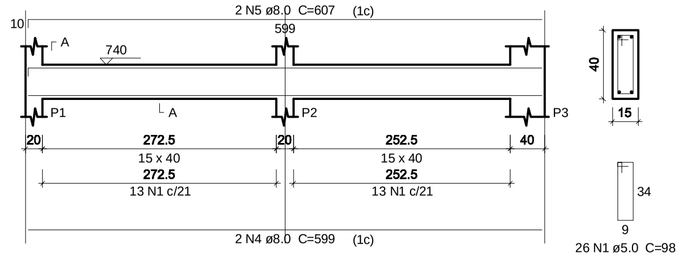
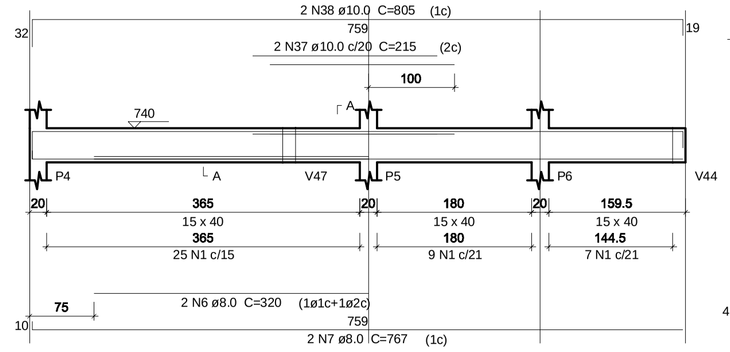
V33
ESC 1:50

