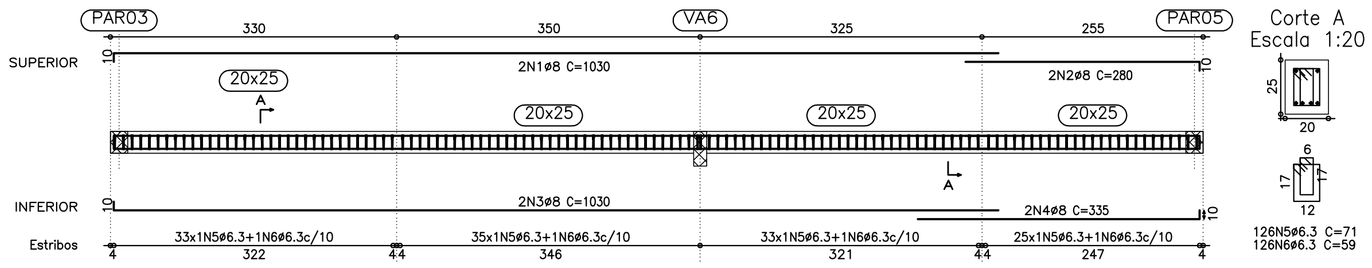
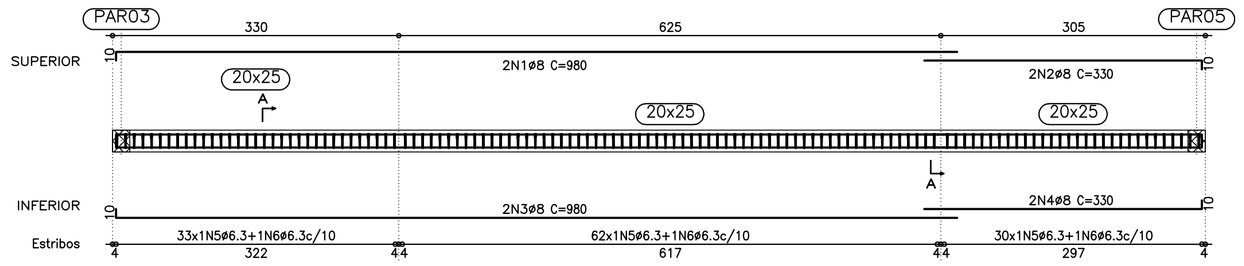
Nível -> -0.30 m (310,700)
Desenho de vigas
Concreto: C25, usina.rigor
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

