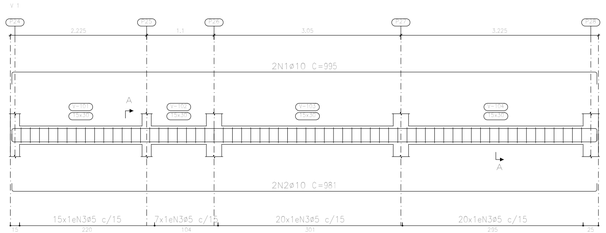

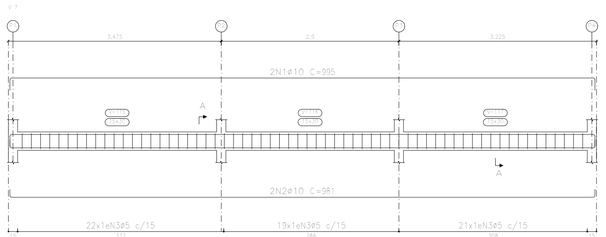

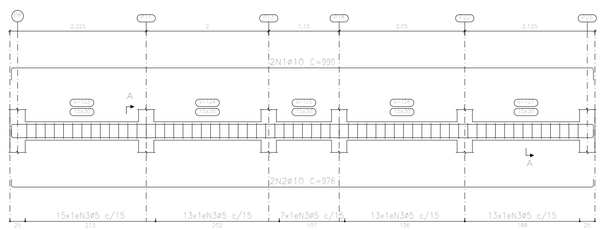

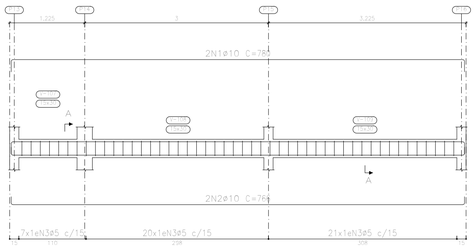

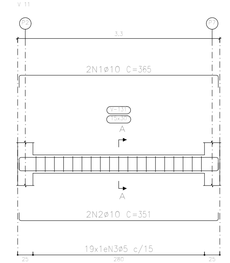

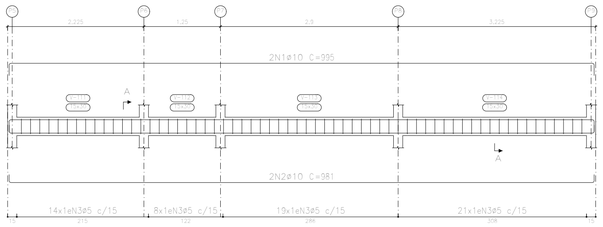

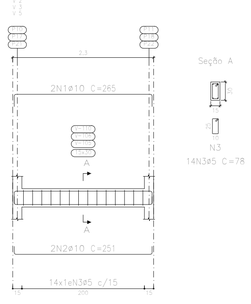

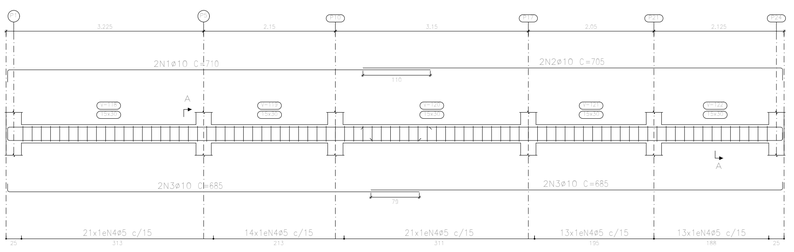

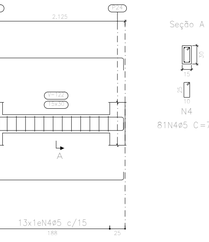

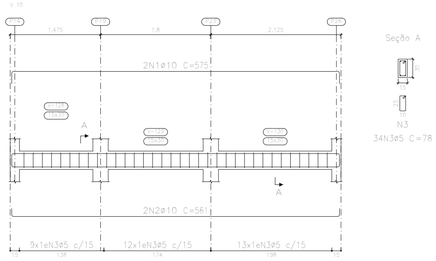

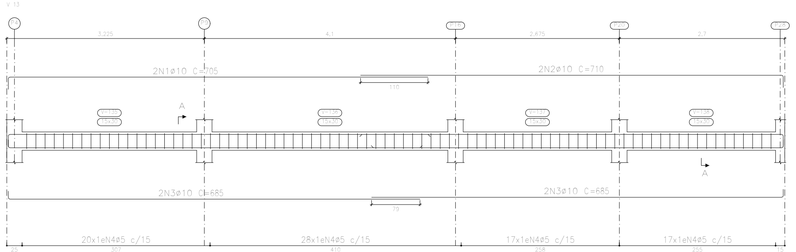

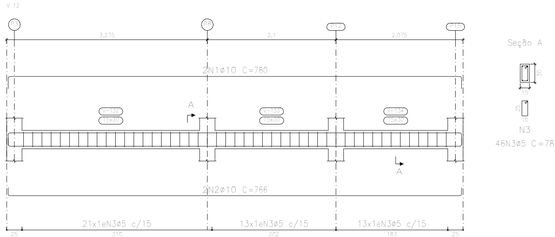

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	ø10	2	20	955	20	995	1990	12,3	
	2	ø10	2	13	955	13	981	1962	12,1	
	3	ø5	62	5	68	5	78	4836		7,6
								Total+10%:	26,8	8,4
V 2=V 3=V 5	1	ø10	2	20	225	20	265	530	3,3	
	2	ø10	2	13	225	13	251	502	3,1	
	3	ø5	14	5	68	5	78	1092		1,7
								Total+10%:	7,0	1,9
								(x3):	21,0	5,7
V 4	1	ø10	2	20	740	20	780	1560	9,6	
	2	ø10	2	13	740	13	766	1532	9,4	
	3	ø5	48	5	68	5	78	3744		5,9
								Total+10%:	20,9	6,5
V 6	1	ø10	2	20	955	20	995	1990	12,3	
	2	ø10	2	13	955	13	981	1962	12,1	
	3	ø5	62	5	68	5	78	4836		7,6
								Total+10%:	26,8	8,4
V 7	1	ø10	2	20	955	20	995	1990	12,3	
	2	ø10	2	13	955	13	981	1962	12,1	
	3	ø5	62	5	68	5	78	4836		7,6
								Total+10%:	26,8	8,4
V 8	1	ø10	2	20	690		710	1420	8,8	
	2	ø10	2		685	20	705	1410	8,7	
	3	ø10	4	13	672		685	2740	16,9	
	4	ø5	82	5	68	5	78	6396		10,0
								Total+10%:	37,8	11,0
V 9	1	ø10	2	20	950	20	990	1980	12,2	
	2	ø10	2	13	950	13	976	1952	12,0	
