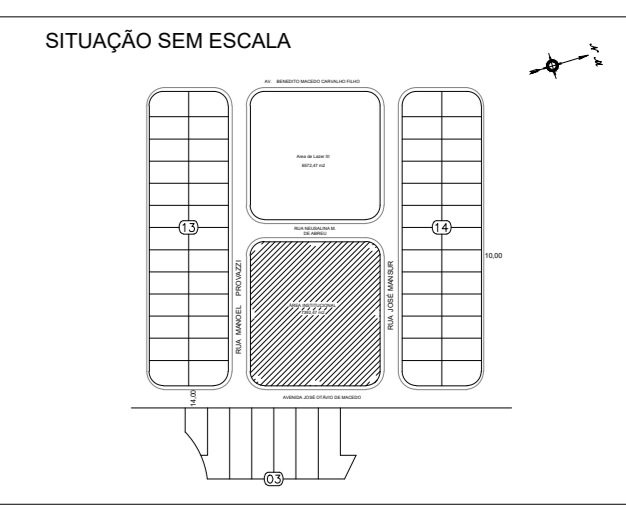


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 O:270159 Dados: 2026.01.09
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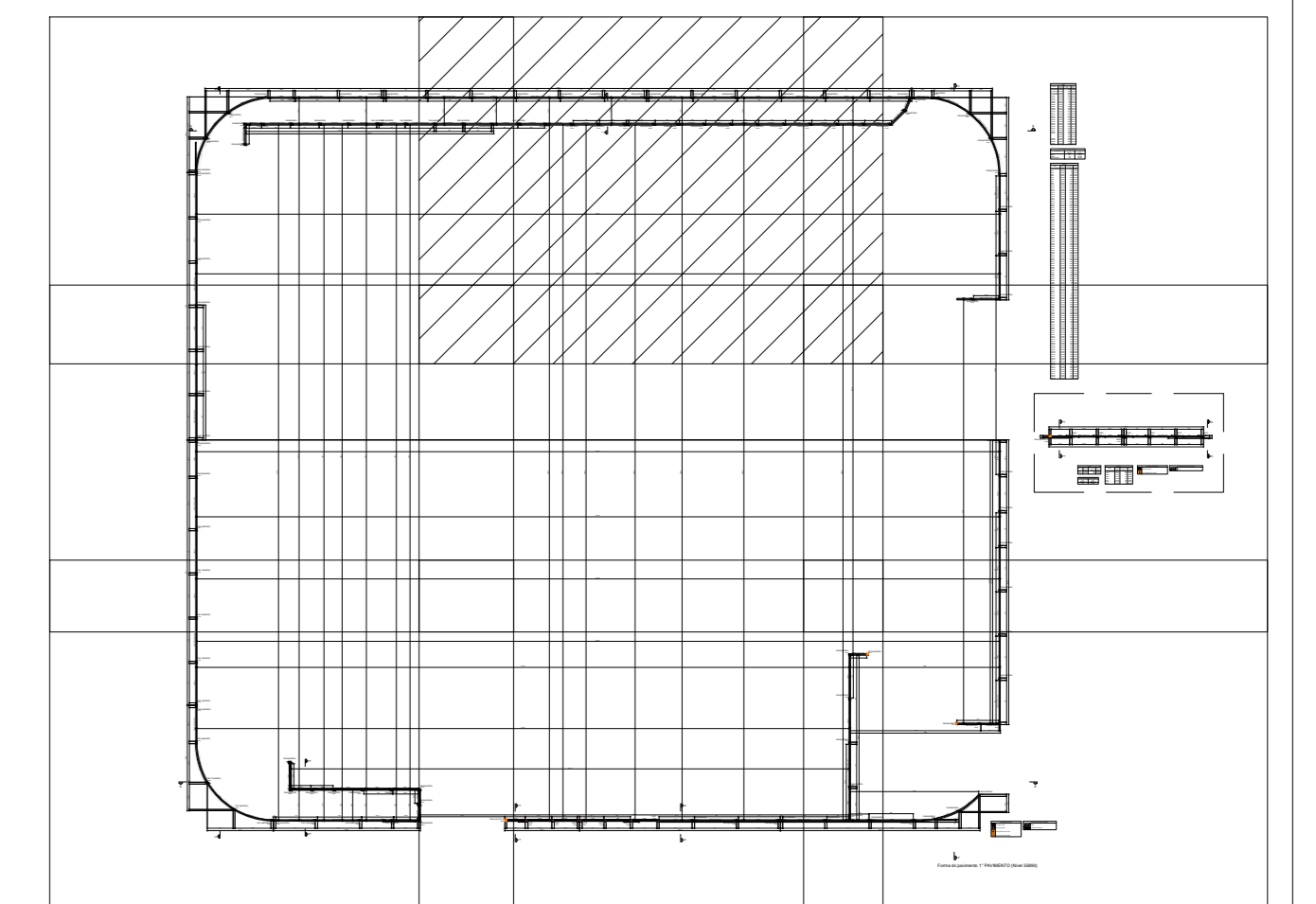
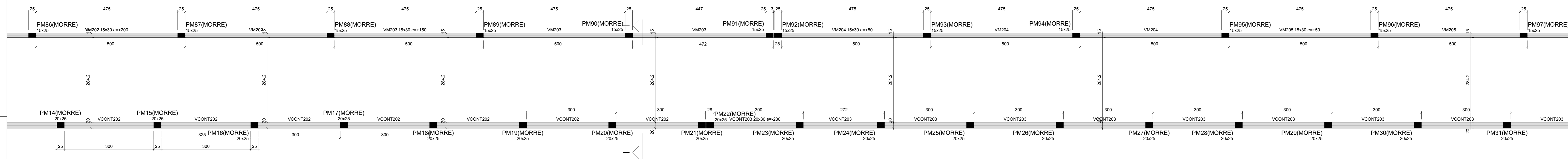


PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
 Construção de Escola em Tempo Integral no Bairro
 Panorama – FNDE - Escola 13 salas

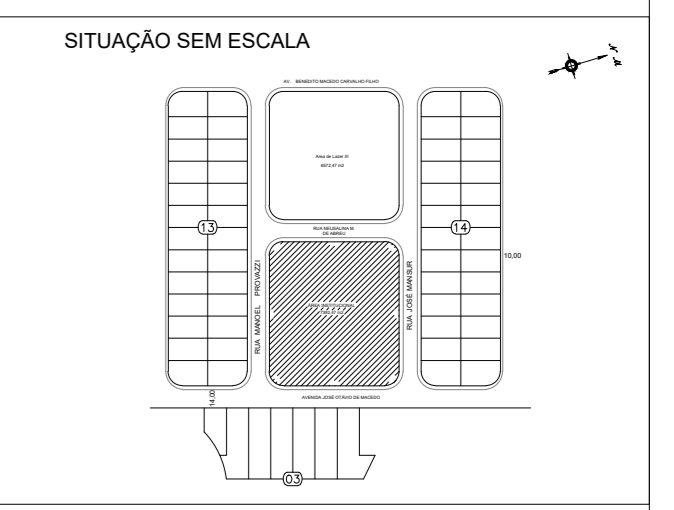
DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL	ANTONIO POTIGUARA CHAGAS FERREIRA SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANITA SECRETARIO MUNICIPAL DE EDUCACAO	ENG. ALFREDO PADUA MANZANO CREA: 10623/2014-08 ART: 2520251801916

Entregado:	AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA		Número do Processo:	5.613/2024
Cliente:	MUNICIPIO DE CAÇAPAVA		ÁREA:	Ver na folha ARQ 01/52
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO - LOCAÇÃO	Função: 2040
Levantamento:		Escala:	Indicada	Data: NOV/2025
				Revisão: RD1



Assinado de
ALFREDO PADUA
 MANZANO:2901838
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forma digital por
ALFREDO PADUA
 MANZANO:27015
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 Dados: 2026.01.09
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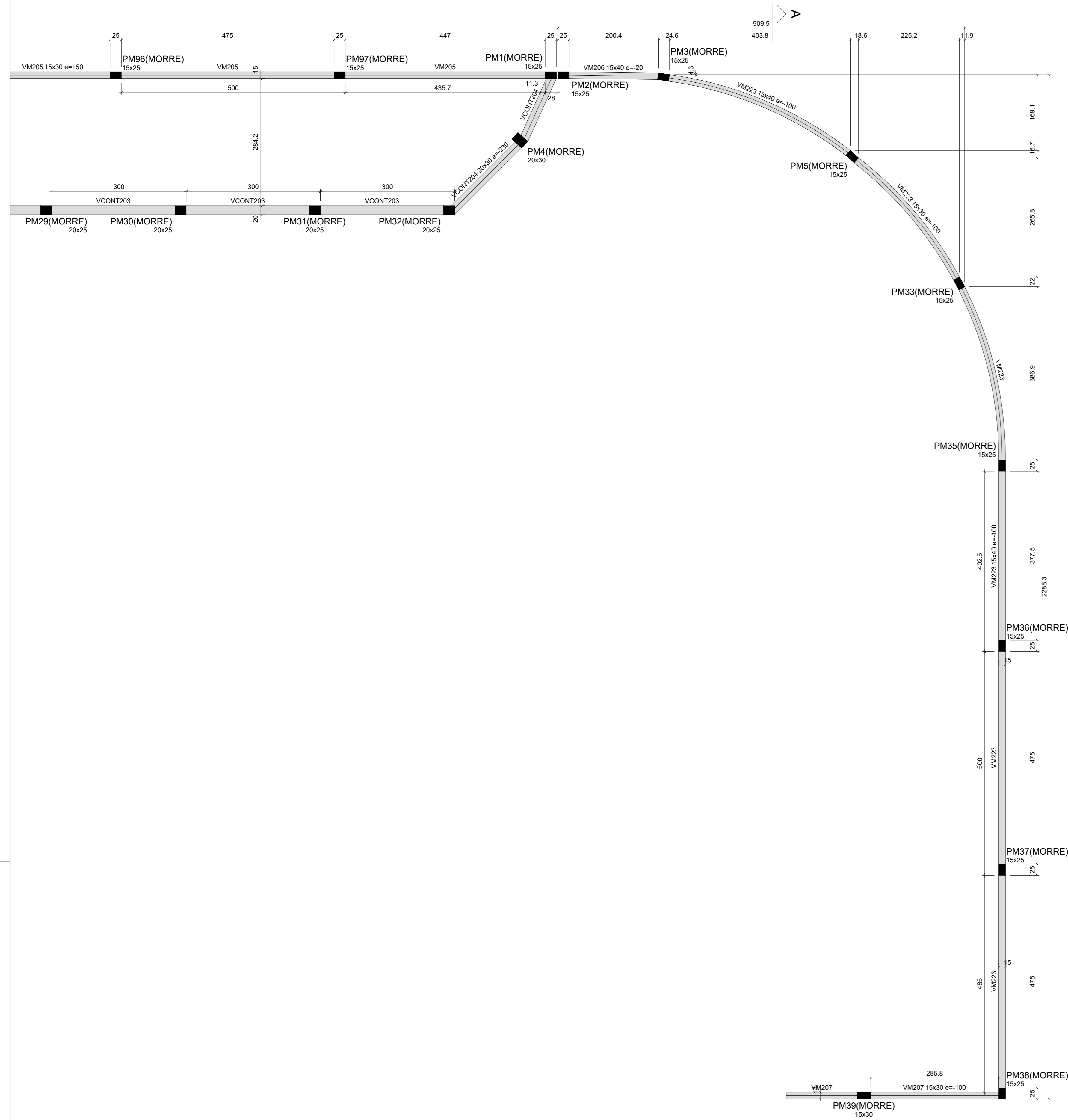


PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL	ANTONIO POTIGUARA CHAGAS FERREIRA SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA SECRETÁRIO MUNICIPAL DE EDUCAÇÃO	ENG. ALFREDO PADUA MANZANO CREA: 10623/2014-08 ART: 252025183/1516

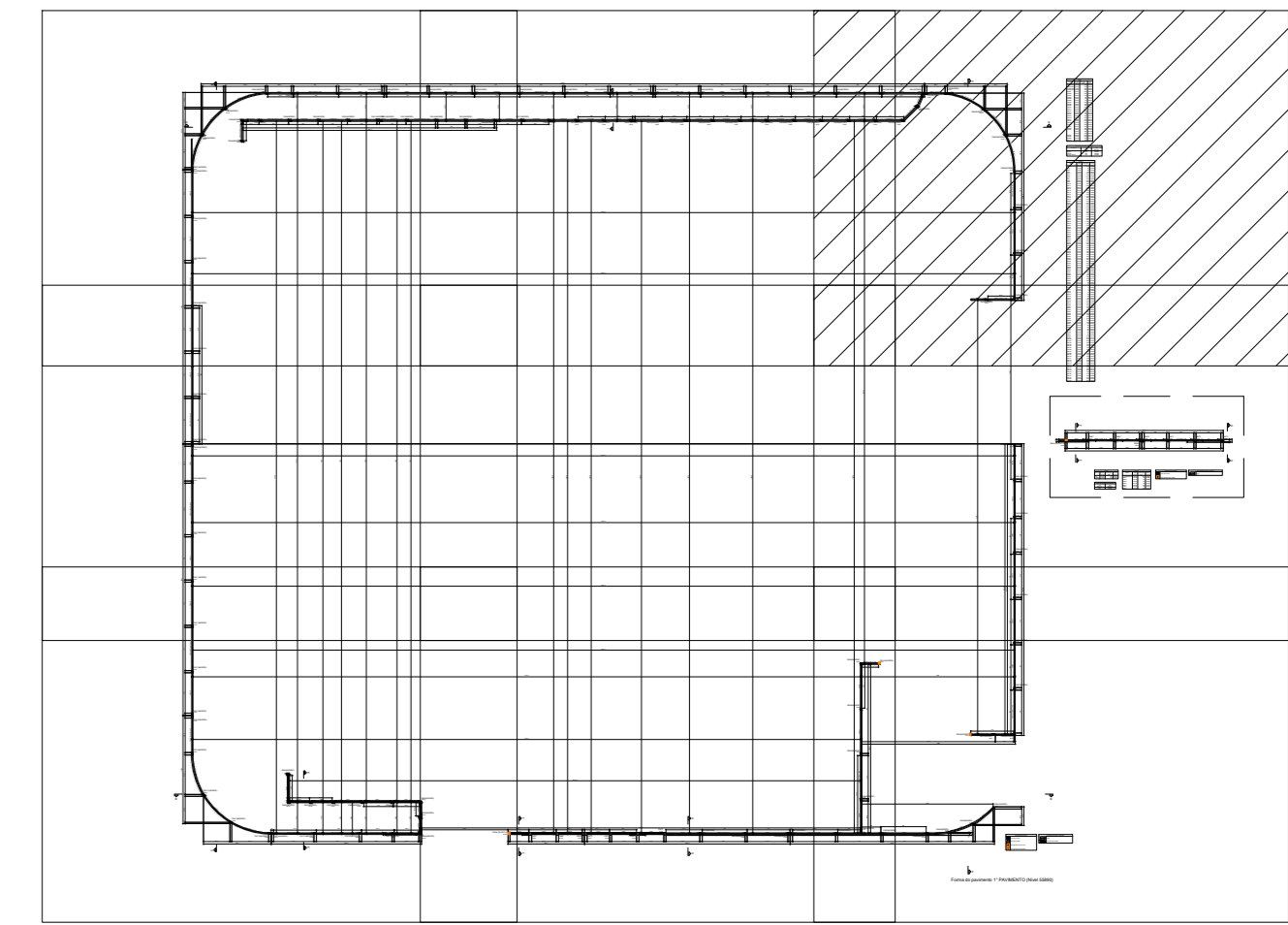
Entregue:	AVENIDA JOSE OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA		Número do Processo:	5.613/2024	
Cliente:	MUNICÍPIO DE CAÇAPAVA		ÁREA:	Ver na folha ARQ 01/52	
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO- LOCAÇÃO	Folha:	2/140
Levantamento:		Escala:	Indicada	Data:	NOV/2025
				Revisão:	RD1



Nome	Seção	Elevação (cm)	Nível (cm)
VM205	15x30 e=+50	-230	55660
VM206	15x30	-230	55660
VM207	15x30	-230	55660
VM208	15x30	-230	55660
VM209	15x30	-230	55660
VM210	15x30	-230	55660
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VM223	15x30	-230	55660
VM224	15x30	-230	55660
VM225	15x30	-230	55660
VM226	15x30	-230	55660
VM227	15x30	-230	55660

Elemento	fck (kgf/cm²)	Ecs (kgf/cm²)
Vigas	300	268354
Placas	300	268354
Reservatórios	250	231500

Nome	Seção	Elevação (cm)	Nível (cm)
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PM2	15x25	-230	55660
PM3	15x25	-230	55660
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PM124	15x25	-230	55660



ALFREDO PADUA MANZANO
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 SITUAÇÃO SEM ESCALA

PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: **Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas**

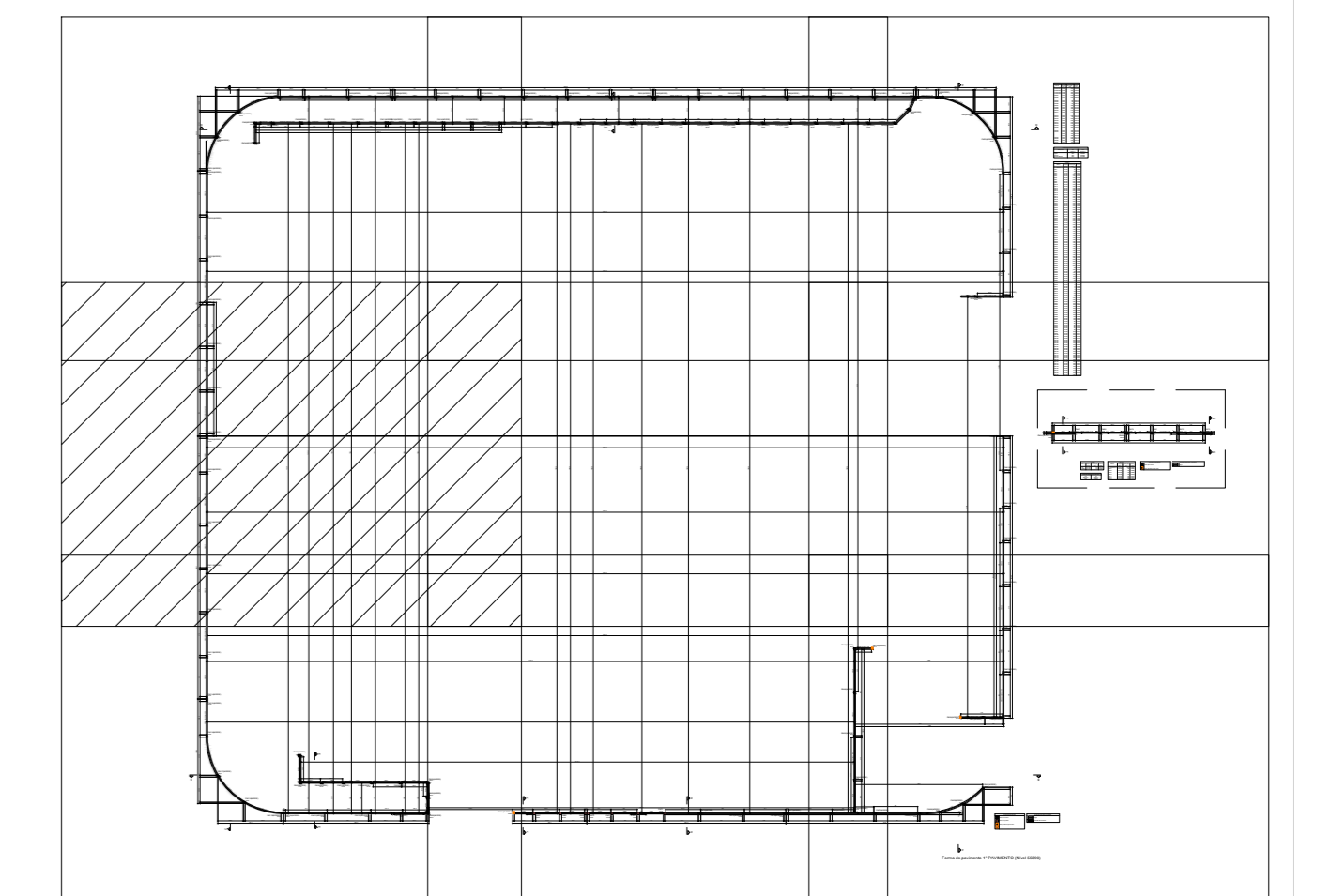
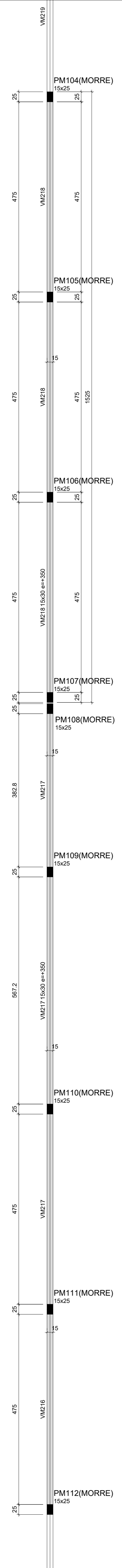
DR. VAN LOPES ALMEIDA
 PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
 SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
 SECRETARIO MUNICIPAL DE EDUCACAO

