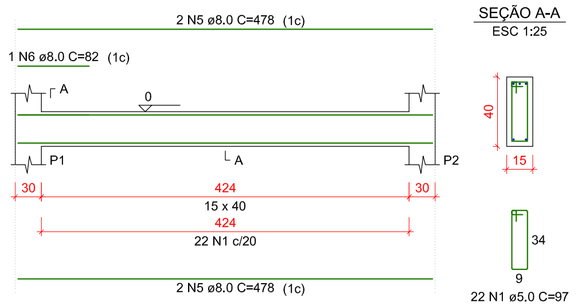
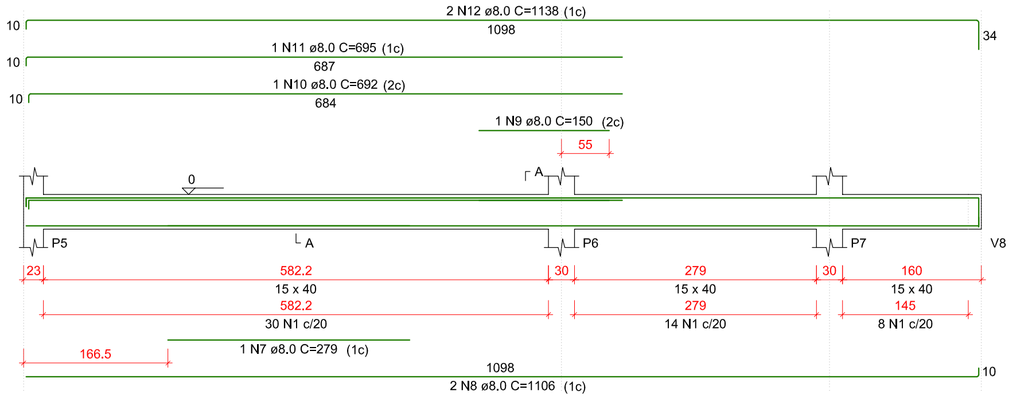
V1
ESC 1:50

