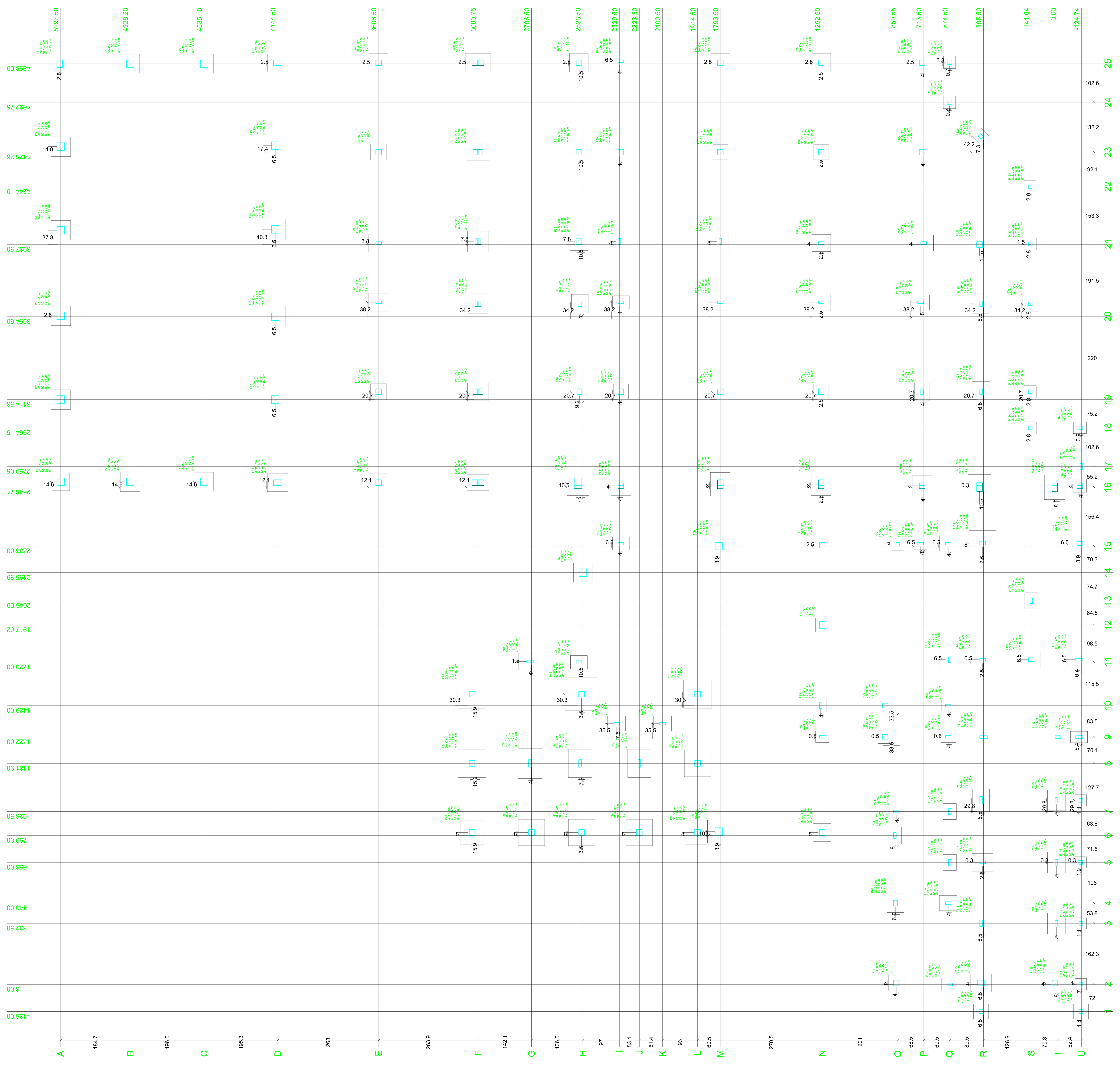


Planta de locação
escala 1:100

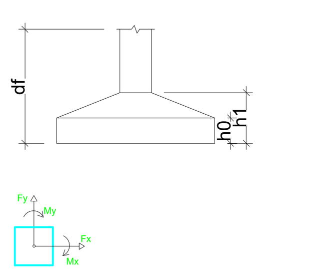
Nome	Seção (cm)	X (cm)	Y (cm)	Pilar: Carga Máx. (tf)	Carga Mín. (tf)	Mx (kgf.m)	My (kgf.m)	Fx (tf)	Fy (tf)	Fundação: Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	df (cm)
P1	40x40	2678.00	5297.50	8.6	7.5	500	600	0.3	0.6	95	95	55	55	150
P2	40x40	3114.55	5297.50	9.2	8.5	1200	500	0.3	0.2	105	105	55	55	150
P3	40x40	3559.60	5297.50	9.2	8.6	1600	400	0.3	0.2	105	105	55	55	150
P4	40x40	4013.05	5297.50	9.2	8.6	1600	400	0.2	0.2	105	105	55	55	150
P5	40x40	4458.05	5297.50	9.2	8.5	1300	500	0.3	0.2	105	105	55	55	150
P6	30x40	4898.00	5302.50	8.0	7.2	400	500	0.7	0.5	80	90	35	35	150
P7	40x40	2678.00	4928.20	8.3	7.6	400	1300	0.2	0.3	105	105	55	55	150
P8	40x40	4898.00	4928.20	8.1	7.4	400	1300	0.2	0.3	100	100	55	55	150
P9	40x40	2678.00	4535.10	8.3	7.6	400	1300	0.2	0.3	100	100	55	55	150
P10	40x40	4898.00	4535.10	8.0	7.3	400	1300	0.2	0.3	100	100	55	55	150
P11	30x45	2673.00	4144.50	12.7	11.8	700	400	0.6	0.8	95	110	35	35	150
P12	40x40	3114.53	4157.50	8.9	8.3	1200	600	0.5	0.2	100	100	55	55	150
P13	40x40	3554.60	4157.50	12.0	11.3	1200	800	1.0	0.8	110	110	55	55	150
P14	40x40	4018.05	4157.50	12.1	11.4	1300	800	1.0	0.8	110	110	45	45	150
P15	40x40	4463.05	4157.50	8.9	8.3	1200	600	0.5	0.2	100	100	55	55	150
P16	30x45	4903.00	4144.50	12.3	11.4	700	400	0.6	0.9	95	110	35	35	150
P17	30x30	2673.00	3608.60	11.9	11.2	200	500	0.8	0.2	100	100	45	45	150
P18	30x30	3156.00	3608.60	7.6	7.1	300	300	0.3	0.1	85	85	45	45	150
P19	14x30	3631.00	3608.50	14.9	14.6	400	100	0.2	0.2	95	110	35	35	150
P20	14x30	3945.00	3608.50	14.9	14.7	400	200	0.2	0.2	95	110	35	35	150
P21	30x30	4428.26	3608.60	8.5	8.0	300	200	0.2	0.1	85	85	45	45	150
P22	30x30	4903.00	3608.60	12.7	12.0	200	500	0.7	0.2	100	100	45	45	150
P23	30x30	815.00	3112.50	21.4	13.3	600	1100	0.8	0.6	125	125	45	45	150
P24	30x30	1181.90	3112.50	28.6	20.4	500	1700	1.6	0.3	150	150	45	45	150
