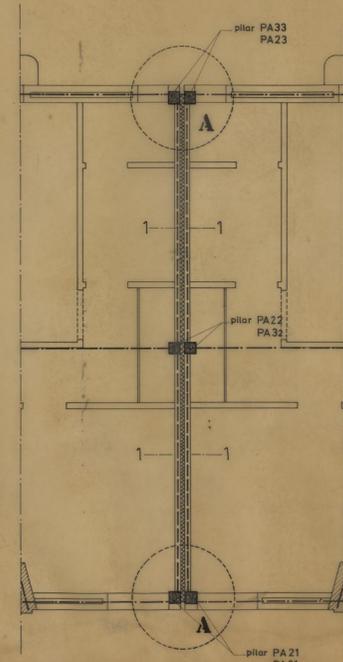


PILARES						
DESIGNAÇÃO	SECÇÕES					
	Até ao nível do r/c		Depois do nível do r/c		Depois do nível do 4º piso	
	secção	armaduras	secção	armaduras	secção	armaduras
PB	20 X 32	6ø12	20 X 20	4ø12	20 X 20	4ø10
PC	32 X 28	4ø12	32 X 28	4ø12	32 X 28	4ø10
PA21	20 X 32	6ø12	20 X 20	4ø12	20 X 20	4ø10
PA22 PA32	20 X 25	4ø12	20 X 25	4ø12	20 X 25	4ø10

PA32 = PC32 = PA22
PA21 = PA31 = PA23 = PA33

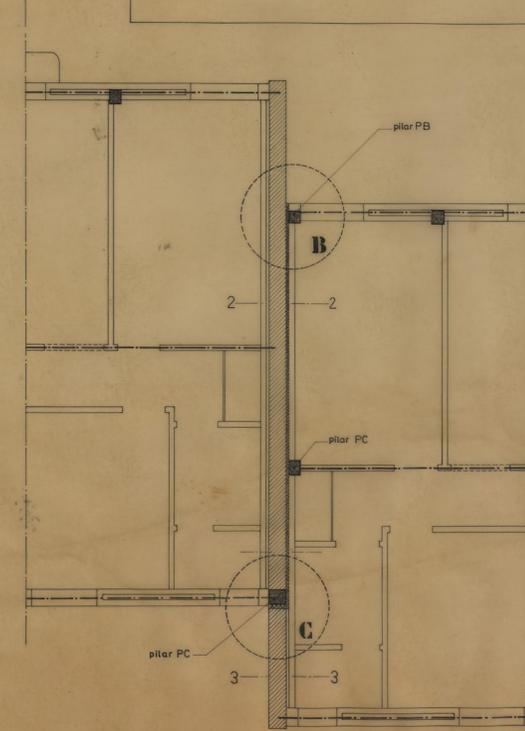
Os pilares PB e PC indicados são aplicáveis a todos os tipos de estruturas previstas.



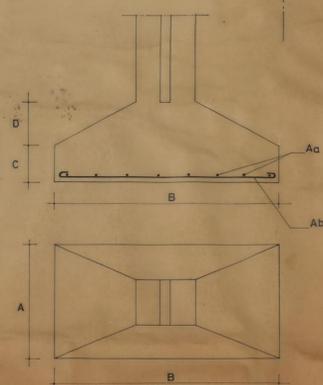
TIPO A
(edifs. 1, 2, 3, 4, 5, 7, 8, 9)

SAPATAS								
LOCALIZAÇÃO	DESIGNAÇÃO	DIMENSÕES				ARMADURAS		INDICAÇÃO
		A	B	C	D	Aa	Ab	
Junta de dilatação A	SA21 = SA33	1.10	1.80	20	30	7ø10 p.m.	9ø10 p.m.	Os pilares PA têm uma única sapata, têm uma única sapata, têm uma única sapata.
	SA22	1.10	1.80	20	30	7ø12 p.m.	10ø12 p.m.	
	SA32	1.25	2.10	25	35	7ø12 p.m.	7ø16 p.m.	
	SA23 = SA31	1.45	1.90	25	35	9ø12 p.m.	12ø12 p.m.	
Junta de dilatação B e C	SB21 = SB31	40	65	30	—	ø8 esp. 0.10	ø8 esp. 0.10	As sapatas SB e SC são aplicáveis a todas as sapatas de base cúbica de 1,20 m de largura.
	SB23 = SB33 = SB43	50	80	40	—	ø8 esp. 0.10	ø8 esp. 0.10	
	SC21 = SC31	50	80	30	—	ø8 esp. 0.10	ø8 esp. 0.10	
Junta de dilatação B e C	SC23 = SC33 = SC41	70	70	40	—	ø8 esp. 0.10	ø8 esp. 0.10	
	SC32	60	80	40	—	ø8 esp. 0.10	ø8 esp. 0.10	

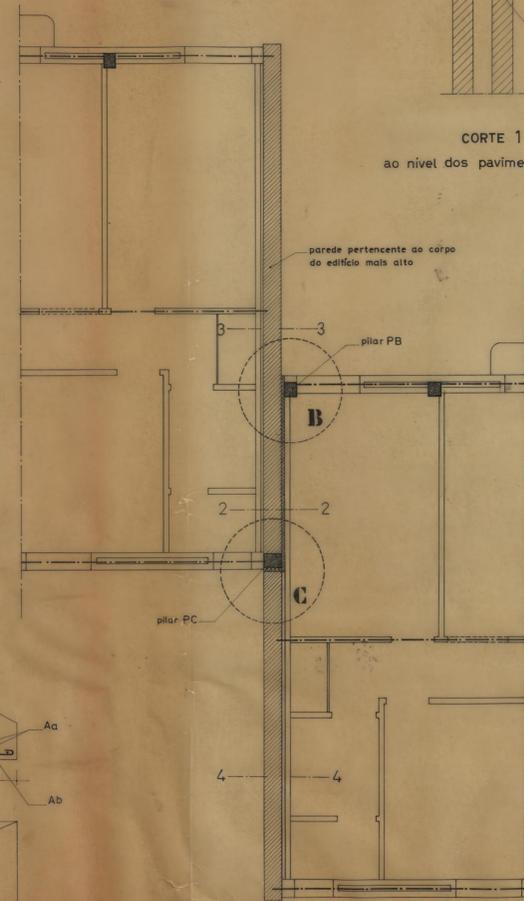
NOTA: A designação dos pilares e sapatas obedece à norma seguinte:
o 1º número é indicativo do tipo de estrutura,
o 2º " " define a sua posição na mesma, indicando respectivamente os números 1, 2 ou 3, a fachada principal, interior da moradia e fachada posterior.



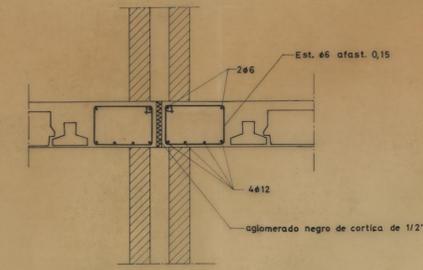
TIPO C
(edifs. 2, 5)



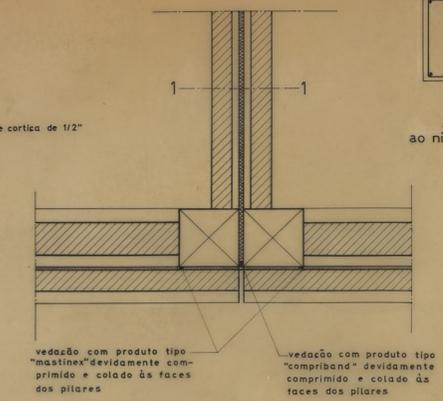
TIPO B
(edifs. 1, 3, 4, 6, 8, 9)



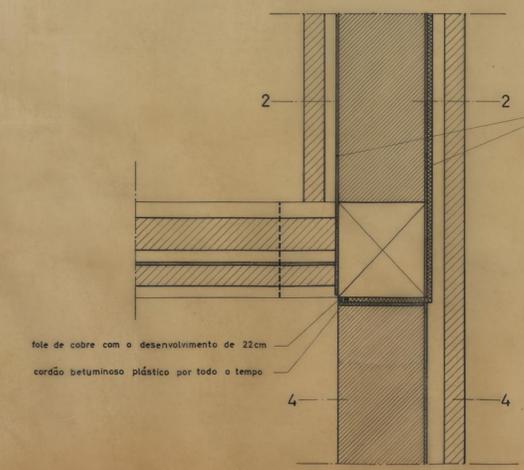
CORTE 1-1
ao nível dos pavimentos e tectos



PORMENOR A

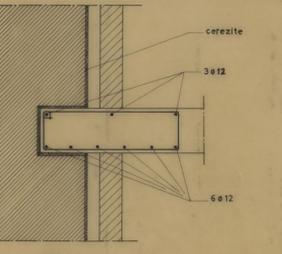
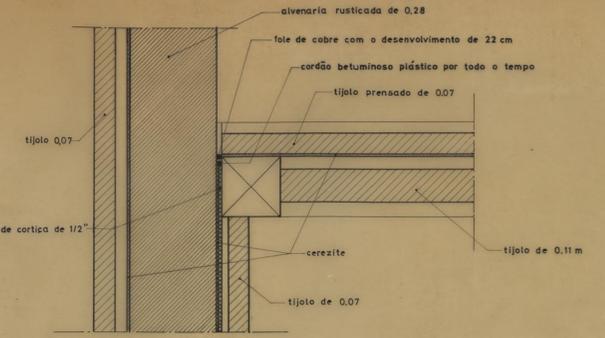