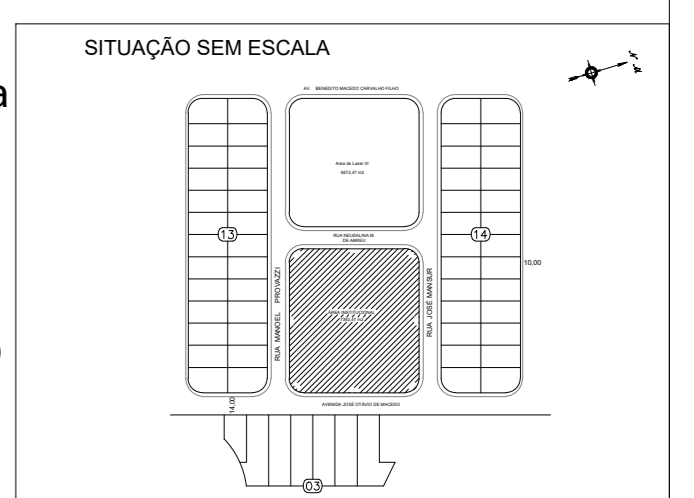
ENG. ALFREDO PADUA MANZANO
 CREA: 180239814-08
 ART: 2620251801916

Entregue: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
 Cliente: MUNICIPIO DE CAÇAPAVA
 Desenho: PROJETO ESTRUTURAL
 Descrição: BLOCO MURO- LOCAÇÃO
 Escala: Indecida
 Data: NOV/2025
 Número de Processo: 5.6132024
 AREA: Ver na folha ARQ 01/52
 Folha: 23/60
 Revisão: RD1



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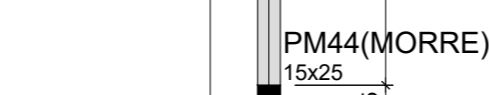
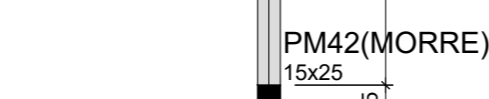
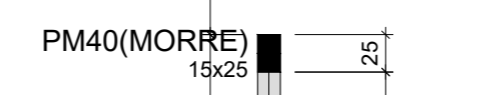
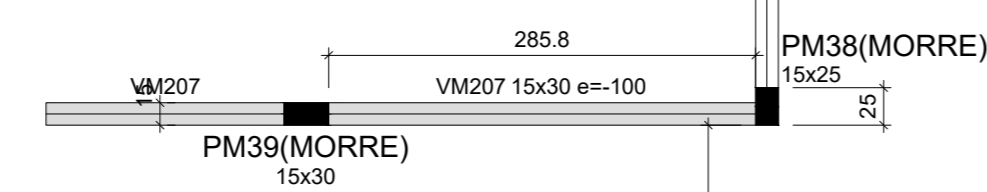


PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

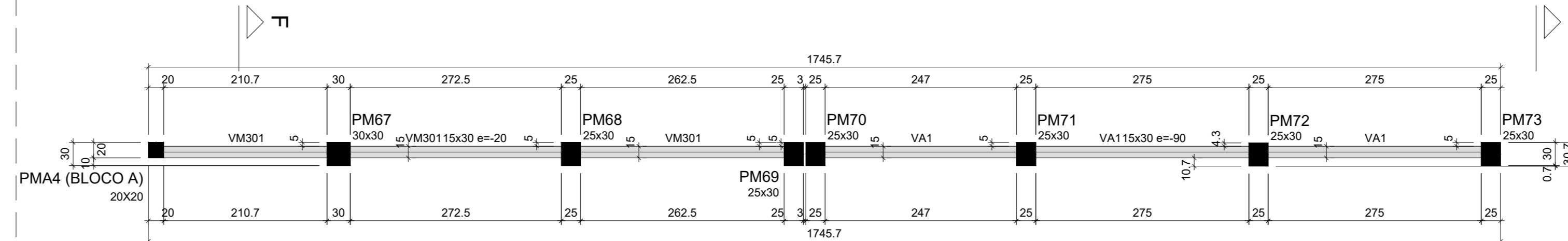
PROJETO:
Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL		ANTONIO POTIGUARA CHAGAS FERREIRA SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA SECRETARIO MUNICIPAL DE EDUCACAO		ENG. ALFREDO PADUA MANZANO CREA: 100239814-08 ART: 252025181916

Empreiteira: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número do Processo: 5.6132004
Cliente: MUNICIPIO DE CAÇAPAVA	ÁREA: Ver na folha ARQ 01/52
Desenho: PROJETO ESTRUTURAL	Descrição: BLOCO MURO- LOCAÇÃO
Levantamento:	Planta: 23/60
Escala: Indecida	Data: NOV/2025
	Revisão: RD1



CINTA SUPERIOR

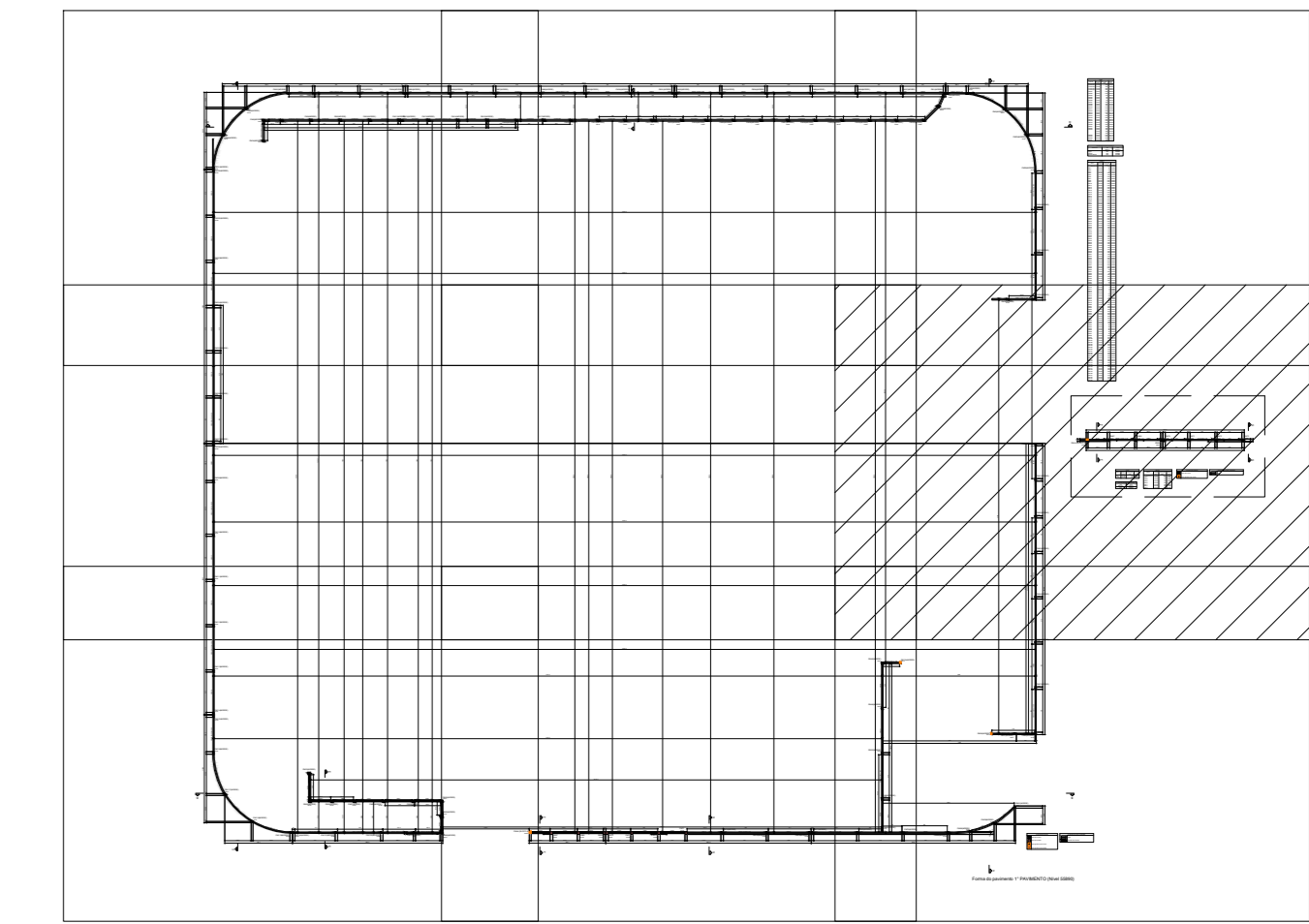


Vigas				Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)	Nome	Seção (cm)	Elevação (cm)	Nível (cm)
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VM301	15x30	-20	55980	PM67	25x30	-20	55980
				PM68	25x30	-20	55980
				PM69	25x30	-20	55980
				PM70	25x30	-80	55910
				PM71	25x30	-80	55910
				PM72	25x30	-80	55910
				PM73	25x30	-80	55910

