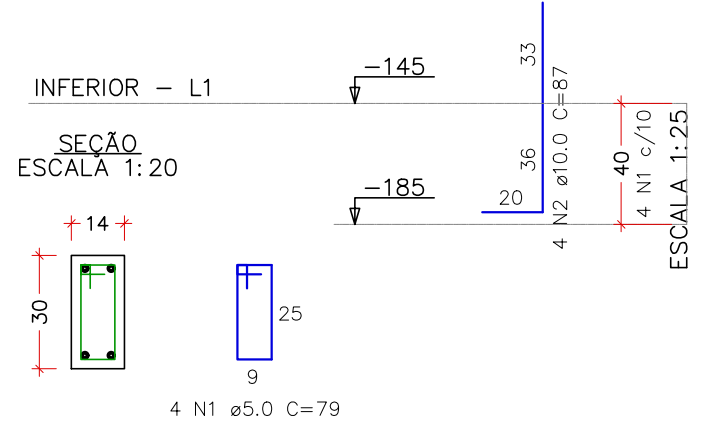
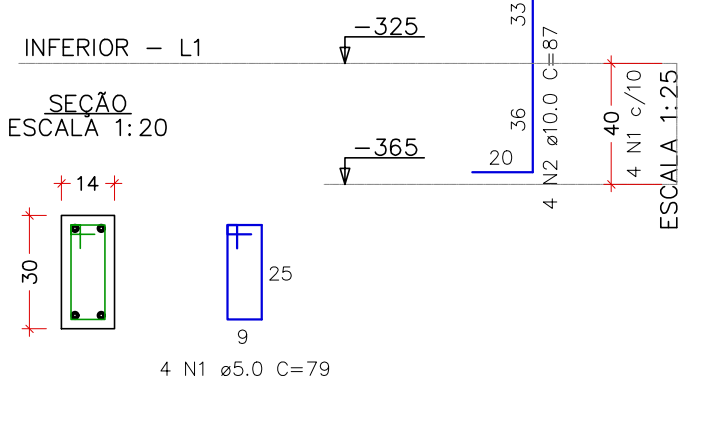