PORMENOR C

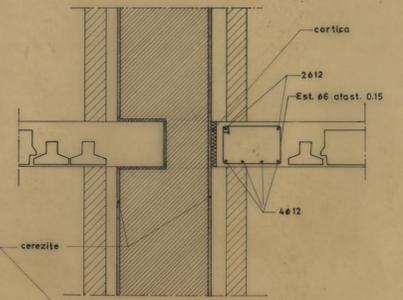


CORTE 3-3

PORMENOR B

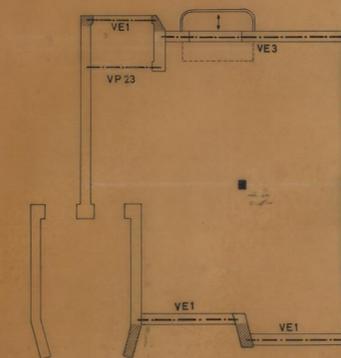


CORTE 4-4

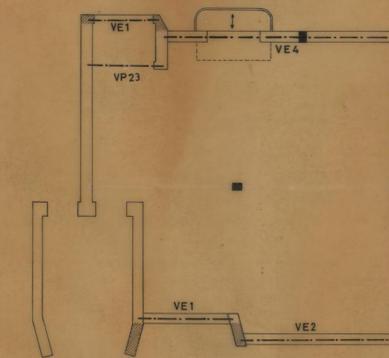


CORTE 2-2

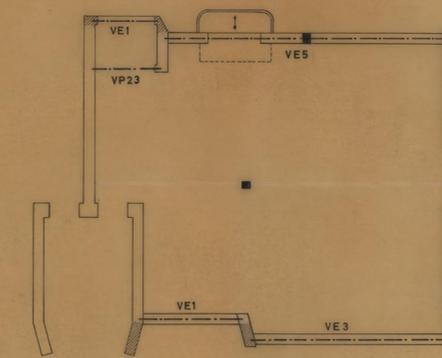
CAMARA MUNICIPAL DO PORTO D. S. H. REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	GRUPO DE MORADIAS POPULARES DO FALCÃO		MAR 1962 ESC. 1/50, A DESENHADORA
	BETÃO ARMADO	JUNTAS DE DILATAÇÃO	
0º ENG. CHEFE	0 ENGENHEIRO		



TIPO-2

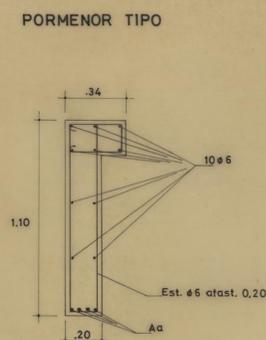
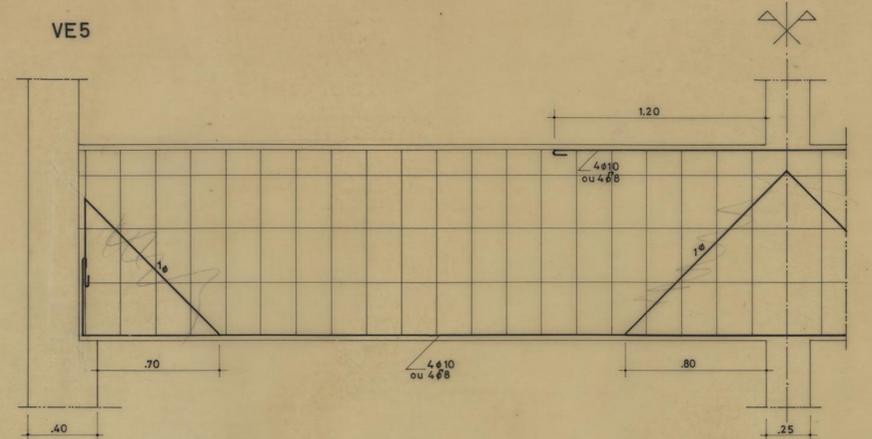
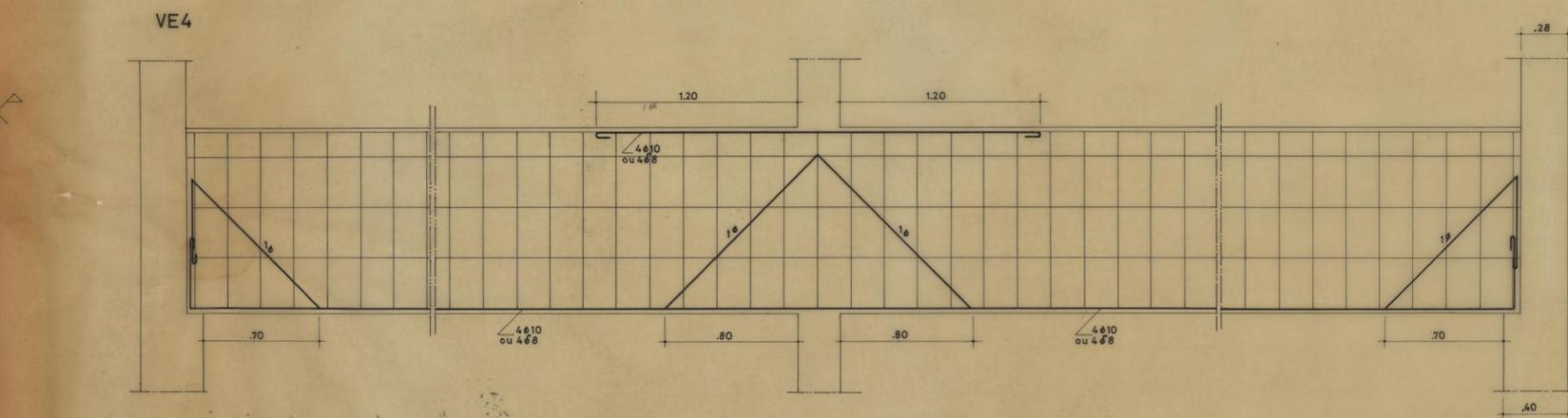
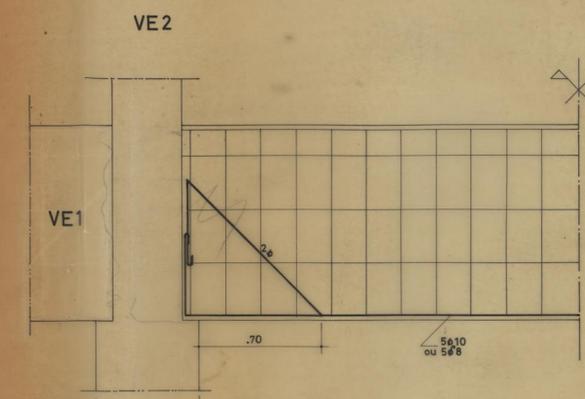
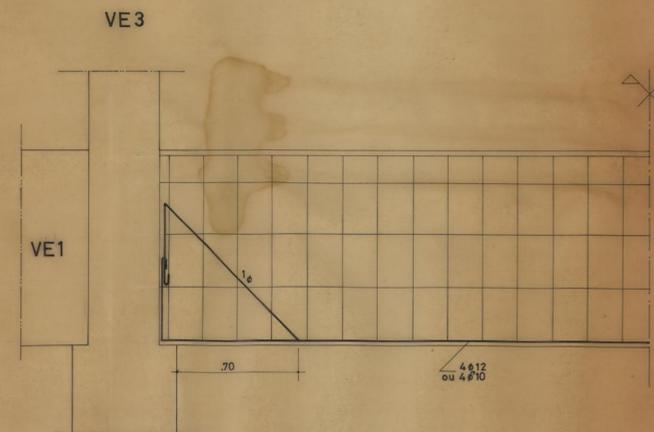
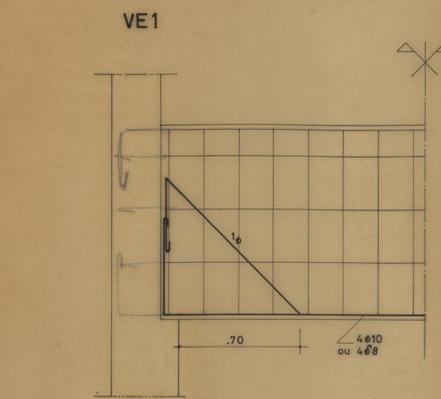