Características dos materiais			
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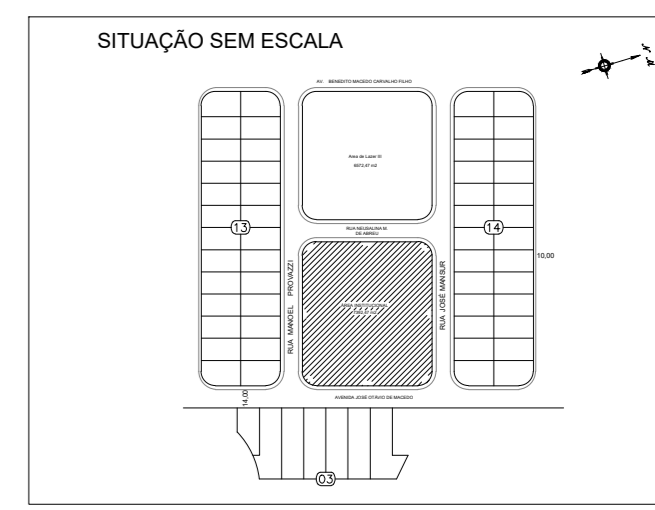
Legenda dos pilares	
■	Pilar que morre
■	Pilar genérico que morre

Legenda das vigas e paredes	
▬	Viga



ALFREDO PADUA MANZANO
 270159018
 38

Assinado de forma digital por **ALFREDO PADUA MANZANO**
 901838
 Dados: 2026.01.09 11:56:44 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: **Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas**

DR. VAN LOPES ALMEIDA
 PREFEITO MUNICIPAL

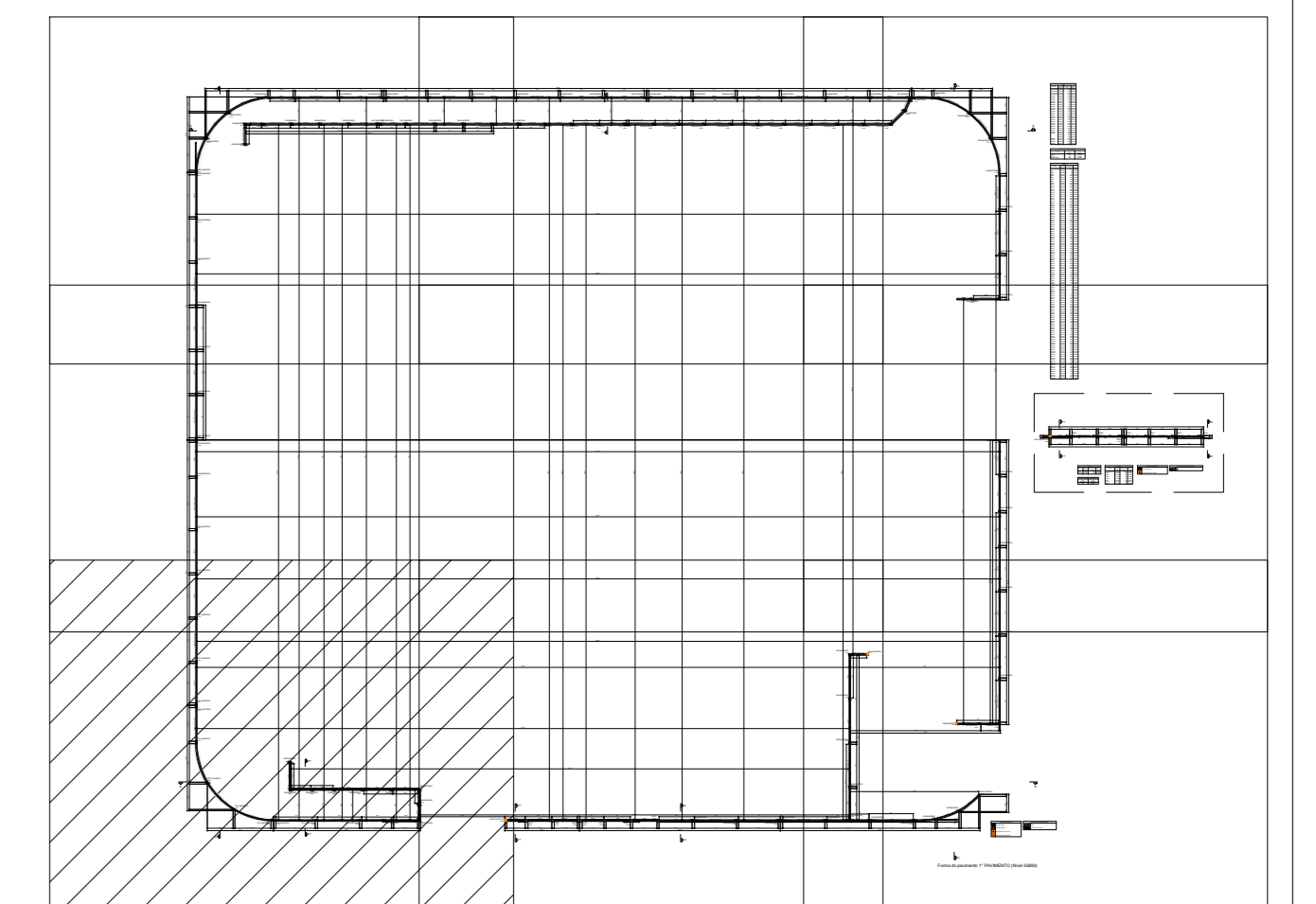
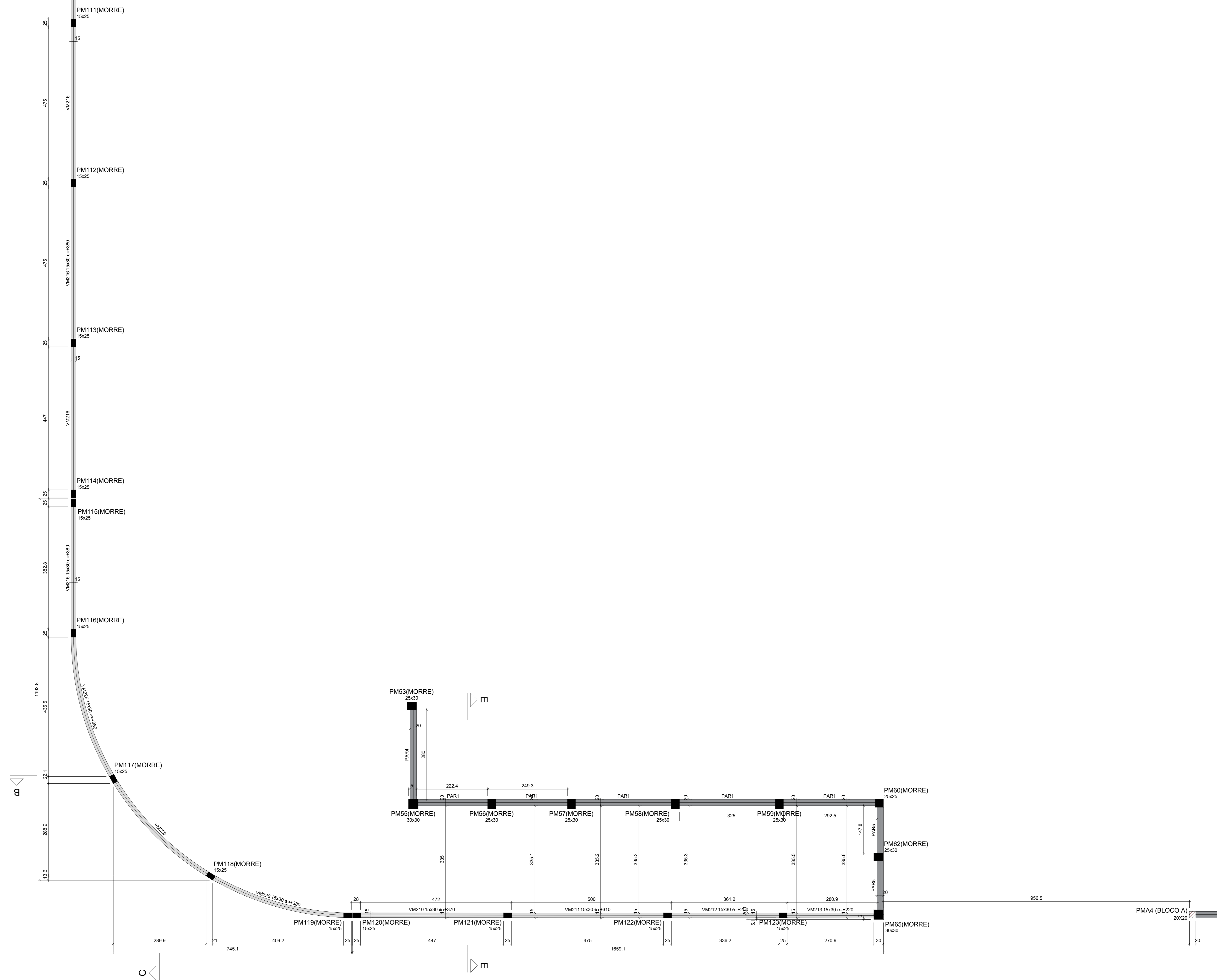