PROJETO ESTRUTURAL – CONSTRUÇÃO DA UBS DO BAIRRO MORUMBI  
ESCALA INDICADA

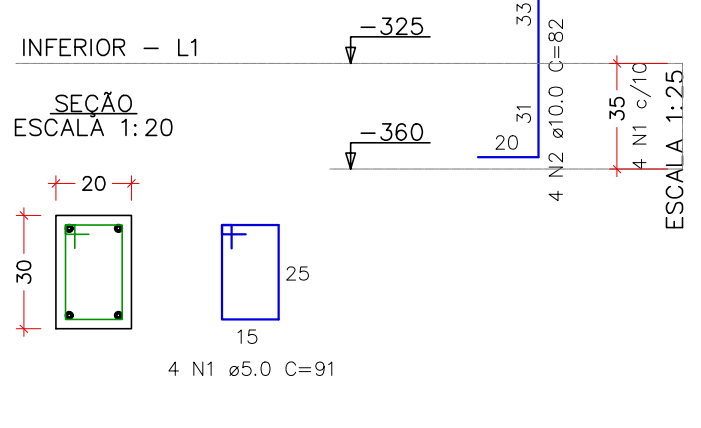
P1=PM19=PM21=PM22=PM23



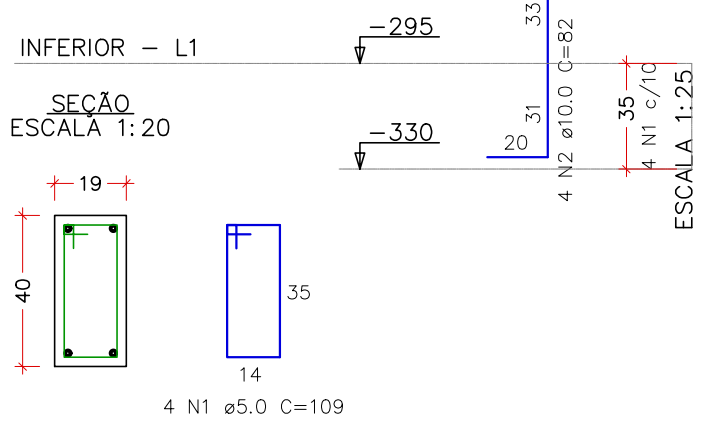
PM1



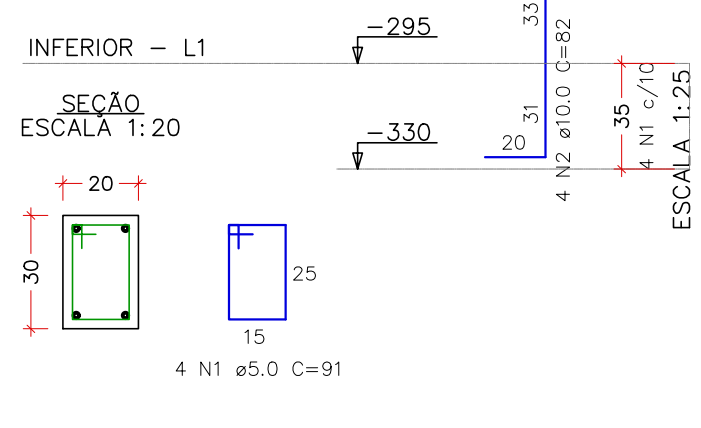
PM2



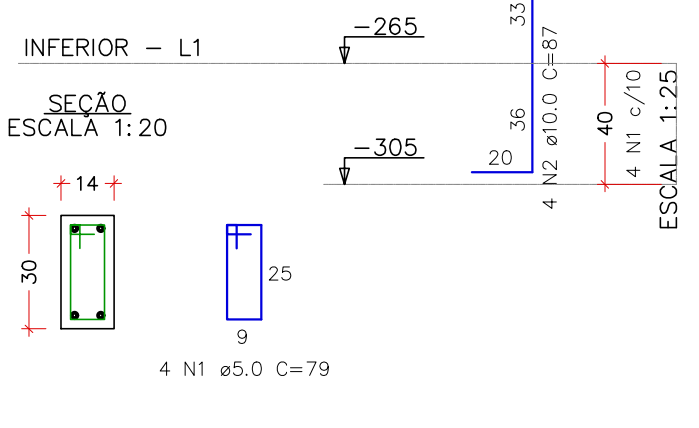
PM3



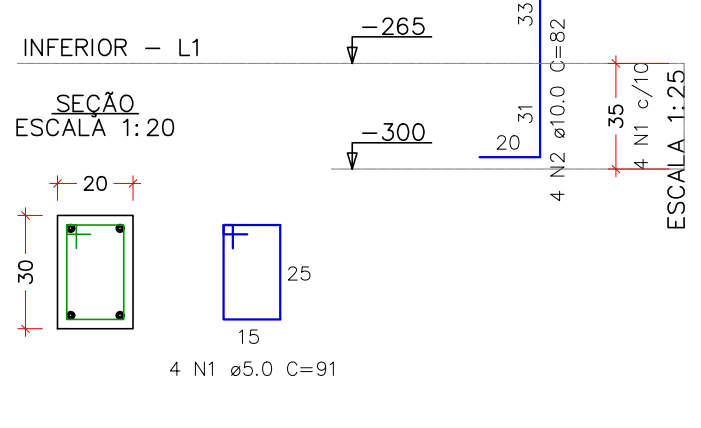
PM4=PM5



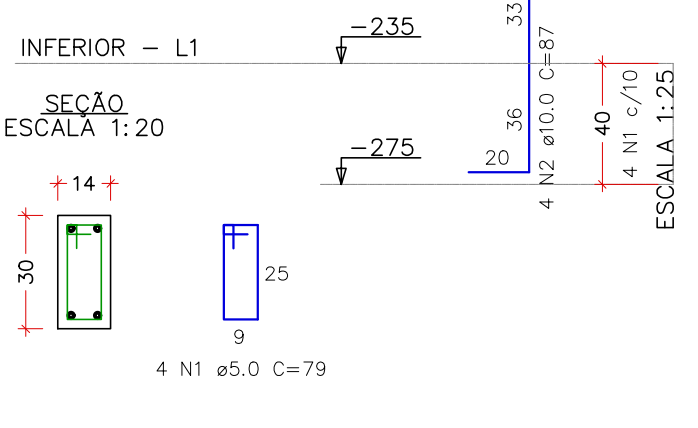
