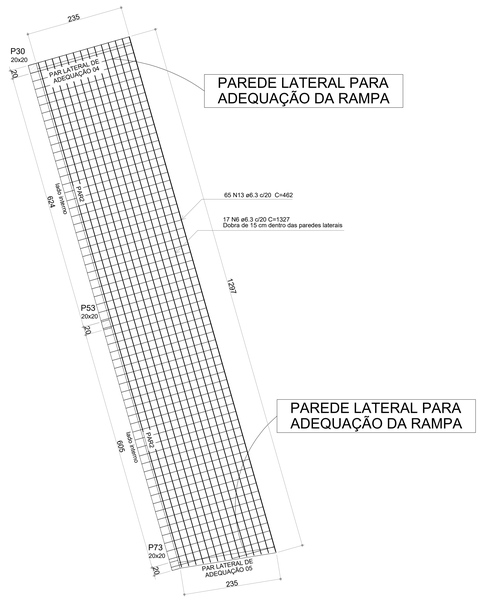
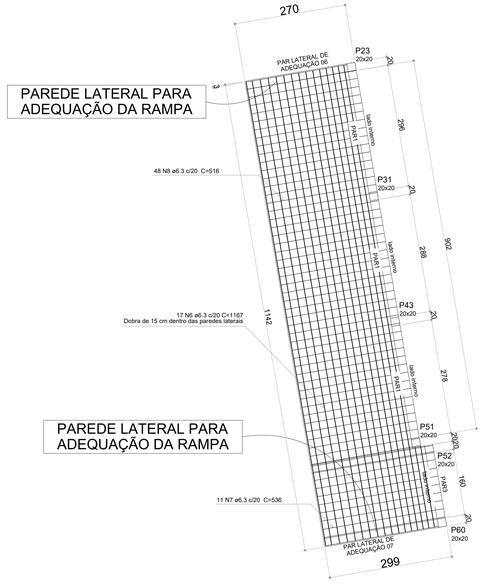
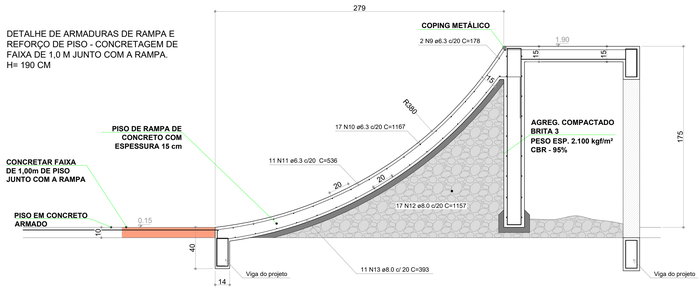




Contenções do pavimento Obstáculos
escala 1:50



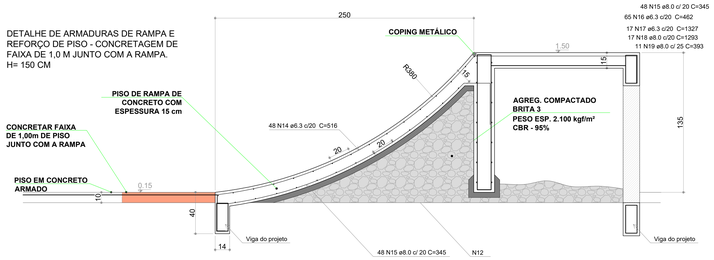
Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
RAMPAS	CA50	9	6.3	2	178	356
	CA50	10	6.3	34	1167	39678
	CA50	11	6.3	11	536	5896
	CA50	12	8.0	17	1157	19669
	CA50	13	8.0	11	393	4323
	CA50	14	6.3	48	516	24768
	CA50	15	8.0	48	345	16560
	CA50	16	6.3	65	462	30030
	CA50	17	6.3	17	1327	22559
	CA50	18	8.0	17	1327	22559
	CA50	19	8.0	11	393	4323

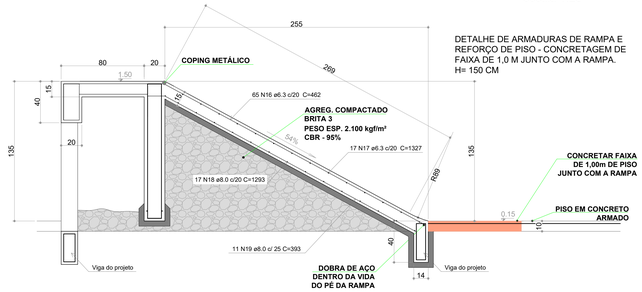
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)	
CA50	6.3	1232.9	332.3	
CA50	8.0	674.4	293.0	
PESO TOTAL (kg)				
CA50	253			

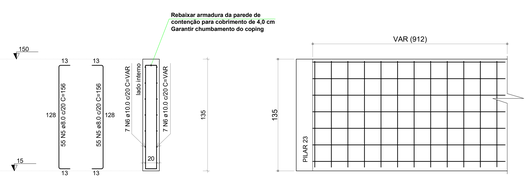
Volume de concreto (C-30) = 10.70 m³
Área de forma = 2.74 m²



Rampa de Obstáculos Circular
escala 1:20

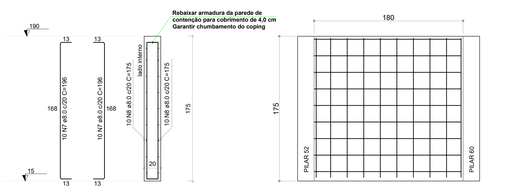


Rampa de Obstáculos Inclinada Reta
escala 1:20



PAR1 = PAR2
ESC 1:25

VISTA PAR1=PAR2
ESC 1:25



PAR3
ESC 1:25

VISTA PAR3
ESC 1:25

Cobrimento paredes = 3,5 cm
Os cobrimentos mínimo de armadura deverão respeitas o projeto de cada peça, conforme detalhamento.