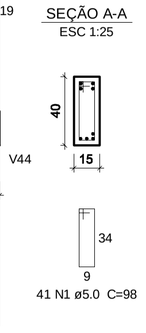


SEÇÃO A-A
ESC 1:25

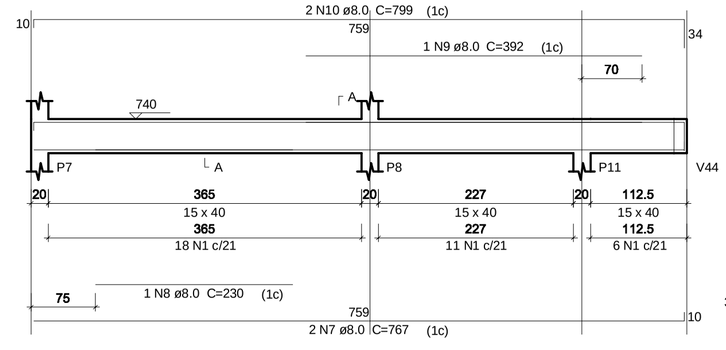
V34
ESC 1:50



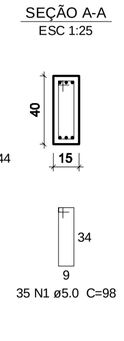
SEÇÃO A-A
ESC 1:25



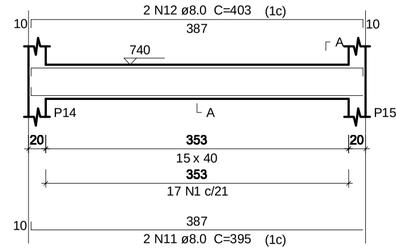
V35
ESC 1:50



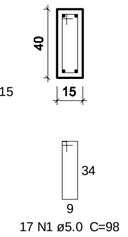
SEÇÃO A-A
ESC 1:25



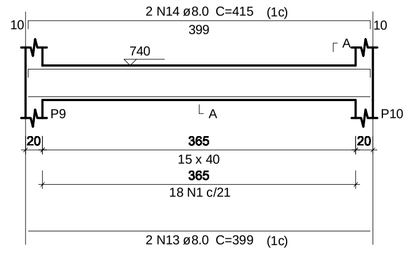
V36
ESC 1:50



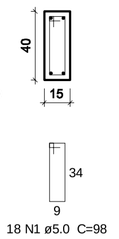
SEÇÃO A-A
ESC 1:25



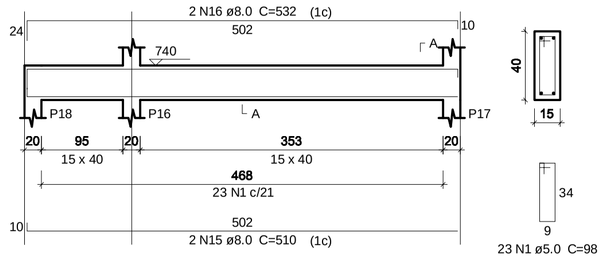
V37
ESC 1:50



SEÇÃO A-A
ESC 1:25

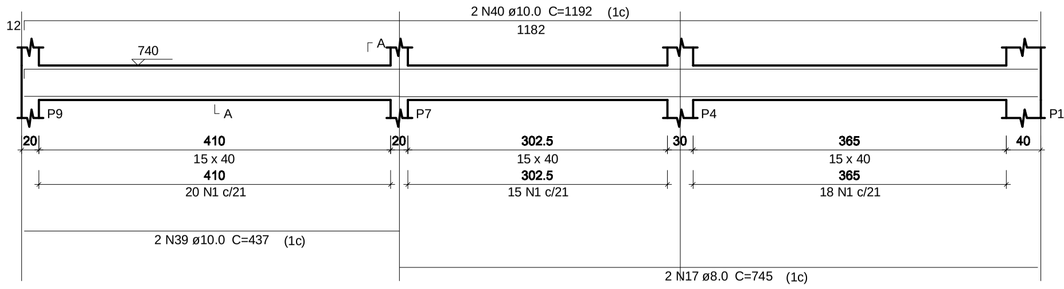


V38
ESC 1:50

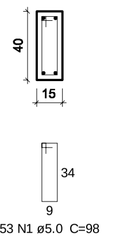


SEÇÃO A-A
ESC 1:25

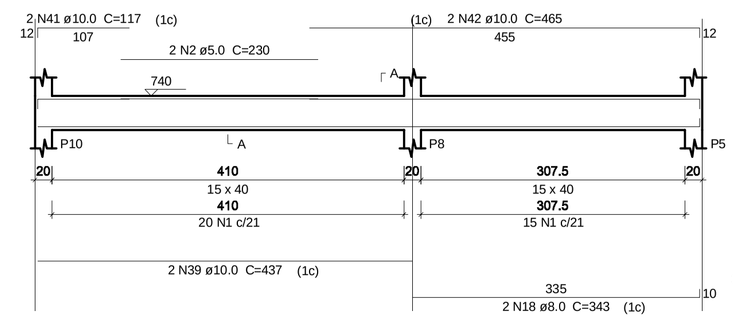
V40
ESC 1:50



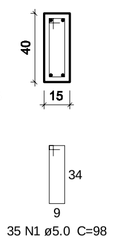
SEÇÃO A-A
ESC 1:25



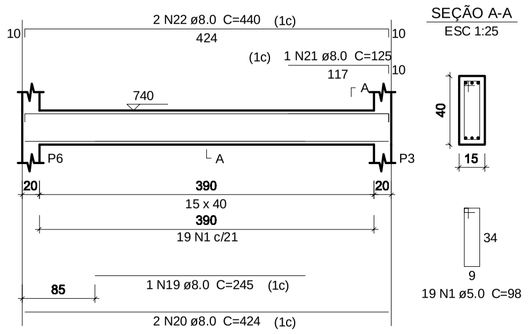
V41
ESC 1:50



SEÇÃO A-A
ESC 1:25

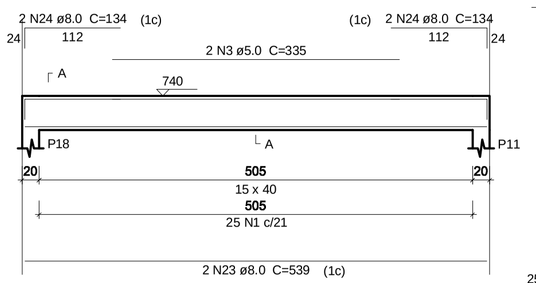


V42
ESC 1:50

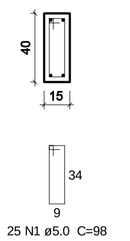


SEÇÃO A-A
ESC 1:25

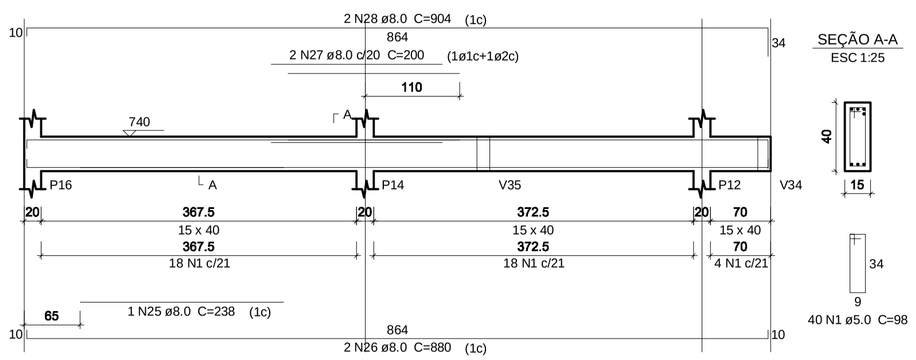
V43
ESC 1:50



SEÇÃO A-A
ESC 1:25

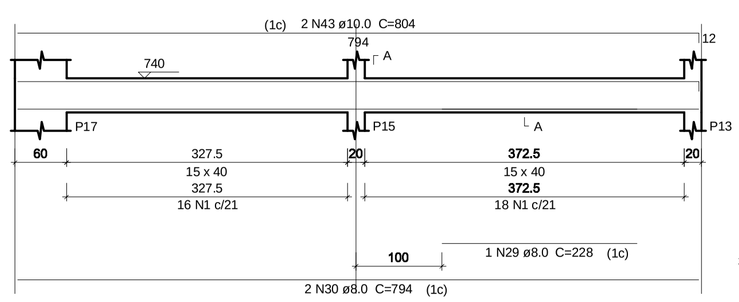


V44
ESC 1:50

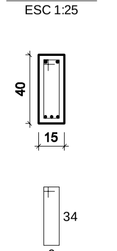


SEÇÃO A-A
ESC 1:25

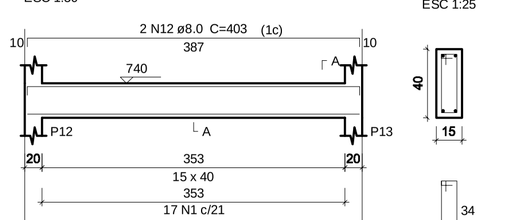
V45
ESC 1:50



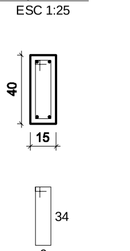
SEÇÃO A-A
ESC 1:25



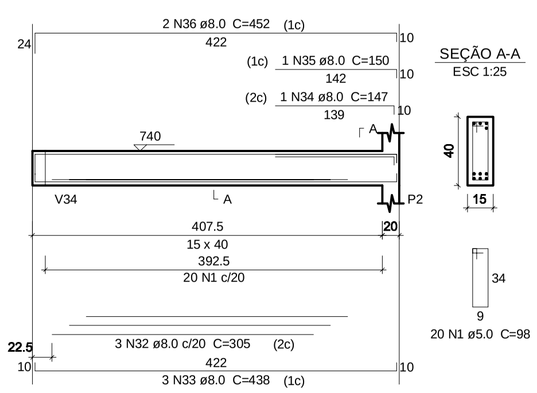
V46
ESC 1:50



SEÇÃO A-A
ESC 1:25



V47
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço

V33	V34	V35
V36	V37	V38
V40	V41	V42
V43	V44	V45
V46	V47	

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	403	98	39494