P25	30x30	1549.50	3112.50	34.2	24.2	1000	1200	1.4	1.3	150	150	45	45	150
P38	30x30	815.00	2796.50	26.7	16.3	600	1100	0.9	0.7	140	140	45	45	150
P39	14x40	1181.90	2804.50	32.3	19.4	200	1500	1.6	0.2	130	160	40	40	150
P40	14x40	1723.00	2804.50	13.7	10.2	700	600	0.9	0.9	90	120	45	45	150
P41	30x30	815.00	2530.50	26.5	16.4	600	1100	0.9	0.5	140	140	45	45	150
P42	14x40	1181.90	2538.50	27.9	16.7	200	1500	1.3	0.2	125	150	40	40	150
P43	30x30	1549.50	2530.50	46.2	29.5	800	1200	1.0	0.8	175	175	50	50	150
P44	20x30	1720.00	2544.50	5.7	3.6	500	400	0.7	0.4	70	90	35	35	150
P45	40x40	2195.39	2523.50	8.2	7.6	1300	800	0.5	0.2	100	100	55	55	150
P48	25x30	3156.00	2542.00	8.3	7.9	200	300	0.3	0.2	80	90	35	35	150
P49	20x30	3623.00	2539.50	8.8	8.3	400	500	0.8	0.9	90	100	35	35	150
P50	30x30	3953.00	2544.50	9.4	8.8	400	500	0.8	0.9	95	95	45	45	150
P51	30x30	4428.26	2544.50	9.7	9.3	300	400	0.5	0.3	95	95	45	45	150
P52	30x30	4903.00	2544.50	9.9	9.2	700	600	1.0	1.2	100	100	45	45	150
P53	14x30	1393.00	2344.50	9.9	5.6	400	300	0.4	0.5	80	95	35	35	150
P54	14x30	2349.00	2321.50	6.8	6.2	500	200	0.3	0.9	70	90	35	35	150
P57	30x30	3156.00	2321.50	5.2	4.8	500	400	0.3	0.1	80	80	45	45	150
P58	14x30	3631.00	2321.50	5.5	5.1	500	100	0.2	0.9	70	90	35	35	150
P59	14x30	3953.50	2329.50	5.0	4.6	100	300	0.6	0.1	60	70	35	35	150
P60	30x30	4428.26	2321.50	9.8	9.4	600	400	0.4	0.2	95	95	45	45	150
P61	14x30	4911.00	2321.50	8.4	8.0	500	300	0.6	0.9	80	95	35	35	150
P62	30x30	815.00	2223.30	27.5	17.0	500	1000	0.9	0.5	140	140	45	45	150
P63	14x40	1181.90	2223.30	25.9	14.3	200	1600	1.5	0.2	125	150	40	40	150
P64	14x30	1393.00	2100.50	10.0	5.9	400	300	0.4	0.5	80	95	35	35	150
P65	30x30	815.00	1914.50	18.9	11.0	400	800	1.0	1.0	125	125	45	45	150
P66	30x30	1181.90	1914.50	27.5	19.9	500	1300	1.2	0.4	140	140	45	45	150
P67	30x30	1549.50	1914.50	28.7	18.0	1000	1300	1.1	1.2	150	150	45	45	150
P68	40x40	820.00	1801.28	14.3	5.0	1600	2300	0.7	1.6	120	120	55	55	150