TIPO-3



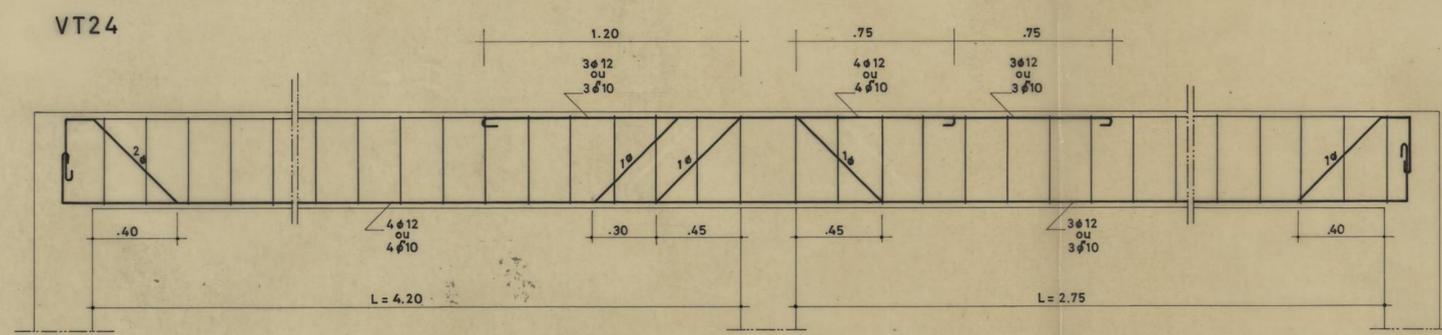
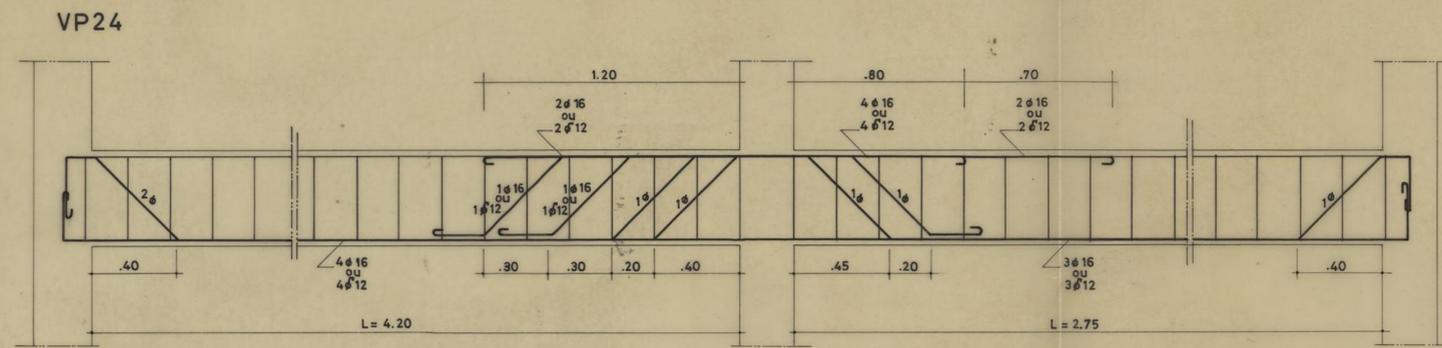
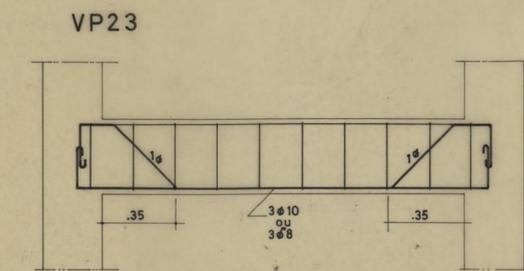
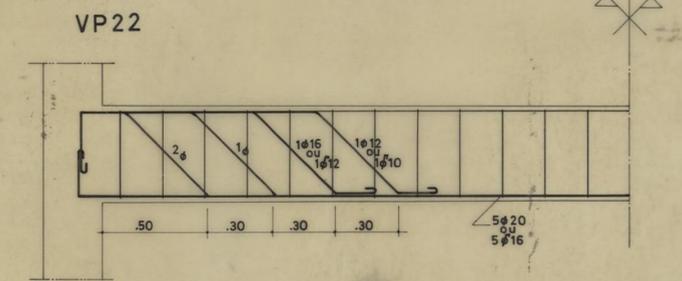
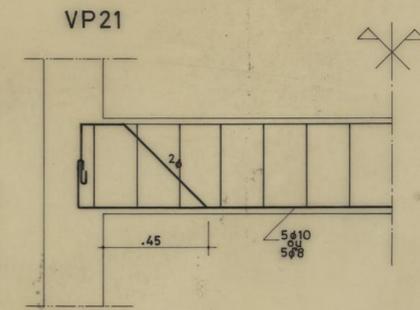
TIPO-4

→ envasamento em alvenaria rusticada
 VE → " em betão armado aparente hidrofugado

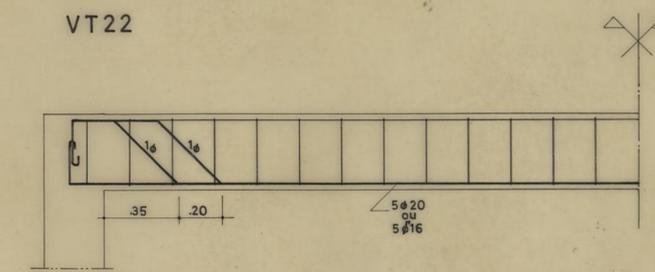
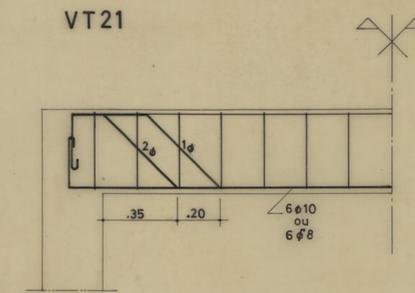


NOTA: para alturas diferentes de vigas de envasamento, pormenor a estudar de acordo com o local.

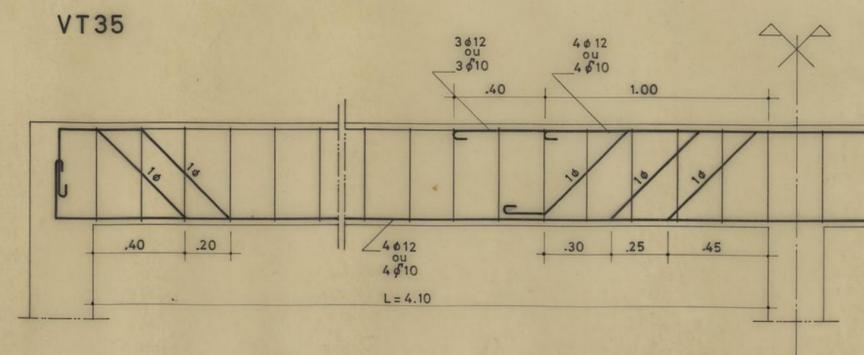
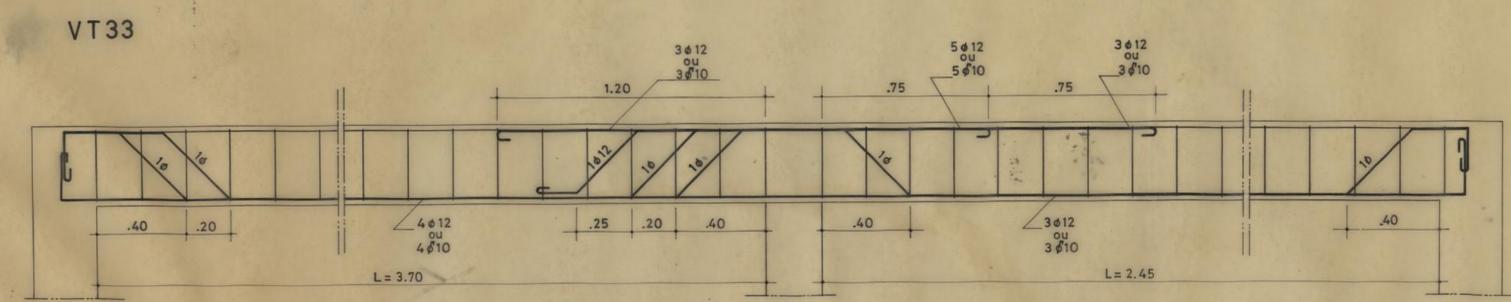
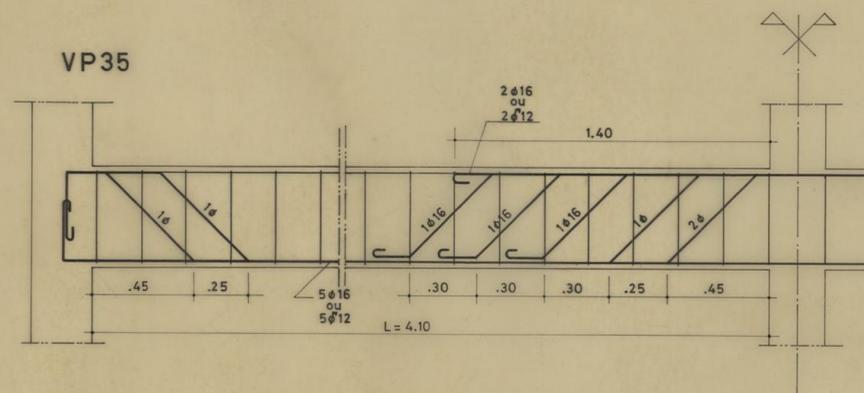
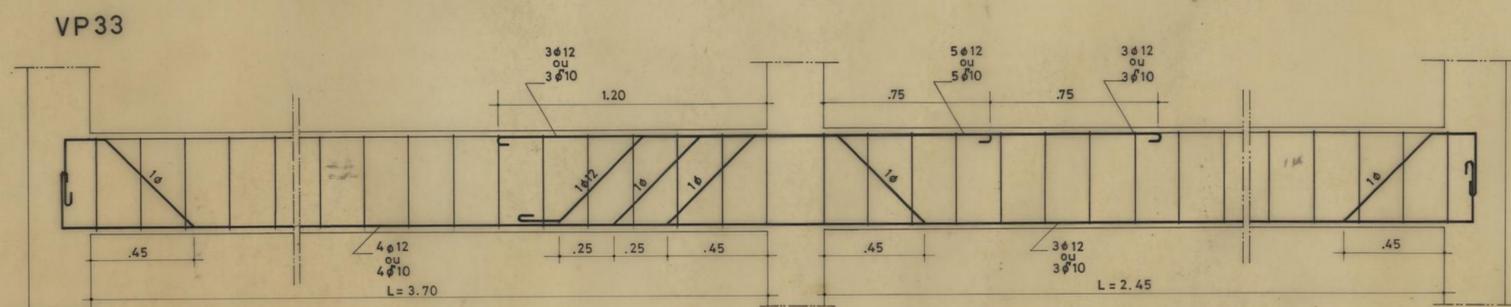
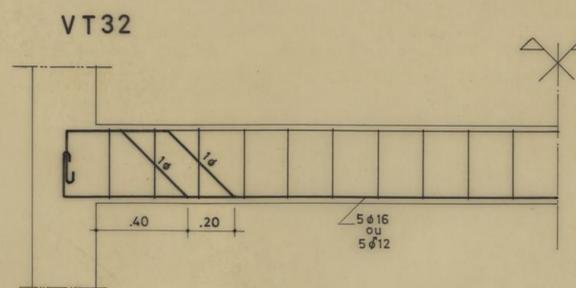
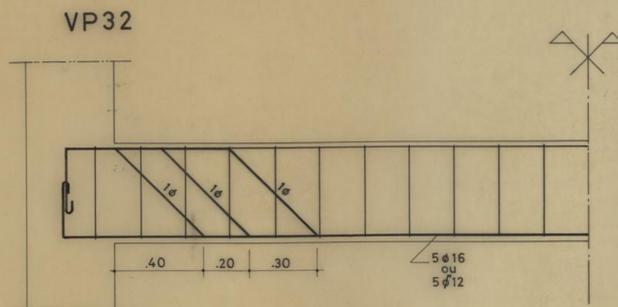
CAMARA MUNICIPAL DO PORTO D. S. H. REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	GRUPO DE MORADIAS POPULARES DO FALCÃO		 ABRIL 1968 ESC. 1/100, 1/20
	BETÃO ARMADO	ENVASAMENTOS	
O ENG. CHEFE	O ENGENHEIRO	A DESENHADORA	