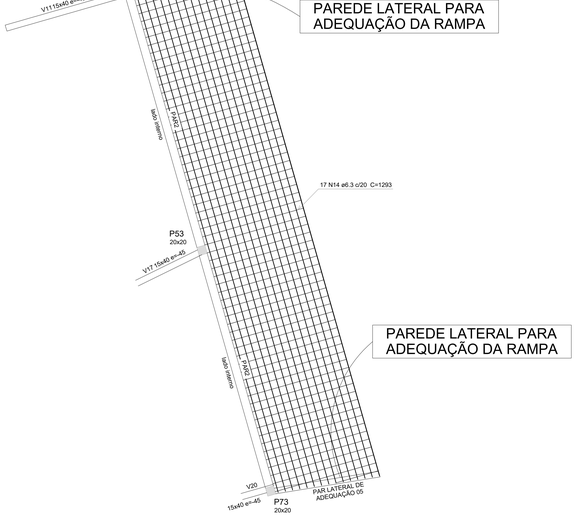
Relação do aço

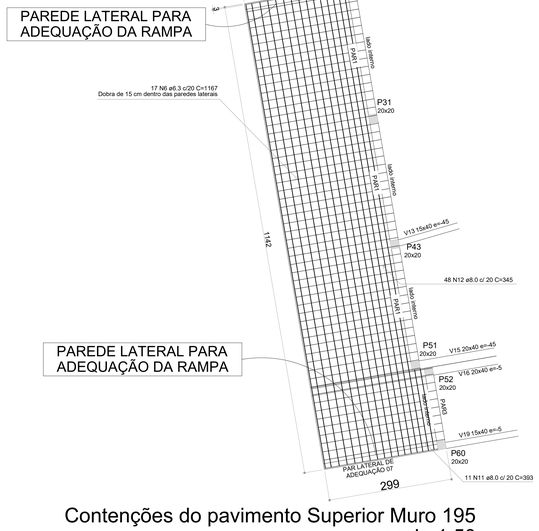
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
PAREDES	CA50	1	8.0	30	105	3150
	CA50	2	8.0	22	136	2992
	CA50	3	8.0	56	88	4928
	CA50	4	8.0	36	66	2376
	CA50	5	8.0	110	156	17160
	CA50	6	10.0	14	912	12768
	CA50	7	8.0	20	196	3920
	CA50	8	8.0	20	175	3500

Resumo do aço

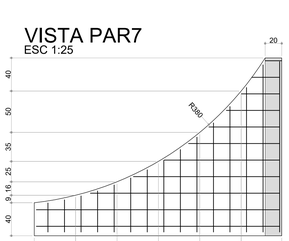
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)	
CA50	8.0	380.3		166
CA50	10.0	127.7		87
PESO TOTAL (kg)				
CA50	253			

Volume de concreto (C-30) = 8.36 m³
Área de forma = 90.66 m²

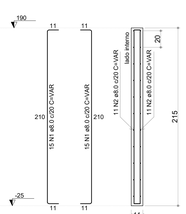




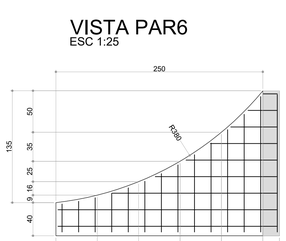
Contenções do pavimento Superior Muro 195
escala 1:50



PAR7
ESC 1:25

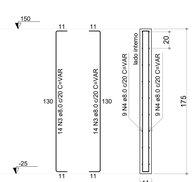


VISTA PAR7
ESC 1:25

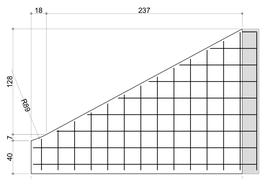


PAR6
ESC 1:25

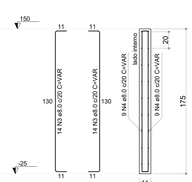
VISTA PAR6
ESC 1:25



PAR4=PAR5
ESC 1:25



VISTA PAR4=PAR5
ESC 1:25



PAR4=PAR5
ESC 1:25

DIOCLESIO RAGNINI:42395984949

Assinado de forma digital por DIOCLESIO RAGNINI:42395984949
Dados: 2024.08.14 13:02:54 -03'00'

govbr
Documento assinado digitalmente
JULIO CESAR RECH
Data: 02/08/2024 08:24:19-0300
Verifique em https://validar.iti.gov.br

PROJETO DE ESTRUTURAS

Prancha: ES - 16/16

Área Edificação: 507,21 m²

Área terreno: -

Data: Junho / 2024

Escala: Indicada

Arquivo: DET_PREF_JOAÇABA_REV03.dwg

Proprietário: **PREFEITURA MUNICIPAL DE JOAÇABA** JOAÇABA- SC

Obra: **PISTA DE SKATE**

Responsável Técnico: Julio Cesar Rech, Engenheiro Civil, CREA-SC 105.610-3

Discriminação: Detalhamento: Paredes de contenção das rampas

CONCÓRDIA ENGENHARIA E TECNOLOGIA LTDA
concordia.eng@concordia.psi.br
(49) 9.8818-1999
Rua Dep. Carlos Buchele, 172, Centro, Concórdia - SC