P69	40x40	2336.00	1801.30	11.4	10.0	700	1100	0.4	0.4	105	105	55	55	150
P72	30x30	3156.00	1793.50	8.5	7.9	300	300	0.3	0.1	80	80	45	45	150
P73	14x30	3631.00	1793.50	14.1	13.9	200	100	0.2	0.3	90	100	35	35	150
P74	14x30	3953.50	1793.50	12.0	11.8	200	300	0.4	0.3	90	100	35	35	150
P75	30x30	4428.26	1793.50	8.3	7.8	300	300	0.2	0.1	80	80	45	45	150
P76	30x30	4903.00	1793.50	13.1	12.4	400	500	0.7	0.4	100	100	45	45	150
P77	30x30	815.00	1252.50	10.9	10.3	600	300	0.2	0.6	95	95	45	45	150
P78	14x30	1323.00	1252.50	4.5	4.1	100	100	0.1	0.1	60	70	35	35	150
P79	14x30	1489.00	1260.50	4.2	3.8	100	200	0.3	0.2	60	70	35	35	150
P80	30x35	1917.02	1252.50	4.5	4.0	400	500	0.3	0.1	70	75	35	35	150
P81	30x30	2341.00	1252.50	10.9	10.5	400	300	0.4	0.5	95	95	45	45	150
P84	30x30	3156.00	1257.50	8.6	8.0	300	300	0.3	0.1	80	80	45	45	150
P85	14x30	3631.00	1257.50	12.5	12.2	200	200	0.3	0.2	90	100	35	35	150
P86	14x30	3945.50	1257.50	12.8	12.6	100	200	0.3	0.2	90	100	35	35	150
P87	30x30	4428.26	1257.50	8.6	8.0	300	300	0.3	0.1	80	80	45	45	150
P88	30x30	4903.00	1257.50	13.0	12.3	500	500	0.7	0.2	100	100	45	45	150
P89	25x30	1323.00	917.50	3.6	3.3	200	200	0.1	0.2	70	75	35	35	150
P90	25x30	1489.00	917.50	6.6	6.2	300	200	0.1	0.3	70	75	35	35	150
P91	30x30	16.00	858.50	8.0	7.2	300	600	1.0	0.3	85	85	45	45	150
P92	20x30	440.00	863.50	11.2	10.4	200	500	0.7	0.2	90	100	35	35	150
P93	14x30	799.00	866.50	8.0	7.4	200	500	0.6	0.3	70	90	35	35	150
P94	14x30	926.50	858.50	3.9	2.8	200	100	0.2	0.4	60	70	35	35	150
P95	20x20	2346.00	850.55	5.8	5.0	200	200	0.2	0.2	65	65	35	35	150
P96	14x30	2349.00	729.50	4.0	3.3	200	100	0.2	0.3	60	70	35	35	150
P99	14x30	3156.00	721.50	9.9	9.5	100	200	0.2	0.1	80	95	35	35	150
P100	14x30	3631.00	729.50	8.6	8.2	400	300	0.4	0.7	80	95	35	35	150
P101	14x30	3945.50	713.50	10.7	10.0	300	300	0.5	0.6	85	105	35	35	150
P102	30x30	4428.26	721.50	9.5	9.0	700	700	0.6	0.2	95	95	55	55	150
P103	30x30	4903.00	721.50	9.7	8.9	500	400	0.6	0.9	95	95	45	45	150
