	1.00	1	16.0	20.0	0.772	4.0	12.356	150.0	178.769	36.871
36	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
37	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
38	412.5	412.50	2.00	1	16.0	20.0	0.619	4.0	9.908	150.0	174.853	72.127
39	206.25	206.25	1.00	1	16.0	20.0	0.772	4.0	12.356	150.0	178.769	36.871

Floor 9

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL (psf)	Self Weight DL (psf)	Total load (psf)	Axial Load (k)
1	206.25	206.25	1.00	1	100	20	0.772	4	77.22	150.0	282.557	95.149
2	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
3	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
4	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
5	206.25	206.25	1.00	1	100	20	0.772	4	77.22	150.0	282.557	95.149
6	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
7	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
8	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
9	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
10	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
11	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
12	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
13	680.63	680.63	3.30	1	100	20	0.537	4	53.75	150.0	244.997	284.337
14	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
15	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
16	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
17	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
18	713.63	713.63	3.46	1	100	20	0.531	4	53.08	150.0	243.921	297.233
19	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
20	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
21	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
22	767.25	767.25	3.72	1	100	20	0.521	4	52.08	150.0	242.322	318.143
23	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
24	340.31	340.31	1.65	1	100	20	0.657	4	65.66	150.0	264.049	149.688
25	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
26	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
27	206.25	206.25	1.00	1	100	20	0.772	4	77.22	150.0	282.557	95.149
28	748.69	748.69	3.63	1	100	20	0.524	4	52.41	150.0	242.856	310.911
29	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
30	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
31	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
32	686.81	686.81	3.33	1	100	20	0.536	4	53.62	150.0	244.789	286.754
33	825	825.00	4.00	1	100	20	0.511	4	51.11	150.0	240.779	340.612
34	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
35	206.25	206.25	1.00	1	100	20	0.772	4	77.22	150.0	282.557	95.149
36	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
37	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
38	412.5	412.50	2.00	1	100	20	0.619	4	61.93	150.0	258.084	178.587
39	206.25	206.25	1.00	1	100	20	0.772	4	77.22	150.0	282.557	95.149

Floor 8

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	412.50	1.00	2	100	20	0.619	4	61.93	150.0	258.084	148.378
2	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
3	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
4	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
5	206.25	412.50	1.00	2	100	20	0.619	4	61.93	150.0	258.084	148.378
6	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
7	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
8	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
9	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
10	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
11	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
12	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
13	680.63	1361.25	3.30	2	100	20	0.453	4	45.33	150.0	231.525	441.920
14	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
15	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
16	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
17	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
18	713.63	1427.25	3.46	2	100	20	0.449	4	44.85	150.0	230.764	461.912
19	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
20	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
21	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
22	767.25	1534.50	3.72	2	100	20	0.441	4	44.15	150.0	229.634	494.330
23	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
24	340.31	680.63	1.65	2	100	20	0.537	4	53.75	150.0	244.997	233.063
25	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
26	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
27	206.25	412.50	1.00	2	100	20	0.619	4	61.93	150.0	258.084	148.378
28	748.69	1497.38	3.63	2	100	20	0.444	4	44.38	150.0	230.011	483.118
29	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
30	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
31	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
32	686.81	1373.63	3.33	2	100	20	0.452	4	45.24	150.0	231.378	445.666
33	825	1650.00	4.00	2	100	20	0.435	4	43.46	150.0	228.542	529.159
34	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
35	206.25	412.50	1.00	2	100	20	0.619	4	61.93	150.0	258.084	148.378
36	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
37	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
38	412.5	825.00	2.00	2	100	20	0.511	4	51.11	150.0	240.779	277.908
39	206.25	412.50	1.00	2	100	20	0.619	4	61.93	150.0	258.084	148.378

Floor 7

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL (psf)	Self Weight DL (psf)	Total load (psf)	Axial Load (k)
1	206.25	618.75	1.00	3	100	20	0.552	4	55.15	150.0	247.242	199.372
2	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
3	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
4	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
5	206.25	618.75	1.00	3	100	20	0.552	4	55.15	150.0	247.242	199.372
6	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
7	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
8	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
9	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
10	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
11	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
12	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
13	680.63	2041.88	3.30	3	100	20	0.416	4	41.60	150.0	225.556	595.440
14	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
15	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
16	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
17	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
18	713.63	2140.88	3.46	3	100	20	0.412	4	41.21	150.0	224.935	622.433
19	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
20	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
21	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
22	767.25	2301.75	3.72	3	100	20	0.406	4	40.63	150.0	224.012	666.203
23	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
24	340.31	1020.94	1.65	3	100	20	0.485	4	48.47	150.0	236.566	313.565
25	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
26	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
27	206.25	618.75	1.00	3	100	20	0.552	4	55.15	150.0	247.242	199.372
28	748.69	2246.06	3.63	3	100	20	0.408	4	40.83	150.0	224.320	651.064
29	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
30	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
31	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
32	686.81	2060.44	3.33	3	100	20	0.415	4	41.52	150.0	225.436	600.498
33	825	2475.00	4.00	3	100	20	0.401	4	40.08	150.0	223.121	713.234
34	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
35	206.25	618.75	1.00	3	100	20	0.552	4	55.15	150.0	247.242	199.372
36	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
37	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
38	412.5	1237.50	2.00	3	100	20	0.463	4	46.32	150.0	233.112	374.067
39	206.25	618.75	1.00	3	100	20	0.552	4	55.15	150.0	247.242	199.372

