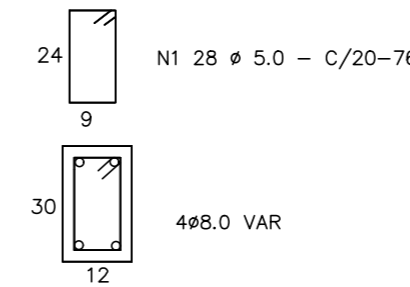
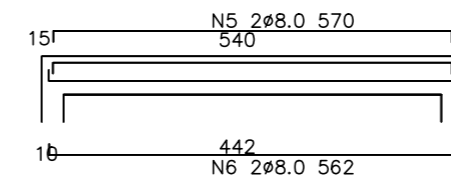
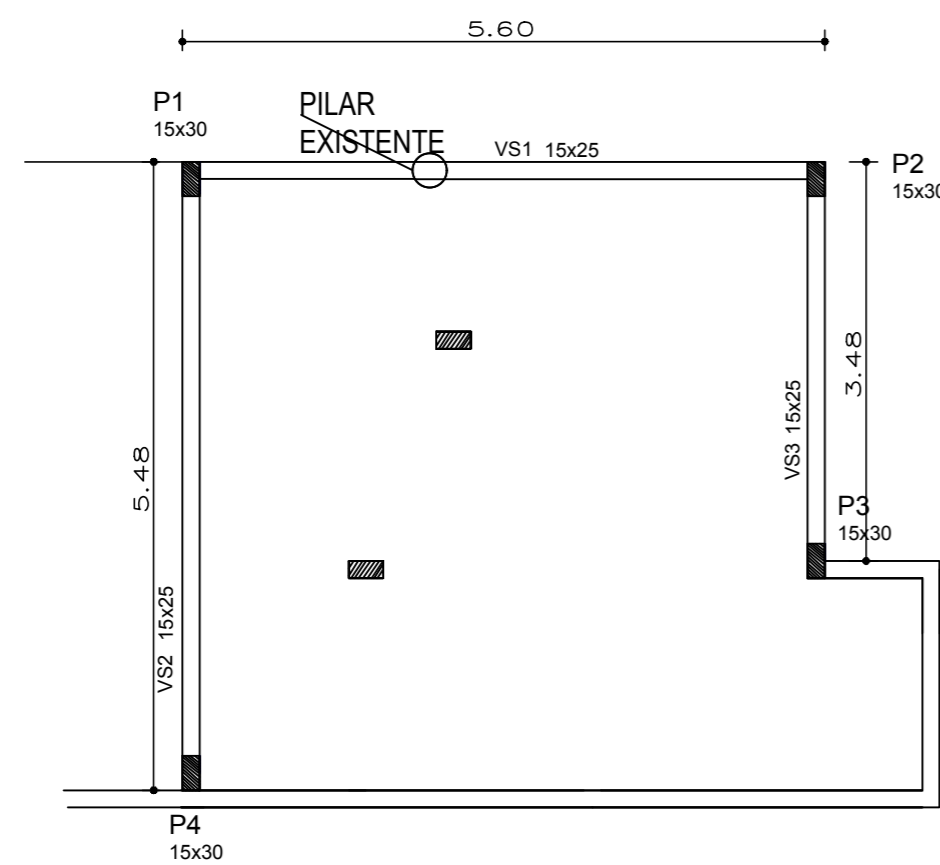
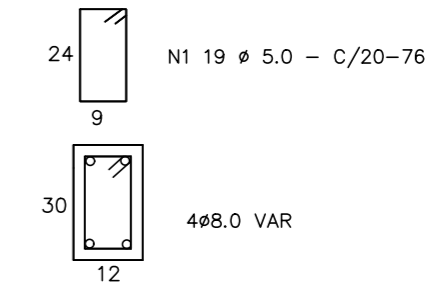
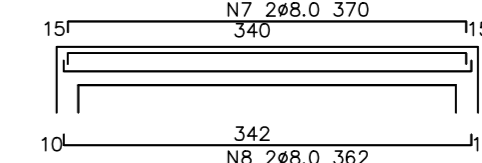


VIGA BALDRAME TIPO VB=15X30

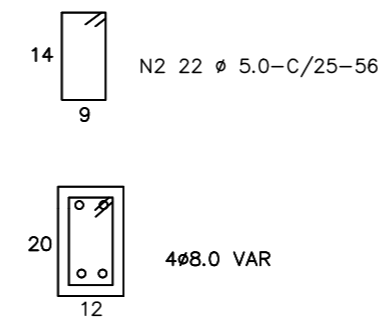
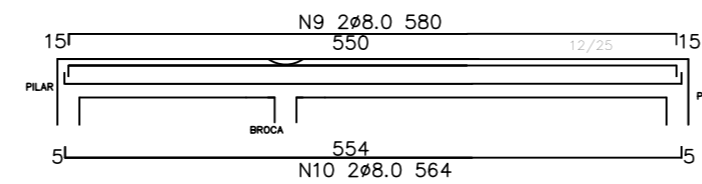
VB2=15X30