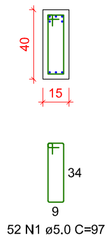


SEÇÃO A-A
ESC 1:25

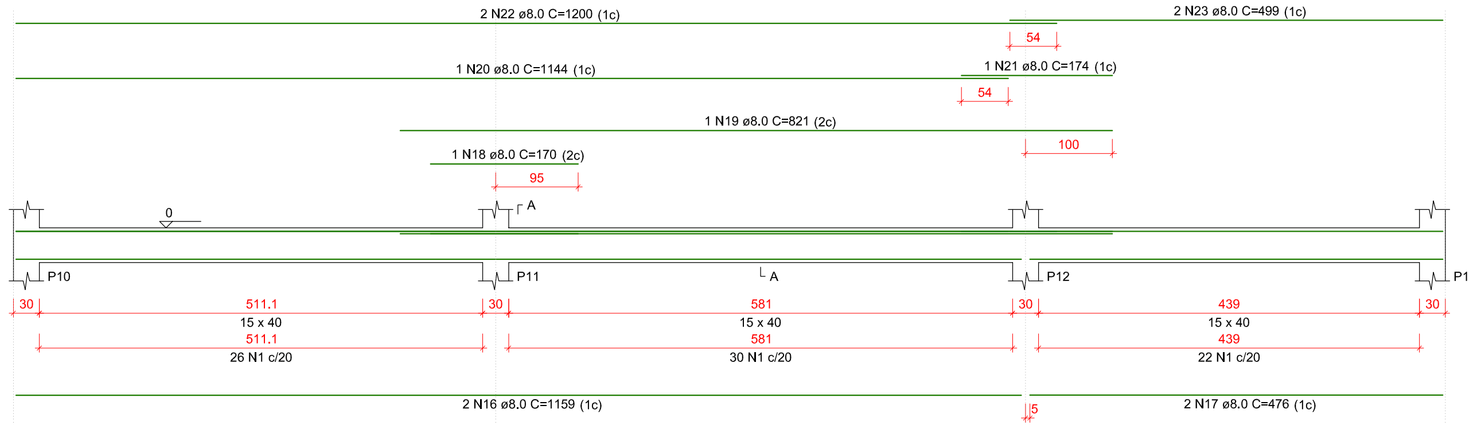
V2
ESC 1:50



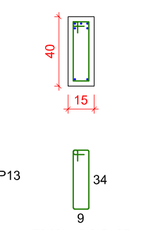
SEÇÃO A-A
ESC 1:25



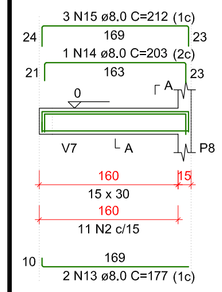
V4
ESC 1:50



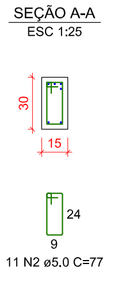
SEÇÃO A-A
ESC 1:25



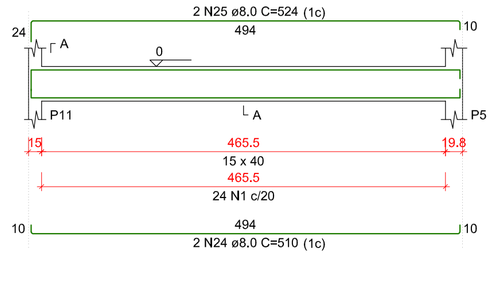
V3
ESC 1:50



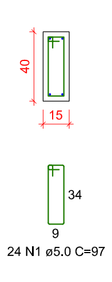
SEÇÃO A-A
ESC 1:25



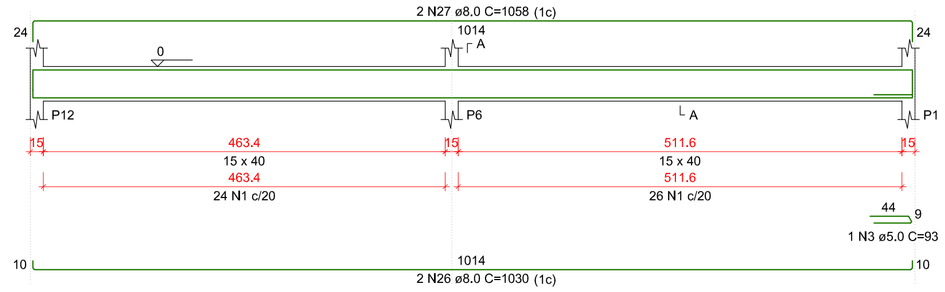
V5
ESC 1:50



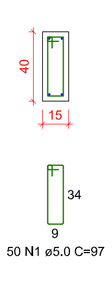
SEÇÃO A-A
ESC 1:25



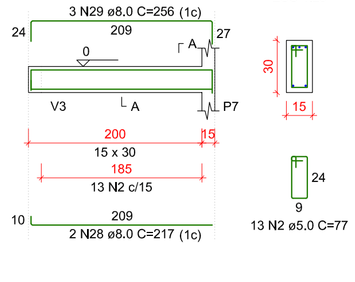
V6
ESC 1:50



SEÇÃO A-A
ESC 1:25

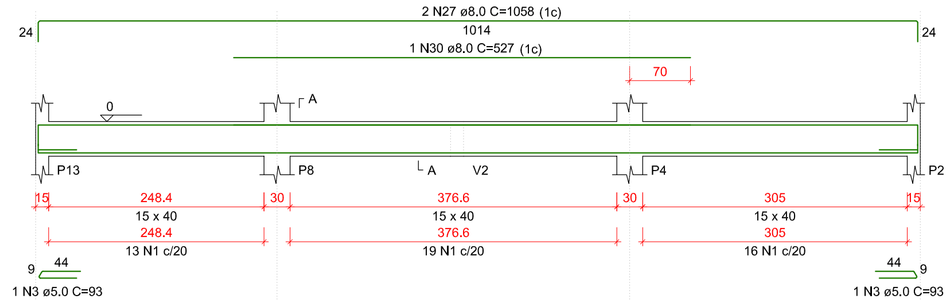


V7
ESC 1:50

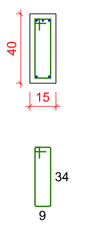


