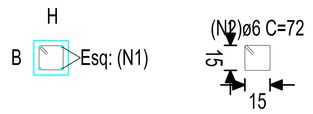
P13 (1x)

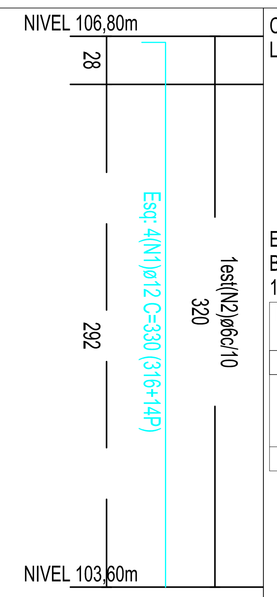
CONC 20x20
L=320 lb=21 la=14



Esq: 4(N1)ø12

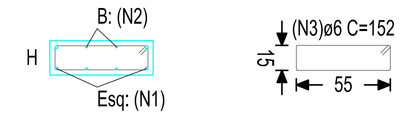
1est(N2)ø6c/10

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø12			316	14	330 1320	12,094
2	32	ø6					72 2304	5,277
							Total+10,0%	19,108



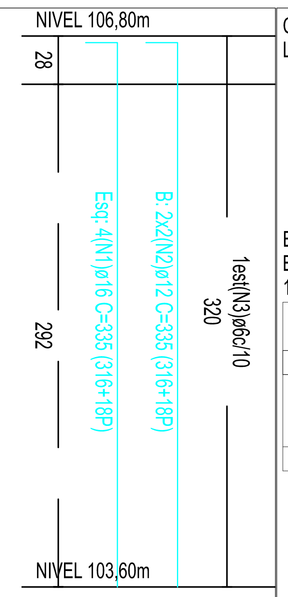
P14=P15 (2x) (20x60)

CONC 60x20
L=320 lb=28 la=18



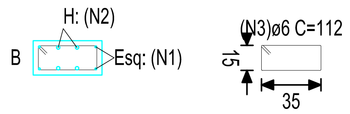
Esq: 4(N1)ø16
B/H: 2x2(N2)ø12/ _
1est(N3)ø6c/10

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø16		316	18	334	1336	21,761
2	4	ø12		316	18	334	1336	12,241
3	32	ø6				152	4864	11,141
							Total+10,0%	49,657



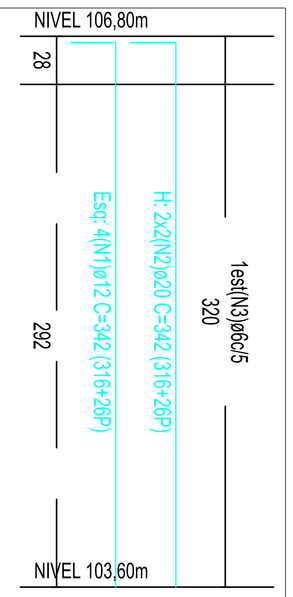
P16 (1x)

CONC 20x40
L=320 lb=34 la=26



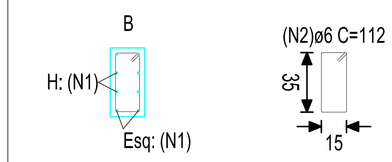
Esq: 4(N1)ø12
B/H: _ /2x2(N2)ø20
1est(N3)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø12		316	26	342	1368	12,534
2	4	ø20		316	26	342	1368	34,817
3	63	ø6				112	7056	16,162
							Total+10,0%	69,864



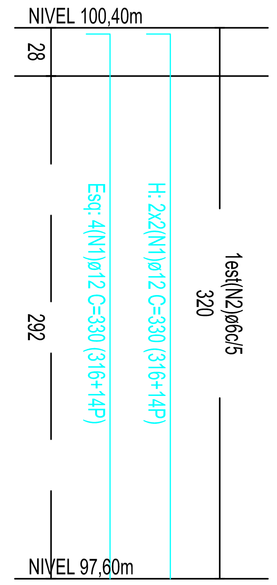
P11=P12 (2x)

CONC 20x40
L=320 lb=21 la=14

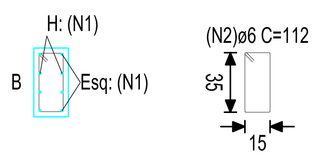


Esq: 4(N1)ø12
B/H: _ /2x2(N1)ø12
1est(N2)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	8	ø12		316	14	330	2640	24,188
2	63	ø6				112	7056	16,162
							Total+10,0%	44,385