VB3=15X30

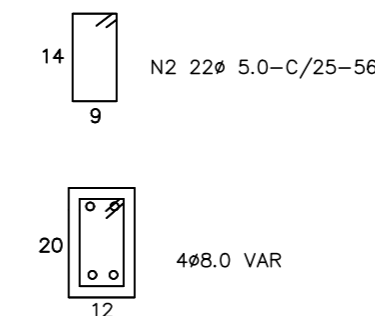
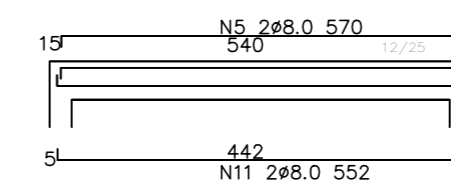


VS1=15X25

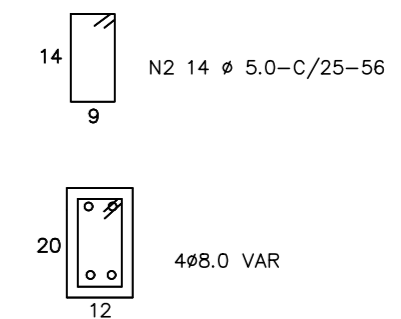
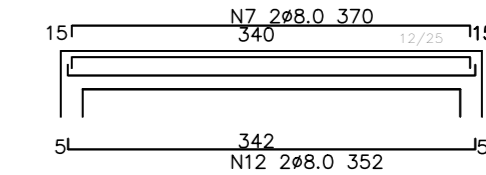


VIGA SUPERIOR TIPO 15X25
VS EXECUTAR A ALTURA DE 2,25M DO PISO

VS2=15X25



VS3=15X25



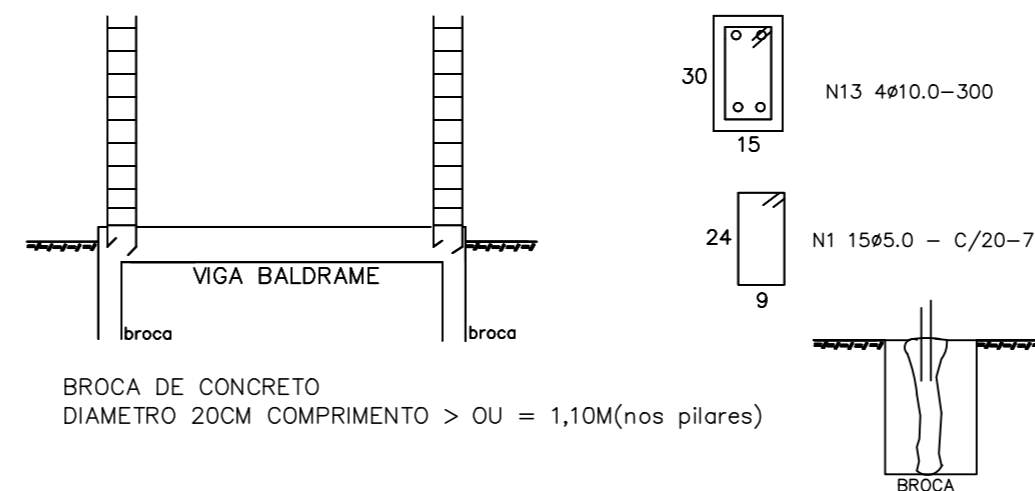
AÇO	N	Ø	Q	UNIT	C.TOTAL Cm
CA-60	1	5.0	135	76	10260
CA-60	2	5.0	58	56	3248
CA-50	3	8.0	2	580	1160
CA-50	4	8.0	2	574	1148
CA-50	5	8.0	4	570	2280
CA-50	6	8.0	2	562	1124
CA-50	7	8.0	4	370	1480
CA-50	8	8.0	2	362	724
CA-50	9	8.0	2	580	1160
CA-50	10	8.0	2	564	1128
CA-50	11	8.0	2	552	1104
CA-50	12	8.0	2	352	704
CA-50	13	10.0	16	300	4800

CONCRETO:
VB=0,70m³
VS=0,60m³
PILAR=0,54m³
BROCA=0,24m³

FORMA:
VB=10,20m²
VS=8,80m²
PILAR=8,40m²

CONCRETO 25MPA
PILAR TIPO 30X15(4X)

AÇO	Ø	COMP	PESO(KG)	+ 10%
CA-60	5.0	135,08	21.62	24.00
CA-50	8.0	120,12	48.05	53.00
CA-50	10.0	48,00	29.80	33.00
				PESO= 110.00



BROCA DE CONCRETO
DIAMETRO 20CM COMPRIMENTO > OU = 1,10M(nos pilares)



OBRA	Reforma - Depósito I	
PROPRIETÁRIO	INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DE MATO GROSSO	
LOCAL	Rua 28, Nº 980 Vila Horizonte TANGARÁ DA SERRA	
AUTOR DO PROJETO	Engenheiro Civil Dercídio Fava Marchezini CREA-MT 06279/D	
RESPONSÁVEL TÉCNICO		
Escola	Indicada	Assunto
Data	09/11/2017	Estrutural - Brocas, Pilares e Vigas
		FOLHA Nº 6/8