VA1
Escala 1:50

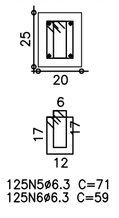


Corte A
Escala 1:20

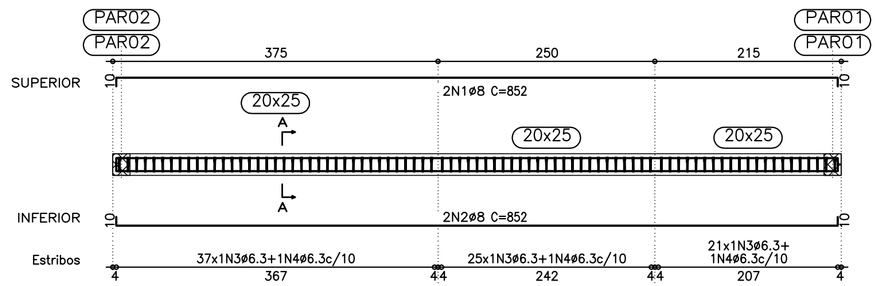
VA2
Escala 1:50



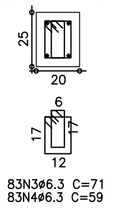
Corte A
Escala 1:20



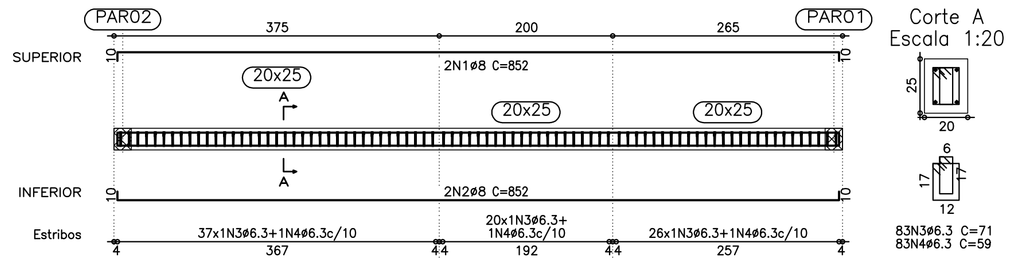
VA3
VA5
Escala 1:50



Corte A
Escala 1:20

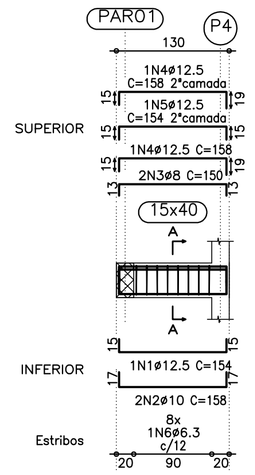


VA4
Escala 1:50

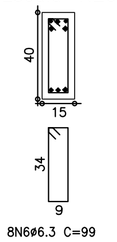


Corte A
Escala 1:20

VA6
Escala 1:50

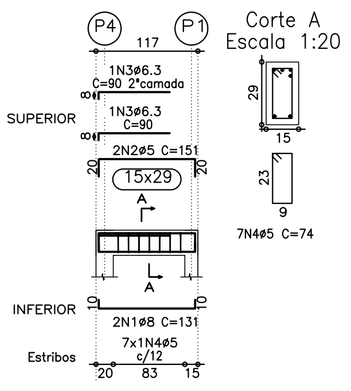


Corte A
Escala 1:20



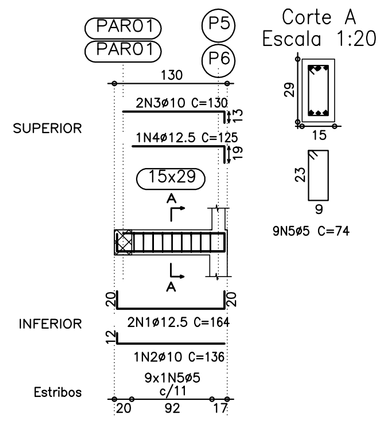
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
VA1	1	ø8	2	10	1020		1030	2060	8.1	
	2	ø8	2		270	10	280	560	2.2	
	3	ø8	2	10	1020		1030	2060	8.1	
	4	ø8	2		325	10	335	670	2.6	
	5	ø6.3	126				71	8946	22.1	
	6	ø6.3	126				59	7434	18.4	
								Total+10%:	67.7	
VA2	1	ø8	2	10	970		980	1960	7.7	
	2	ø8	2		320	10	330	660	2.6	
	3	ø8	2	10	970		980	1960	7.7	
	4	ø8	2		320	10	330	660	2.6	
	5	ø6.3	125				71	8875	21.9	
	6	ø6.3	125				59	7375	18.2	
								Total+10%:	66.8	
VA3=VA5	1	ø8	2	10	832	10	852	1704	6.7	
	2	ø8	2	10	832	10	852	1704	6.7	
	3	ø6.3	83				71	5893	14.6	
	4	ø6.3	83				59	4897	12.1	
								Total+10%:	44.1	
								(x2):	88.2	
VA4	1	ø8	2	10	832	10	852	1704	6.7	
	2	ø8	2	10	832	10	852	1704	6.7	
	3	ø6.3	83				71	5893	14.6	
	4	ø6.3	83				59	4897	12.1	
								Total+10%:	44.1	
VA6	1	ø12.5	1	15	124	15	154	154	1.5	
	2	ø10	2	17	124	17	158	316	2.0	
	3	ø8	2	13	124	13	150	300	1.2	
	4	ø12.5	2	15	124	19	158	316	3.1	
	5	ø12.5	1	15	124	15	154	154	1.5	
	6	ø6.3	8				99	792	2.0	
								Total+10%:	12.4	
								ø6.3:	179.1	0.0
								ø8:	91.2	0.0
								ø10:	2.2	0.0
								ø12.5:	6.7	0.0
								Total:	279.2	0.0

VB1
Escala 1:50



Corte A
Escala 1:20

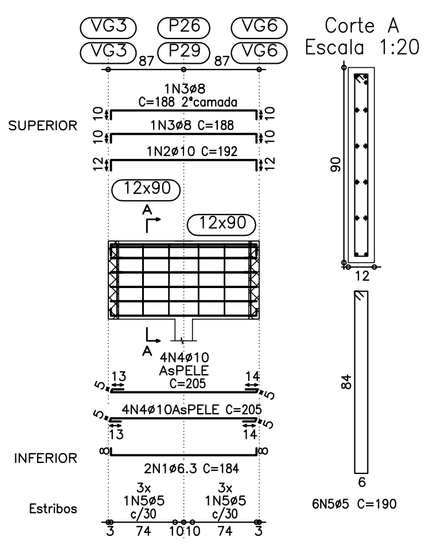
VB2
VB3
Escala 1:50



Corte A
Escala 1:20

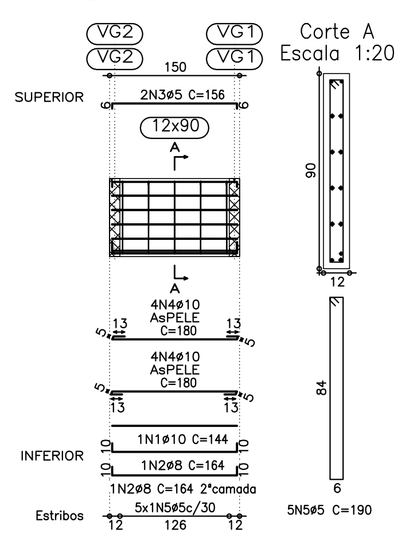
Nível Terreno -> 0,00 m (311,000)
Desenho de vigas
Concreto: C25, usina.rigor
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

VG1
VG2
Escala 1:50



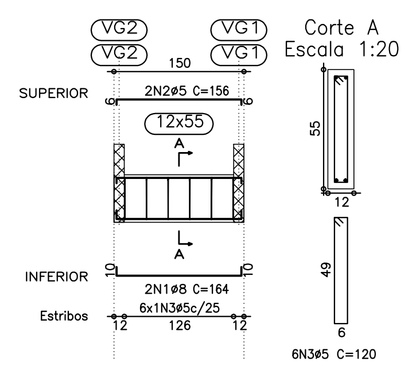
Corte A
Escala 1:20

VG3
VG6
Escala 1:50



Corte A
Escala 1:20

VG4
VG5
Escala 1:50



Corte A
Escala 1:20

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
VG1=VG2	1	ø6.3	2	8	168	8	184	368	0.9	
	2	ø10	1	12	168	12	192	192	1.2	
	3	ø8	2	10	168	10	188	376	1.5	
	4	ø10	8	18	168	19	205	1640	10.3	
	5	ø5	6				190	1140		1.8
								Total+10%:	15.3	2.0
								(x2):	30.6	4.0
VG3=VG6	1	ø10	1		144		144	144	0.9	
	2	ø8	2	10	144	10	164	328	1.3	
	3	ø5	2	6	144	6	156	312		0.5
	4	ø10	8	18	144	18	180	1440	9.0	
	5	ø5	5				190	950		1.5
								Total+10%:	12.3	2.2
								(x2):	24.6	4.4
VG4=VG5	1	ø8	2	10	144	10	164	328	1.3	
	2	ø5	2	6	144	6	156	312		0.5
	3	ø5	6				120	720		1.1
								Total+10%:	1.4	1.8
								(x2):	2.8	3.6
								ø5:	0.0	12.0
								ø6.3:	2.0	0.0
								ø8:	9.0	0.0
								ø10:	47.0	0.0
								Total:	58.0	12.0

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
VB1	1	ø8	2	10	111	10	131	262	1.0	
	2	ø5	2	20	111	20	151	302		0.5
	3	ø6.3	2	8	82		90	180	0.4	
	4	ø5	7				74	518		0.8
								Total+10%:	1.5	1.4
VB2=VB3	1	ø12.5	2	20	124	20	164	328	3.2	
	2	ø10	1	12	124		136	136	0.9	
	3	ø10	2		117	13	130	260	1.6	
	4	ø12.5	1		106	19	125	125	1.2	
	5	ø5	9				74	666		1.0
								Total+10%:	7.6	1.1
								(x2):	15.2	2.2
								ø5:	0.0	3.6
								ø6.3:	0.4	0.0
								ø8:	1.1	0.0
								ø10:	5.6	0.0
								ø12.5:	9.6	0.0
								Total:	16.7	3.6

Nível -> 5.45 m
Desenho de vigas
Concreto: C25, usina.rigor
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

LEGENDA:

NOTAS

ARTICULAÇÃO:

REVISÕES

Nº	NATUREZA DA REVISÃO	DATA	APROVO
00			
01			
02			
03			
04			
05			

CODEVASF

ELABORADO POR:
KL ENGENHARIA

MINISTÉRIO DA INTEGRAÇÃO NACIONAL - MI
COMPANHIA DE DESENVOLVIMENTO DOS VALES DO SÃO FRANCISCO E DO PARNAÍBA - CODEVASF

OBRA:
PROJETO BÁSICO DO SISTEMA DE ESGOTAMENTO SANITÁRIO DE OUROLANDIA - BA

ASSUNTO:
PROJETO ESTRUTURAL - DAFA
VIGAS - FORMAS -1ª PARTE

ENG. JOSÉ MENESCAL NETO	CREA 2066/D - CE	DATA:	MARÇO/2009
ENG.	CREA	ESCALA:	INDICADA
ENG.	CREA	ARQUIVO:	06-OUR-PB-EST-DAFA-R0