	2	5.0	2	230	460
	3	5.0	2	335	670
CA50	4	8.0	2	599	1198
	5	8.0	2	607	1214
	6	8.0	2	320	640
	7	8.0	4	767	3068
	8	8.0	1	230	230
	9	8.0	1	392	392
	10	8.0	2	799	1598
	11	8.0	2	395	790
	12	8.0	4	403	1612
	13	8.0	2	399	798
	14	8.0	2	415	830
	15	8.0	2	510	1020
	16	8.0	2	532	1064
	17	8.0	2	745	1490
	18	8.0	2	343	686
	19	8.0	1	245	245
	20	8.0	2	424	848
	21	8.0	1	125	125
	22	8.0	2	440	880
	23	8.0	2	539	1078
	24	8.0	4	134	536
	25	8.0	1	238	238
	26	8.0	2	880	1760
	27	8.0	2	200	400
	28	8.0	2	904	1808
	29	8.0	1	228	228
	30	8.0	2	794	1588
	31	8.0	2	387	774
	32	8.0	3	305	915
	33	8.0	3	438	1314
	34	8.0	1	147	147
	35	8.0	1	150	150
	36	8.0	2	452	904
	37	10.0	2	215	430
	38	10.0	2	805	1610
	39	10.0	4	437	1748
	40	10.0	2	1192	2384
	41	10.0	2	117	234
	42	10.0	2	465	930
	43	10.0	2	804	1608

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	305.7	132.7
	10.0	89.5	60.7
CA60	5.0	406.3	68.9

PESO TOTAL (kg)	
CA50	193.3
CA60	68.9

Volume de concreto (C-30) = 5.32 m³
Área de forma = 84.27 m²

	DESCRIÇÃO	DATA	EXEC.	VERIF.	APROV.

CONTRATADA:
VIAVOZ LTDA

CONTRATO Nº

RT: SINVAL LADEIRA
REG. CREA: 28.498/D

PROJ.: ROGER WILLIAN ROSA
REG. CREA: 105.413/D

ASS.:

ASS.:

PROJ.:

REG. CREA:

ASS.:

viavoz

CONTRATANTE:
PREFEITURA MUNICIPAL DE JOÃO NEIVA

PROGRAMA:
REFORMA E AMPLIAÇÃO DA ANTIGA EMEI HILDA BRITO

MUNICÍPIO/ÁREA:
JOÃO NEIVA / ES

TÍTULO:
PROJETO ESTRUTURAL
DETALHE
LAVANDERIA / VESTIÁRIOS – CRAS
VIGAS V33 ATÉ V47

DATA: DEZEMBRO/2018
ESCALA: INDICADA
PRANCHA: 4.24
ARQUIVO: