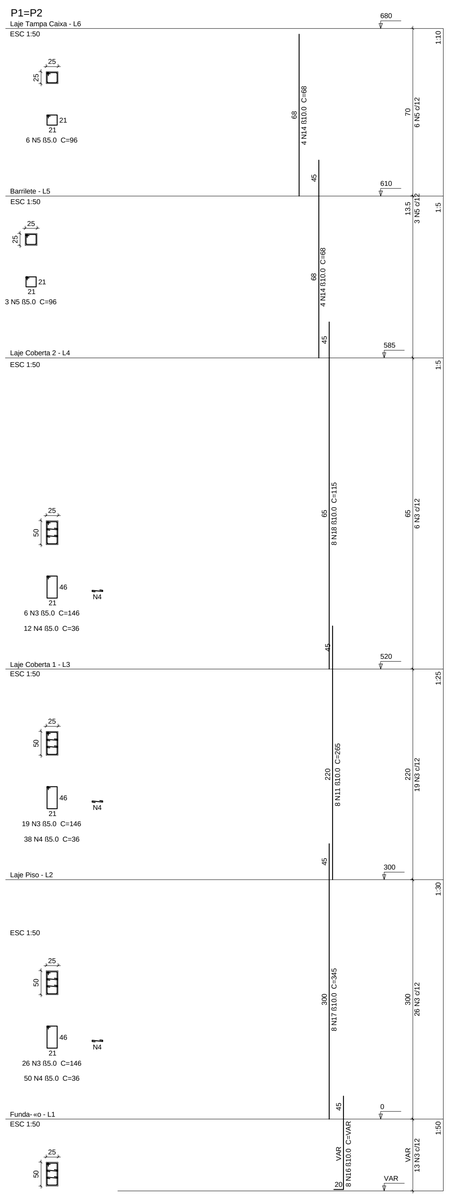
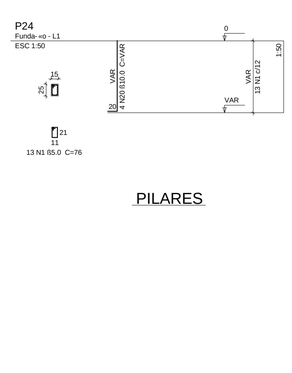
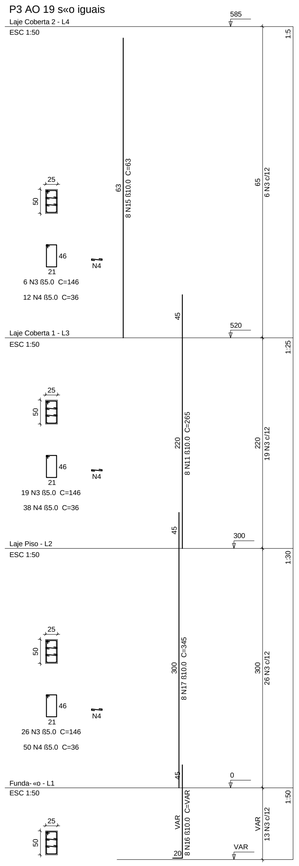
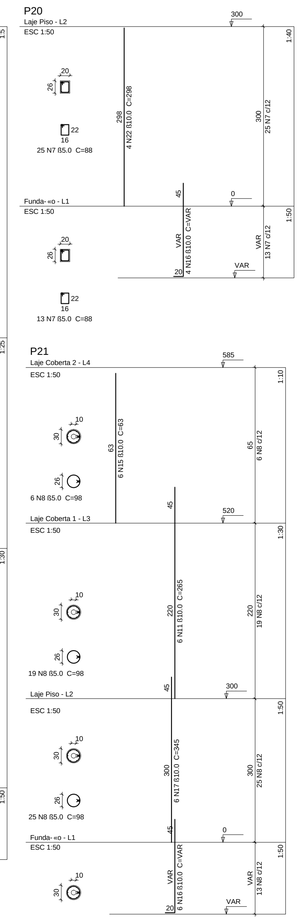
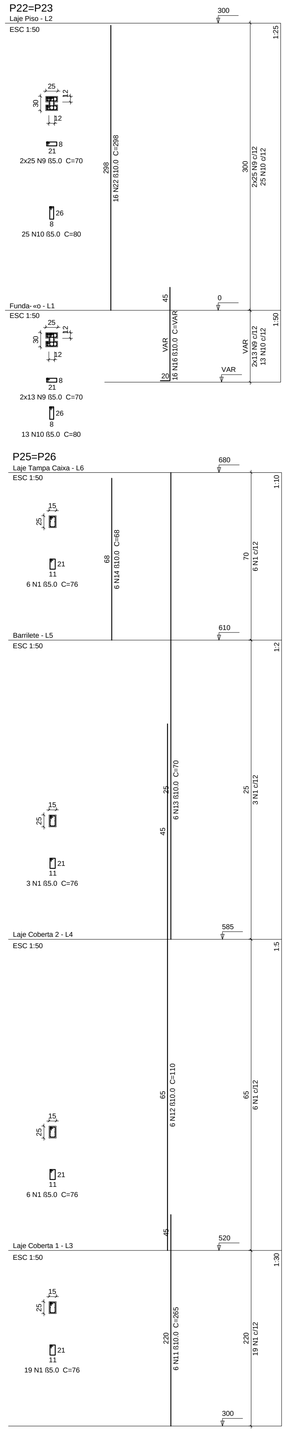
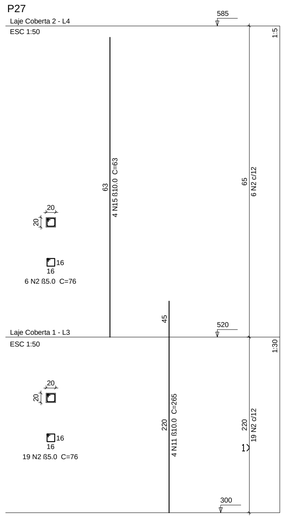