PM6



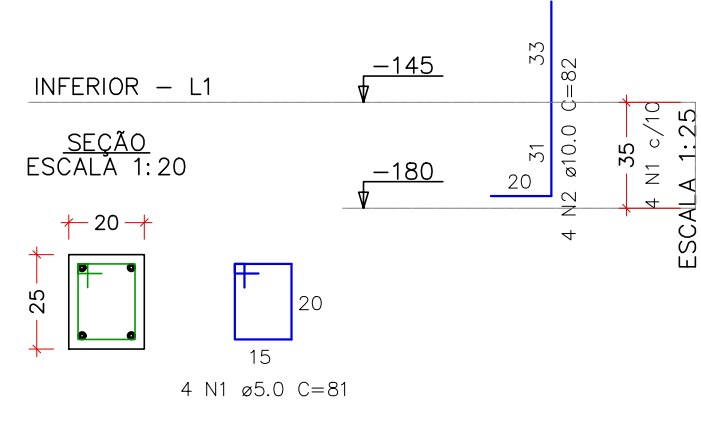
PM7



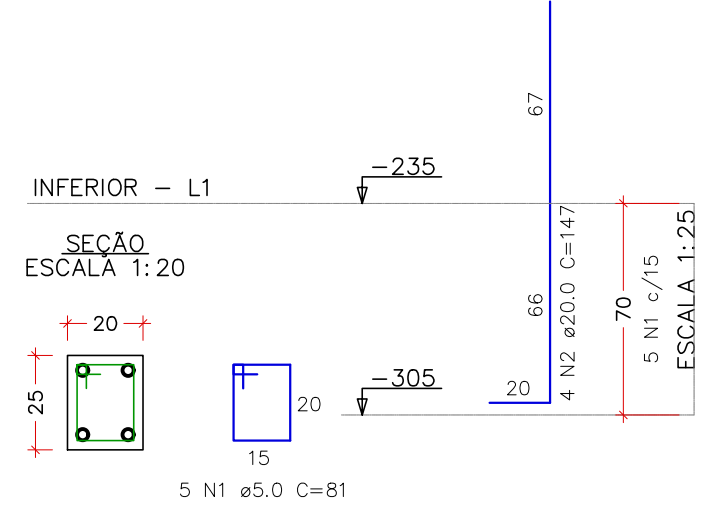
PM8



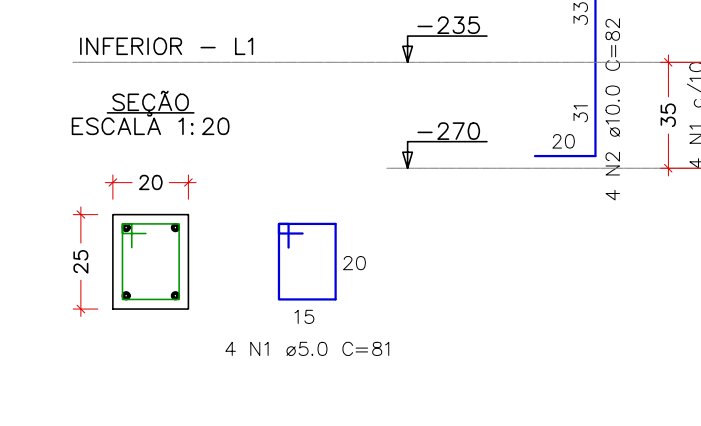
PM9=PM10=PM11=PM34



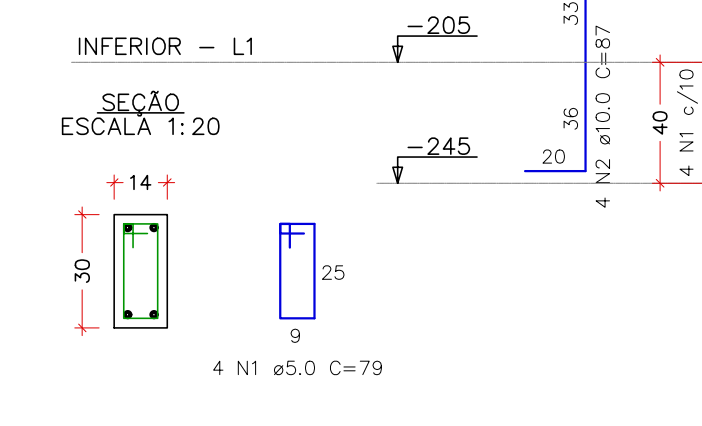
PM12=PM16=PM20



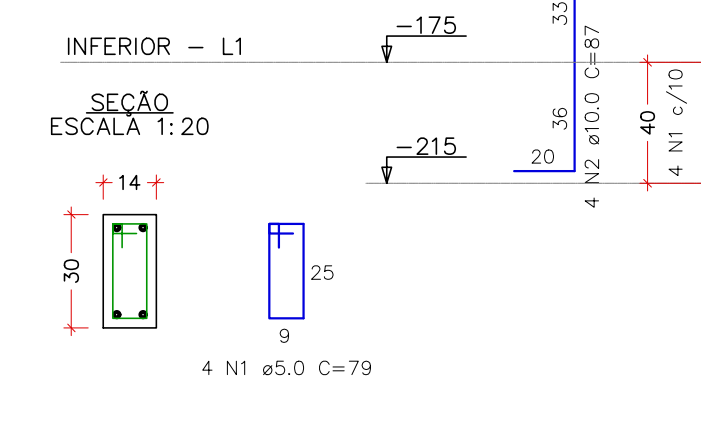
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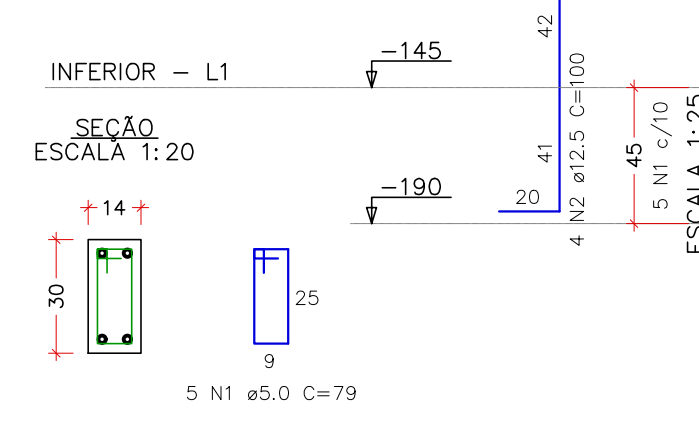
PM15



