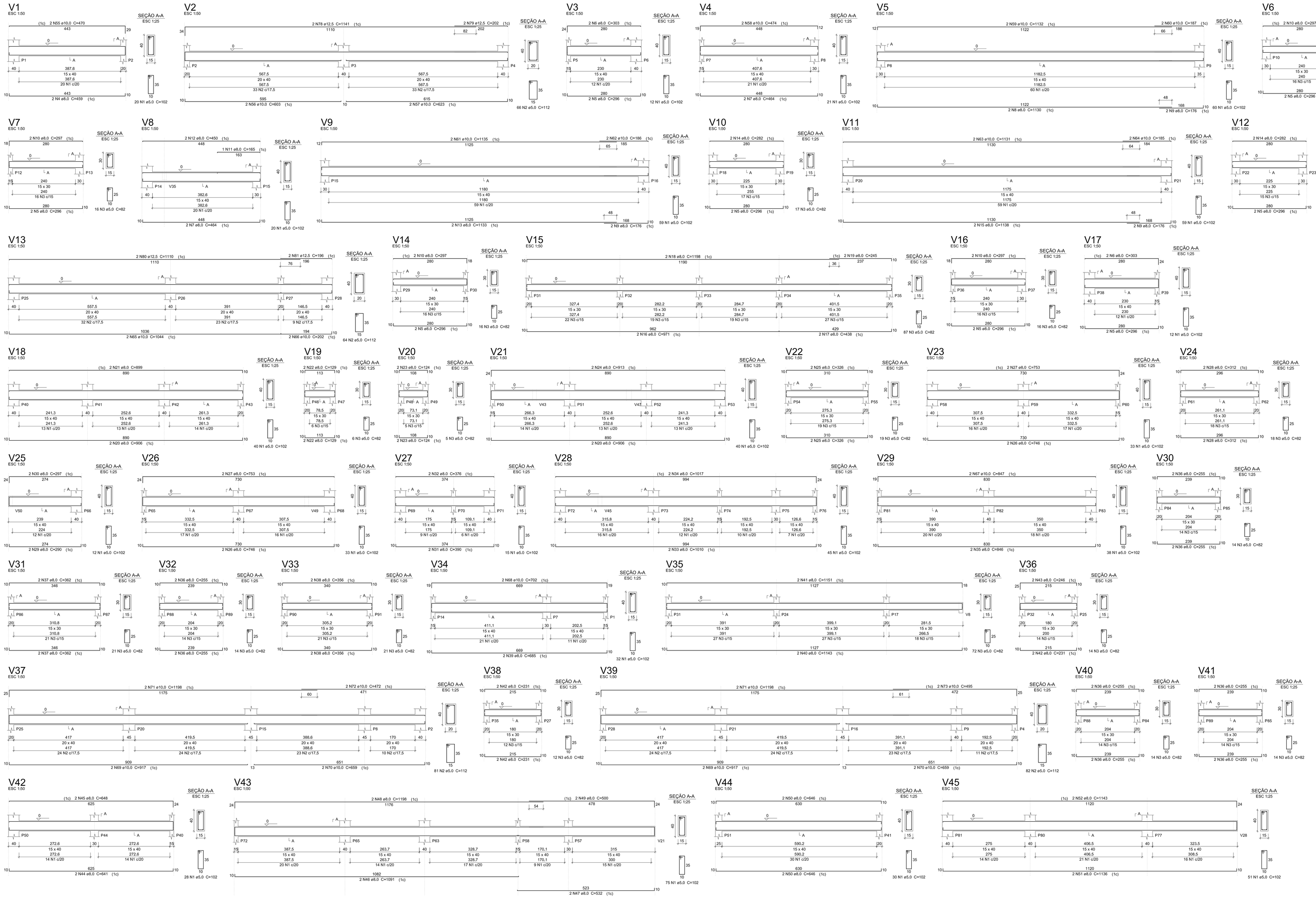

Relação do aço

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	
V28	V29	V30	
V31	V32	V33	
V34	V35	V36	
V37	V38	V39	
V40	V41	V42	
V43	V44	V45	
V46	V47	V48	
V49			

