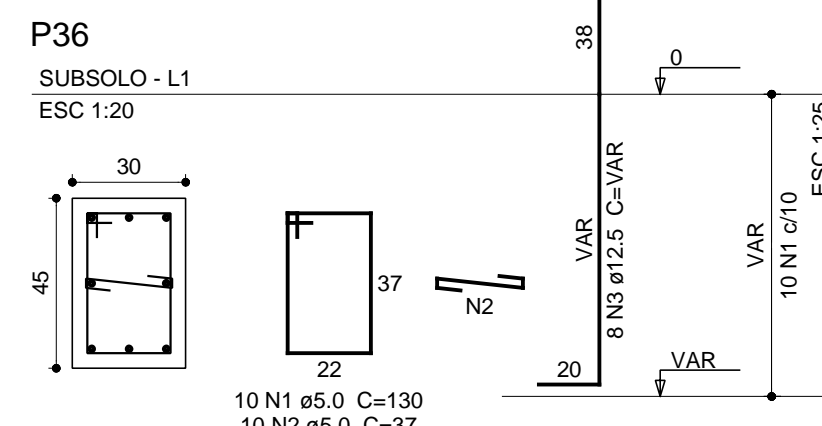
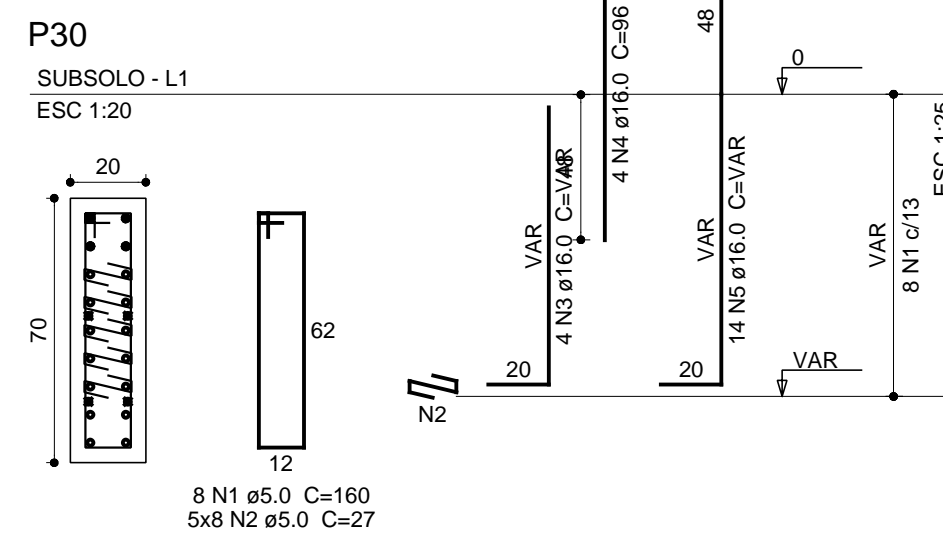
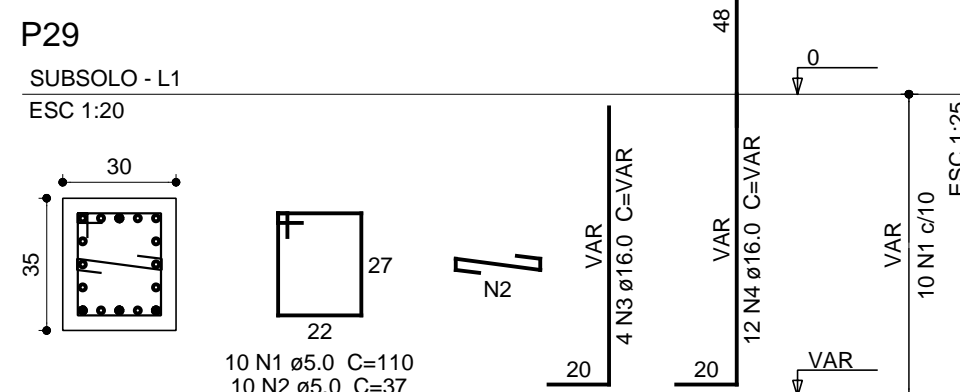
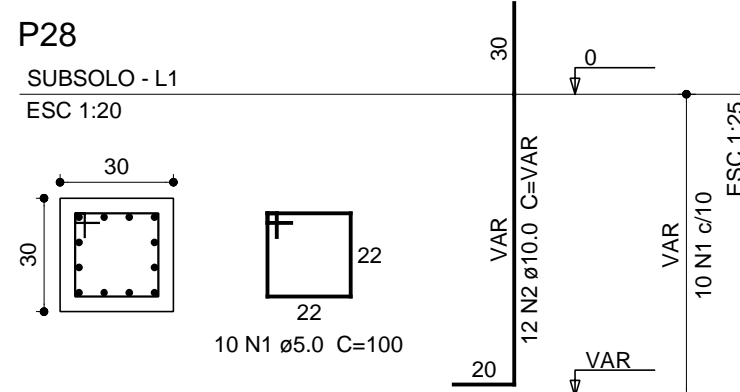
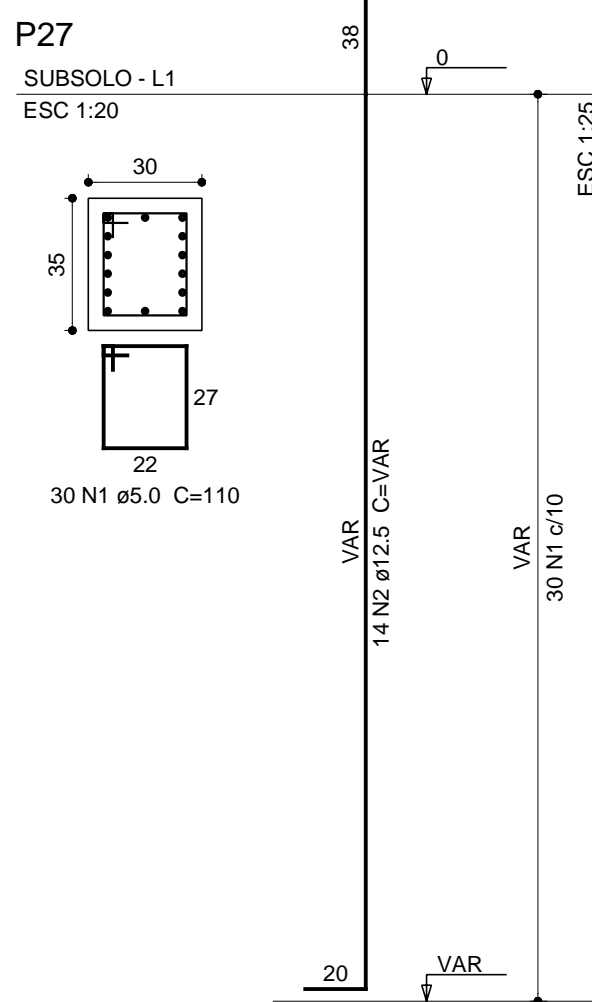