Floor 6

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	825.00	1.00	4	100	20	0.511	4	51.11	150.0	240.779	249.033
2	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
3	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
4	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
5	206.25	825.00	1.00	4	100	20	0.511	4	51.11	150.0	240.779	249.033
6	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
7	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
8	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
9	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
10	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
11	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
12	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
13	680.63	2722.50	3.30	4	100	20	0.400	4	40.00	150.0	223.000	747.221
14	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
15	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
16	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
17	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
18	713.63	2854.50	3.46	4	100	20	0.400	4	40.00	150.0	223.000	781.572
19	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
20	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
21	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
22	767.25	3069.00	3.72	4	100	20	0.400	4	40.00	150.0	223.000	837.300
23	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
24	340.31	1361.25	1.65	4	100	20	0.453	4	45.33	150.0	231.525	392.355
25	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
26	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
27	206.25	825.00	1.00	4	100	20	0.511	4	51.11	150.0	240.779	249.033
28	748.69	2994.75	3.63	4	100	20	0.400	4	40.00	150.0	223.000	818.022
29	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
30	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
31	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
32	686.81	2747.25	3.33	4	100	20	0.400	4	40.00	150.0	223.000	753.657
33	825	3300.00	4.00	4	100	20	0.400	4	40.00	150.0	223.000	897.209
34	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
35	206.25	825.00	1.00	4	100	20	0.511	4	51.11	150.0	240.779	249.033
36	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
37	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
38	412.5	1650.00	2.00	4	100	20	0.435	4	43.46	150.0	228.542	468.340
39	206.25	825.00	1.00	4	100	20	0.511	4	51.11	150.0	240.779	249.033

Floor 5

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	1031.25	1.00	5	100	20	0.484	4	48.35	150.0	236.368	297.783
2	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
3	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
4	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
5	206.25	1031.25	1.00	5	100	20	0.484	4	48.35	150.0	236.368	297.783
6	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
7	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
8	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
9	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
10	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
11	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
12	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
13	680.63	3403.13	3.30	5	100	20	0.400	4	40.00	150.0	223.000	899.001
14	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
15	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
16	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
17	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
18	713.63	3568.13	3.46	5	100	20	0.400	4	40.00	150.0	223.000	940.712
19	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
20	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
21	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
22	767.25	3836.25	3.72	5	100	20	0.400	4	40.00	150.0	223.000	1008.397
23	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
24	340.31	1701.56	1.65	5	100	20	0.432	4	43.18	150.0	228.091	469.977
25	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
26	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
27	206.25	1031.25	1.00	5	100	20	0.484	4	48.35	150.0	236.368	297.783
28	748.69	3743.44	3.63	5	100	20	0.400	4	40.00	150.0	223.000	984.980
29	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
30	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
31	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
32	686.81	3434.06	3.33	5	100	20	0.400	4	40.00	150.0	223.000	906.816
33	825	4125.00	4.00	5	100	20	0.400	4	40.00	150.0	223.000	1081.184
34	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
35	206.25	1031.25	1.00	5	100	20	0.484	4	48.35	150.0	236.368	297.783
36	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
37	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
38	412.5	2062.50	2.00	5	100	20	0.415	4	41.51	150.0	225.423	561.327
39	206.25	1031.25	1.00	5	100	20	0.484	4	48.35	150.0	236.368	297.783

Floor 4

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	1237.50	1.00	6	100	20	0.463	4	46.32	150.0	233.112	345.863
2	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
3	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
4	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
5	206.25	1237.50	1.00	6	100	20	0.463	4	46.32	150.0	233.112	345.863
6	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
7	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
8	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
9	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
10	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
11	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
12	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
13	680.63	4083.75	3.30	6	100	20	0.400	4	40.00	150.0	223.000	1050.782
14	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
15	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
16	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
17	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
18	713.63	4281.75	3.46	6	100	20	0.400	4	40.00	150.0	223.000	1099.851
19	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
20	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
21	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
22	767.25	4603.50	3.72	6	100	20	0.400	4	40.00	150.0	223.000	1179.493
23	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
24	340.31	2041.88	1.65	6	100	20	0.416	4	41.60	150.0	225.556	546.736
25	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
26	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
27	206.25	1237.50	1.00	6	100	20	0.463	4	46.32	150.0	233.112	345.863
28	748.69	4492.13	3.63	6	100	20	0.400	4	40.00	150.0	223.000	1151.938
29	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
30	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
31	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
32	686.81	4120.88	3.33	6	100	20	0.400	4	40.00	150.0	223.000	1059.974
33	825	4950.00	4.00	6	100	20	0.400	4	40.00	150.0	223.000	1265.159
34	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
35	206.25	1237.50	1.00	6	100	20	0.463	4	46.32	150.0	233.112	345.863
36	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
37	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
38	412.5	2475.00	2.00	6	100	20	0.401	4	40.08	150.0	223.121	653.365
39	206.25	1237.50	1.00	6	100	20	0.463	4	46.32	150.0	233.112	345.863

Floor 3

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL(psf)	Self Weight DL(psf)	Total load(psf)	Axial Load(k)
1	206.25	1443.75	1.00	7	100	20	0.447	4	44.74	150.0	230.582	393.420
2	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
3	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
4	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
5	206.25	1443.75	1.00	7	100	20	0.447	4	44.74	150.0	230.582	393.420
6	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
7	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
8	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
9	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
10	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
11	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
12	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
13	680.63	4764.38	3.30	7	100	20	0.400	4	40.00	150.0	223.000	1202.562
14	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
15	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
16	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
17	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
18	713.63	4995.38	3.46	7	100	20	0.400	4	40.00	150.0	223.000	1258.991
19	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
20	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
21	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
22	767.25	5370.75	3.72	7	100	20	0.400	4	40.00	150.0	223.000	1350.590
23	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
24	340.31	2382.19	1.65	7	100	20	0.404	4	40.37	150.0	223.586	622.825
25	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
26	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
27	206.25	1443.75	1.00	7	100	20	0.447	4	44.74	150.0	230.582	393.420
28	748.69	5240.81	3.63	7	100	20	0.400	4	40.00	150.0	223.000	1318.896
29	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
30	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
31	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
32	686.81	4807.69	3.33	7	100	20	0.400	4	40.00	150.0	223.000	1213.133
33	825	5775.00	4.00	7	100	20	0.400	4	40.00	150.0	223.000	1449.134
34	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
35	206.25	1443.75	1.00	7	100	20	0.447	4	44.74	150.0	230.582	393.420
36	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
37	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
38	412.5	2887.50	2.00	7	100	20	0.400	4	40.00	150.0	223.000	745.352
39	206.25	1443.75	1.00	7	100	20	0.447	4	44.74	150.0	230.582	393.420



