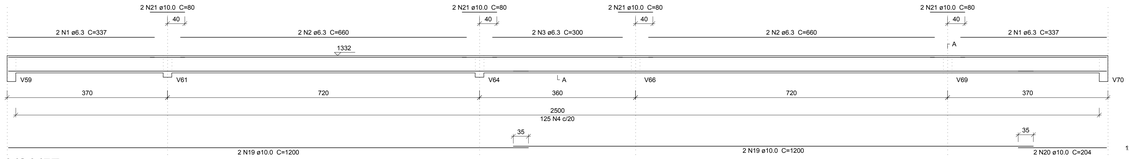
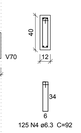
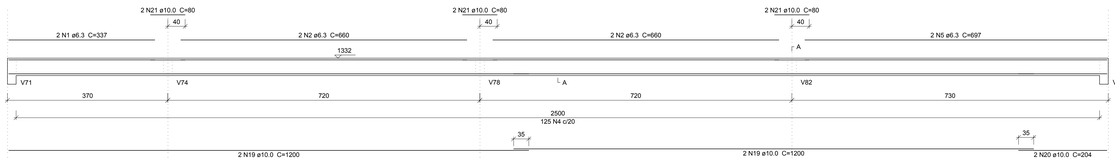
V1
ESC 1:50