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	784	102	79968
	2	5,0	359	112	40208
	3	5,0	427	82	35014
CA50	4	8,0	2	459	918
	5	8,0	16	296	4736
	6	8,0	4	303	1212
	7	8,0	4	464	1856
	8	8,0	2	1130	2260
	9	8,0	6	176	1056
	10	8,0	8	297	2376
	11	8,0	1	165	165
	12	8,0	2	450	900
	13	8,0	2	1133	2266
	14	8,0	4	282	1128
	15	8,0	2	1138	2276
	16	8,0	2	971	1942
	17	8,0	2	438	876
	18	8,0	2	1198	2396
	19	8,0	2	245	490
	20	8,0	4	906	3624
	21	8,0	2	899	1798
	22	8,0	4	129	516
	23	8,0	4	124	496
	24	8,0	2	913	1826
	25	8,0	4	326	1304
	26	8,0	4	746	2984
	27	8,0	4	753	3012
	28	8,0	4	312	1248
	29	8,0	2	290	580
	30	8,0	2	297	594
	31	8,0	2	390	780
	32	8,0	2	376	752
	33	8,0	2	1010	2020
	34	8,0	2	1017	2034
	35	8,0	2	846	1692
	36	8,0	16	255	4080
	37	8,0	4	362	1448
	38	8,0	4	356	1424
	39	8,0	2	685	1370
	40	8,0	2	1143	2286
	41	8,0	2	1151	2302
	42	8,0	6	231	1386
	43	8,0	2	246	492
	44	8,0	2	641	1282
	45	8,0	2	648	1296
	46	8,0	2	1091	2182
	47	8,0	2	532	1064
	48	8,0	2	1198	2396
	49	8,0	2	500	1000
	50	8,0	8	646	5168
	51	8,0	2	1136	2272
	52	8,0	2	1143	2286
	53	8,0	2	441	882
	54	8,0	2	448	896
	55	10,0	2	470	940
	56	10,0	2	603	1206
	57	10,0	2	623	1246
	58	10,0	2	474	948
	59	10,0	2	1132	2264
	60	10,0	2	187	374
	61	10,0	2	1135	2270
	62	10,0	2	186	372
	63	10,0	2	1131	2262
	64	10,0	2	185	370
	65	10,0	2	1044	2088
	66	10,0	2	202	404
	67	10,0	2	847	1694
	68	10,0	2	702	1404
	69	10,0	4	917	3668
	70	10,0	4	659	2636
	71	10,0	4	1198	4792
	72	10,0	2	472	944
	73	10,0	2	495	990
	74	10,0	2	690	1380
	75	10,0	2	720	1440
	76	10,0	2	543	1086
	77	10,0	2	573	1146
	78	12,5	2	1141	2282
	79	12,5	2	202	404
	80	12,5	2	1110	2220
	81	12,5	2	196	392

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8,0	876,3	380,3
	10,0	359,3	243,6
	12,5	53	56,1
CA60	5,0	1551,9	263,1
PESO TOTAL			
CA50	680,1		
CA60	263,1		

Vol. de concreto total (C-30) = 19,03 m³
Área de forma total = 285,64 m²

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 MARTIN PINHEIRO
ENDEREÇO DO SERVIÇO: Rua Simão Borges, S/N, Centro
FRANCHA: 01/02
TÍTULO DO DESENHO: DETALHAMENTO DE VIGAS BALDRAME
ARQUITETO(A):
MUNICÍPIO: Palmeira do Piauí-PI
ZONA: URBANA
DESENHO:
ESCALA: INDICADA
FASE: PROJETO BÁSICO
DATA: DATA REV.ATUAL
REVISÃO: 01