Relação do aço						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.LIMIT (cm)	C.TOTAL (cm)
P21	CA60	1	5,0	30	130	3000
	CA60	2	5,0	60	37	2220
	CA50	3	16,0	14	VAR	VAR
P22	CA60	1	5,0	25	120	3000
	CA60	2	5,0	50	27	1350
	CA50	3	10,0	10	VAR	VAR
P23	CA60	1	5,0	20	120	2400
	CA60	2	5,0	20	27	540
	CA50	3	12,5	10	VAR	VAR
P24	CA60	1	5,0	38	160	6080
	CA60	2	5,0	152	41	6232
	CA50	3	20,0	30	VAR	VAR
P25	CA60	1	5,0	30	100	3000
	CA50	2	12,5	8	VAR	VAR
	CA60	1	5,0	30	110	3300
P26	CA60	2	5,0	30	37	1110
	CA50	3	12,5	12	VAR	VAR
	CA60	1	5,0	30	110	3300
P27	CA50	2	12,5	14	VAR	VAR
	CA60	1	5,0	10	100	1000
	CA50	2	10,0	12	VAR	VAR
P28	CA60	1	5,0	10	110	1100
	CA60	2	5,0	10	10	370
	CA50	3	16,0	4	VAR	VAR
P29	CA50	4	16,0	12	VAR	VAR
	CA60	1	5,0	8	160	1280
	CA60	2	5,0	40	27	1080
P30	CA50	3	16,0	4	VAR	VAR
	CA50	4	16,0	4	96	384
	CA50	5	16,0	14	VAR	VAR
P31	CA60	1	5,0	7	130	910
	CA60	2	5,0	14	27	378
	CA50	3	12,5	14	VAR	VAR
P32	CA60	1	5,0	7	100	700
	CA60	2	5,0	7	27	189
	CA50	3	12,5	16	VAR	VAR
P33	CA60	1	5,0	30	110	3300
	CA60	2	5,0	30	37	1110
	CA50	3	16,0	4	VAR	VAR
P34	CA60	1	5,0	8	VAR	VAR
	CA60	1	5,0	30	100	3000
	CA50	2	16,0	16	VAR	VAR