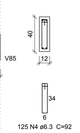
SEÇÃO A-A
ESC 1:25



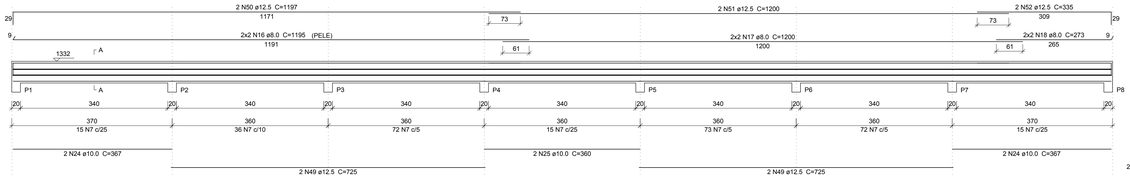
V2,V57
ESC 1:50



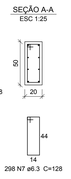
SEÇÃO A-A
ESC 1:25



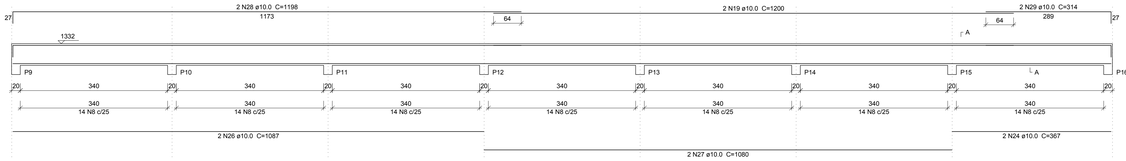
V3
ESC 1:50



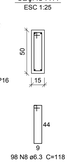
SEÇÃO A-A
ESC 1:25



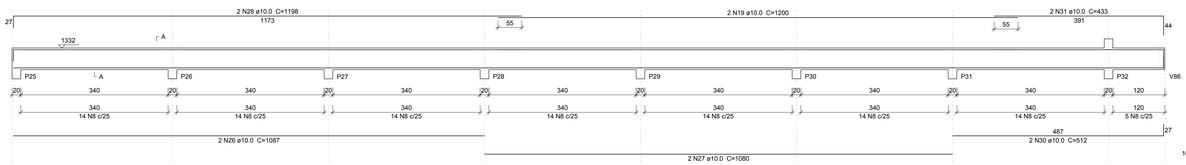
V4
ESC 1:50



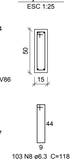
SEÇÃO A-A
ESC 1:25



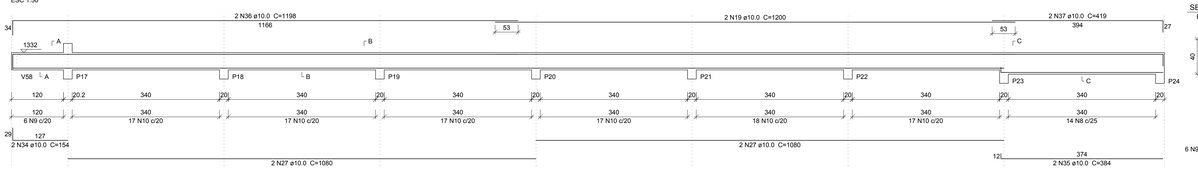
V47,V50
ESC 1:50



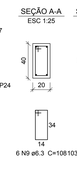
SEÇÃO A-A
ESC 1:25



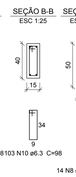
V48,V49
ESC 1:50



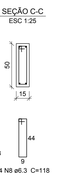
SEÇÃO A-A
ESC 1:25



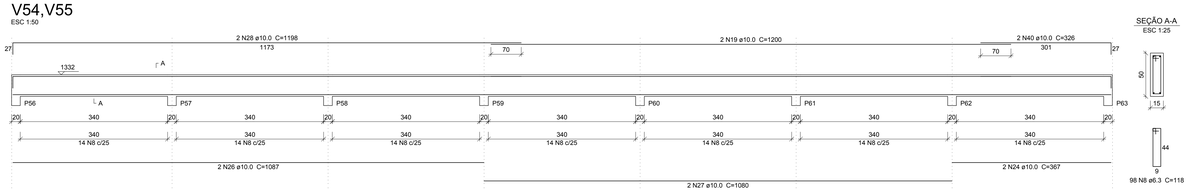
SEÇÃO B-B
ESC 1:25



SEÇÃO C-C
ESC 1:25

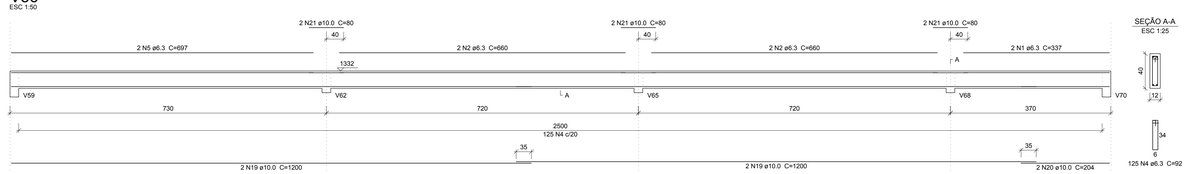


V54,V55
ESC 1:50



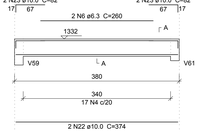
SEÇÃO A-A
ESC 1:25

V56
ESC 1:50

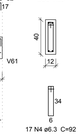


SEÇÃO A-A
ESC 1:25

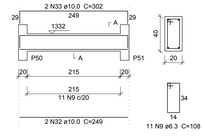
V5 a V46
ESC 1:50



SEÇÃO A-A
ESC 1:25

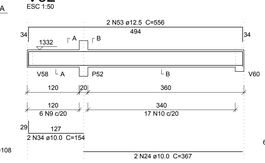


V51
ESC 1:50



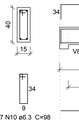
SEÇÃO A-A
ESC 1:25

V52
ESC 1:50

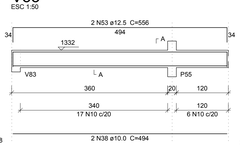


SEÇÃO A-A
ESC 1:25

SEÇÃO B-B
ESC 1:25

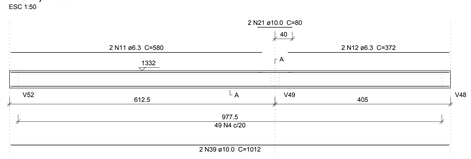


V53
ESC 1:50

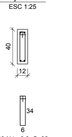


SEÇÃO A-A
ESC 1:25

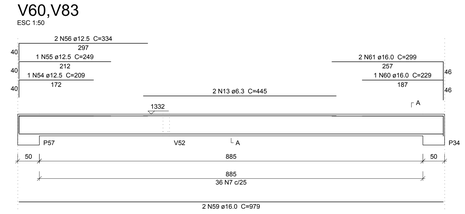
V58,V86
ESC 1:50



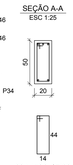
SEÇÃO A-A
ESC 1:25



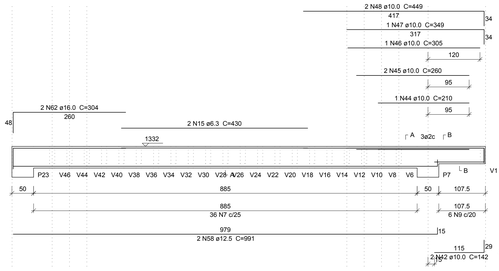
V60,V83
ESC 1:50



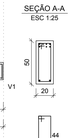
SEÇÃO A-A
ESC 1:25



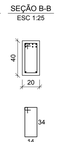
V61,V69
ESC 1:50



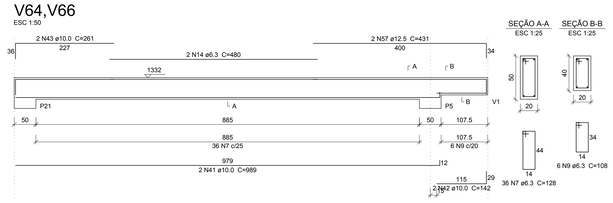
SEÇÃO A-A
ESC 1:25



SEÇÃO B-B
ESC 1:25

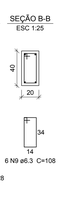


V64,V66
ESC 1:50



SEÇÃO A-A
ESC 1:25

SEÇÃO B-B
ESC 1:25



Relação do aço

V1	2xV2	V3	
V4	42xV5	2xV47	
2xV48	V51	V52	
V53	2xV54	V56	
2xV58	2xV60	2xV61	
2xV64			

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	6.3	10	337	3370
	2	6.3	16	660	10560
	3	6.3	2	300	600
	4	6.3	1312	92	120704
	5	6.3	6	697	4182
	6	6.3	84	260	21840
	7	6.3	514	128	65792
	8	6.3	528	118	62304
	9	6.3	53	108	5724
	10	6.3	246	98	24108
	11	6.3	4	580	2320
	12	6.3	4	372	1488
	13	6.3	4	445	1780
	14	6.3	4	480	1920
	15	6.3	4	430	1720
	16	8.0	4	1195	4780
	17	8.0	4	1200	4800
	18	8.0	4	273	1092
	19	10.0	30	1200	36000
	20	10.0	8	204	1632
	21	10.0	30	80	2400
	22	10.0	84	374	31416
	23	10.0	168	82	13776
	24	10.0	12	367	4404
	25	10.0	2	360	720
	26	10.0	10	1087	10870
	27	10.0	18	1080	19440
	28	10.0	10	1198	11980
	29	10.0	2	314	628
	30	10.0	4	512	2048
	31	10.0	4	433	1732
	32	10.0	2	249	498
	33	10.0	2	302	604
	34	10.0	6	154	924
	35	10.0	4	384	1536
	36	10.0	4	1198	4792
	37	10.0	4	419	1676
	38	10.0	2	494	988
	39	10.0	4	1012	4048
	40	10.0	4	326	1304
	41	10.0	4	989	3956
	42	10.0	8	142	1136
	43	10.0	4	261	1044
	44	10.0	2	210	420
	45	10.0	4	260	1040
	46	10.0	2	305	610
	47	10.0	2	349	698
	48	10.0	4	449	1796
	49	12.5	4	725	2900
	50	12.5	2	1197	2394
	51	12.5	2	1200	2400
	52	12.5	2	335	670
	53	12.5	4	556	2224
	54	12.5	2	209	418
	55	12.5	2	249	498
	56	12.5	4	334	1336
	57	12.5	4	431	1724
	58	12.5	4	991	3964
	59	16.0	4	979	3916
	60	16.0	2	229	458
	61	16.0	4	299	1196
	62	16.0	4	304	1216

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	6.3	3284.2	803.6
	8.0	106.8	42.1
	10.0	1641.2	1011.8
	12.5	185.3	178.5
	16.0	67.9	107.1
PESO TOTAL (kg)			
CA50	2143.2		

Volume de concreto (C-25) = 36.18 m³
Área de forma = 577.6 m²

NOTAS GERAIS

- Concreto a usar: fck = 25,0 MPa.
- Medidas expressas em centímetros. Escalas indicadas no desenho.
- Não tomar medidas do desenho com régua (escala).
- Observar comprimentos mínimos de traspasse (emendas e esperas) exigidos.
- Obedecer cobrimentos das armaduras segundo as normas da ABNT e o projeto.
- Dispor armaduras de pele (costela) quando se indicar no desenho da ferragem.
- Jamais alterar a distribuição das armaduras de pilares nas respectivas seções.
- Projeto de fundações conforme RELATÓRIO N. ° 145.SO. 2009, fornecido por Prossonda Fundações.
- No caso de dúvidas, ou na suspeita de engano no desenho, contatar o calculista.

REVISÃO	DESCRIÇÃO	VISTO	DATA
01	MUDANÇA NAS VIGAS LONGITUDINAIS, PERGOLADO NA COBERTURA E PILARES CANTEIRAS	Manassés	05/10/2016
00	EMISSÃO INICIAL	Manassés	16/10/2014

UNIVERSIDADE FEDERAL DO AMAZONAS
PREFEITURA DA UFAM

OBRA
CAMPUS UNIVERSITÁRIO DA UFAM MANAUS
BIBLIOTECA SETOR SUL
PROJETO DE ESTRUTURA DE CONCRETO

TITULO
PAVIMENTO COBERTURA
VIGAS V1,V2,V3,V4,V5,V47,V48,V51,V52,V53,V54,V56,V58,V560,V61,V64

ESCALA	DATA	PROJETO	ART:	ARQUIVO
INDICADA	16/10/2014	Eng.Manassés Maia CREA 111160/AM	0030730/2014	1411-EC-033-R01.cad

R01
01-EC-653
PRANCHA

Configuração de Penas
Colocar em TICKNS
- Espessura = 0.05
- Color = Black
- GrayScale = Off
Com exceção das seguintes:

Pena	Espessura
1	0.10
2	0.20
3	0.30
4	0.40
5	0.50
6	0.60
7	0.15
8	0.05