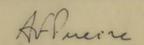
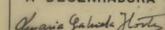
VT 23 = VP23

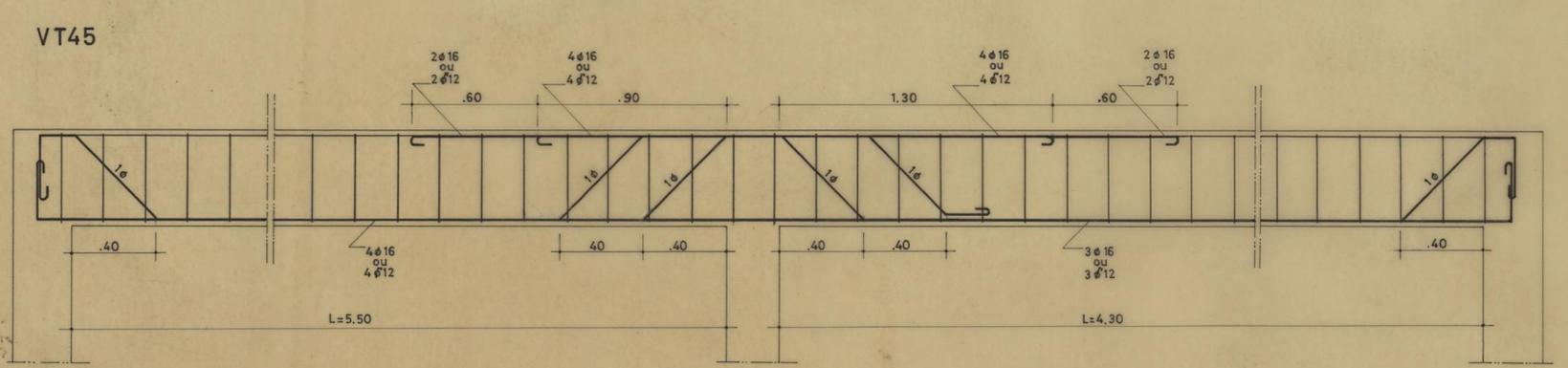
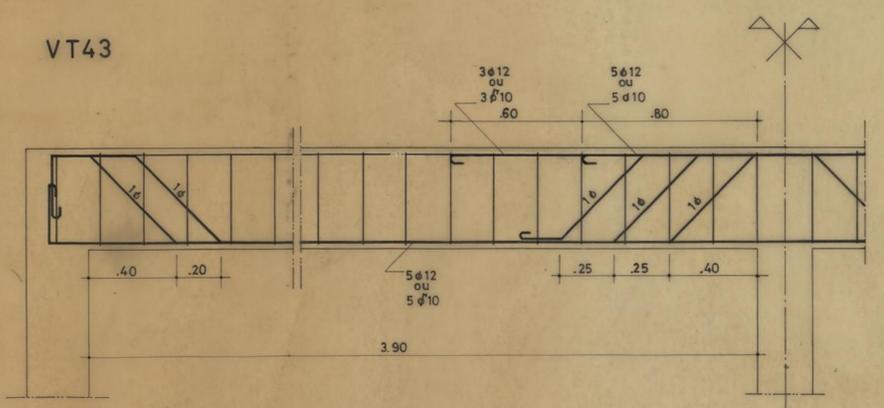
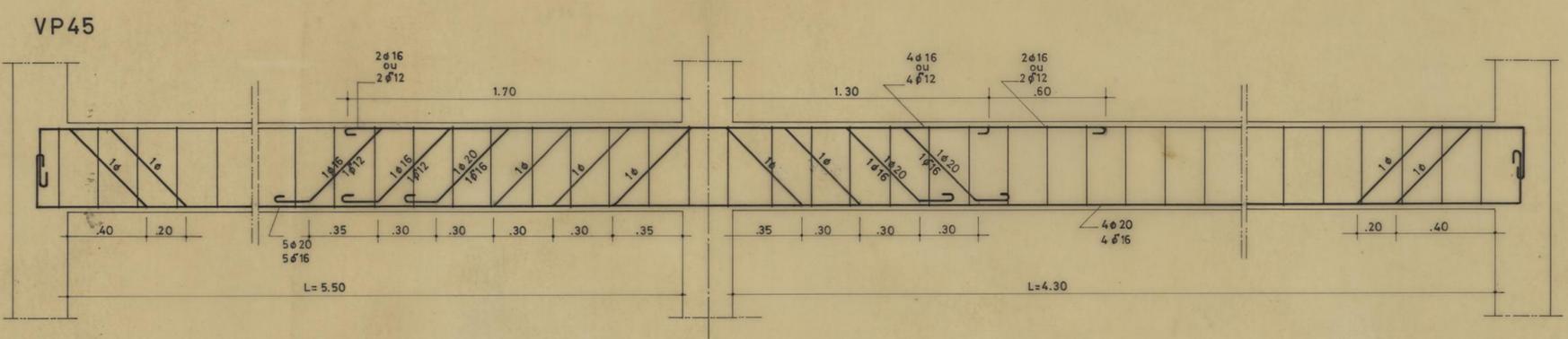
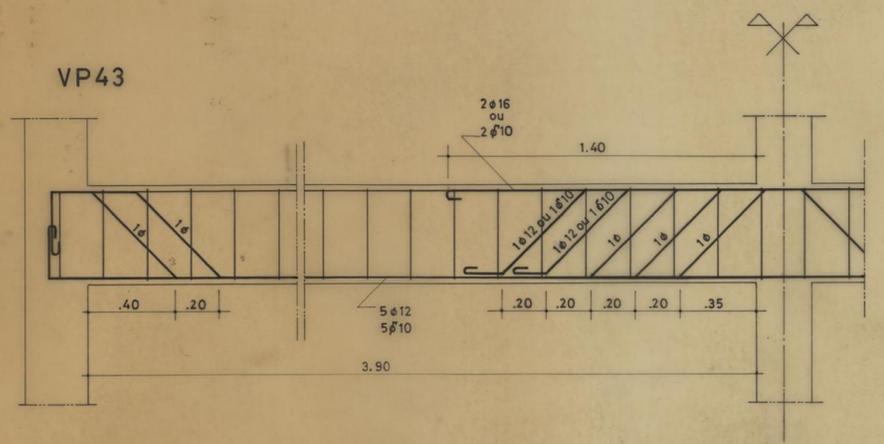


CAMARA MUNICIPAL DO PORTO D. S. H. REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	GRUPO DE MORADIAS POPULARES DO FALCÃO		 ABRIL 1968 ESC. 1/20
	BETÃO ARMADO	VIGAS-TIPO 2	
O ENG. CHEFE	O ENGENHEIRO	A DESENHADORA	