Resumo do aço			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	10.0	55.9	34.4
	12.5	199.8	192.4
	16.0	259.1	408.9
	20.0	109.4	269.8
CA60	5.0	508.5	78.4
PESO TOTAL (kg)			
CA50	905.6		
CA60	78.4		

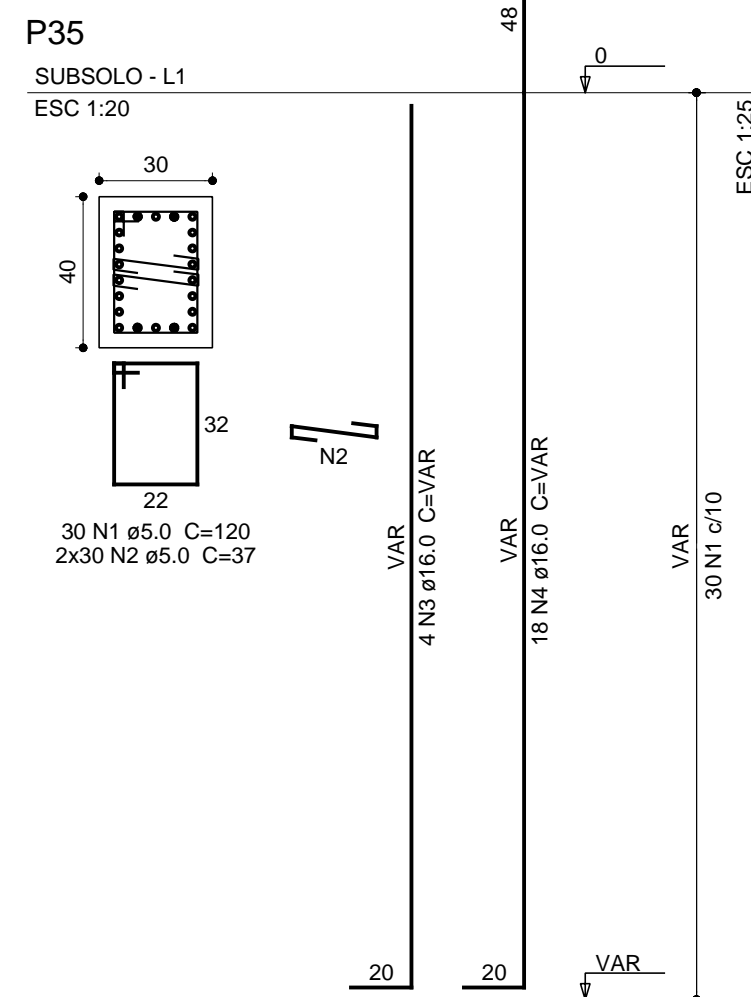