Floor 2

column #	Floor Area (sq ft)	Tributary Area (sq ft)	Area Multiplier	Floor Multiplier	Live Load (psf)	Dead Load (psf)	reduction factor	KLL Factor	Reduced LL (psf)	Self Weight DL (psf)	Total load (psf)	Axial Load (k)
1	206.25	1650.00	1.00	8	100	20	0.435	4	43.46	150.0	228.542	440.557
2	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
3	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
4	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
5	206.25	1650.00	1.00	8	100	20	0.435	4	43.46	150.0	228.542	440.557
6	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
7	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
8	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
9	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
10	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
11	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
12	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
13	680.63	5445.00	3.30	8	100	20	0.400	4	40.00	150.0	223.000	1354.343
14	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
15	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
16	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
17	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
18	713.63	5709.00	3.46	8	100	20	0.400	4	40.00	150.0	223.000	1418.130
19	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
20	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
21	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
22	767.25	6138.00	3.72	8	100	20	0.400	4	40.00	150.0	223.000	1521.687
23	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
24	340.31	2722.50	1.65	8	100	20	0.400	4	40.00	150.0	223.000	698.714
25	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
26	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
27	206.25	1650.00	1.00	8	100	20	0.435	4	43.46	150.0	228.542	440.557
28	748.69	5989.50	3.63	8	100	20	0.400	4	40.00	150.0	223.000	1485.854
29	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
30	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
31	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
32	686.81	5494.50	3.33	8	100	20	0.400	4	40.00	150.0	223.000	1366.291
33	825	6600.00	4.00	8	100	20	0.400	4	40.00	150.0	223.000	1633.109
34	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
35	206.25	1650.00	1.00	8	100	20	0.435	4	43.46	150.0	228.542	440.557
36	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
37	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
38	412.5	3300.00	2.00	8	100	20	0.400	4	40.00	150.0	223.000	837.340
39	206.25	1650.00	1.00	8	100	20	0.435	4	43.46	150.0	228.542	440.557

Columns 1,5,35,39

Floor Number	Total Axial Load (k)
Roof	36.871
9	95.149
8	148.378
7	199.372
6	249.033
5	297.783
4	345.863
3	393.420
2	440.557

Columns 2,3,4,,6,8,11,15,16,19,20,23,25,29,30,34,36,37,38

Floor Number	Total Axial Load (k)
Roof	72.127
9	178.587
8	277.908
7	374.067
6	468.340
5	561.327
4	653.365
3	745.352
2	837.340

Columns 7,9,10,12,14,17,21,26,31,33

Floor Number	Total Axial Load (k)
Roof	141.970
9	340.612
8	529.159
7	713.234
6	897.209
5	1081.184
4	1265.159
3	1449.134
2	1633.109

Columns 13,32

Floor Number	Total Axial Load (k)
Roof	117.585
9	284.337
8	441.920
7	595.440
6	747.221
5	899.001
4	1050.782
3	1202.562
2	1354.343

Columns 22,28

Floor Number	Total Axial Load (k)
Roof	132.221
9	318.143
8	494.330
7	666.203
6	837.300
5	1008.397
4	1179.493
3	1350.590
2	1521.687

Columns 18

Floor Number	Total Axial Load (k)
Roof	123.163
9	297.233
8	461.912
7	622.433
6	781.572
5	940.712
4	1099.851
3	1258.991
2	1418.130

Story	Diaphragm	Load	DriftX	DriftY
STORY9	D1	QUAKE	0.7255	0.0718
STORY8	D1	QUAKE	0.6099	0.0619
STORY7	D1	QUAKE	0.503	0.0503
STORY6	D1	QUAKE	0.3987	0.0392
STORY5	D1	QUAKE	0.2996	0.0288
STORY4	D1	QUAKE	0.2089	0.0195
STORY3	D1	QUAKE	0.1299	0.0116
STORY2	D1	QUAKE	0.0662	0.0055
STORY1	D1	QUAKE	0.0216	0.0014
BASE	D1	QUAKE	0	0

## Cost Analysis - 30'x27.5' Design

### Columns

Floor	Height(ft)	Col. Size	Number Columns	Col. Area (sq in)	Total Volume (cubic yd)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)	Total Cost (\$)
9	14.43	24"x24"	39	576	83.37	440	263	26.5	729.5	60,820.85	
8	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
7	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
6	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
5	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
4	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
3	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
2	13.33	24"x24"	39	576	77.02	440	263	26.5	729.5	56,184.47	
1	15	28"x28"	39	784	117.96	440	263	26.5	729.5	86,053.98	
					740.46			Total \$		540,166.11	

### Slab

Floor	Depth (in)	Area (sq ft)	Total Volume (cubic Yds)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Finishing Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
8	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
7	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
6	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
5	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
4	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
3	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
2	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
1	7	23,100	564.65	100.1	11.9	4.65	0.46	117.11	66,126.64
								Total \$	595,139.75