SEÇÃO A-A
ESC 1:25

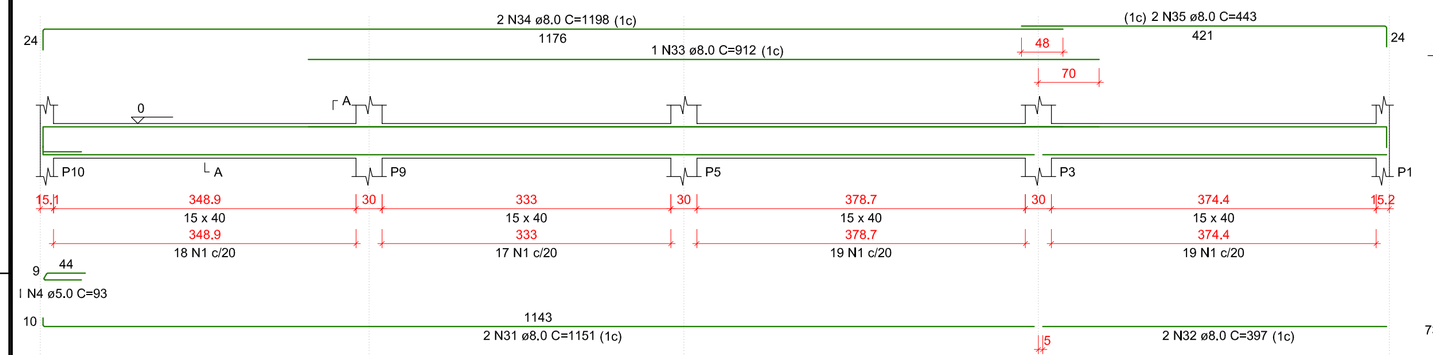
V8
ESC 1:50



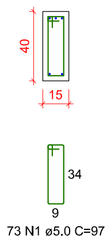
SEÇÃO A-A
ESC 1:25



V9
ESC 1:50



SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

V1 V2 V3 V4 V5
V6 V7 V8 V9

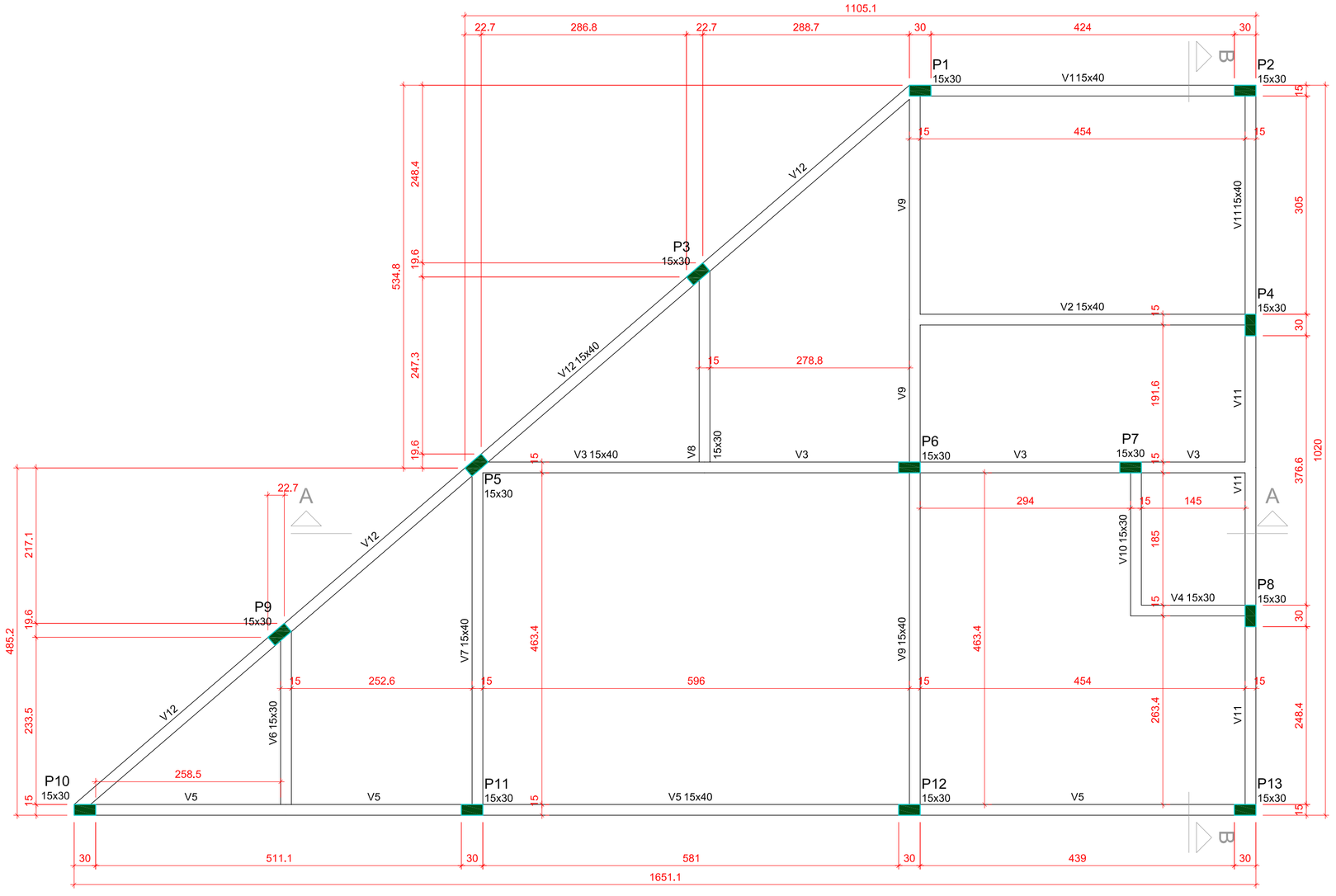
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	347	97	33659
	2	5.0	24	77	1848
	3	5.0	3	93	279
	4	5.0	1	93	93
CA50	5	8.0	4	478	1912
	6	8.0	1	82	82
	7	8.0	1	279	279
	8	8.0	2	1106	2212
	9	8.0	1	150	150
	10	8.0	1	692	692
	11	8.0	1	695	695
	12	8.0	2	1138	2276
	13	8.0	2	177	354
	14	8.0	1	203	203
	15	8.0	3	212	636
	16	8.0	2	1159	2318
	17	8.0	2	476	952
	18	8.0	1	170	170
	19	8.0	1	821	821
	20	8.0	1	1144	1144
	21	8.0	1	174	174
	22	8.0	2	1200	2400
	23	8.0	2	499	998
	24	8.0	2	510	1020
	25	8.0	2	524	1048
	26	8.0	4	1030	4120
	27	8.0	4	1058	4232
	28	8.0	2	217	434
	29	8.0	3	256	768
	30	8.0	1	527	527
	31	8.0	2	1151	2302
	32	8.0	2	397	794
	33	8.0	1	912	912
	34	8.0	2	1198	2396
	35	8.0	2	443	886

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	379.1	149.6
CA60	5.0	358.8	55.3

PESO TOTAL (kg)	
CA50	149.6
CA60	55.3

Volume de concreto (C-30) = 4.28 m³
Área de forma = 67.80 m²



Forma do pavimento Nível 2 (Nível 300)
escala 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x40	0	300
V2	15x40	0	300
V3	15x40	0	300
V4	15x30	0	300
V5	15x40	0	300
V6	15x30	0	300
V7	15x40	0	300
V8	15x30	0	300
V9	15x40	0	300
V10	15x30	0	300
V11	15x40	0	300
V12	15x40	0	300

