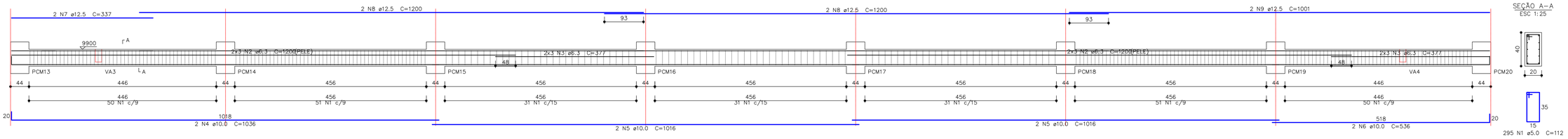
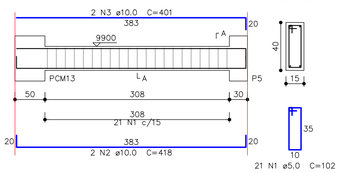
VA1
ESC 1:50



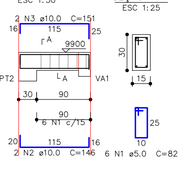
SEÇÃO A–A
ESC 1:25

VA2
ESC 1:50



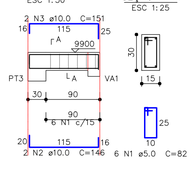
SEÇÃO A–A
ESC 1:25

VA3
ESC 1:50



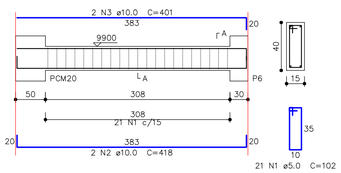
SEÇÃO A–A
ESC 1:25

VA4
ESC 1:50



SEÇÃO A–A
ESC 1:25

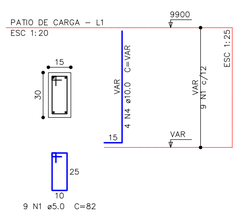
VA5
ESC 1:50



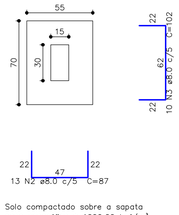
SEÇÃO A–A
ESC 1:25

PT2=PT3

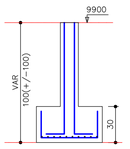
PATIO DE CARGA – L1
ESC 1:20



ST2=ST3
PLANTA
ESC 1:25



CORTE
ESC 1:25



Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
2xS5	CA60	1	5.0	14	92	1288
	CA50	2	10.0	14	151	2114
	CA50	3	10.0	38	121	4598
	CA50	4	12.5	8	VAR	VAR
2xSCM13	CA60	1	5.0	14	208	2912
	CA60	2	5.0	28	74	2072
	CA60	3	5.0	28	54	1512
	CA50	4	10.0	48	211	10128
	CA50	5	10.0	32	241	7712
	CA50	6	12.5	24	VAR	VAR
6xSCM14	CA60	1	5.0	42	208	8736
	CA60	2	5.0	84	74	6216
	CA60	3	5.0	84	54	4536
	CA50	4	10.0	210	307	64470
	CA50	5	10.0	96	423	40608
	CA50	6	12.5	72	VAR	VAR
2xST2	CA60	1	5.0	18	82	1476
	CA50	2	8.0	26	87	2262
	CA50	3	8.0	20	102	2040
	CA50	4	10.0	8	VAR	VAR
VA1	CA60	1	5.0	295	112	33040
	CA50	2	6.3	12	1200	14400
	CA50	3	6.3	12	377	4524
	CA50	4	10.0	2	1036	2072
	CA50	5	10.0	4	1016	4064
	CA50	6	10.0	2	536	1072
	CA50	7	12.5	2	337	674
	CA50	8	12.5	4	1200	4800
	CA50	9	12.5	2	1001	2002
VA2	CA60	1	5.0	21	102	2142
	CA50	2	10.0	2	418	836
	CA50	3	10.0	2	401	802
VA3	CA60	1	5.0	6	82	492
	CA50	2	10.0	2	146	292
	CA50	3	10.0	2	151	302
VA4	CA60	1	5.0	6	82	492
	CA50	2	10.0	2	146	292
	CA50	3	10.0	2	151	302
VA5	CA60	1	5.0	21	102	2142
	CA50	2	10.0	2	418	836
	CA50	3	10.0	2	401	802