ANTONIO POTIGUARA CHAGAS FERREIRA
 SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

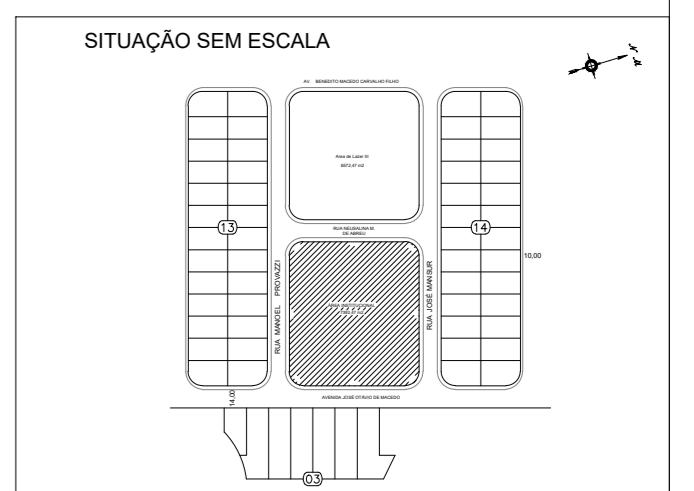
SIDNEY SANTIA
 SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
 CREA: 106203981-4-SP
 ART. 2520251801916

Empreiteira:	AVENIDA JOSÉ OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número do Processo:	5.6132004
Cliente:	MUNICÍPIO DE CAÇAPAVA	ÁREA:	Ver na folha ARQ 01/52
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO - LOCAÇÃO
Levantamento:		Escala:	Indicada
		Data:	NOV/2025
		Revisão:	RD1
		Folha:	24/30



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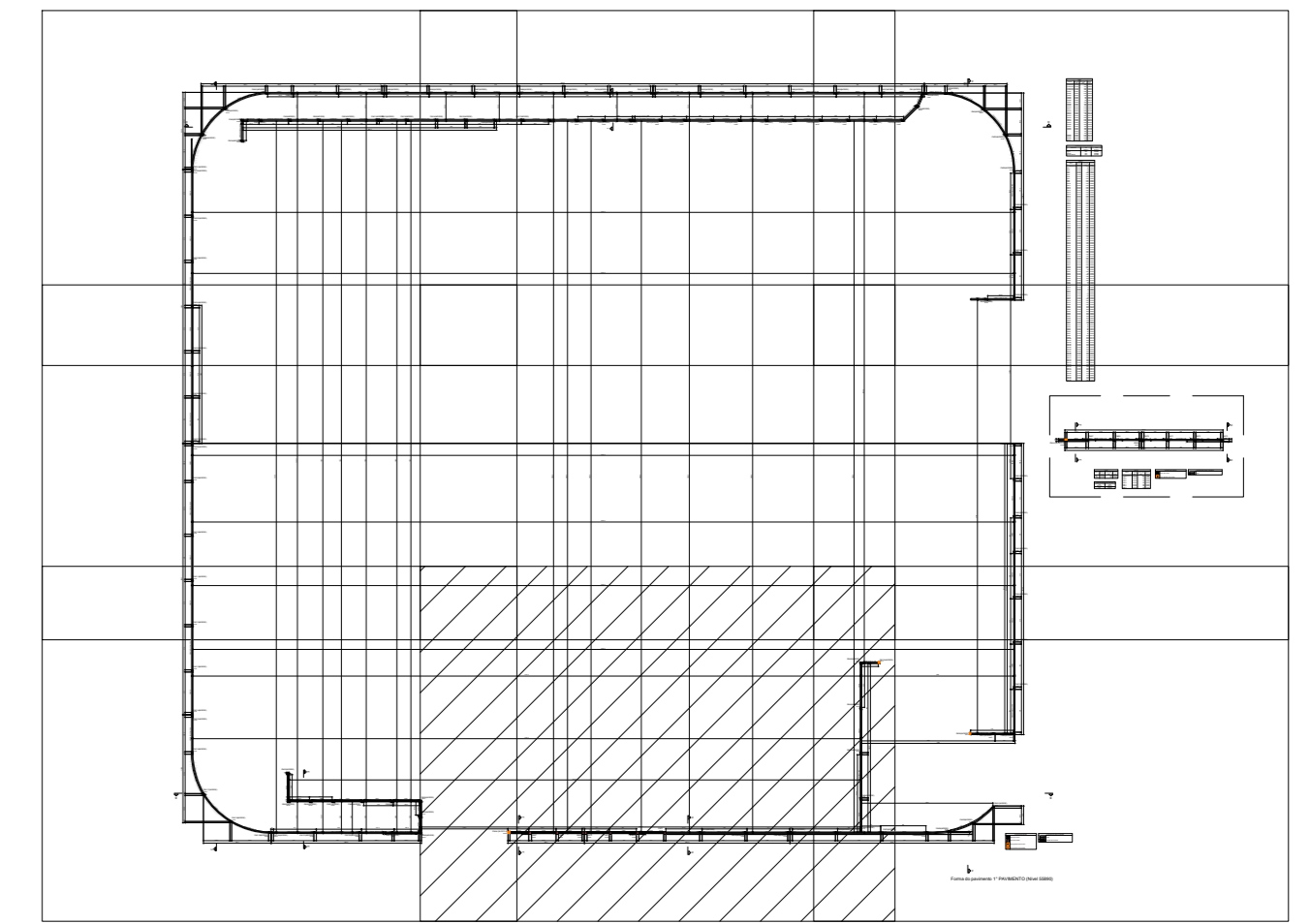
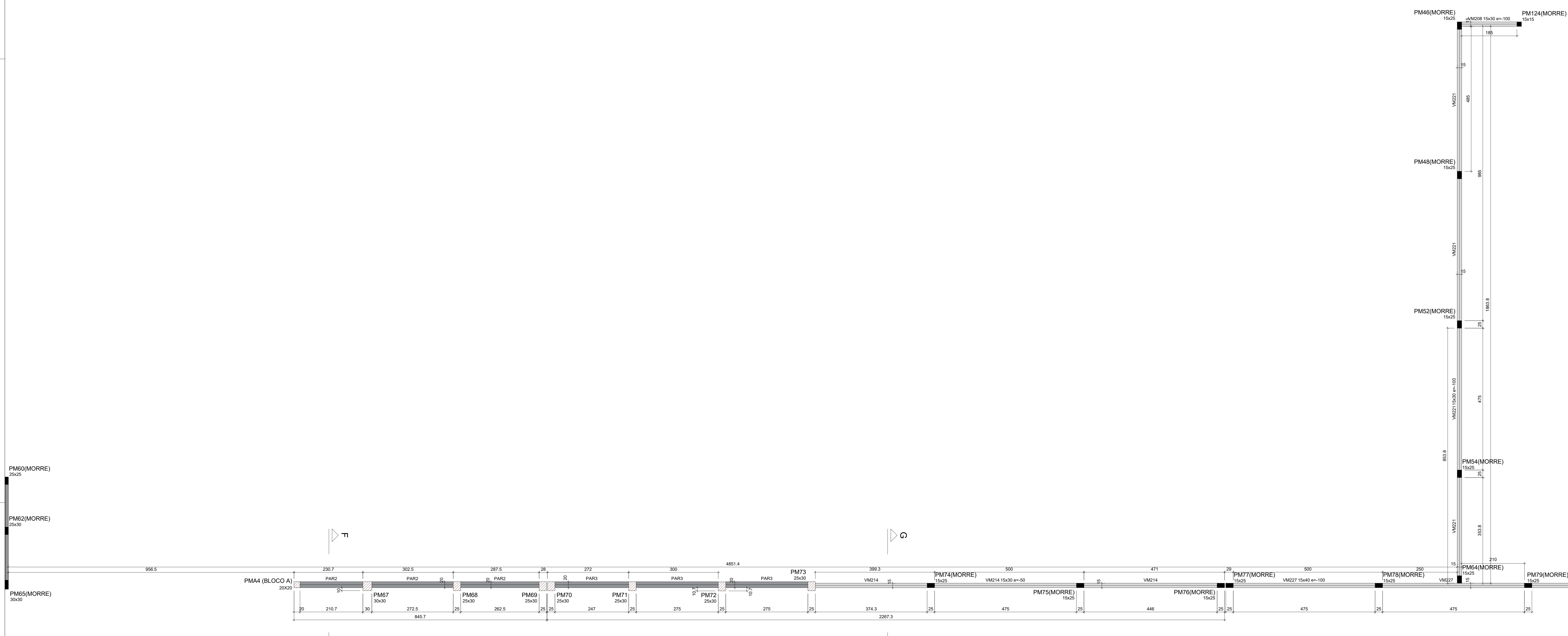


PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL		ANTONIO POTIGUARA CHAGAS FERREIRA SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA SECRETÁRIO MUNICIPAL DE EDUCAÇÃO		ENG. ALFREDO PADUA MANZANO CREA: 106203984-08 ART: 2620251801916

Entrega:	AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA		Número do Processo:	5.613204	
Cliente:	MUNICÍPIO DE CAÇAPAVA		ÁREA:	Ver na folha ARQ 01/52	
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO- LOCAÇÃO	Folha:	25/40
Levantamento:		Escala:	Indicada	Data:	NOV/2025
				Revisão:	RD1



ALFREDO PADUA
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 MANZANO: 2701590183
 8

ANZANO:2701590183
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 Dados: 2026.01.09 11:56:22 -03'00'