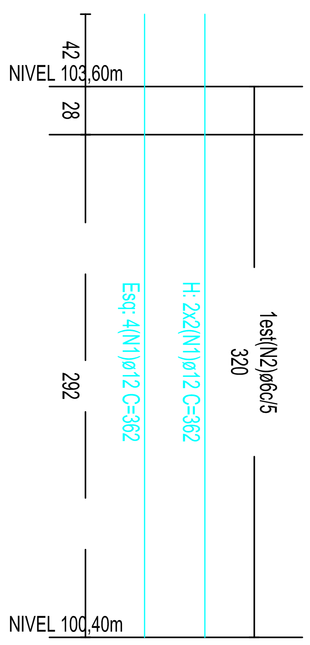


CONC 40x20
L=320 lb=21 ls=42

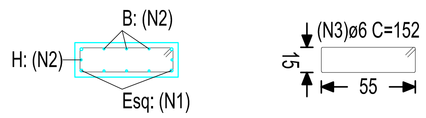


Esq: 4(N1)ø12
B/H: _ /2x2(N1)ø12
1est(N2)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	8	ø12			362		362 2896	26,534
2	63	ø6					112 7056	16,162
							Total+10,0%	46,965

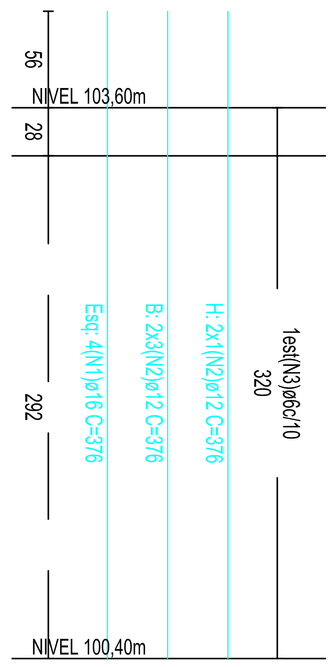


CONC 60x20
L=320 lb=28 ls=56

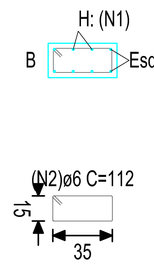


Esq: 4(N1)ø16
B/H: 2x3(N2)ø12/2x1(N2)ø12
1est(N3)ø6c/10

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø16		376		376	1504	24,498
2	8	ø12		376		376	3008	27,560
3	32	ø6				152	4864	11,141
							Total+10,0%	69,519

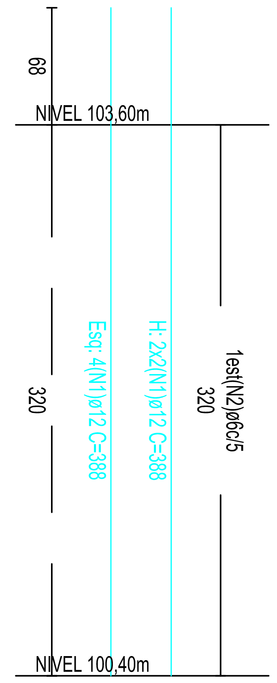


CONC 20x40
L=320 lb=21 ls=68



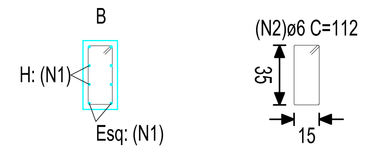
Esq: 4(N1)ø12
B/H: _ /2x2(N1)ø12
1est(N2)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	8	ø12		388		388	3104	28,440
2	63	ø6				112	7056	16,162
							Total+10,0%	49,062



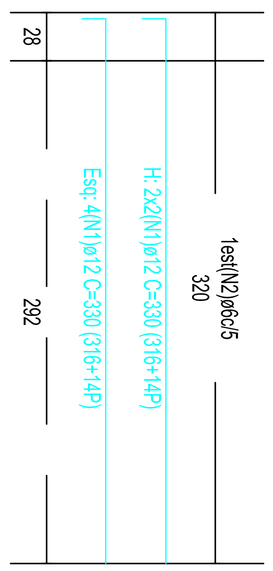
P18=P19=P20=P21 (4x)

CONC 20x40
L=320 lb=21 la=14

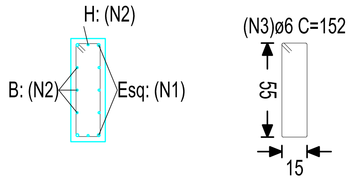


Esq: 4(N1)ø12
B/H: _ /2x2(N1)ø12
1est(N2)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	8	ø12		316	14	330	2640	24,188
2	63	ø6				112	7056	16,162
							Total+10,0%	44,385