Rela- «o do a- o Pilares

Funda- «o:

P1	P2
P3	P4
P5	P6
P7	P8
P9	P10
P11	P12
P13	P14
P15	P16
P17	P18
P19	P20
P21	P22
P23	P24
P25	P26
P27	

Laje Coberta 1:

A€ O	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	81	76	6156
	2	5.0	25	76	1900
	3	5.0	1192	146	174032
	4	5.0	2094	36	75384
	5	5.0	18	96	1728
	6	5.0	132	36	4752
	7	5.0	38	88	3344
	8	5.0	63	98	6174
	9	5.0	152	70	10640
	10	5.0	76	80	6080
CA50	11	10.0	174	265	46110
	12	10.0	12	110	1320
	13	10.0	12	70	840
	14	10.0	20	68	1360
	15	10.0	154	63	9702
	16	10.0	146	VAR	VAR
	17	10.0	110	345	37950
	18	10.0	8	115	920
	19	10.0	8	73	584
	20	10.0	52	VAR	VAR
	21	10.0	24	90	2160
	22	10.0	36	298	10728
	23	12.5	36	90	3240
	24	12.5	12	298	3576
	25	12.5	24	345	8280

Resumo do a- o

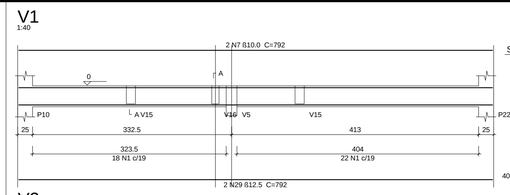
A€ O	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	1514.1	1026.8
	12.5	151	160
CA60	5.0	2901.9	492