P104	14x30	8.00	574.50	7.5	6.6	300	300	0.5	0.4	70	90	35	35	150
P105	14x30	440.00	582.50	9.8	9.1	200	200	0.3	0.3	80	95	35	35	150
P106	14x30	656.00	574.50	6.9	5.9	100	300	0.4	0.2	70	85	35	35	150
P107	14x30	926.50	574.50	8.0	7.2	100	300	0.4	0.2	70	85	35	35	150
P108	14x30	1323.00	582.50	6.9	6.0	200	100	0.2	0.3	70	80	35	35	150
P109	14x30	1489.00	582.50	2.9	2.4	300	100	0.1	0.5	60	70	35	35	150
P110	14x30	1733.00	574.50	12.6	10.8	100	900	1.7	0.2	95	110	35	35	150
P111	14x30	2349.00	582.50	7.2	5.8	200	600	1.2	0.2	80	95	35	35	150
P112	25x25	4692.75	576.10	1.5	1.3	200	100	0.1	0.2	65	65	35	35	150
P113	25x25	4905.50	575.90	1.1	0.4	200	100	0.2	0.2	65	65	35	35	350
P114	20x20	-136.00	408.50	3.3	2.1	600	200	0.2	1.1	80	80	45	45	150
P115	30x40	16.00	408.50	13.0	10.3	700	400	0.5	1.2	95	110	35	35	150
P116	14x35	332.50	408.50	15.5	12.2	100	300	0.3	0.2	95	110	35	35	150
P117	14x30	656.50	400.50	14.0	10.9	500	100	0.1	0.9	95	110	35	35	150
P118	14x40	986.00	408.50	15.1	12.0	200	300	0.3	0.4	90	120	45	45	150
P119	14x30	1322.00	395.50	14.6	11.4	600	100	0.1	1.1	95	110	35	35	150
P120	14x30	1733.00	400.50	17.7	14.5	300	400	0.7	0.4	100	120	35	35	150
P121	20x30	2352.00	400.50	19.5	14.9	800	1100	2.0	1.5	135	145	40	40	350
P124	14x30	3156.00	408.50	14.9	13.1	100	200	0.3	0.1	95	110	35	35	150
P125	14x30	3623.00	408.50	10.7	8.7	100	600	1.0	0.2	85	105	35	35	150
P126	30x30	3937.50	416.50	7.6	6.0	300	200	0.2	0.4	80	80	45	45	150
P127	20x20	4512.58	410.07	2.4	2.2	100	200	0.1	0.1	65	65	35	35	150
P128	20x30	1733.00	141.64	11.2	7.9	200	500	0.8	0.2	90	100	35	35	150
P129	14x30	2046.00	141.64	6.0	3.4	100	600	1.2	0.1	70	85	35	35	150
P130	20x20	2964.15	147.30	5.4	3.7	200	200	0.3	0.2	65	65	35	35	150
P131	20x20	3156.00	147.30	5.3	3.8	100	200	0.4	0.2	65	65	35	35	150
P132	20x20	3623.00	147.30	5.8	4.3	200	300	0.4	0.3	80	80	35	35	350
P133	20x20	3940.55	147.30	2.9	2.2	200	200	0.2	0.2	65	65	35	35	150
P134	20x20	4244.10	147.50	2.2	2.0	200	200	0.2	0.3	65	65	35	35	150