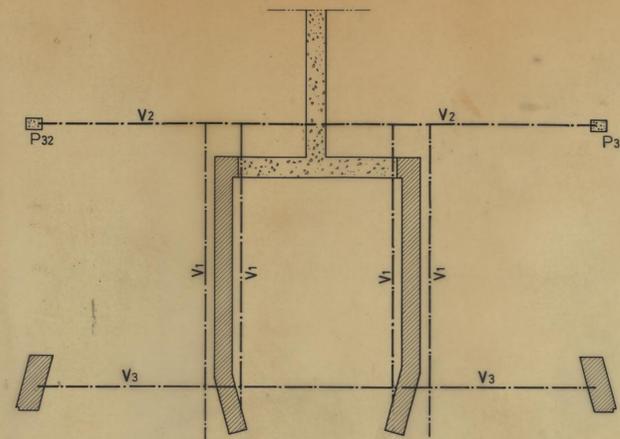
VP31 = VP21
 VP34 = VP23 = VT34
 VT31 = VT21

CAMARA MUNICIPAL DO PORTO D. S. H. REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	GRUPO DE MORADIAS POPULARES DO FALCÃO		 ABRIL 1968 ESC. 1/20
	BETÃO ARMADO	VIGAS - TIPO 3	
O ENG. CHEFE	O ENGENHEIRO	A DESENHADORA	
		 	

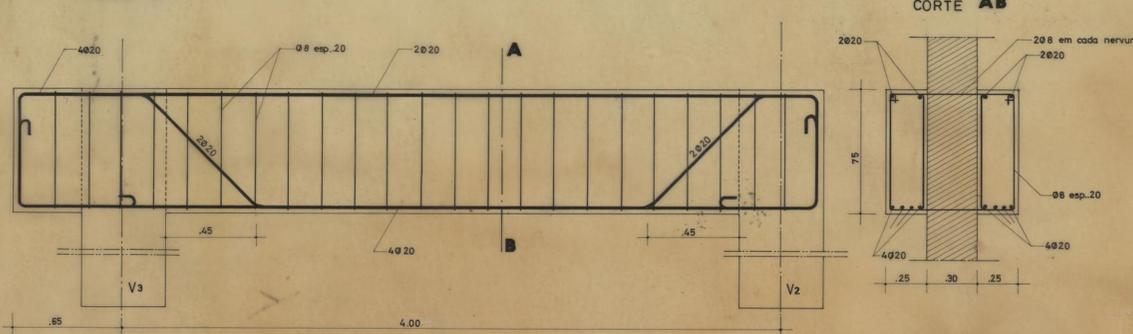


VP41 = VP21 VT41 = VT21
 VP42 = VP22 VT42 = VT22
 VP44 = VP23 VT44 = VP44

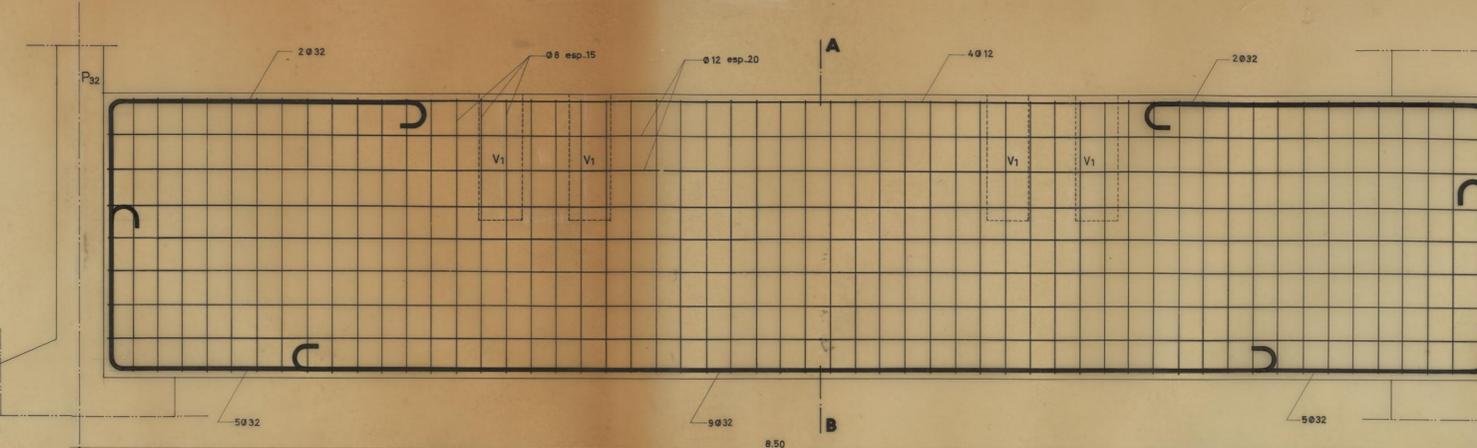
CAMARA MUNICIPAL DO PORTO D. S. H. REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	GRUPO DE MORADIAS POPULARES DO FALCÃO		 ABRIL 1968 ESC. 1/20
	BETÃO ARMADO	VIGAS - TIPO 4	
O ENG. CHEFE	O ENGENHEIRO	<i>A. P. Pereira</i>	A DESENHADORA <i>Amélia Gabriela Henriques</i>



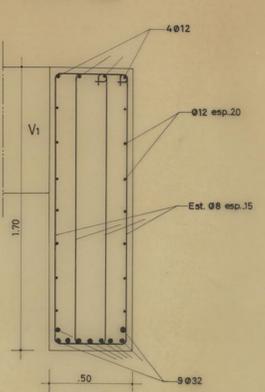
VIGA V1



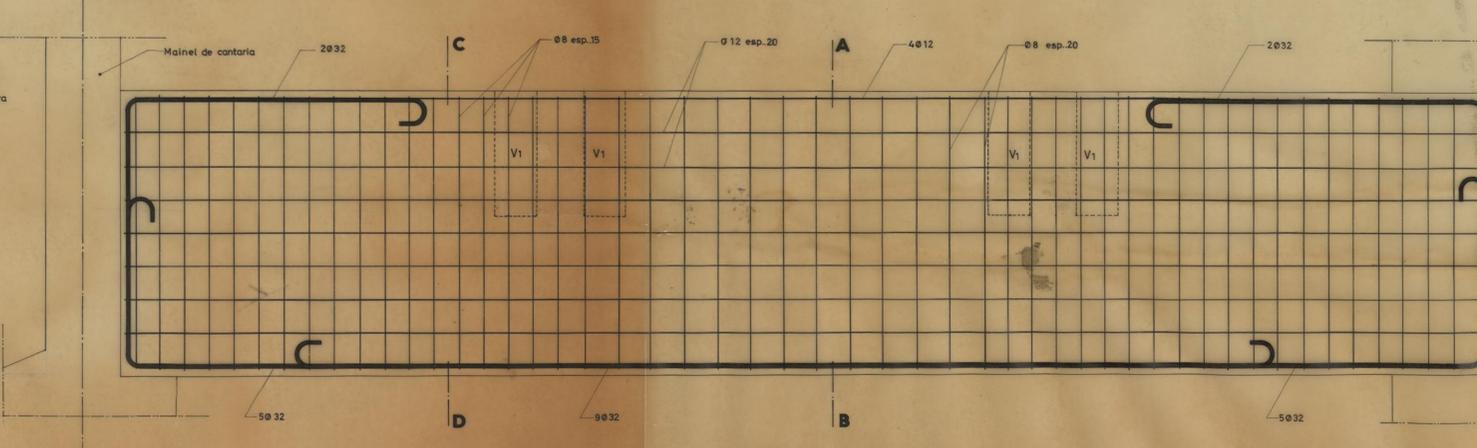
VIGA V2



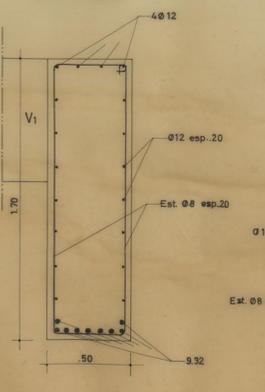
CORTE AB



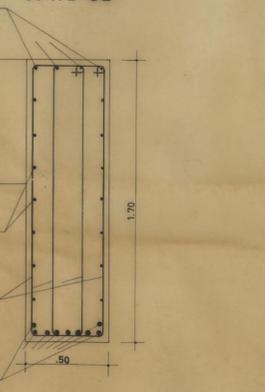
VIGA V3



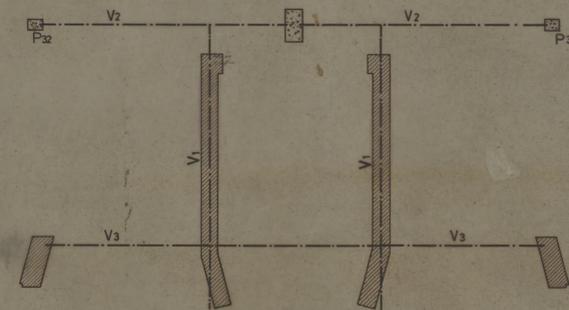
CORTE AB



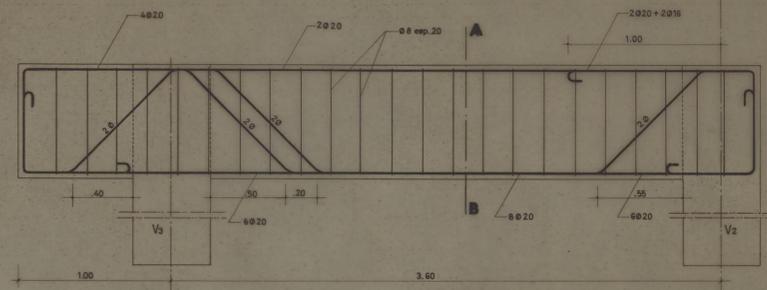
CORTE CD



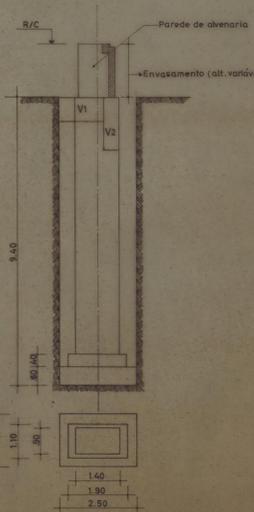
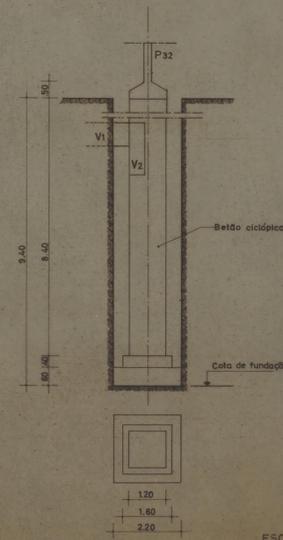
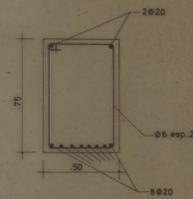
GRUPO DE MORADIAS POPULARES		CAMARA MUNICIPAL
EDIFICIO 7 (NASCENTE) DO FALCÃO		DO PORTO
BETÃO ARMADO		DIRECÇÃO DOS SERVIÇOS DE HABITAÇÃO
VIGA V1; VIGA V2 e VIGA V3		REPARTIÇÃO DE CONSTRUÇÃO DE CASAS
O ENG. CHEFE		DESENHO N.º
DESENHOU		ESCALAS
PROJECTOU		1/50 e 1/20
		ANULADO
		SUBSTITUÍDO
		DATA FEVEREIRO 1972