## Slab Reinforcement

Floor	Weight (tons)	Mat. Cost (\$/ton)	Lab. Cost (\$/ton)	Equip. Cost (\$/ton)	Total Cost (\$/ton)	Total Cost (\$)
9	69.18	995.5	496	18.17	1,509.67	104,438.97
8	69.18	995.5	496	18.17	1,509.67	104,438.97
7	69.18	995.5	496	18.17	1,509.67	104,438.97
6	69.18	995.5	496	18.17	1,509.67	104,438.97
5	69.18	995.5	496	18.17	1,509.67	104,438.97
4	69.18	995.5	496	18.17	1,509.67	104,438.97
3	69.18	995.5	496	18.17	1,509.67	104,438.97
2	69.18	995.5	496	18.17	1,509.67	104,438.97
1	69.18	995.5	496	18.17	1,509.67	104,438.97
					Total \$	939,950.74

## Slab Formwork

Floor	Floor Area (sq ft)	Mat. Cost (\$/sq ft)	Lab. Cost (\$/sq ft)	Total Cost (\$/sq ft)	Total Cost (\$)	
9	23,100	1.40	2.96	4.36	100,716.00	
8	23,100	1.40	2.96	4.36	100,716.00	
7	23,100	1.40	2.96	4.36	100,716.00	
6	23,100	1.40	2.96	4.36	100,716.00	
5	23,100	1.40	2.96	4.36	100,716.00	
4	23,100	1.40	2.96	4.36	100,716.00	
3	23,100	1.40	2.96	4.36	100,716.00	
2	23,100	1.40	2.96	4.36	100,716.00	
1	23,100	1.40	2.96	4.36	100,716.00	
					Total \$	906,444.00

## Shear Walls

Floor	Height (ft)	Total Length (ft)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	14.26	242.2	174.9	193.25	24.8	392.95	50,265.17
8	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
7	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
6	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
5	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
4	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
3	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
2	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
1	15	242.2	174.9	193.25	24.8	392.95	52,873.61
						<b>Total \$</b>	<b>432,047.86</b>

**Total Cost (\$)** = 3,413,748.45

## Cost Analysis - Existing Structure

### Columns

Column Sizes	Height(ft)	Number Columns	Total Length (ft)	Mat. Cost (\$/LF)	Lab. Cost (\$/LF)	Equip. Cost (\$/LF)	Total Cost (\$/LF)	Total Cost (\$)
W12x40	27.5	8.5	233.75	52.5	2.9	1.9	57.3	13,393.88
W12x50	27.5	4	110	52.5	2.9	1.9	57.3	6,303.00
W12x53	27.5	13.5	371.25	52.5	2.9	1.9	57.3	21,272.63
W12x58	27.5	13	357.5	60.5	2.9	1.9	65.3	23,344.75
W12x65	27.5	13	357.5	60.5	2.9	1.9	65.3	23,344.75
W12x72	27.5	15	412.5	75	3.4	2.23	80.63	33,259.88
W12x79	27.5	4	110	75	3.4	2.23	80.63	8,869.30
W12x87	27.5	11	302.5	91	3.4	2.23	96.63	29,230.58
W12x96	27.5	6	165	95	3.4	2.23	100.63	16,603.95
W12x106	27.5	14	385	115	3	1.9	119.9	46,161.50
W12x120	27.5	5	137.5	105	2.48	1.59	109.07	14,997.13
W12x136	27.5	15	412.5	130	3	1.9	134.9	55,646.25
W12x152	27.5	7	192.5	132	3	1.9	136.9	26,353.25
W12x170	27.5	8	220	150	2.75	1.5	154.25	33,935.00
W12x190	27.5	4	110	166	2.61	1.67	170.28	18,730.80
W12x210	27.5	5	137.5	180	2.75	1.5	184.25	25,334.38
W12x230	27.5	2	55	200	2.75	1.5	204.25	11,233.75
Total \$								448,816.23

## Slab

Floor	Depth (in)	Area (sq ft)	Total Volume (cubic Yds)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Finishing Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
8	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
7	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
6	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
5	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
4	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
3	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
2	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
1	5.25	23,100	374.31	100.1	11.9	4.65	0.46	117.11	43,834.92
<b>Total \$</b>									<b>433,965.74</b>

## Metal Decking

Floor	Floor Area (sq ft)	Mat. Cost (\$/sq ft)	Lab. Cost (\$/ft)	Equip. Cost (\$/ft)	Total Cost (\$/ft)	Total Cost (\$)
9	23100	1.89	0.36	0.02	2.27	52,437.00
8	23100	1.89	0.36	0.02	2.27	52,437.00
7	23100	1.89	0.36	0.02	2.27	52,437.00
6	23100	1.89	0.36	0.02	2.27	52,437.00
5	23100	1.89	0.36	0.02	2.27	52,437.00
4	23100	1.89	0.36	0.02	2.27	52,437.00
3	23100	1.89	0.36	0.02	2.27	52,437.00
2	23100	1.89	0.36	0.02	2.27	52,437.00
1	23100	1.89	0.36	0.02	2.27	52,437.00
<b>Total \$</b>						<b>519,126.30</b>



## Beams and Girders

Beam Size	Number Beams	Length (ft)	Total Length	Mat. Cost (\$/LF)	Lab. Cost (\$/LF)	Equip Cost (\$/LF)	Total Cost (\$/LF)	Total Cost (\$)
W12 x 14	9	30	270	13.50	2.35	1.51	17.36	4,687.20
W16 x 26	58	30	1,740	25.00	2.07	1.33	28.40	49,416.00
W16 x 31	545	30	16,350	30.00	2.3	1.47	33.77	552,139.50
W16 x 36	77	30	2,310	37.00	2.5	1.55	41.05	94,825.50
W16 x 56	1	30	30	50.00	2.6	1.70	54.30	1,629.00
W16 x 66	1	30	30	64.50	2.72	1.74	68.96	2,068.80
W18 x 35	19	30	570	33.50	3.13	1.46	38.09	21,711.30
W18 x 40	112	30	3,360	38.50	3.13	1.46	43.09	144,782.40
W18 x 55	3	30	90	53.00	3.29	1.54	57.83	5,204.70
W24 x 55	33	35	1,155	53.00	2.7	1.27	56.97	65,800.35
W24 x 62	14	35	490	59.50	2.7	1.27	63.47	31,100.30
W24 x 76	11	35	385	73.00	2.7	1.27	76.97	29,633.45
W24 x 84	16	35	560	81.00	2.78	1.30	85.08	47,644.80
W27 x 84	65	35	2,275	81.00	2.52	1.18	84.70	192,692.50
W27 x 94	54	35	1,890	90.50	2.52	1.18	94.20	178,038.00
W27 x 114	2	35	70	110.00	2.61	1.22	113.83	7,968.10
W30 x 99	4	40	160	95.50	2.5	1.17	99.17	15,867.20
<b>Total \$</b>								<b>1,589,730.01</b>