P135	30x30	16.00	16.00	10.8	8.0	700	300	0.3	1.2	95	95	45	45	150
P136	14x30	332.50	8.00	14.6	11.6	200	200	0.2	0.3	95	110	35	35	150
P137	14x30	656.50	8.00	14.5	11.5	200	200	0.2	0.3	95	110	35	35	150
P138	14x30	986.00	8.00	15.6	12.6	200	200	0.2	0.3	95	110	35	35	150
P139	14x30	1322.00	0.00	12.2	8.7	600	200	0.2	1.0	95	110	35	35	150
P142	20x20	-135.95	-121.95	3.1	2.3	600	100	0.2	1.2	80	80	45	45	400
P143	20x20	10.00	-121.40	2.1	1.5	100	100	0.2	0.1	60	60	35	35	400
P144	20x20	332.50	-121.95	1.8	1.5	100	100	0.2	0.1	60	60	35	35	400
P145	20x20	656.50	-120.95	1.7	1.4	100	100	0.2	0.1	60	60	35	35	400
P146	20x20	986.00	-121.95	1.6	1.3	100	100	0.2	0.1	60	60	35	35	400
P147	14x40	1322.00	-111.95	6.3	4.3	300	100	0.2	0.4	60	90	35	35	350
P148	14x40	1733.00	-111.95	15.3	12.6	400	300	0.6	0.5	100	125	45	45	350
P149	20x30	2349.00	-116.95	17.9	14.8	1200	700	1.3	2.2	120	130	35	35	150
P152	14x30	2759.05	-124.74	2.3	0.5	100	200	0.2	0.1	60	70	35	35	150
P153	20x30	2964.15	-116.95	2.1	1.1	300	200	0.3	0.4	60	60	35	35	150
P26+P27		2673.00	3080.75	14.3	13.9	0	0	0.5	0.3	85	115	55	55	150
P28+P29		3156.00	3080.75	10.0	9.9	1200	800	0.5	0.2	95	110	45	45	150
P30+P31		3623.00	3080.75	13.2	13.0	300	800	0.7	0.2	105	105	35	35	150
P32+P33		3953.00	3080.75	13.1	12.9	400	1000	0.8	0.2	110	110	35	35	150
P34+P35		4428.26	3080.75	10.0	9.8	1100	700	0.4	0.2	90	115	45	45	150
P36+P37		4903.00	3080.75	14.6	14.1	600	1200	0.9	0.4	100	135	55	55	150
P46+P47		2669.75	2549.50	14.3	13.1	2100	1000	0.5	1.5	130	115	55	55	150
P55+P56		2656.75	2321.50	11.9	10.8	1200	400	0.3	1.1	105	105	35	35	150
P70+P71		2664.75	1793.50	17.4	17.0	700	300	0.7	0.5	125	105	45	45	150
P82+P83		2664.75	1257.50	17.2	17.0	500	400	0.7	0.4	120	105	45	45	150
P97+P98		2656.75	721.50	14.4	13.5	1100	200	0.5	1.0	110	105	35	35	150
P122+P123		2649.24	416.50	16.4	14.2	1500	1500	2.1	1.3	135	120	45	45	150
P140+P141		2648.74	17.00	14.8	10.9	1200	1000	0.3	1.1	130	110	45	45	150
P150+P151		2656.74	-116.75	5.3	2.5	400	100	0.1	0.3	70	70	35	35	150