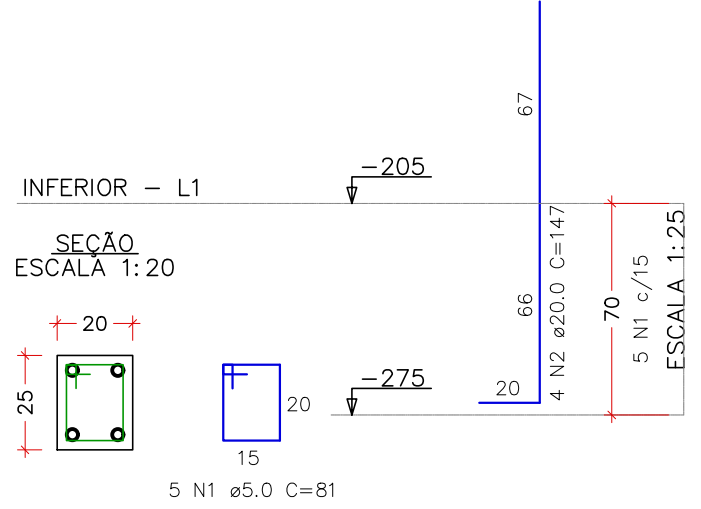
PM17



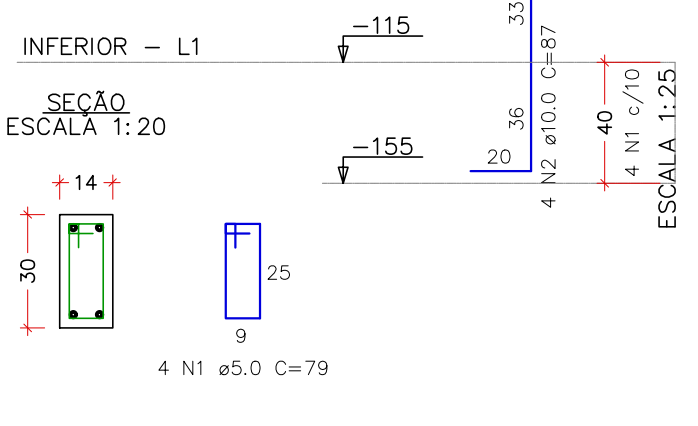
PM18



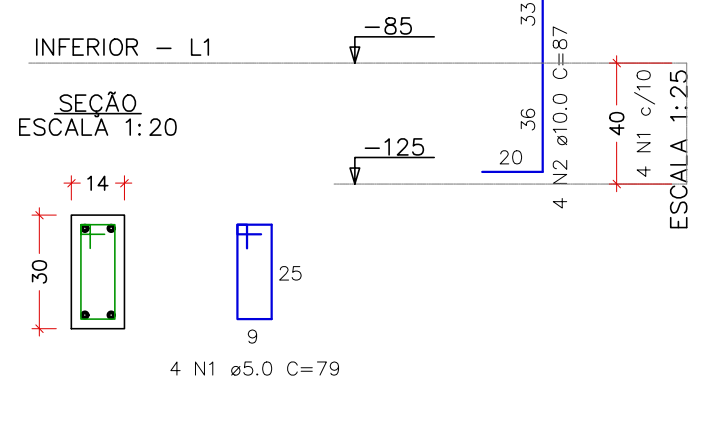
PM24=PM25=PM28=PM30



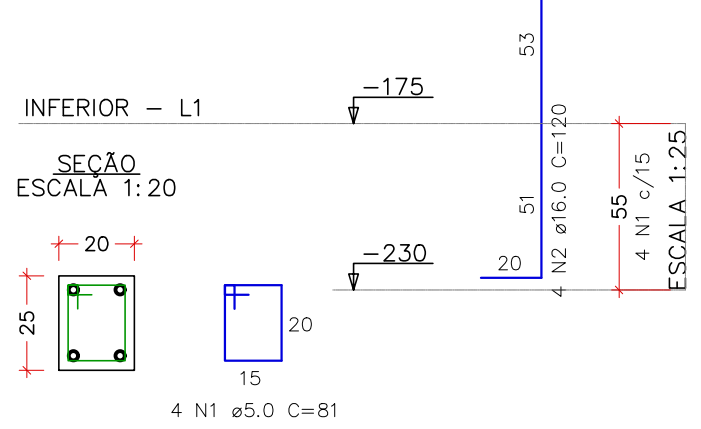
PM26=PM29



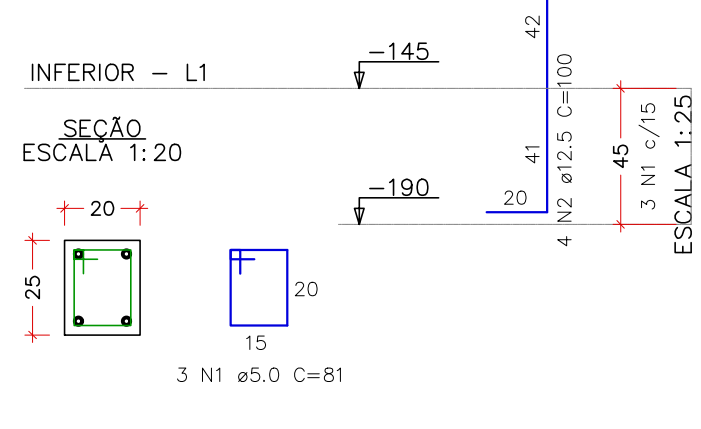
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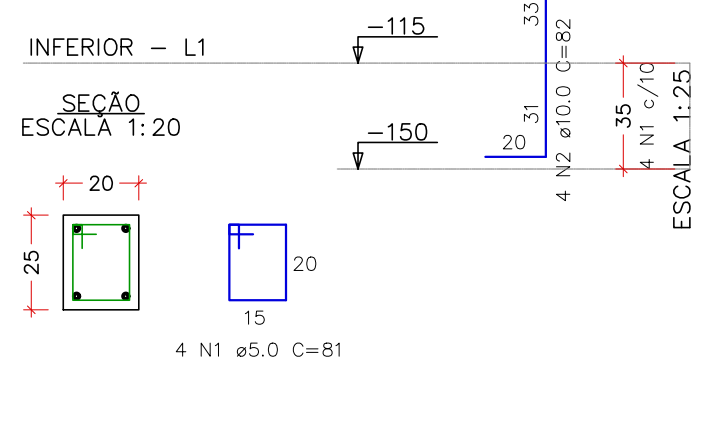
PM32