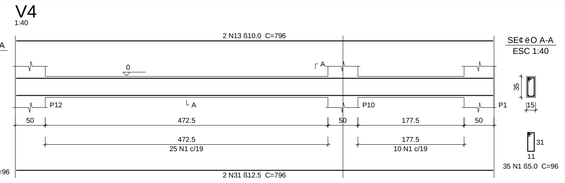
PESO TOTAL

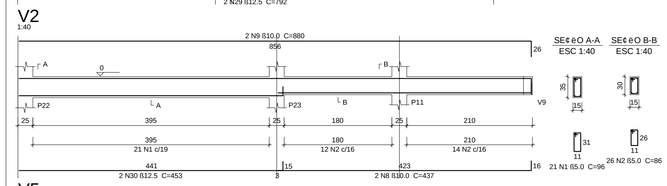
CA50	1186.8
CA60	492

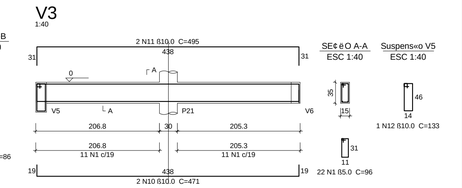
Vol. de concreto total (C-25) = 19.33 mj
Área de forma total = 244.3 mj

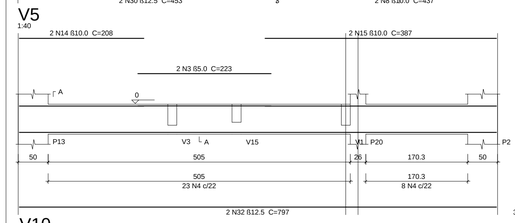
PILARES

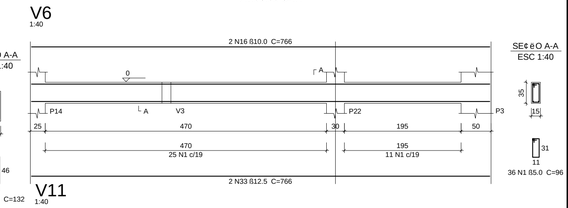


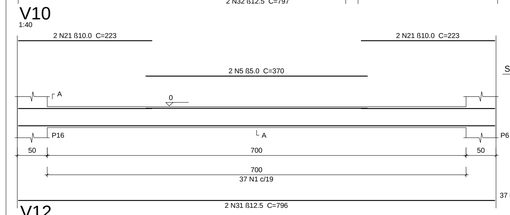


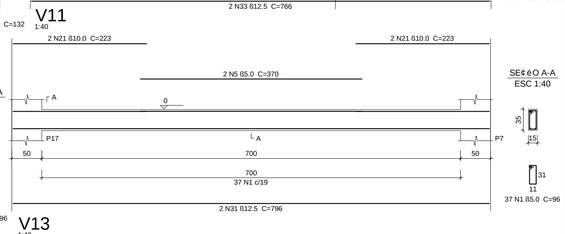


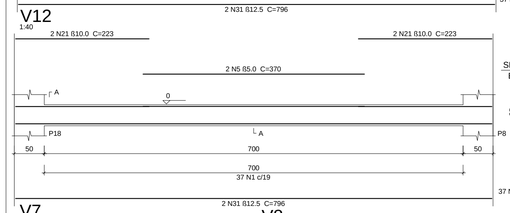


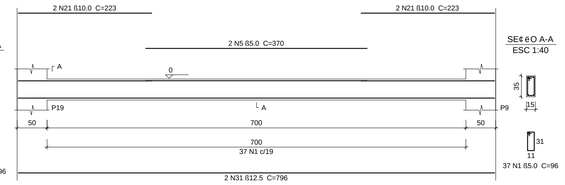


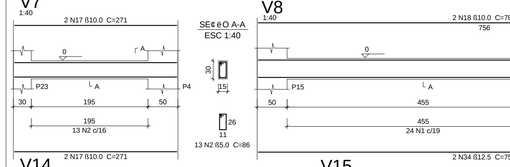


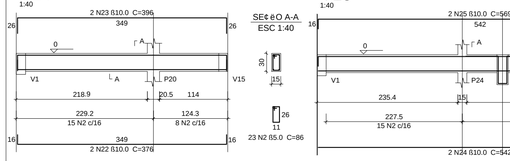


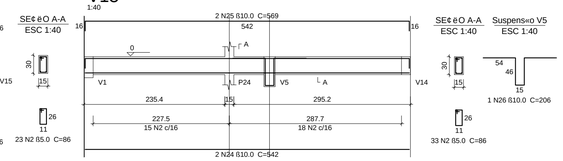


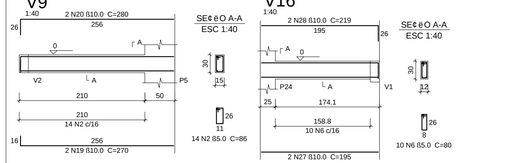


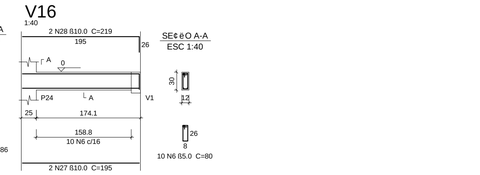












Rela- «o do a- o Vigas Funda- «o

V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16		

A€ O	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	337	96	32352
	2	5.0	109	86	9374
	3	5.0	2	223	446
	4	5.0	31	132	4092
	5	5.0	8	370	2960
	6	5.0	10	80	800
CA50	7	10.0	2	792	1584
	8	10.0	2	437	874
	9	10.0	2	880	1760
	10	10.0	2	471	942
	11	10.0	2	495	990
	12	10.0	1	133	133
	13	10.0	2	796	1592
	14	10.0	2	208	416
	15	10.0	2	387	774
	16	10.0	2	766	1532
	17	10.0	4	271	1084