Resumo do aço

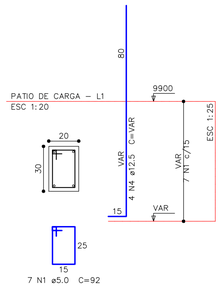
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	189.3	50.9
	8.0	43.1	18.7
	10.0	1421.5	964
	12.5	270.3	286.4
CA60	5.0	670.6	113.7

PESO TOTAL (kg)	
CA50	1320.1
CA60	113.7

Volume de concreto Sapatas (C–25) = 10.73 m³
Volume de concreto Pilares e Vigas (C–25) = 6.36 m³
Área de forma Sapatas= 32.30 m²
Área de forma Pilares e Vigas = 68.35 m²

P5=P6

PATIO DE CARGA – L1
ESC 1:20



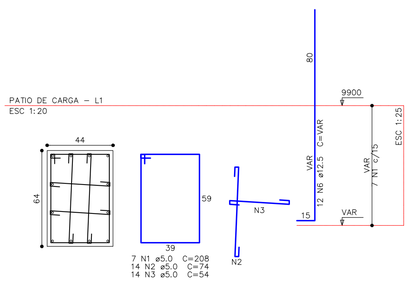
S5=S6
PLANTA
ESC 1:25

CORTE
ESC 1:25

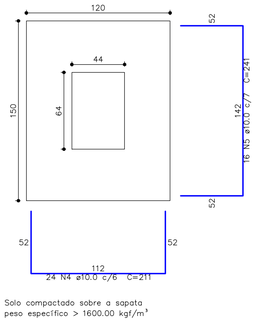
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

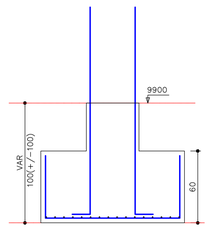
PCM13=PCM20

PATIO DE CARGA – L1
ESC 1:20



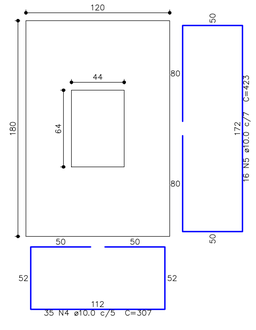
CORTE
ESC 1:25



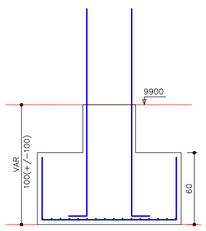


Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

SCM14=SCM15=SCM16 =SCM17=SCM18=SCM19
PLANTA
ESC 1:25

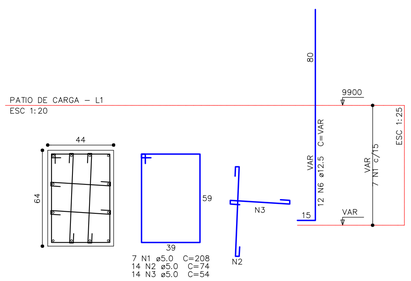


CORTE
ESC 1:25



PCM14=PCM15=PCM16 =PCM17=PCM18=PCM19

PATIO DE CARGA – L1
ESC 1:20



Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

REV	
VER	
DATA	
REV	
VER	
DATA	

2MB ENGENHARIA e PROJETOS
RUA RUI BARBOSA Nº 1721, VILA SANTA HELENA FONE (018)-3221191/9 CEL.8702-0868 – CEP:19.930-000 – PRES.PRUDENTE – SP

FOLHA: EC–03

PROJETO:	ESTRUTURA DE CONCRETO ARMADO – ADMINISTRAÇÃO/REFEITÓRIO
OBRA:	PÚBLICA – CENTRO TRIAGEM DE MATERIAIS RECICLAVEIS
LOCAL DA OBRA:	RODOVIA DEMÉTRIO ANTÔNIO ZACARIAS (2KM+200M) – SANTO ANASTÁCIO – SP
INTERESSADO:	PREFEITURA MUNICIPAL DE SANTO ANASTACIO
ASSUNTO:	DETALHAMENTO DE SAPATAS E VIGAS DO ARRIMO NIVEL 9900cm

DATA:	ESCALA:	ENG. RESPONSAVEL:	
MARÇO DE 2015	1:50	MORANDIR MEIRA BRANDAO	CREA: 5060040121/SP

A1=840x594mm

MENU DE PENAS

PENA	ESPESSURA	COR
1	0,03	1
2	0,05	2
3	0,07	3
4	0,09	4
5	0,11	5
6	0,13	6
7	0,15	7
8	0,18	8
9	0,20	9
21	0,15	7
1,30	0,15	1,30
254	0,15	254

DEMAIS PENAS 0,15 NA COR
PLOTAGEM ESCALA 1:100