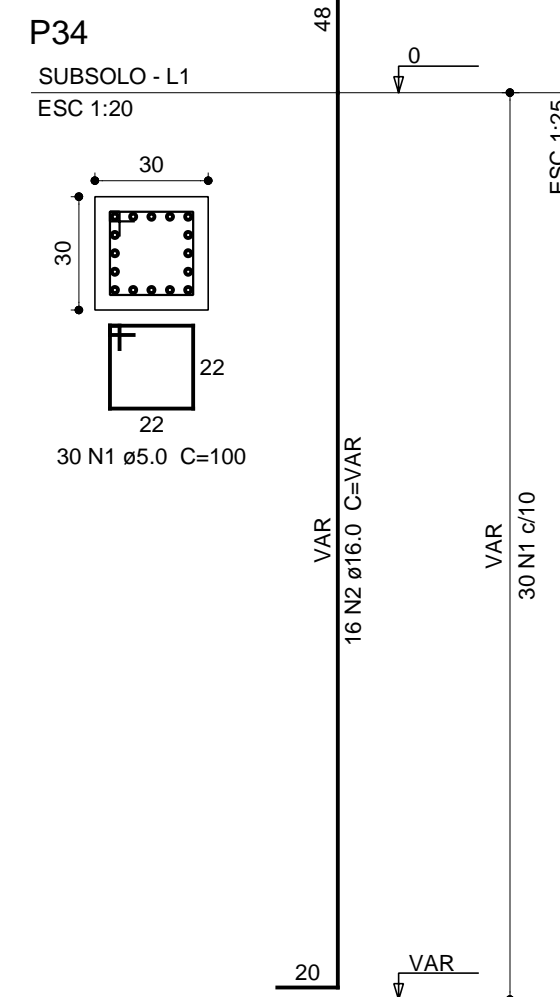
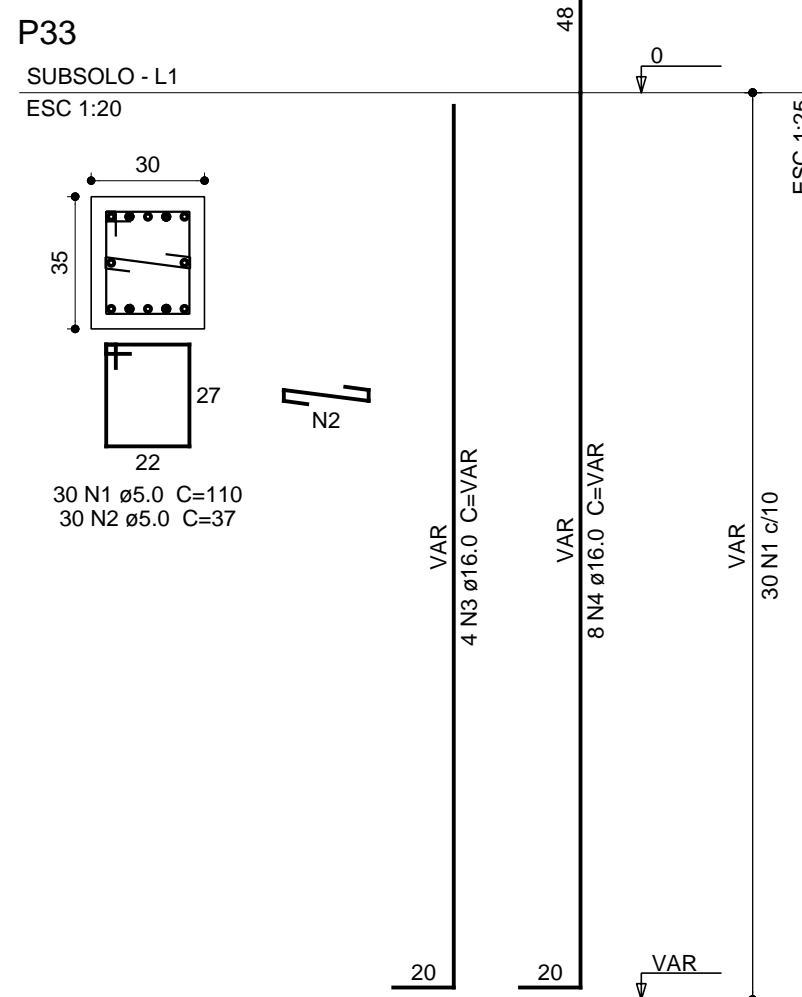
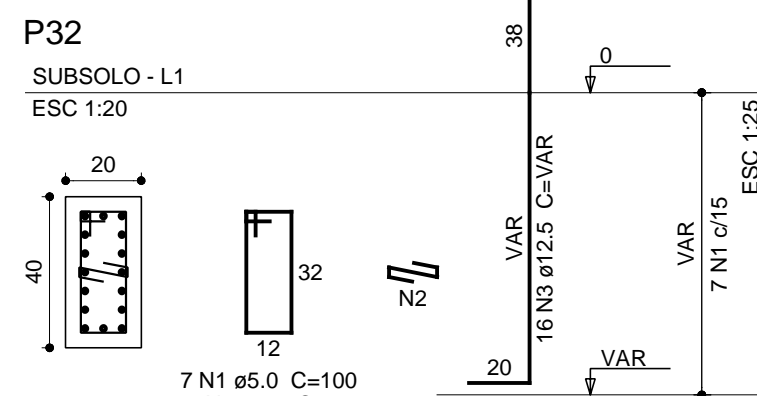
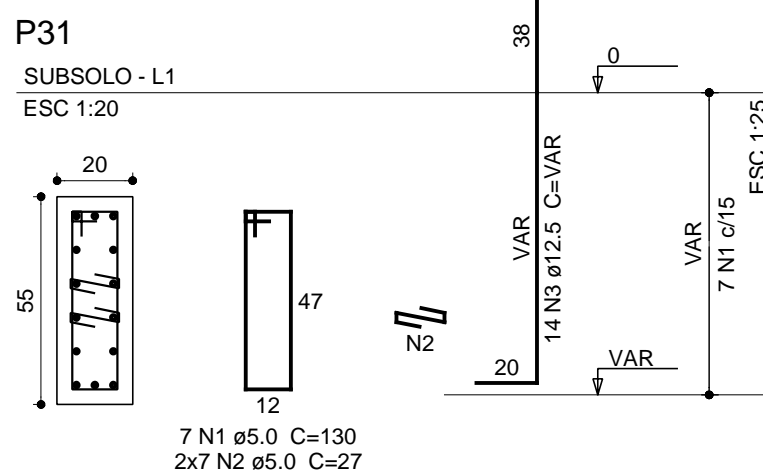
Volume de concreto (C35) = 3.59 m³
Área de forma = 44.2 m²




ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P35	CA60	1	5.0	30	120	3600
	CA60	2	5.0	60	37	2220
	CA50	3	16.0	4	VAR	VAR
P36	CA50	4	16.0	10	VAR	VAR
	CA60	1	5.0	10	130	1300
	CA60	2	5.0	10	37	370
	CA50	3	12.5	8	VAR	VAR

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	12.5	24.7	23.7
	16.0	105.1	165.8
CA60	5.0	74.9	11.5
PESO TOTAL (kg)			
CA50	189.6		
CA60	11.5		

Volume de concreto (C35) = 0.5 m³
Área de forma = 5.7 m²



 ESTEL ENGENHARIA Rua José Quirino, 147 - São João - CEP 88305-060 - Itajaí-SC Tel: (047) 3046-2001 Fax: (047) 3046-2004 estel@estelengenharia.com.br - www.estelengenharia.com.br	PROJETO N° 1280/16
	PROJETO ESTRUTURAL

	CLIENTE MUNICÍPIO DE PARANAGUÁ				
	PROJETO PRÉDIO ADM. DA PREFEITURA DE PARANAGUÁ				
	CONTEÚDO ARMAÇÃO DOS PILARES DO SUBSOLO				
	PRANCHA Nº <div style="font-size: 2em; font-weight: bold; text-align: center;">12/75</div>				
RESPONSÁVEL TÉCNICO <div style="text-align: center;"> _____ SÉRGIO LUIZ DO AMARAL LOZOVEY CREA/SC 13708-0 </div>			PROPRIETÁRIO <div style="text-align: center;"> _____ PREFEITURA DE PARANAGUÁ UNIDADE DE GERENCIAMENTO DE PROGRAMAS </div>		
AUTOR DO PROJETO SÉRGIO LOZOVEY		CAD ARLINE DEPINÉ	DATA 03/2016	REVISÃO 00	CONTROLE DE PROJETOS PROJETO DEFINITIVO (x)
ÁREA 1.850,00 m²	VERIFICAÇÃO RENATO REIS	ESCALA IND.	ARQUIVO 1280-EST-12-R0	PROJETO NÃO DEFINITIVO ()	

PENAS	
RED	0.1mm BLACK
YELLOW	0.2mm BLACK
GREEN	0.3mm BLACK
CYAN	0.4mm BLACK
BLUE	0.5mm BLACK
MAGENTA	0.6mm BLACK
10	0.1mm 10
62	0.1mm 62
96	0.1mm 96
156	0.1mm 156
180	0.2mm 180
254	0.1mm 254