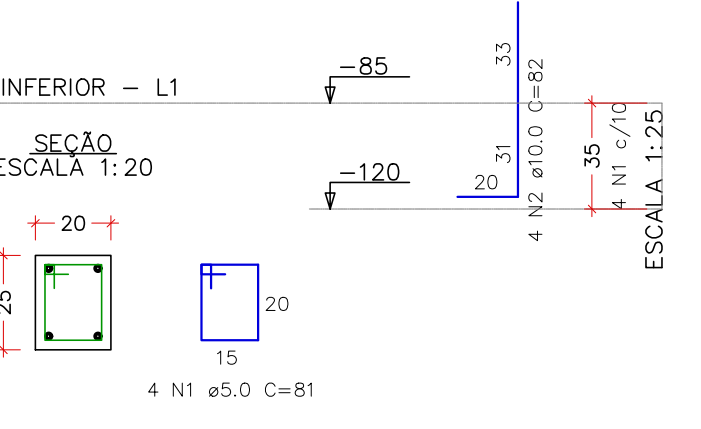
PM33



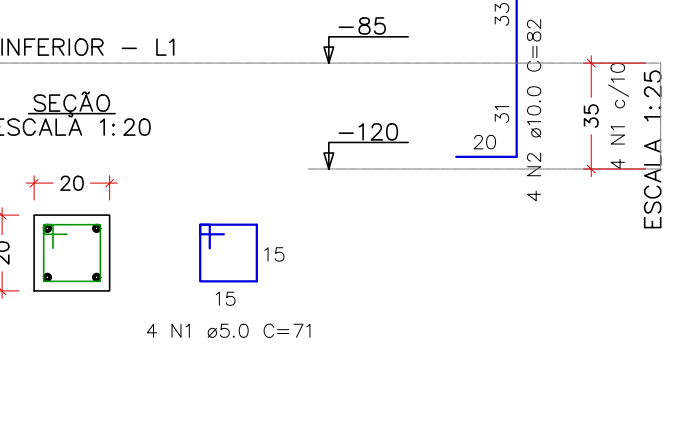
PM35



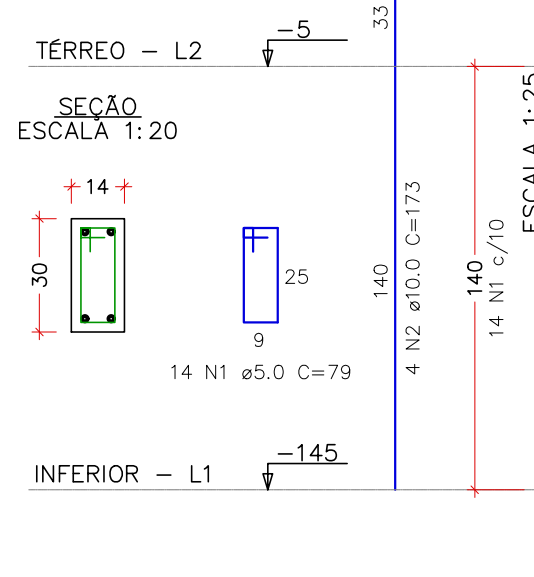
PM36=PM37=PM38



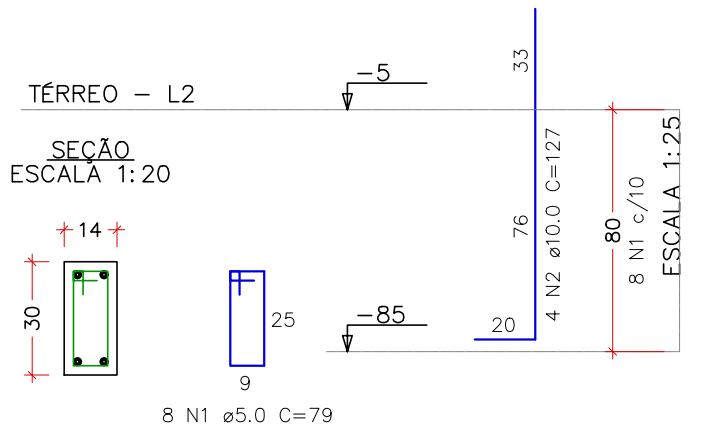
PM39



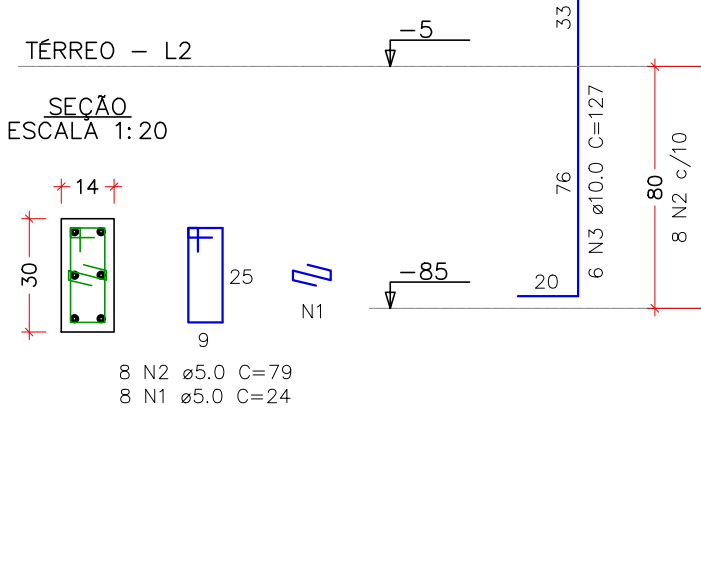
P1



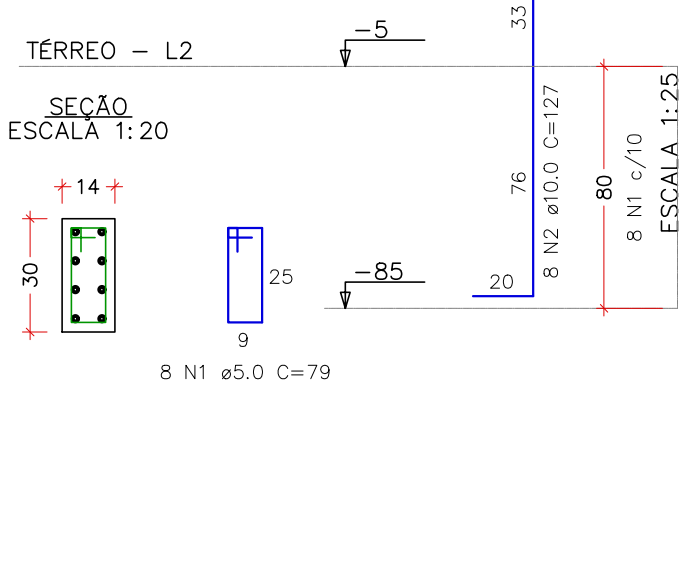