Locação no eixo X

Coordenadas (cm)	Nome
-136.00	P114
-135.95	P142
8.00	P104
10.00	P143
16.00	P91, P115, P135
332.50	P116, P136, P144
440.00	P92, P105
656.00	P106
656.50	P117, P137, P145
799.00	P93
815.00	P23, P38, P41, P62, P65, P77
820.00	P68
926.50	P94, P107
986.00	P118, P138, P146
1181.90	P24, P39, P42, P63, P66
1322.00	P119, P139, P147
1323.00	P78, P89, P108
1393.00	P53, P64
1489.00	P79, P90, P109
1549.50	P25, P43, P67
1720.00	P44
1723.00	P40
1733.00	P110, P120, P128, P148
1917.02	P80
2046.00	P129
2195.39	P45
2336.00	P69
2341.00	P81
2346.00	P95
2349.00	P54, P96, P111, P149
2352.00	P121
2648.74	P140+P141
2649.24	P122+P123
2656.75	P55+P56, P97+P98
2656.74	P150+P151
2664.75	P70+P71, P82+P83
2669.75	P46+P47
2673.00	P11, P17, P26+P27
2678.00	P1, P7, P9
2759.05	P152
2964.15	P130, P153
3114.53	P12
3114.55	P2
3156.00	P18, P28+P29, P48, P57, P72, P84, P99, P124, P131
3554.60	P13
3559.60	P3
3623.00	P30+P31, P49, P125, P132
3631.00	P19, P58, P73, P85, P100
3937.50	P126
3940.55	P133
3945.00	P20
3945.50	P86, P101
3953.00	P32+P33, P50
3953.50	P59, P74
4013.05	P4
4018.05	P14
4244.10	P134
4428.26	P21, P34+P35, P51, P60, P75, P87, P102
4458.05	P5
4463.05	P15
4512.58	P127
4692.75	P112
4898.00	P6, P8, P10
4903.00	P16, P22, P36+P37, P52, P76, P88, P103
4905.50	P113
4911.00	P61

Locação no eixo Y

Coordenadas (cm)	Nome
5302.50	P6
5297.50	P1, P2, P3, P4, P5
4928.20	P7, P8
4535.10	P9, P10
4157.50	P12, P13, P14, P15
4144.50	P11, P16
3608.60	P17, P18, P21, P22
3608.50	P19, P20
3112.50	P23, P24, P25
3080.75	P26+P27, P28+P29, P30+P31, P32+P33, P34+P35, P36+P37
2804.50	P39, P40
2796.50	P38
2549.50	P46+P47
2544.50	P44, P50, P51, P52
2542.00	P48
2539.50	P49
2538.50	P42
2530.50	P41, P43
2523.50	P45
2344.50	P53
2329.50	P59
2321.50	P54, P55+P56, P57, P58, P60, P61
2223.30	P62, P63
2100.50	P64
1914.50	P65, P66, P67
1801.30	P69
1801.28	P68
1793.50	P70+P71, P72, P73, P74, P75, P76
1260.50	P79
1257.50	P82+P83, P84, P85, P86, P87, P88
1252.50	P77, P78, P80, P81
917.50	P89, P90
866.50	P93
863.50	P92
858.50	P91, P94
850.55	P95
729.50	P96, P100
721.50	P97+P98, P99, P102, P103
713.50	P101
582.50	P105, P108, P109, P111
576.10	P112
575.90	P113
574.50	P104, P106, P107, P110
416.50	P122+P123, P126
410.07	P127
408.50	P114, P115, P116, P118, P124, P125
400.50	P117, P120, P121
395.50	P119
147.50	P134
147.30	P130, P131, P132, P133
141.64	P128, P129
17.00	P140+P141
16.00	P135
8.00	P136, P137, P138
0.00	P139
-111.95	P147, P148
-116.75	P150+P151
-116.95	P149, P153
-120.95	P145
-121.40	P143
-121.95	P142, P144, P146
-124.74	P152



ARQUITETURA E ENGENHARIA

> PROJETOS INDUSTRIAIS / COMERCIAIS / RESIDENCIAIS E PÚBLICAS
> ASSESSORIA / CONSULTORIA
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CNPJ 20.270.410/0001-60

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RESP. TÉC.: JAMES ANDRE CLAUBERG:60441690904 — Assinado de forma digital por JAMES ANDRE CLAUBERG:60441690904 Dados: 2022.10.13 12:31:33 -03'00'

James André Clauberg
Eng. Civil - CREA 45.160-6

RESP. TÉC.: INDIAMARA DE OLIVEIRA RIBEIRO:06834160906 — Assinado de forma digital por INDIAMARA DE OLIVEIRA RIBEIRO:06834160906 Dados: 2022.10.13 12:31:57 -03'00'

Indiamara de Oliveira Ribeiro
Eng. Civil - CREA 13.4548-3

CLIENTE: **Prefeitura Municipal de Rio Rufino**

OBRA:

PROJETO ESTRUTURAL
ESCOLA MUNICIPAL DE RIO RUFINO

PLANTA DE LOCAÇÃO DAS SAPATAS

DESENHO :	ESCALA:	DATA:
		OUT/2022

TAMANHO DE FOLHA A1