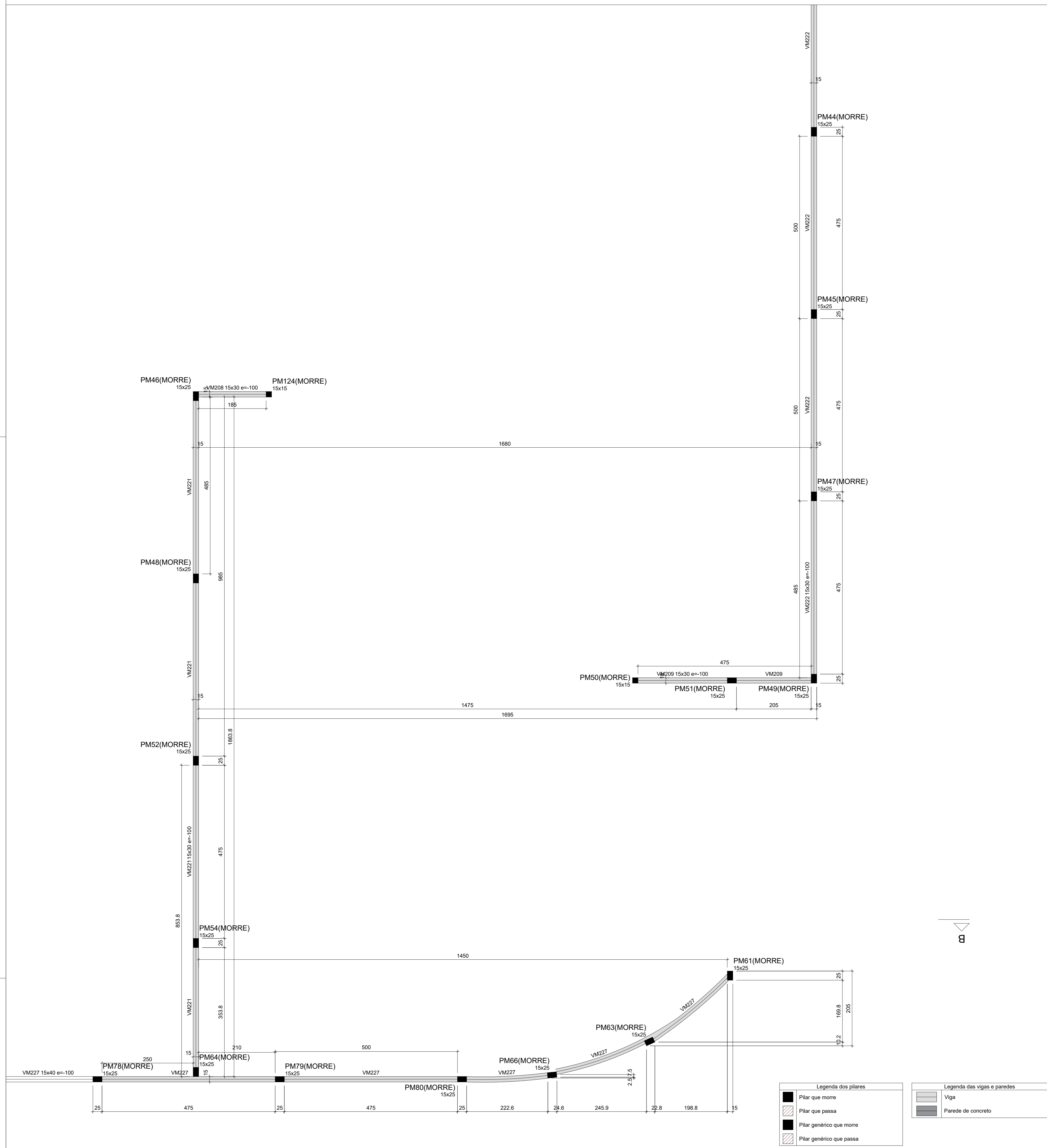


PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
 Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL		ANTONIO POTIGUARA CHAGAS FERREIRA SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA SECRETARIO MUNICIPAL DE EDUCACAO		ENG. ALFREDO PADUA MANZANO CREA: 106203981-4-08 ART: 2620251801916

Entregue: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número do Processo: 5.6132024
Cliente: MUNICIPIO DE CAÇAPAVA	Área: Ver na folha ARQ 01/52
Descrição: PROJETO ESTRUTURAL	Descrição: BLOCO MURO- LOCAÇÃO
Levantamento:	Escala: Indecida Data: NOV/2025 Folha: 20/60 Revisão: RD1



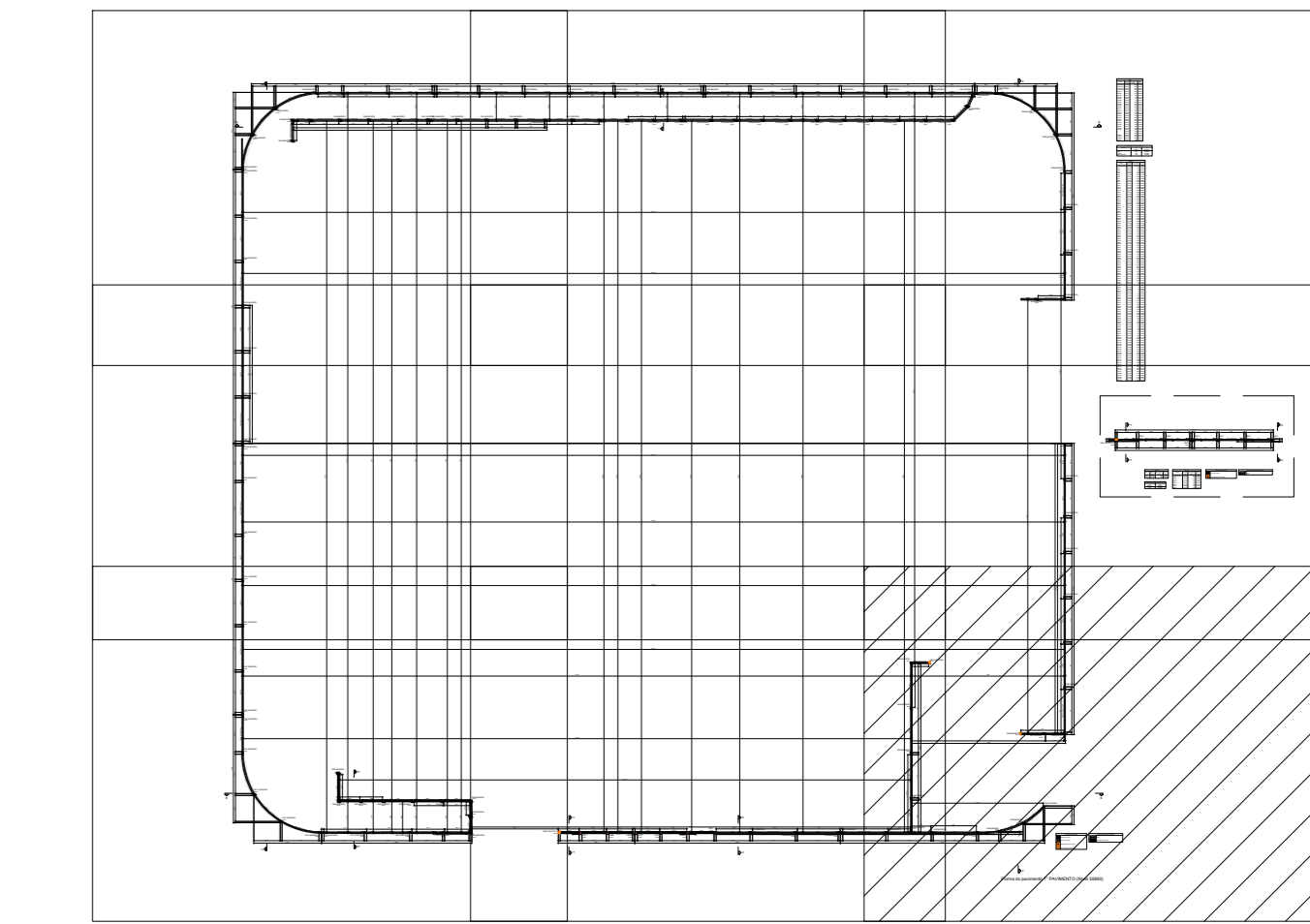
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Legenda dos pilares

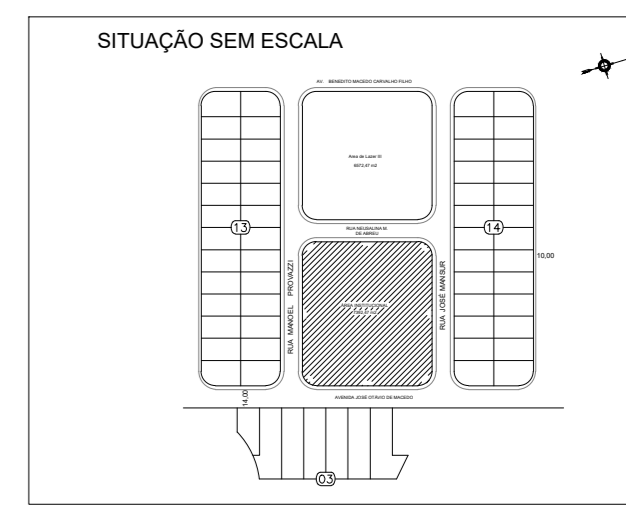
- Pilar que morre
- Pilar que passa
- Pilar genérico que morre
- Pilar genérico que passa

Legenda das vigas e paredes

- Viga
- Parede de concreto



ALFREDO PADUA MANZANO:201838
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Dados: 2026.01.09 11:55:59 -03'00'