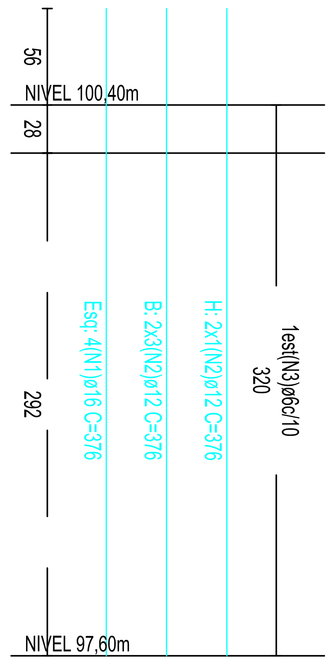


CONC 60x20
L=320 lb=28 ls=56

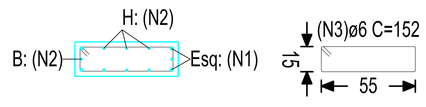


Esq: 4(N1)ø16
B/H: 2x3(N2)ø12/2x1(N2)ø12
1est(N3)ø6c/10

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø16		376		376	1504	24,498
2	8	ø12		376		376	3008	27,560
3	32	ø6				152	4864	11,141
							Total+10,0%	69,519

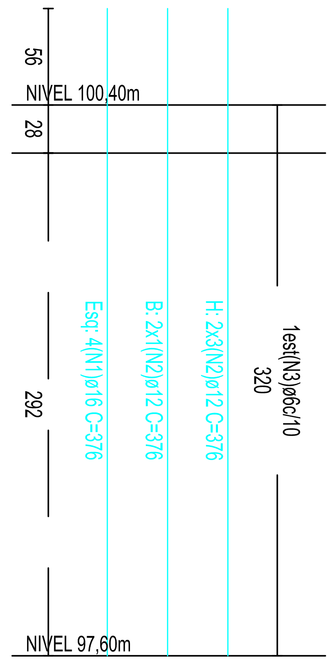


CONC 20x60
L=320 lb=28 ls=56

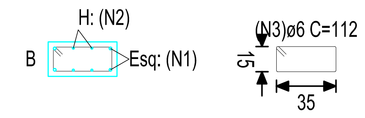


Esq: 4(N1)ø16
B/H: 2x1(N2)ø12/2x3(N2)ø12
1est(N3)ø6c/10

ID	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø16		376		376	1504	24,498
2	8	ø12		376		376	3008	27,560
3	32	ø6				152	4864	11,141
							Total+10,0%	69,519

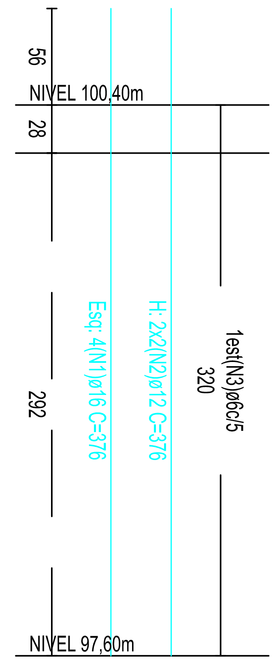


CONC 20x40
L=320 lb=28 ls=56



Esq: 4(N1)ø16
B/H: _ /2x2(N2)ø12
1est(N3)ø6c/5

N	Qt.	Diâm.	Comprimento unitário (cm) P	C. Reto	P	C. Total	Total (cm)	(kg)
Pilares							Aço CA-50 N 500	MPa
1	4	ø16		376		376	1504	24,498
2	4	ø12		376		376	1504	13,780
3	63	ø6				112	7056	16,162
							Total+10,0%	59,884



PENAS		
PEN	COLOR	WIDT
RED	7	0.10
YEL	7	0.20
GRE	7	0.30
CYA	7	0.40
BLU	5	0.20
MAG	7	0.60
W/B	7	0.15
DEMAIS CORES		
COLORIDO		0.20

REVISÃO No.	DATA:	MODIFICAÇÕES:
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PROJETO EXECUTIVO

ESTRUTURAL

ARMADURA DOS PILARES

CLIENTE: INSTITUTO DE PREVIDÊNCIA DOS SERVIDORES PÚBLICOS MUNICIPAIS
OBRA: CONSTRUÇÃO DE SEDE
ENDEREÇO: RUA SENADOR SARAIVA, 136 - CENTRO
CIDADE: SÃO JÃO DA BOA VISTA - SP

DATA:	DESENHO:	REVISÃO	ESCALA:	ARQUIVO:	FOLHA NÚMERO:
MARÇO/2011	Ródion		1:25	Estrutural.dwg	16

PROJ. NÚMERO: 2011-008