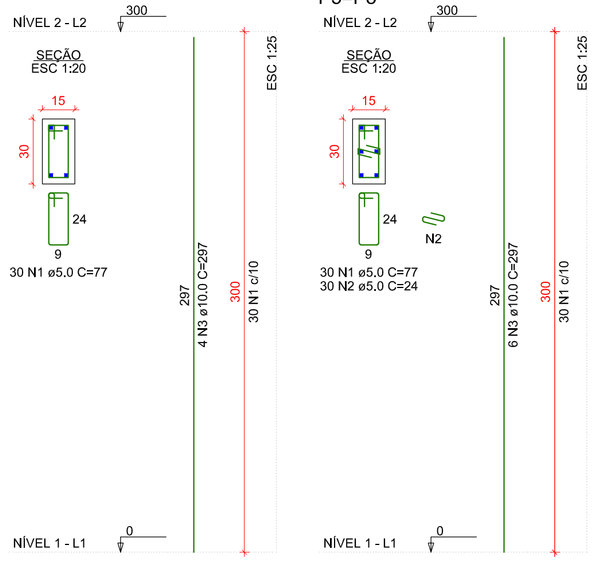
Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
300	322061

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15x30	0	300
P2	15x30	0	300
P3	15x30	0	300
P4	15x30	0	300
P5	15x30	0	300
P6	15x30	0	300
P7	15x30	0	300
P8	15x30	0	300
P9	15x30	0	300
P10	15x30	0	300
P11	15x30	0	300
P12	15x30	0	300
P13	15x30	0	300

Legenda	
	Pilar que morre
	Viga

P1=P2=P3=P4=P6=P7=P9 =P10=P11=P12=P13



P5=P8

RELAÇÃO DO AÇO

11xP1 2xP5

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	390	77	30030
CA50	3	10.0	56	297	16632

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	166.3	102.5
CA60	5.0	314.7	48.5

PESO TOTAL (kg)	
CA50	102.5
CA60	48.5

Volume de concreto (C-30) = 1,75 m³
Área de forma = 35,10 m²

Aprovações:

ammoc
Associação dos Municípios do Meio Oeste Catarinense
Rua Roberto Trompowski,68 - 2° andar / Tel: 49 3522-2800 - www.ammoc.org.br - e-mail: ammoc@ammoc.org.br - Joaçaba/SC

PREFEITURA MUNICIPAL DE CAPINZAL

Obra:

AMPLIAÇÃO E REFORMA ESCOLA MUNICIPAL
BERNARDO MORO SOBRINHO

Local da Obra:

RUA DANILO GALILEU CAUDURO PICCOLI

ESTRUTURAL

Conteúdo:
- Detalhamento: viga - Nível 1 (01)
- Planta de fôrma - Nível 2 (01)
- Detalhamento: pilar - Nível 2 (01)

Responsável Técnico:

Ana Júlia U. de Carvalho - Eng. Civil - Crea/SC 105.295-8
André Brito Dotti - Eng. Civil- Crea/SC 162.237-5
Denir Narcizo Zulian - Eng. Civil - Crea/SC 50.805-8
Fábio Zilio Caron - Eng. Civil - Crea/SC 140.642-7
Lucas F. Balestrin - Eng. Agrônomo - Crea/SC 156.743-7
Max Mooshammer - Eng. Civil - Crea/SC 139.164-0
Suellen Karine Cervelin - Eng. Civil- Crea/SC 166.933-0

EST 02/05

Quaisquer alterações consulte os responsáveis técnicos:

ammoc
Assinado digitalmente por ANA JULIA UNGERICHT DE CARVALHO: 06859574976
Data: 2023-11-22 16:46:13

Assinatura Responsável Técnico

Assinatura Prefeito(a) Municipal

Desenho:	Data:	Escala:	Área Total:
André Dotti	Novembro / 2023	Indicada (s)	1.745,83 m²