## Braced Frames

Column size	Height (ft)	Number Beams	Total Length (ft)	Mat. Cost (\$/LF)	Lab. Cost (\$/LF)	Equip. Cost (\$/LF)	Total Cost (\$/LF)	Total Cost (\$)
W6 x 25	14	8	112	19.25	3.45	2.21	24.91	2,789.92
W8 x 15	14	16	224	14.45	3.45	2.21	20.11	4,504.64
W8 x 18	14	8	112	20	3.45	2.21	25.66	2,873.92
W8 x 24	14	8	112	23	3.76	2.41	29.17	3,267.04
W8 x 28	14	8	112	27	3.76	2.41	33.17	3,715.04
W8 x 31	14	8	112	30	3.76	2.41	36.17	4,051.04
W8 x 35	14	16	224	33.5	3.76	2.41	39.67	8,886.08
W8 x 48	14	16	224	46	3.76	2.41	52.17	11,686.08
W10 x 22	14	8	112	21	3.45	2.21	26.66	2,985.92
W10 x 30	14	8	112	32	3.76	2.41	38.17	4,275.04
W10 x 33	14	8	112	32	3.76	2.41	38.17	4,275.04
W10 x 39	14	8	112	40	3.76	2.41	46.17	5,171.04
W10 x 45	14	8	112	47	3.76	2.41	53.17	5,955.04
W10 x 54	14	8	112	50	3.76	2.41	56.17	6,291.04
W14 x 22	14	40	560	25	2.09	1.34	28.43	15,920.80
W14 x 43	14	41	574	41.5	2.56	1.64	45.7	26,231.80
W18 x 50	14	9	126	48	3.29	1.54	52.83	6,656.58
<b>Total \$</b>							<b>131,489.67</b>	

**Total Cost (\$)**                      =                      **3,123,127.94**

## Cost Analysis - 30'X40' Design

### Columns

Floor	Height(ft)	Col. Size	Number Columns	Col. Area (sq in)	Total Volume (cubic yd)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Finishing Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	14.43	24"x24"	32	576	68.41	440	263	26.5	0.46	117.11	75,145.58	49,904.28
8	13.33	24"x24"	32	576	63.19	440	263	26.5	0.46	117.11	75,145.58	46,100.08
7	13.33	24"x24"	32	576	63.19	440	263	26.5	0.46	117.11	75,145.58	46,100.08
6	13.33	24"x24"	32	576	63.19	440	263	26.5	0.46	117.11	75,145.58	46,100.08
5	13.33	24"x24"	32	576	63.19	440	263	26.5	0.46	117.11	75,145.58	46,100.08
4	13.33	24"x24"	32	576	63.19	440	263	26.5	0.46	117.11	75,145.58	46,100.08
3	13.33	28"x28"	32	784	86.01	440	263	26.5	0.46	117.11	75,145.58	62,747.33
2	13.33	28"x28"	32	784	86.01	440	263	26.5	0.46	117.11	75,145.58	62,747.33
1	15	32"x32"	32	1024	126.42	440	263	26.5	0.46	117.11	75,145.58	92,223.21
Total \$											682.83	498,122.53

### Slab

Floor	Depth (in)	Area (sq ft)	Total Volume (cubic Yds)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Finishing Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
8	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
7	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
6	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
5	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
4	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
3	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
2	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
1	9	23,100	641.67	100.1	11.9	4.65	0.46	117.11	75,145.58
Total \$									676,310.25

## Slab Reinforcement

Floor	Weight (tons)	Mat. Cost (\$/ton)	Lab. Cost (\$/ton)	Equip. Cost (\$/ton)	Total Cost (\$/ton)	Total Cost (\$)
9	29.5	995.5	496	18.17	1,509.67	44,535.27
8	29.5	995.5	496	18.17	1,509.67	44,535.27
7	29.5	995.5	496	18.17	1,509.67	44,535.27
6	29.5	995.5	496	18.17	1,509.67	44,535.27
5	29.5	995.5	496	18.17	1,509.67	44,535.27
4	29.5	995.5	496	18.17	1,509.67	44,535.27
3	29.5	995.5	496	18.17	1,509.67	44,535.27
2	29.5	995.5	496	18.17	1,509.67	44,535.27
1	29.5	995.5	496	18.17	1,509.67	44,535.27
Total \$						400,817.39

## Slab Formwork

Floor	Floor Area (sq ft)	Mat. Cost (\$/sq ft)	Lab. Cost (\$/sq ft)	Total Cost (\$/sq ft)	Total Cost (\$)
9	23,100	1.40	2.96	4.36	100,716.00
8	23,100	1.40	2.96	4.36	100,716.00
7	23,100	1.40	2.96	4.36	100,716.00
6	23,100	1.40	2.96	4.36	100,716.00
5	23,100	1.40	2.96	4.36	100,716.00
4	23,100	1.40	2.96	4.36	100,716.00
3	23,100	1.40	2.96	4.36	100,716.00
2	23,100	1.40	2.96	4.36	100,716.00
1	23,100	1.40	2.96	4.36	100,716.00
Total \$					906,444.00

