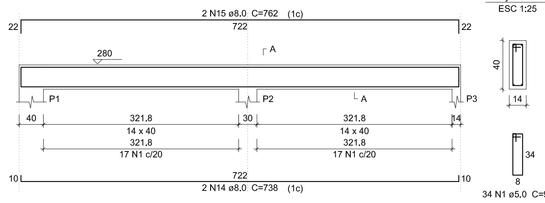
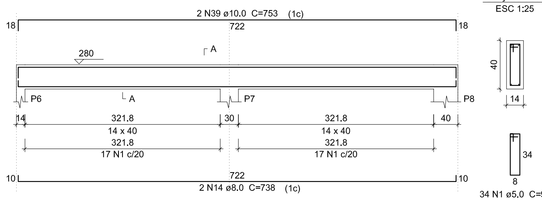
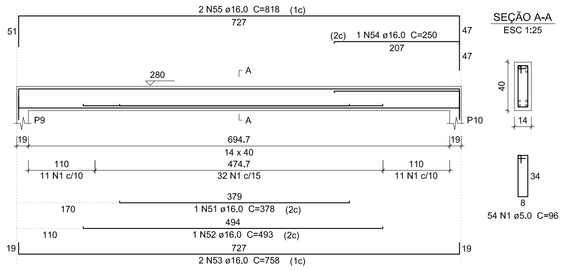
V1
ESC 1:50