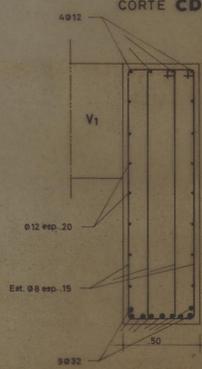
VIGA V1



CORTE AB

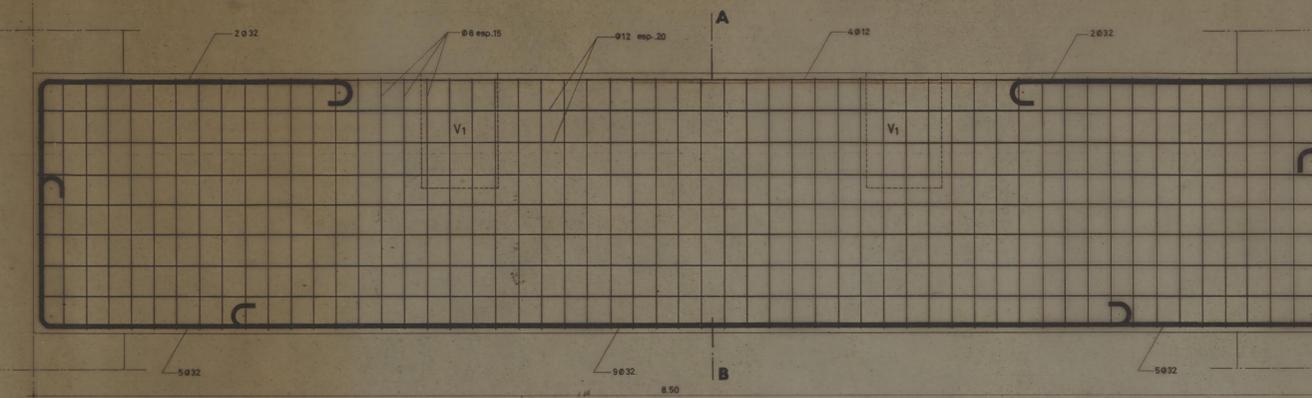


CORTE CD

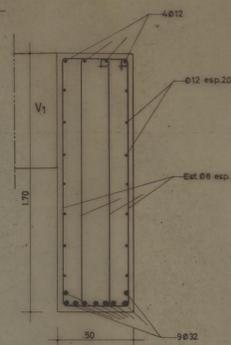


ESCALA: 1/100

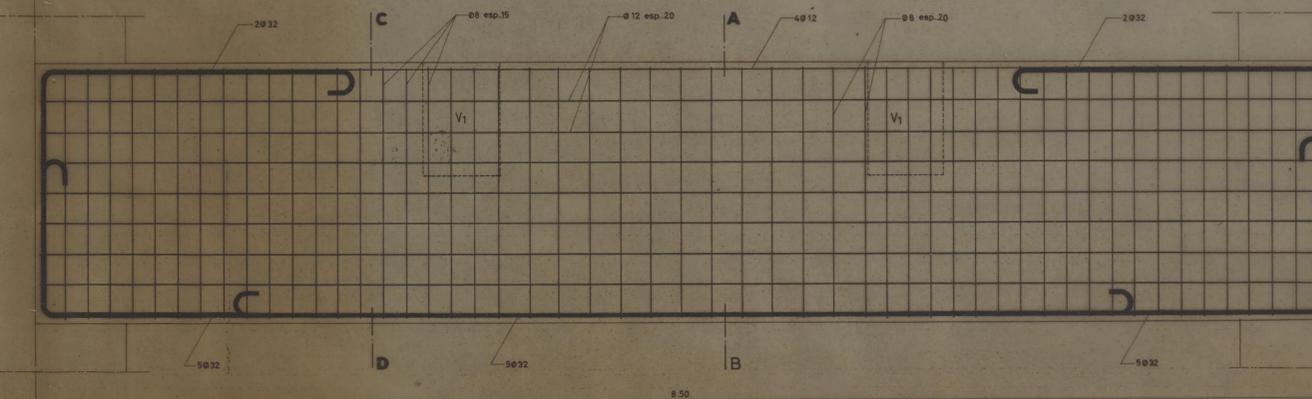
VIGA V2



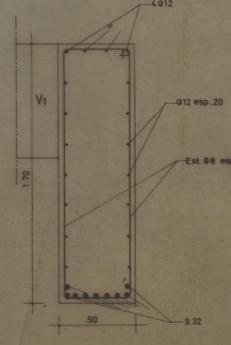
CORTE AB



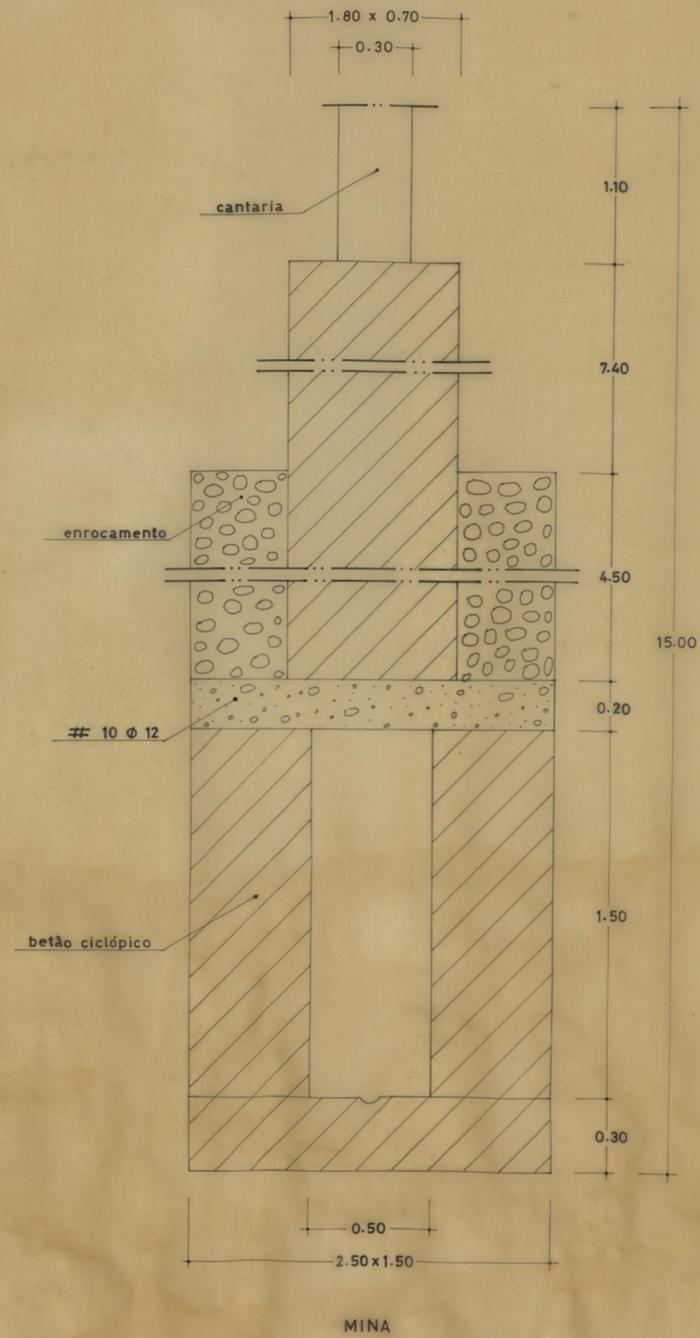
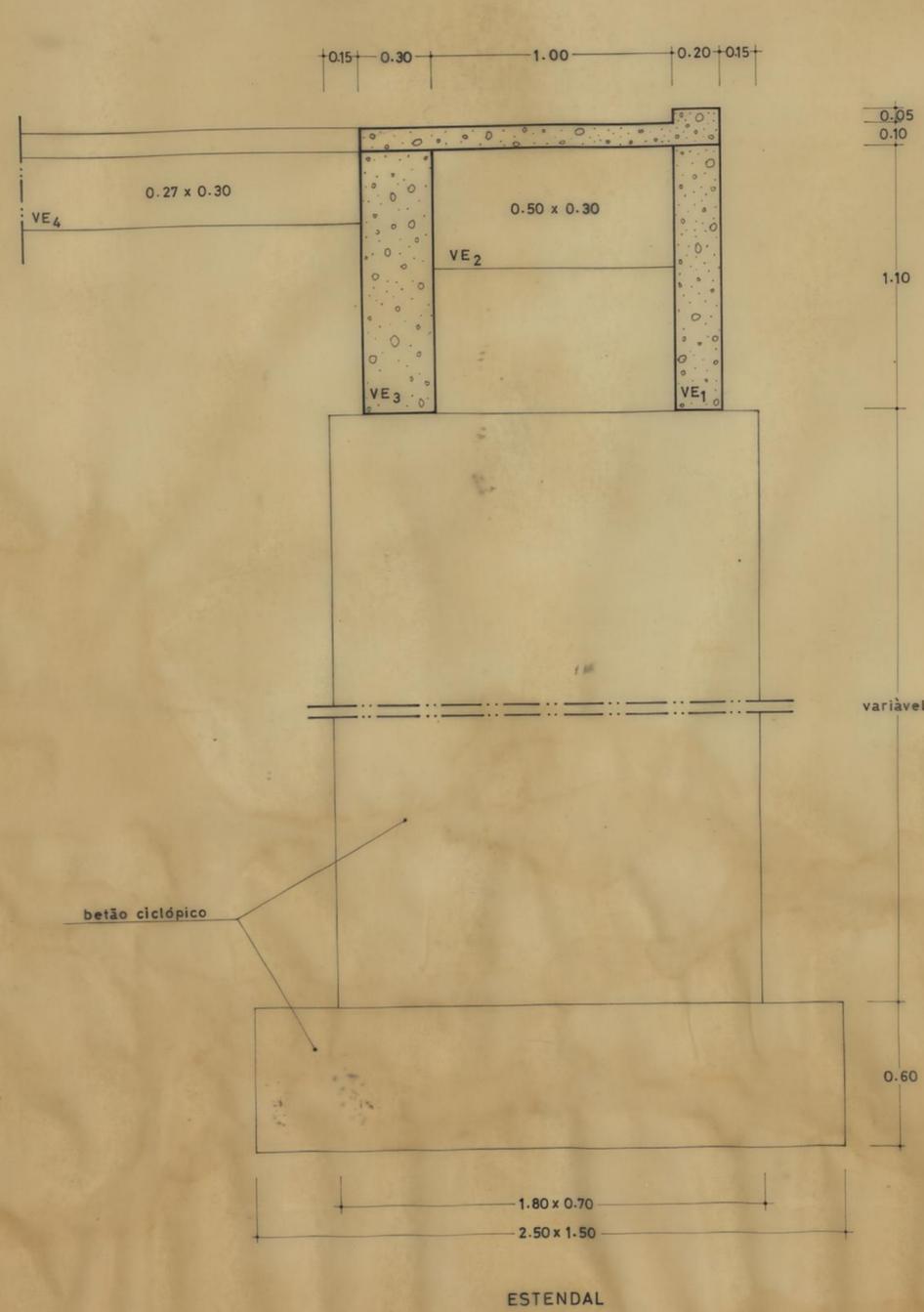
VIGA V3



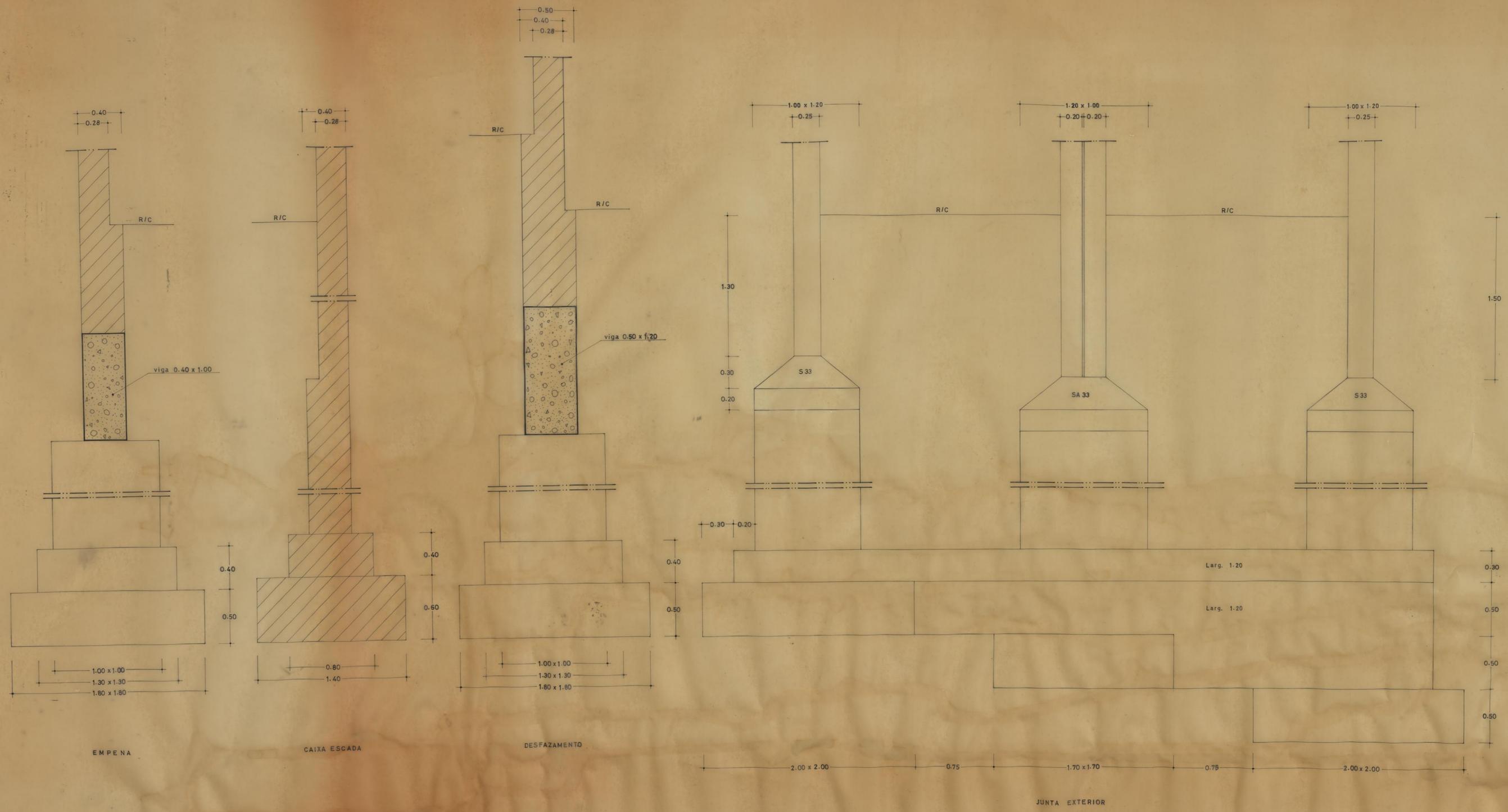
CORTE AB



GRUPO DE MORADIAS POPULARES		CAMARA MUNICIPAL DO PORTO	
EDIFICIO 7 (PONTE DO FALCÃO)		DIRECÇÃO DOS SERVIÇOS DE HABITAÇÃO	
BETÃO ARMADO			
VIGA V1; VIGA V2 e VIGA V3		DESENHO N.º	
ESCALAS: 1/50, 1/100 e 1/20		ANULADO	
O ENL. CHEFE		SUBSTITUÍDO	
DESENHOU		DATA FEVEREIRO 1972	
PROJECTOU			

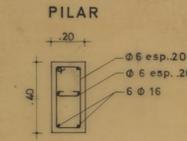
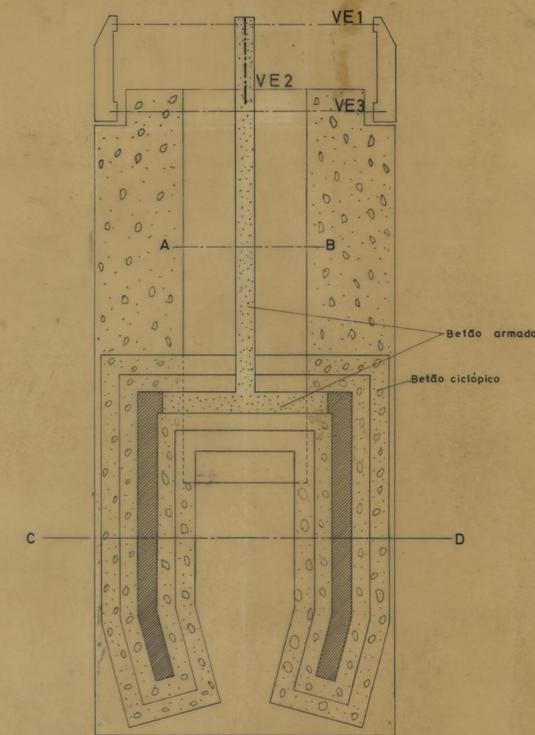


GRUPO DE MORADIAS POPULARES DO FALCÃO		CAMARA MUNICIPAL DO PORTO	
PORMENORES		DIRECÇÃO DOS SERVIÇOS DE HABITAÇÃO	
SAPATAS DO EDIFÍCIO 5		REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	
DESENHO N.º		DESENHO N.º	
ESCALAS	1:20	ANULADO	
PROJECTOU,	<i>J. Ant.</i>	SUBSTITUÍDO	
DESENHOU,	<i>Bornes</i>	DATA	
ENG. CHEFE,	<i>[Signature]</i>		

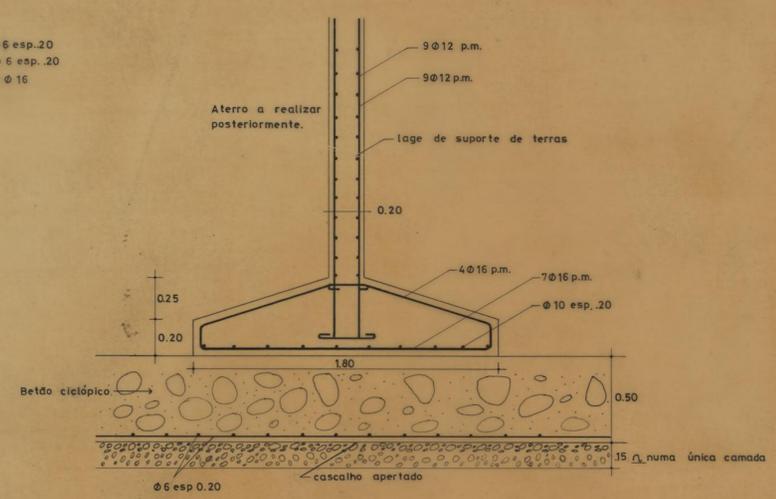


GRUPO DE MORADIAS POPULARES DO FALCÃO		CAMARA MUNICIPAL DO PORTO	
PORMENORES		DIRECÇÃO DOS SERVIÇOS DE HABITAÇÃO	
SAPATAS DO EDIFÍCIO 5		REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	
DESENHO N.º		DESENHO N.º	
ESCALAS	1:20	ANULADO	
		SUBSTITUÍDO	
		DATA	

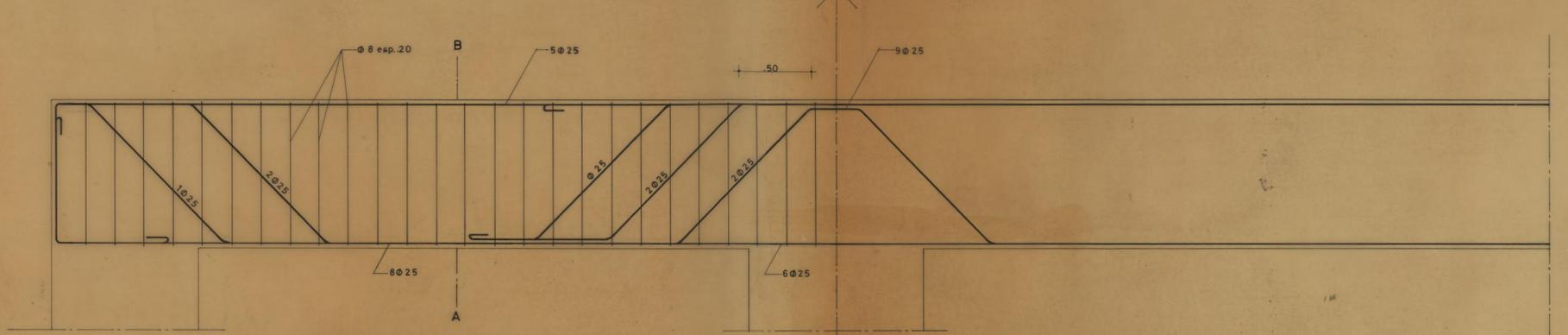
EDIFÍCIO 7 (com cave)



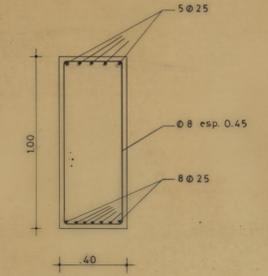
CORTE A B



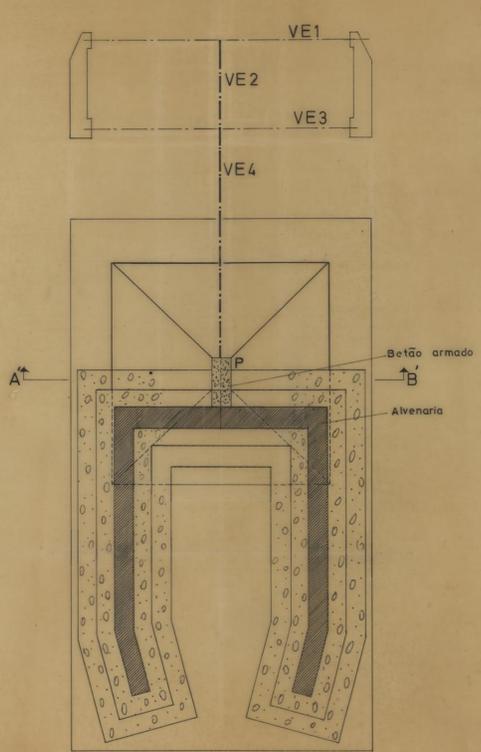
VIGA DE APOIO DA PAREDE DE EMPENA DO EDIFÍCIO 7



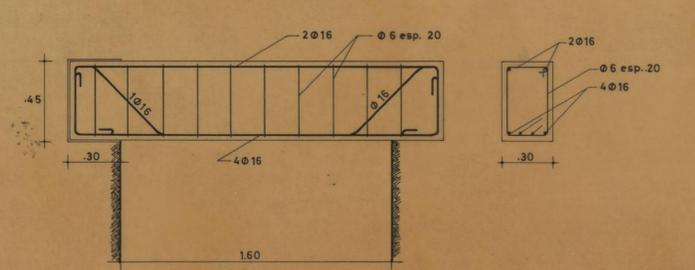
CORTE A B



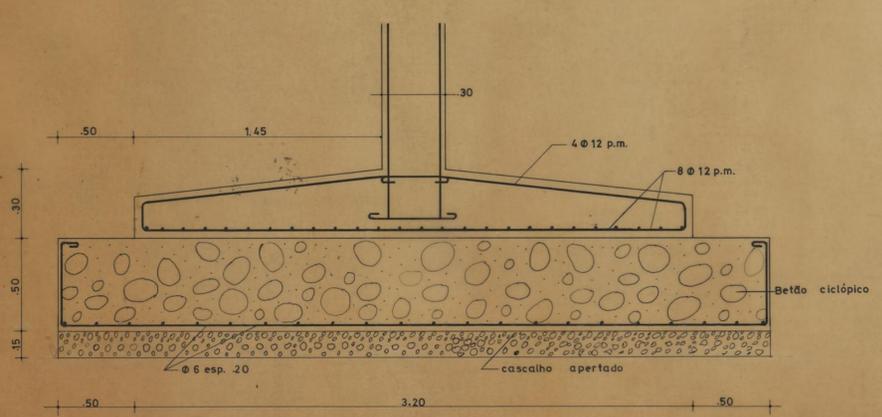
EDIFÍCIO 7 (sem cave)



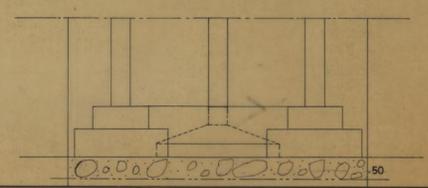
PADIEIRA DA EMPENA DO EDIFÍCIO 7



CORTE A B



CORTE C D



GRUPO DE MORÁDIAS POPULARES DO FALCÃO		CAMARA MUNICIPAL DO PORTO	
BETÃO ARMADO		DIRECÇÃO DOS SERVIÇOS DE HABITAÇÃO	
ADITAMENTO		REPARTIÇÃO DE CONSTRUÇÃO DE CASAS	
(edifício 7)		DESENHO N.º	
DESENHOU: <i>[Signature]</i>		ESCALAS 1:20 e 1:50	
PROJECTOU: <i>[Signature]</i>		ANULADO	
		SUBSTITUÍDO	
		DATA JANEIRO DE 1971	