## Post Tensioning

Floor	Weight (lbs)	Mat. Cost (\$/sq ft)	Lab. Cost (\$/sq ft)	Equip. Cost (\$/sq ft)	Total Cost (\$/sq ft)	Total Cost (\$)
9	22,160	0.47	0.85	0.02	1.34	29,694.40
8	22,160	0.47	0.85	0.02	1.34	29,694.40
7	22,160	0.47	0.85	0.02	1.34	29,694.40
6	22,160	0.47	0.85	0.02	1.34	29,694.40
5	22,160	0.47	0.85	0.02	1.34	29,694.40
4	22,160	0.47	0.85	0.02	1.34	29,694.40
3	22,160	0.47	0.85	0.02	1.34	29,694.40
2	22,160	0.47	0.85	0.02	1.34	29,694.40
1	22,160	0.47	0.85	0.02	1.34	29,694.40
<b>Total \$</b>					<b>267,249.60</b>	

## Shear Walls

Floor	Height (ft)	Total Length (ft)	Mat. Cost (\$/CY)	Lab. Cost (\$/CY)	Equip. Cost (\$/CY)	Total Cost (\$/CY)	Total Cost (\$)
9	14.26	242.2	174.9	193.25	24.8	392.95	50,265.17
8	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
7	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
6	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
5	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
4	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
3	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
2	13.33	242.2	174.9	193.25	24.8	392.95	46,987.01
1	15	242.2	174.9	193.25	24.8	392.95	52,873.61
<b>Total \$</b>						<b>432,047.86</b>	

**Total Cost (\$)**                      =                      **3,180,991.62**

Towers Crescent Building B		Classic WBS Layout				31-Mar-06 13:17					
Activity ID	Activity Name	Original Duration	Remaining Duration	Apr	May	Jun	Jul	Aug	Qtr 3, 2006	Qtr 4, 2006	
		135	135						Aug	Sep	
<b>Towers Crescent Building B</b>											
<b>Normal Layout</b>											
<b>1</b>	A1000	Construct Columns	3	3	14-Apr-06, 1	Construct Columns					
	A1010	Form Slab/Beams	3	3		Form Slab/Beams					
	A1020	Place Reinforcement	3	3		Place Reinforcement					
	A1030	Place Post. Tens. Strands	1	1		Place Post. Tens. Strands					
	A1040	Pour Slabs/Beams	2	2		Pour Slabs/Beams					
	A1050	Cure Slab/Beams	2	2		Cure Slab/Beams					
	A1060	Stress Strands	1	1		Stress Strands					
<b>2</b>			15	15	05-May-06, 2	Construct Columns					
	A1070	Construct Columns	3	3		Construct Columns					
	A1080	Form Slab/Beams	3	3		Form Slab/Beams					
	A1090	Place Reinforcement	3	3		Place Reinforcement					
	A1100	Place Post. Tens. Strands	1	1		Place Post. Tens. Strands					
	A1110	Pour Slabs/Beams	2	2		Pour Slabs/Beams					
	A1120	Cure Slab/Beams	2	2		Cure Slab/Beams					
	A1130	Stress Strands	1	1		Stress Strands					
<b>3</b>			15	15	26-May-06, 3	Construct Columns					
	A1140	Construct Columns	3	3		Construct Columns					
	A1150	Form Slab/Beams	3	3		Form Slab/Beams					
	A1160	Place Reinforcement	3	3		Place Reinforcement					
	A1170	Place Post. Tens. Strands	1	1		Place Post. Tens. Strands					
	A1180	Pour Slabs/Beams	2	2		Pour Slabs/Beams					
	A1190	Cure Slab/Beams	2	2		Cure Slab/Beams					
	A1200	Stress Strands	1	1		Stress Strands					
<b>4</b>			15	15	19-Jun-06, 4	Construct Columns					
	A1210	Construct Columns	3	3		Construct Columns					
	A1220	Form Slab/Beams	3	3		Form Slab/Beams					
	A1230	Place Reinforcement	3	3		Place Reinforcement					
	A1240	Place Post. Tens. Strands	1	1		Place Post. Tens. Strands					
	A1250	Pour Slabs/Beams	2	2		Pour Slabs/Beams					
	A1260	Cure Slab/Beams	2	2		Cure Slab/Beams					

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Activity ID	Activity Name	Qtr 2, 2006			Qtr 3, 2006			Qtr 4, 2006		
		Apr	May	Jun	Jul	Aug	Sep	Oct		
A1270	Stress Strands									
<b>5</b>										
A1280	Construct Columns									
A1290	Form Slab/Beams									
A1300	Place Reinforcement									
A1310	Place Post. Tens. Strands									
A1320	Pour Slabs/Beams									
A1330	Cure Slab/Beams									
A1340	Stress Strands									
<b>6</b>										
A1350	Construct Columns									
A1360	Form Slab/Beams									
A1370	Place Reinforcement									
A1380	Place Post. Tens. Strands									
A1390	Pour Slabs/Beams									
A1400	Cure Slab/Beams									
A1410	Stress Strands									
<b>7</b>										
A1420	Construct Columns									
A1430	Form Slab/Beams									
A1440	Place Reinforcement									
A1450	Place Post. Tens. Strands									
A1460	Pour Slabs/Beams									
A1470	Cure Slab/Beams									
A1480	Stress Strands									
<b>8</b>										
A1490	Construct Columns									
A1500	Form Slab/Beams									
A1510	Place Reinforcement									
A1520	Place Post. Tens. Strands									
A1530	Pour Slabs/Beams									
A1540	Cure Slab/Beams									
A1550	Stress Strands									
<b>9</b>										

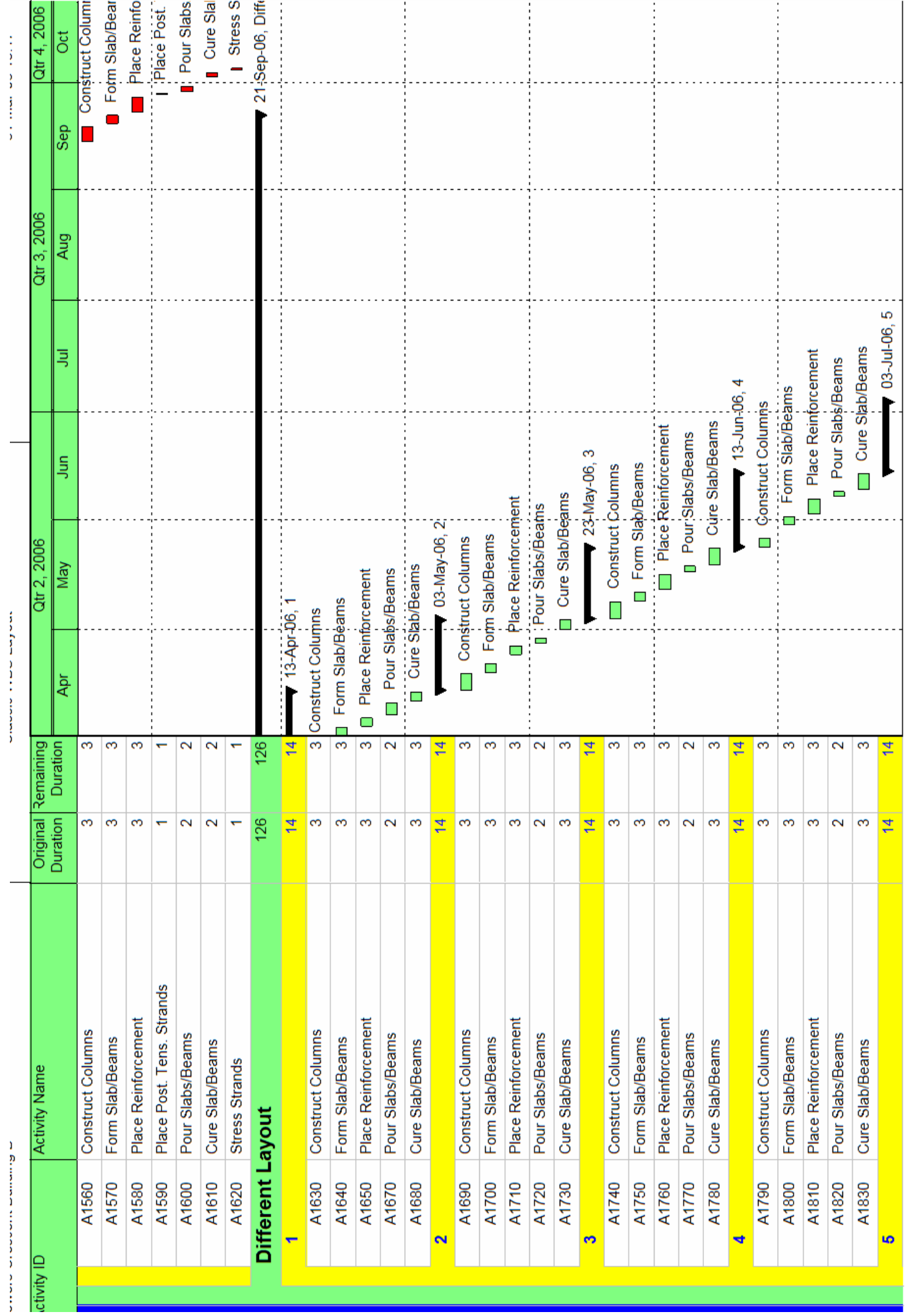
TASK filter: All Activities

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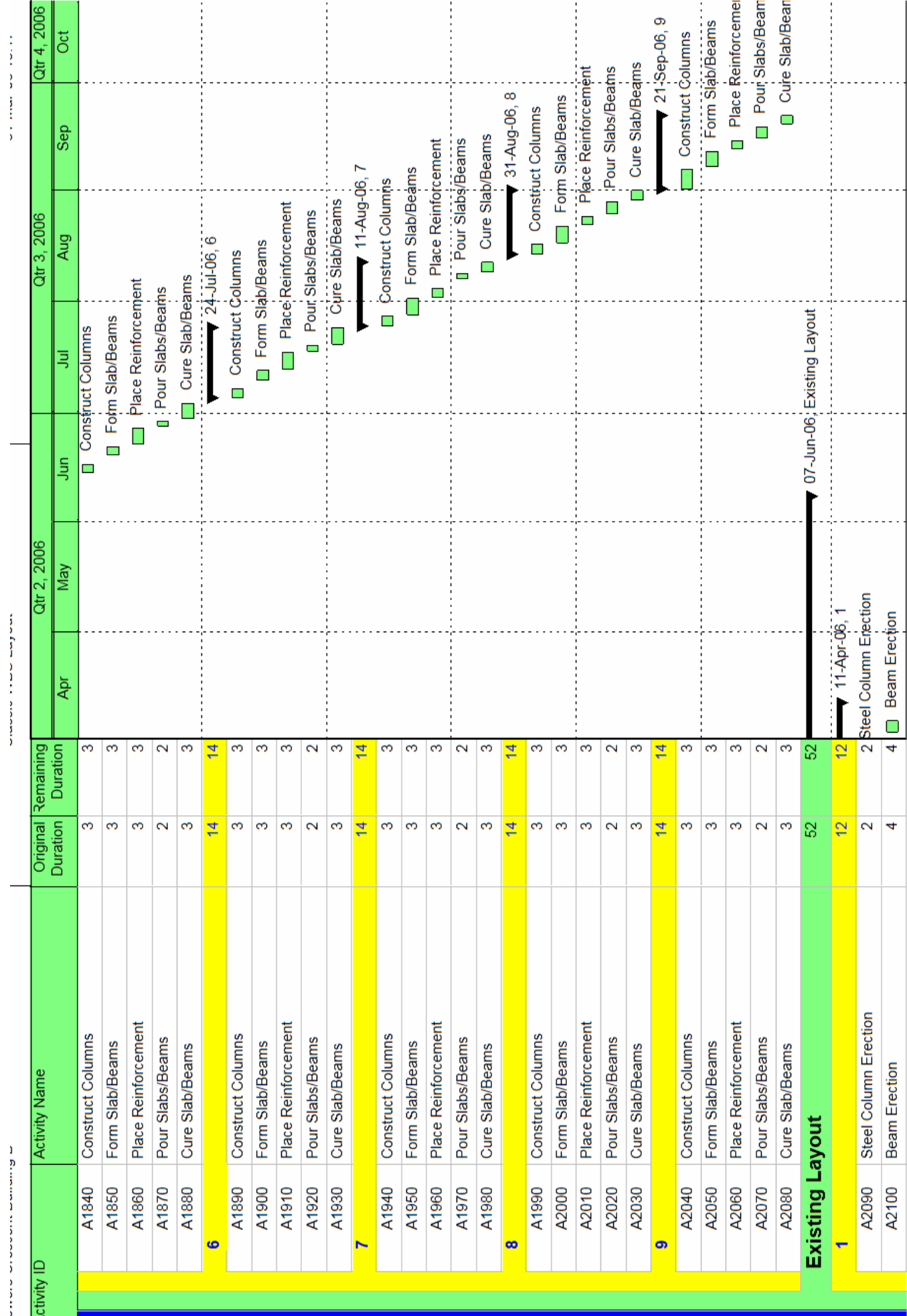
Actual Work Critical Remaining Work Summary