P2=P3=P4=P6=P7=P17=P18=  
=P19=P20=P22=P24=P25=P26=  
=P27=P28=P29=P30=P31=P32=  
=P34=P35=P36=P37=P38=P41=  
=P42=P43=P44=P45=P46



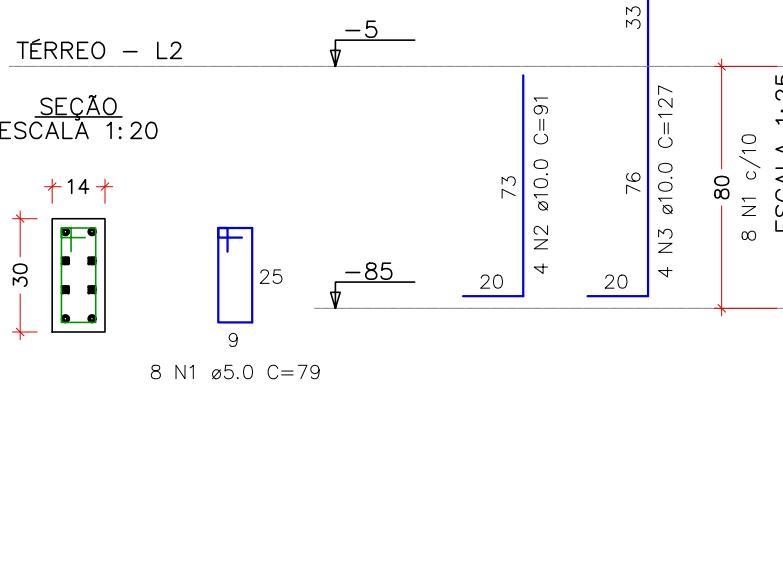
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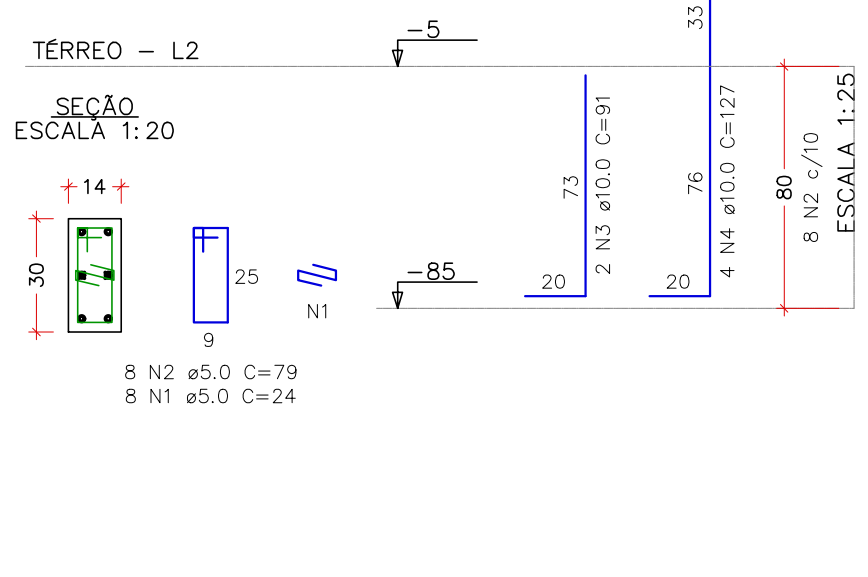
P8=P16