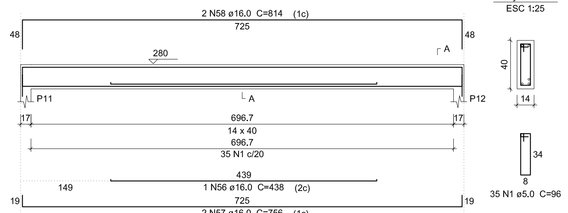
V2
ESC 1:50



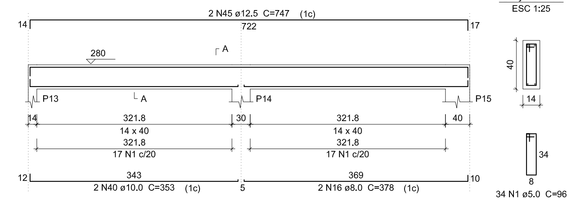
V3
ESC 1:50



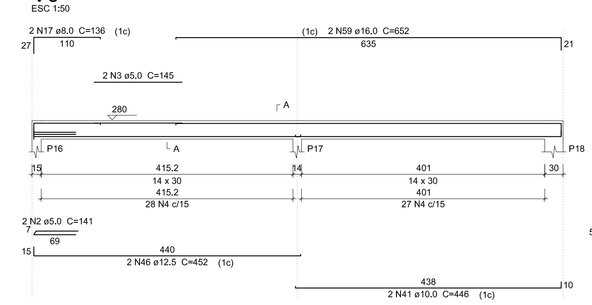
V4
ESC 1:50



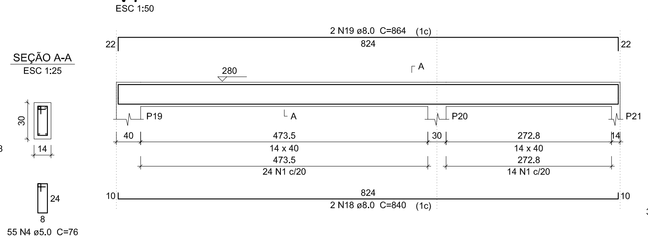
V5
ESC 1:50



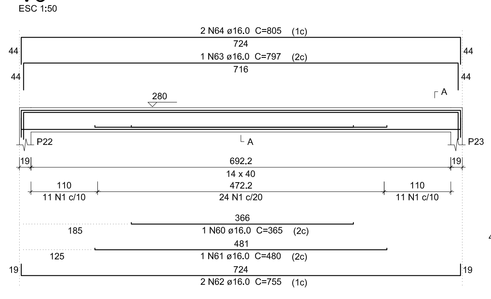
V6
ESC 1:50



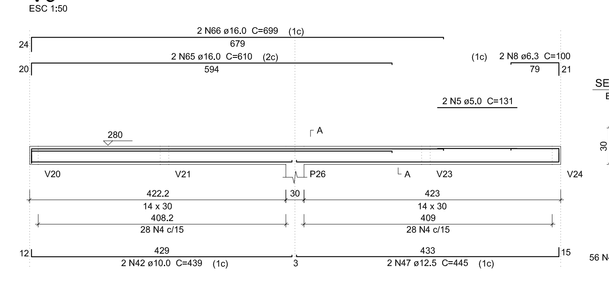
V7
ESC 1:50



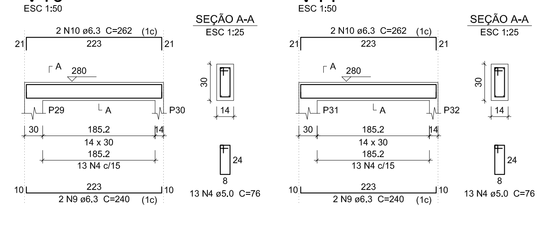
V8
ESC 1:50



V9
ESC 1:50

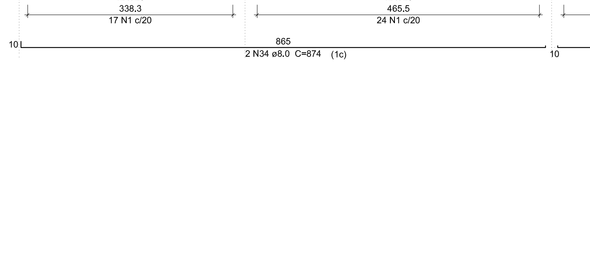


V10
ESC 1:50

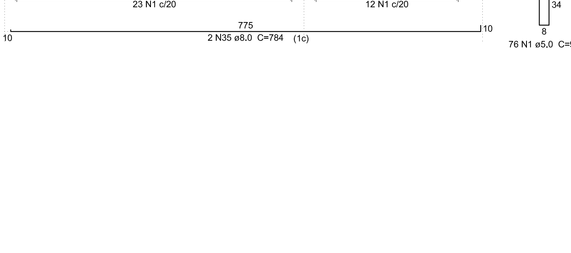


V11
ESC 1:50

V12
ESC 1:50



V13
ESC 1:50



V14
ESC 1:50

V15
ESC 1:50

V16
ESC 1:50

V17
ESC 1:50

V18
ESC 1:50

V19
ESC 1:50

V20
ESC 1:50

V21
ESC 1:50

V22
ESC 1:50

V23
ESC 1:50

V24
ESC 1:50

V25
ESC 1:50

V26
ESC 1:50

V27
ESC 1:50

Relação do aço

V1	V2	V3	
V4	V5	V6	
V7	V8	V9	
V10	V11	V12	
V13	V14	V15	
V16	V17	V18	
V19	V20	V21	
V22	V23	V24	
V25	V26	V27	

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	1039	96	99744
	2	5,0	2	141	282
	3	5,0	2	145	290
	4	5,0	262	76	19912
	5	5,0	2	131	262
	6	5,0	7	143	1001
	7	5,0	2	249	498
CA50	8	6,3	2	100	200
	9	6,3	4	240	960
	10	6,3	4	262	1048
	11	6,3	4	239	956
	12	6,3	2	387	774
	13	6,3	2	409	818
	14	8,0	10	738	7380
	15	8,0	6	762	4572
	16	8,0	2	378	756
	17	8,0	2	136	272
	18	8,0	2	840	1680
	19	8,0	2	864	1728
	20	8,0	2	276	552
	21	8,0	2	284	568
	22	8,0	2	144	288
	23	8,0	2	816	1632
	24	8,0	2	1038	2076
	25	8,0	2	1048	2096
	26	8,0	4	1169	4676
	27	8,0	6	1198	7188
	28	8,0	8	1200	9600
	29	8,0	4	650	2600
	30	8,0	2	829	1658
	31	8,0	2	1014	2028
	32	8,0	2	1085	2170
	33	8,0	2	269	538
	34	8,0	4	874	3496
	35	8,0	4	784	3136
	36	8,0	2	547	1094
	37	8,0	2	389	778
	38	8,0	2	415	830
	39	10,0	4	753	3012
	40	10,0	2	353	706
	41	10,0	2	446	892
	42	10,0	2	439	878
	43	10,0	2	1198	2396
	44	10,0	2	546	1092
	45	12,5	2	747	1494
	46	12,5	2	452	904
	47	12,5	2	445	890
	48	12,5	2	557	1114
	49	12,5	2	893	1786
	50	12,5	2	282	564
	51	16,0	1	378	378
	52	16,0	1	493	493
	53	16,0	2	758	1516
	54	16,0	1	250	250
	55	16,0	2	818	1636
	56	16,0	1	438	438
	57	16,0	2	756	1512
	58	16,0	2	814	1628
	59	16,0	2	652	1304
	60	16,0	1	365	365
	61	16,0	1	480	480
	62	16,0	2	755	1510
	63	16,0	1	797	797
	64	16,0	2	805	1610
	65	16,0	2	610	1220
	66	16,0	2	699	1398
	67	16,0	1	436	436
	68	16,0	2	754	1508
	69	16,0	2	812	1624
	70	16,0	2	577	1154
	71	16,0	2	507	1014
	72	16,0	4	606	2424
	73	16,0	2	640	1280
	74	16,0	2	647	1294

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6,3	47,6	12,8
	8,0	634	275,1
	10,0	89,8	60,9
	12,5	67,6	71,5
	16,0	272,7	473,4
CA60	5,0	1219,9	206,8
PESO TOTAL			
CA50	893,8		
CA60	206,8		

Vol. de concreto total (C-30) = 13,89 m³
Área de forma total = 234,71 m²

Piauí
GOVERNO DO ESTADO

GOVERNO DO ESTADO DO PIAUÍ

SEDUC - SECRETARIA DE ESTADO DA EDUCAÇÃO

DEPARTAMENTO: GERÊNCIA DE ARQUITETURA E ENGENHARIA

DESENHO: EST1

TÍTULO DO PROJETO: PROJETO DE CONSTRUÇÃO - U.E AFONSO MAFRENSE

ENDEREÇO DO SERVIÇO: Avenida 12 de outubro, 1995, Centro

PRANCHA: 01/01

TÍTULO DO DESENHO: DETALHAMENTO DE VIGAS COBERTURA

ARQUITETO(A):

MUNICÍPIO: Altos-PI

ZONA: URBANA

DESENHO:

ESCALA: INDICADA

FASE: PROJETO BÁSICO

DATA: DATA REV.ATUAL

REVISÃO: 01