	3	ø5	61	5	68	5	78	4758		7,5
								Total+10%:	26,6	8,3
V 10	1	ø10	2	20	535	20	575	1150	7,1	
	2	ø10	2	13	535	13	561	1122	6,9	
	3	ø5	34	5	68	5	78	2652		4,2
								Total+10%:	15,4	4,6
V 11	1	ø10	2	20	325	20	365	730	4,5	
	2	ø10	2	13	325	13	351	702	4,3	
	3	ø5	19	5	68	5	78	1482		2,3
								Total+10%:	9,7	2,5
V 12	1	ø10	2	20	740	20	780	1560	9,6	
	2	ø10	2	13	740	13	766	1532	9,4	
	3	ø5	47	5	68	5	78	3666		5,8
								Total+10%:	20,9	6,4
V 13	1	ø10	2	20	685		705	1410	8,7	
	2	ø10	2		690	20	710	1420	8,8	
	3	ø10	4	13	672		685	2740	16,9	
	4	ø5	82	5	68	5	78	6396		10,0
								Total+10%:	37,8	11,0
								ø5:	0,0	81,2
								ø10:	270,5	0,0
								Total:	270,5	81,2

BALDRAME
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:50
Escala aberturas 1:50

Título da prancha
PROJETO ESTRUTURAL

Conteúdo
DETALHAMENTO VIGAS BALDRAME

BOLTERI & DE MARI ENGENHARIA
AV. SAUL ELKIND, 1065 - 1º ANDAR, SALA 03
(43) 3064-1391 | (43) 99976-7252 | (43) 98435-3461
bolteridemariengenharia@gmail.com | @bolteridemari.eng

Tipo da edificação:
EDIFICAÇÃO COMERCIAL EM ALVENARIA DE TIJOLOS E CONCRETO ARMADO

Escala:
ESCALA INDICADA

Local da obra
QUADRA 11, LOTE 09, RUA PEDRO PEREIRA, 08 - JD. VILA ALVORADA - ALVORADA DO SUL, PR

Data do projeto:
AGO/21

Prancha:
4/6

Contratante
SERVIÇO AUTÔNOMO DE ÁGUA E ESGOTO DE ALVORADA DO SUL
CNPJ: 78.009.149/0001-29

Responsável Técnico
RICHARD AXEL YAMAMOTO BOLTERI | MAYARA DE MARI MUSSATO CAMARGO
CREA-PR: 158.584/D | 158.592/D