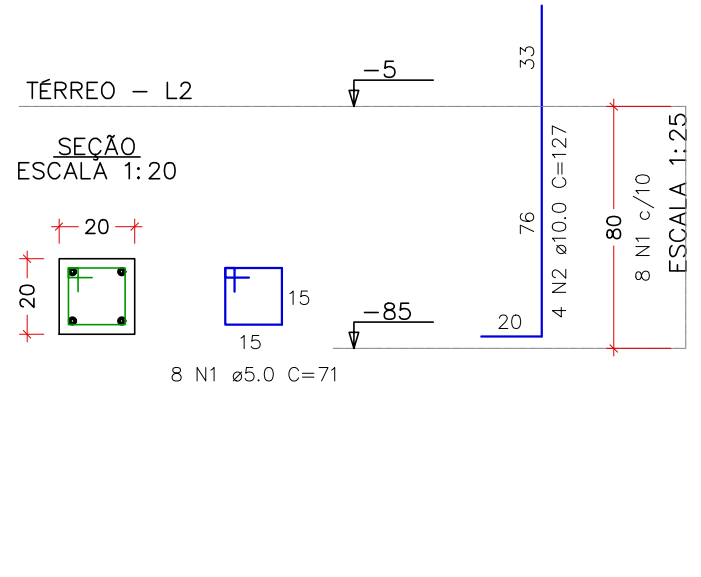
P9



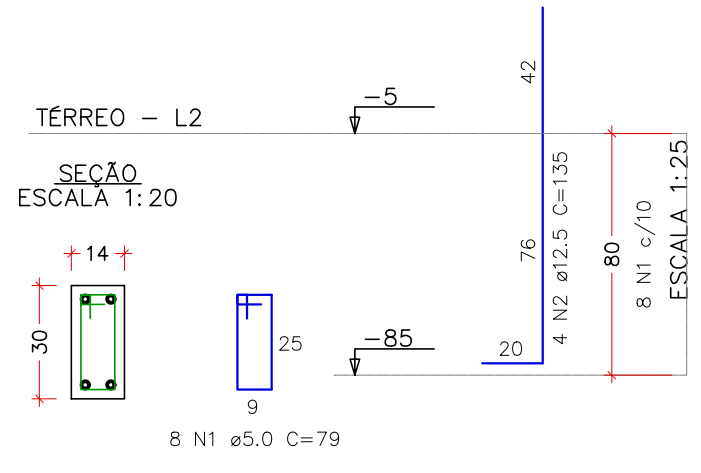
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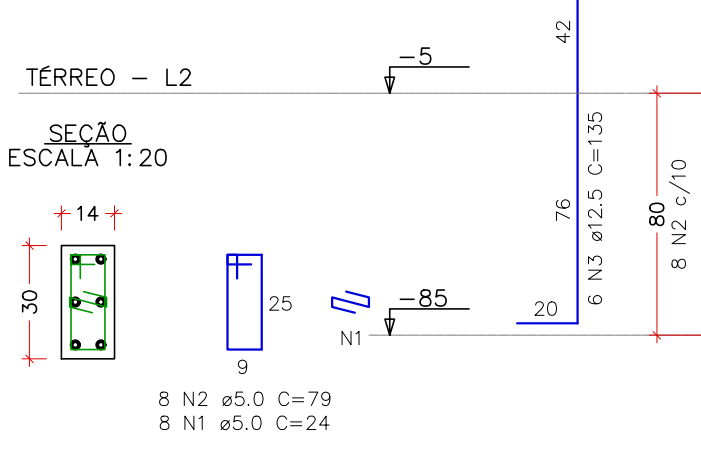
P11=P12=P13