Remaining Work Milestone

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Activity ID	Activity Name	Original Duration	Remaining Duration	Qtr 2, 2006			Qtr 3, 2006			Qtr 4, 2006	
				Apr	May	Jun	Jul	Aug	Sep	Oct	
A2110	Place Metal Decking	2	2	Place Metal Decking							
A2120	Pour Slab	1	1	Pour Slab							
A2130	Cure Slab	3	3	Cure Slab							
<b>2</b>		<b>12</b>	<b>12</b>	18-Apr-06, 2							
A2140	Steel Column Erection	2	2	Steel Column Erection							
A2150	Beam Erection	4	4	Beam Erection							
A2160	Place Metal Decking	2	2	Place Metal Decking							
A2170	Pour Slab	1	1	Pour Slab							
A2180	Cure Slab	3	3	Cure Slab							
<b>3</b>		<b>12</b>	<b>12</b>	25-Apr-06, 3							
A2190	Steel Column Erection	2	2	Steel Column Erection							
A2200	Beam Erection	4	4	Beam Erection							
A2210	Place Metal Decking	2	2	Place Metal Decking							
A2220	Pour Slab	1	1	Pour Slab							
A2230	Cure Slab	3	3	Cure Slab							
<b>4</b>		<b>12</b>	<b>12</b>	02-May-06, 4							
A2240	Steel Column Erection	2	2	Steel Column Erection							
A2250	Beam Erection	4	4	Beam Erection							
A2260	Place Metal Decking	2	2	Place Metal Decking							
A2270	Pour Slab	1	1	Pour Slab							
A2280	Cure Slab	3	3	Cure Slab							
<b>5</b>		<b>12</b>	<b>12</b>	09-May-06, 5							
A2290	Steel Column Erection	2	2	Steel Column Erection							
A2300	Beam Erection	4	4	Beam Erection							
A2310	Place Metal Decking	2	2	Place Metal Decking							
A2320	Pour Slab	1	1	Pour Slab							
A2330	Cure Slab	3	3	Cure Slab							
<b>6</b>		<b>12</b>	<b>12</b>	16-May-06, 6							
A2340	Steel Column Erection	2	2	Steel Column Erection							
A2350	Beam Erection	4	4	Beam Erection							
A2360	Place Metal Decking	2	2	Place Metal Decking							
A2370	Pour Slab	1	1	Pour Slab							
A2380	Cure Slab	3	3	Cure Slab							
<b>7</b>		<b>12</b>	<b>12</b>	23-May-06, 7							

█ Actual Work   
 █ Critical Remaining Work   
 █ Remaining Work   
 ◆ Milestone   
 Summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Qtr 2, 2006				Qtr 3, 2006			Qtr 4, 2006
				Apr	May	Jun	Jul	Aug	Sep	Oct	
A2390	Steel Column Erection	2	2		■ Steel Column Erection						
A2400	Beam Erection	4	4		■ Beam Erection						
A2410	Place Metal Decking	2	2		■ Place Metal Decking						
A2420	Pour Slab	1	1		■ Pour Slab						
A2430	Cure Slab	3	3		■ Cure Slab						
<b>8</b>		12	12		■ Steel Column Erection ■ Beam Erection ■ Place Metal Decking ■ Pour Slab ■ Cure Slab						
A2440	Steel Column Erection	2	2		■ Steel Column Erection						
A2450	Beam Erection	4	4		■ Beam Erection						
A2460	Place Metal Decking	2	2		■ Place Metal Decking						
A2470	Pour Slab	1	1		■ Pour Slab						
A2480	Cure Slab	3	3		■ Cure Slab						
<b>9</b>		12	12		■ Steel Column Erection ■ Beam Erection ■ Place Metal Decking ■ Pour Slab ■ Cure Slab						
A2490	Steel Column Erection	2	2		■ Steel Column Erection						
A2500	Beam Erection	4	4		■ Beam Erection						
A2510	Place Metal Decking	2	2		■ Place Metal Decking						
A2520	Pour Slab	1	1		■ Pour Slab						
A2530	Cure Slab	3	3		■ Cure Slab						

Actual Work  
 Remaining Work  
 Critical Remaining Work  
 Milestone

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