	18	10.0	2	785	1570
	19	10.0	2	270	540
	20	10.0	2	280	560
	21	10.0	16	223	3568
	22	10.0	2	376	752
	23	10.0	2	396	792
	24	10.0	2	542	1084
	25	10.0	2	569	1138
	26	10.0	1	206	206
	27	10.0	2	195	390
	28	10.0	2	219	438
	29	12.5	2	792	1584
	30	12.5	2	453	906
	31	12.5	10	796	7960
	32	12.5	2	797	1594
	33	12.5	2	766	1532
	34	12.5	2	756	1512

Resumo do a- o

A€ O	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	227.2	154.1
	12.5	150.9	159.9
CA60	5.0	500.3	84.8

PESO TOTAL

CA50	314
CA60	84.8

Vol. de concreto total (C-25) = 5.41 mj
Área de forma total = 86.05 mj

VIGAS FUNDA€ëO

ESC.PLOT. 1000 = 100			
LAYER COR NR.	PEN NR.	PEN #STR	
vermelho	7	0.40	
amarelo	7	0.30	
verde	7	0.20	
ciano	7	0.35	
azul	7	0.15	
magenta	7	0.15	
branco	7	0.20	
cinza5	7	0.10	
cinza9	7	0.10	
demais	7	0.10	

Tamanho: A1 (Along_Proc=estabelecida Pr24 (N8 K Cp. 2)

APROVO | PAGO | I.S.S.P. | I.S.S.C. | CREA

PROJETO
CÁLCULO
CONSTRUÇÃO
PROPRIETÁRIO

PROJETO DE CÁLCULO ESTRUTURAL

–SOBRAL–CE

PROJETO
CENTRO DE TURISMO DE SOBRAL
PROPRIETÁRIO: PREFEITURA MUNICIPAL DE SOBRAL
END: AV. DR. GUARANY, SOBRAL-CE

ASSUNTO
PILARES E VIGAS FUNDAÇÃO

PRANCHA 02/05

CÁLCULO GERAL | ESCALA INDICADA | DATA MAR./2012 | DESENHO Autor