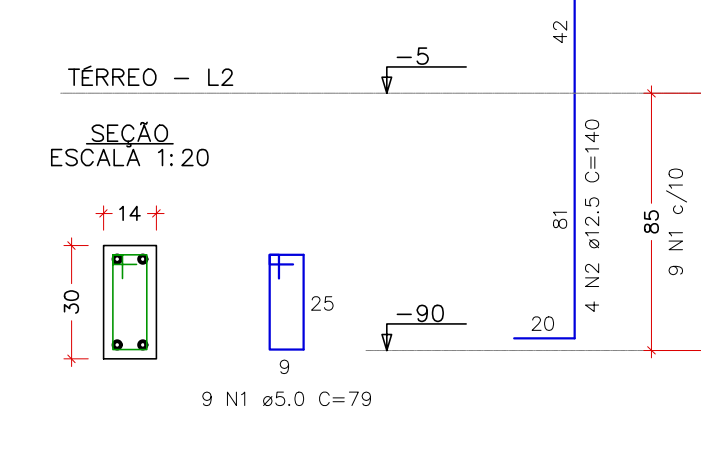
P14=P23=P33



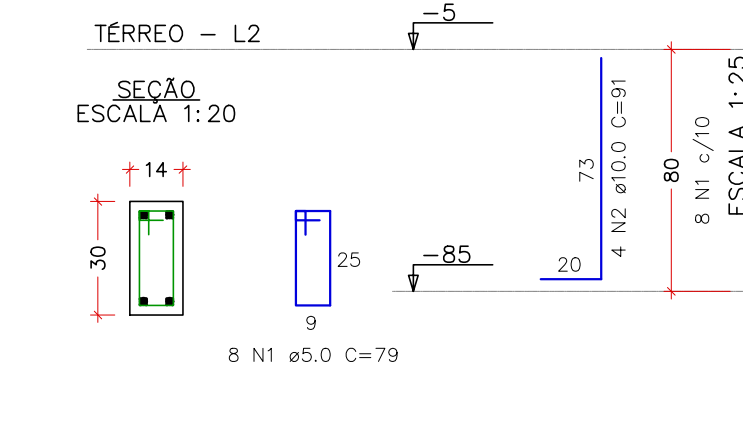
P15



P40



PB1=PB2=PB3=PB4=PB5=PB6=  
=PB7=PB8=PB9=PB10



RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
5xP1	CA60	1	5.0	20	79	1580
PM1	CASO	2	10.0	20	87	1740
PM1	CA60	1	5.0	4	79	316
PM2	CASO	2	10.0	4	87	348
PM2	CA60	1	5.0	4	91	364
PM3	CASO	2	10.0	4	82	328
2xPM4	CA60	1	5.0	8	91	436
2xPM4	CASO	2	10.0	8	82	728
PM6	CA60	1	5.0	4	79	656
PM7	CASO	2	10.0	4	87	316
PM7	CA60	1	5.0	4	82	328
PM8	CA60	1	5.0	4	79	316
PM8	CASO	2	10.0	4	87	348
4xPM9	CA60	1	5.0	16	81	1296
4xPM9	CASO	2	10.0	16	82	1312
3xPM12	CA60	1	5.0	15	81	1215
3xPM12	CASO	2	20.0	12	147	1764
2xPM13	CA60	1	5.0	8	82	656
2xPM13	CASO	2	10.0	8	79	316
PM15	CA60	1	5.0	4	79	316
PM17	CASO	2	10.0	4	87	348
PM17	CA60	1	5.0	5	79	395
PM18	CASO	2	12.5	4	100	400
4xPM24	CA60	1	5.0	20	81	1620
4xPM24	CASO	2	20.0	16	147	2352
2xPM26	CA60	1	5.0	8	79	632
2xPM26	CASO	2	10.0	8	87	696
2xPM27	CA60	1	5.0	8	79	632
PM32	CASO	2	10.0	8	87	696
PM32	CA60	1	5.0	4	81	324
PM33	CASO	2	16.0	4	120	480
PM35	CA60	1	5.0	4	81	243
PM35	CASO	2	12.5	4	100	400
PM35	CA60	1	5.0	4	81	324
3xPM36	CA60	1	5.0	12	81	972
3xPM36	CASO	2	10.0	12	82	984
PM39	CA60	1	5.0	4	71	284
PM39	CASO	2	10.0	4	82	328

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (kg)	PESO + 10% (kg)
CASO	10.0	101.2	68.6
CASO	12.5	8	8.5
CASO	15.0	4.8	5.3
CA60	5.0	41.2	111.7
PESO TOTAL (kg)		136.4	23.1
PESO TOTAL (kg)		197.1	
CA60		23.1	

RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P1	CA60	1	5.0	14	79	1106
30xP2	CASO	2	10.0	4	173	692
30xP2	CA60	1	5.0	240	79	18960
2xP5	CASO	2	10.0	120	127	15240
2xP5	CA60	1	5.0	16	24	384
2xP8	CA60	2	5.0	16	79	1264
2xP8	CASO	3	10.0	12	127	1524
P9	CA60	1	5.0	16	79	1264
P9	CASO	2	10.0	16	127	2032
2xP10	CA60	1	5.0	8	79	632
2xP10	CASO	2	10.0	4	91	364
2xP10	CA60	3	10.0	4	91	508
2xP10	CASO	2	5.0	16	24	384
3xP11	CA60	2	5.0	16	79	1264
3xP11	CASO	3	10.0	4	91	364
3xP14	CA60	1	5.0	24	79	1896
3xP14	CASO	2	12.5	12	135	1620
P15	CA60	1	5.0	8	24	192
P15	CA60	2	5.0	8	79	632
P40	CASO	3	12.5	6	135	810
10xPB1	CA60	1	5.0	9	79	711
10xPB1	CASO	2	12.5	4	140	560
10xPB1	CA60	2	10.0	40	91	3640

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CASO	10.0	269	182.5
CASO	12.5	29.9	31.7
CA60	5.0	367.1	62.2
PESO TOTAL (kg)		214.1	
CASO		214.1	
CA60		62.2	

VOLUME DE CONCRETO (C-30) = 0.98 m³

ÁREA DE FORMA = 20.50 m²

REV. 01	13/09/24	ALTERAÇÕES CONFORME SOLICITAÇÕES DA VIOLÊNCIA SANITÁRIA NO PROJ. ARQUITETÔNICO	DAC
REV. 00	01/11/23	EMIÇÃO INICIAL	DAC
REVISÃO DATA	DESCRIÇÃO		RESP.:
CLIENTE			
PROJETO	COORDENAÇÃO DE PROJETOS		
DENIS DE SOUZA SILVA		CREA-MG-127.216/D	
RESPONSÁVEL TÉCNICO			
ALOISIO C. FERREIRA		CREA-MG-97.132/D	
RESPONSÁVEL TÉCNICO			
RAFAEL B. CARREIRA		CAU: 00A155411-5	
EMPREENHAMENTO			
CONSTRUÇÃO DA UBS DO BAIRRO MORUMBI			
ENDEREÇO	RUA JÚLIO CESAR HUHN, BAIRRO MORUMBI POUSO ALEGRE – MINAS GERAIS		DISCIPLINA ESTRUTURAL
ASSUNTO	PROJETO ESTRUTURAL EM CONCRETO ARMADO DETALHAMENTO DOS PILARES		FASE DO PROJETO EXECUTIVO
DATA INICIAL	ESCALA	REVISÃO	ARQUIVO
01/11/2023	INDICADA	R01	DAC-PMPA-MRB-PE-EST-R01.DWG