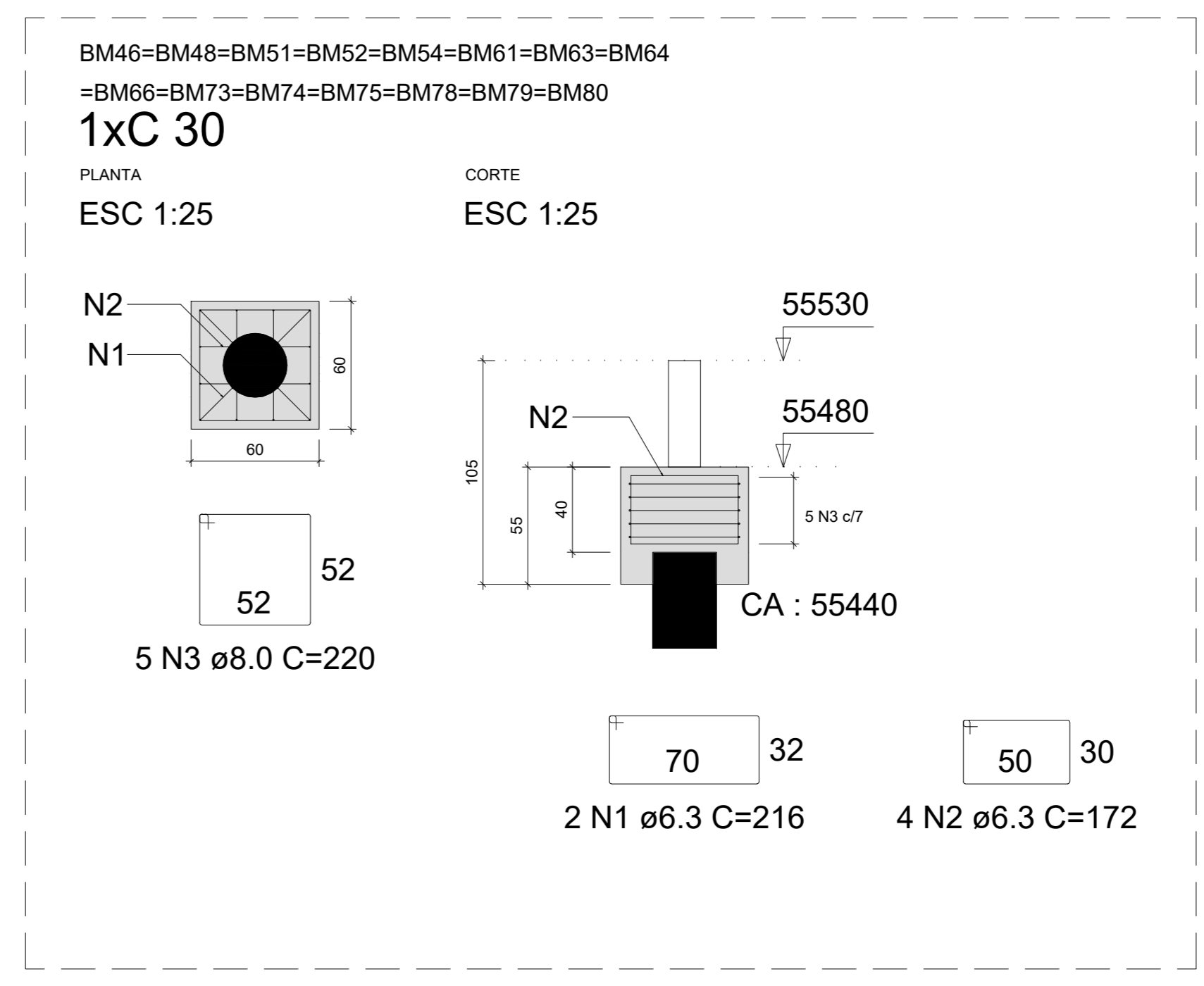
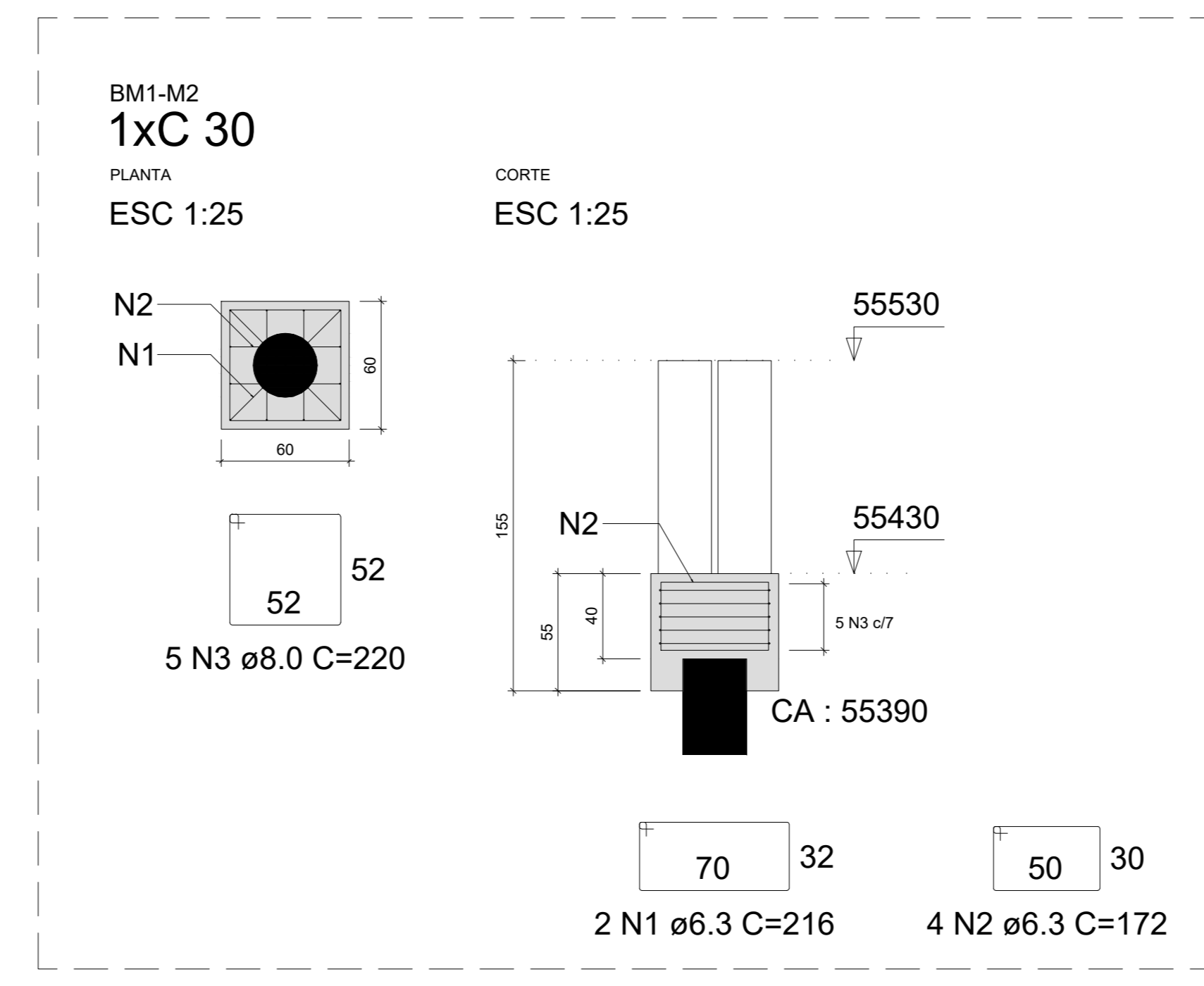
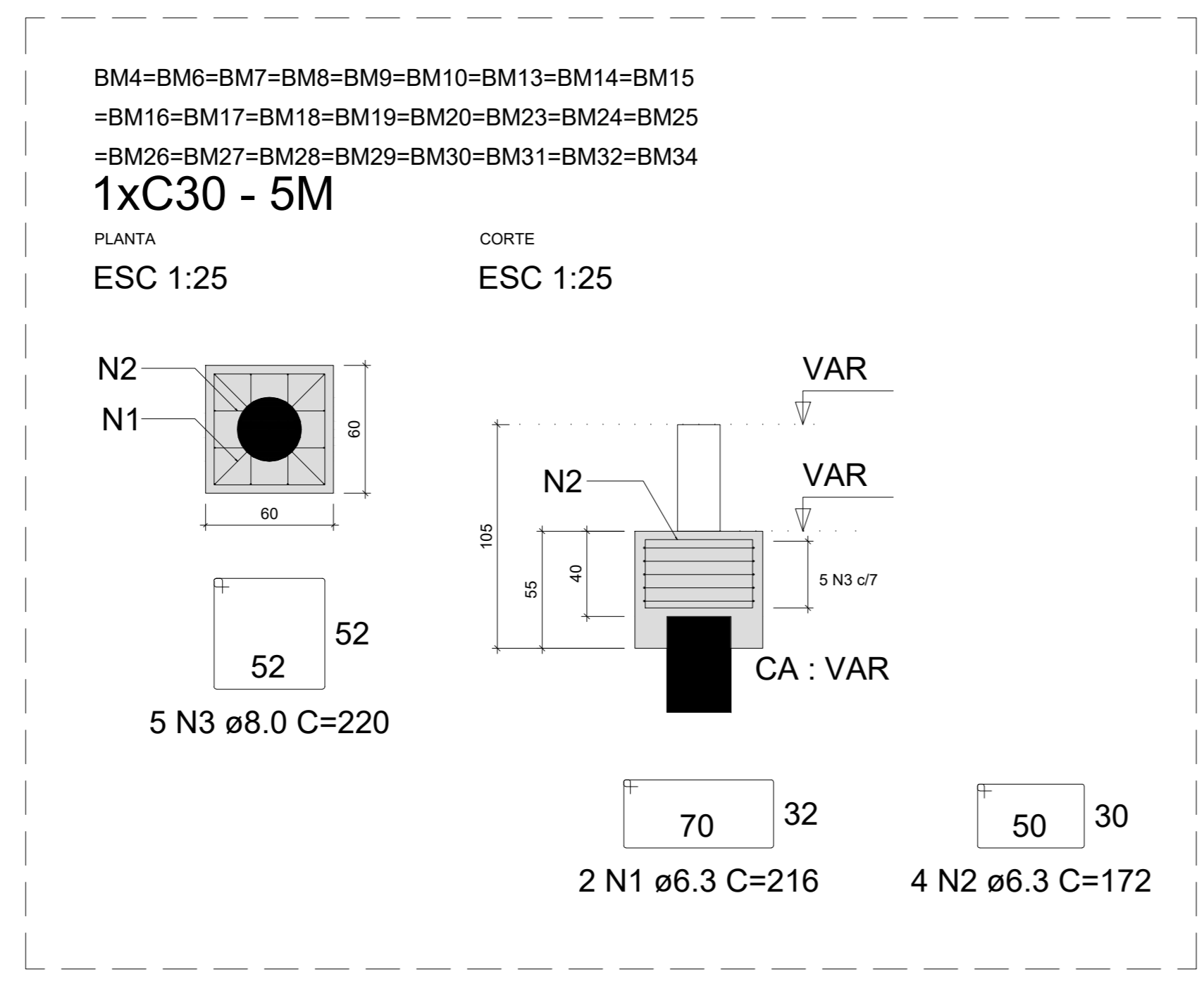
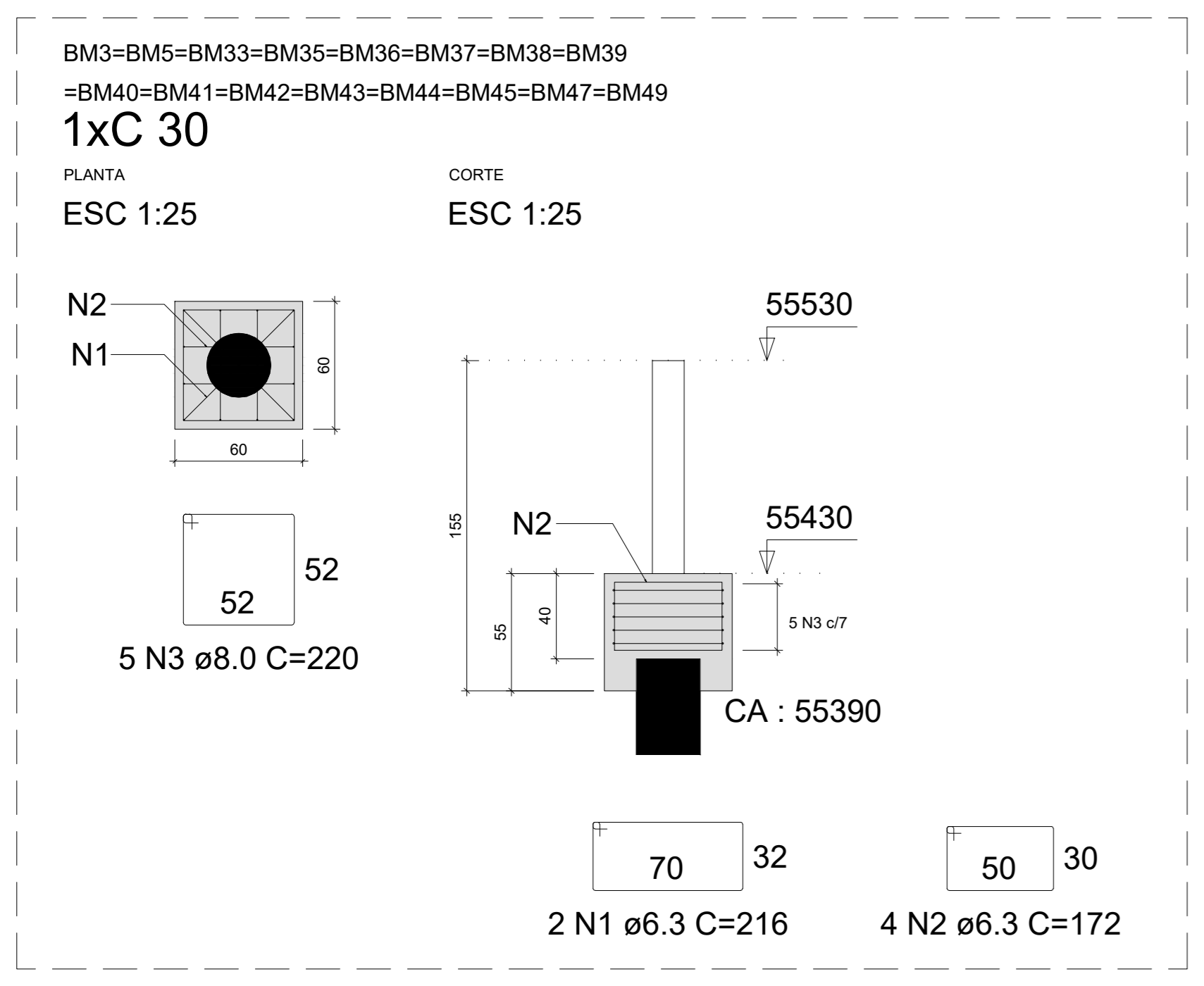


PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA PREFEITO MUNICIPAL		ANTONIO POTIGUARA CHAGAS FERREIRA SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANITA SECRETÁRIO MUNICIPAL DE EDUCAÇÃO		ENG. ALFREDO PADUA MANZANO CREA: 10623/9814-08 ART: 262051801916

Entregue:	AVENIDA JOSE OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número do Processo:	5.613/2024				
Cliente:	MUNICÍPIO DE CAÇAPAVA	ÁREA:	Ver na folha ARQ 01/52				
Descrição:	PROJETO ESTRUTURAL	BLOCO MURO- LOCAÇÃO	Folha:	2740			
Levantamento:		Escala:	Indicada	Data:	NOV/2025	Revisão:	RD1



RELAÇÃO DO AÇO - BLOCO DE COROAMENTO 01/02

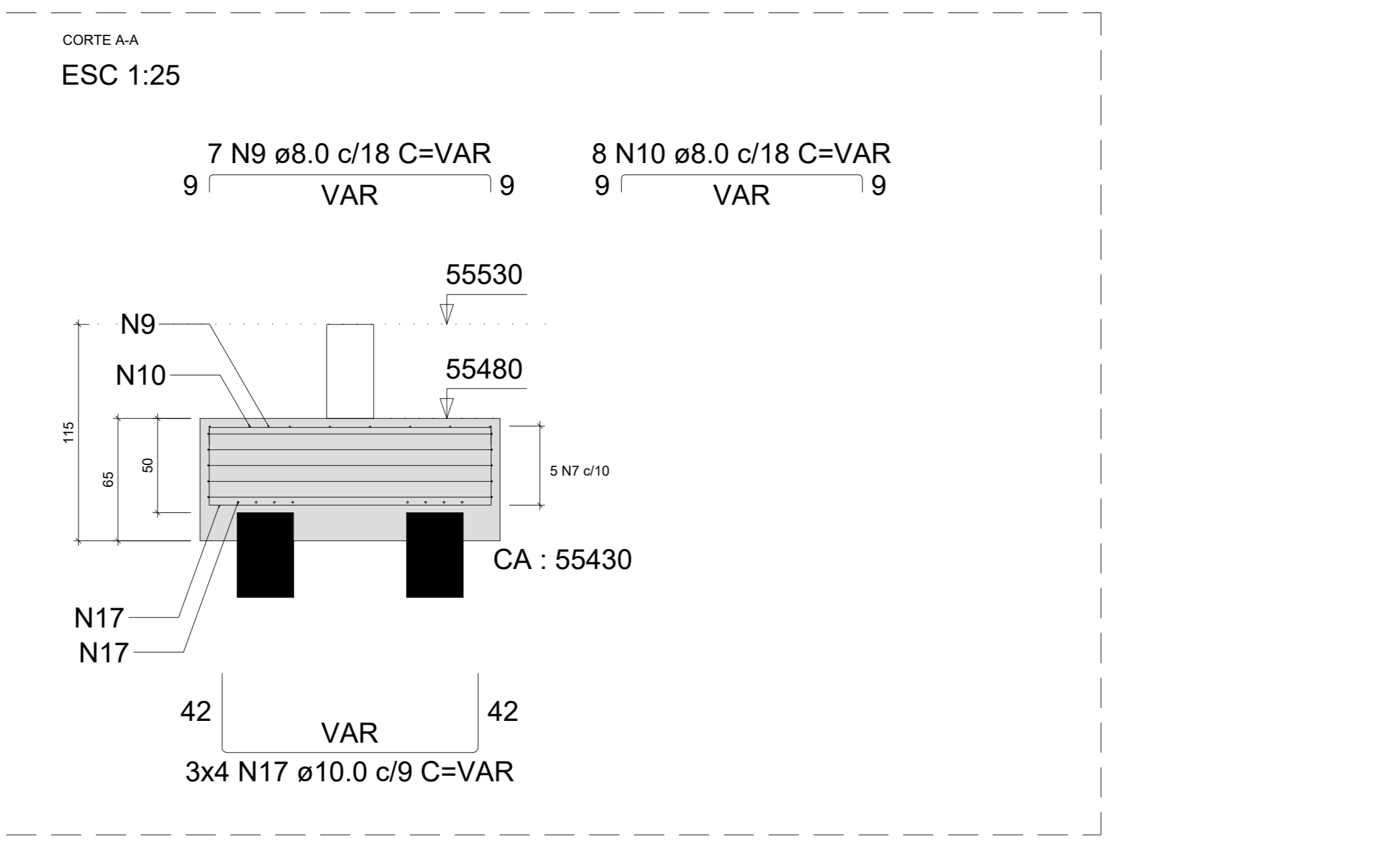
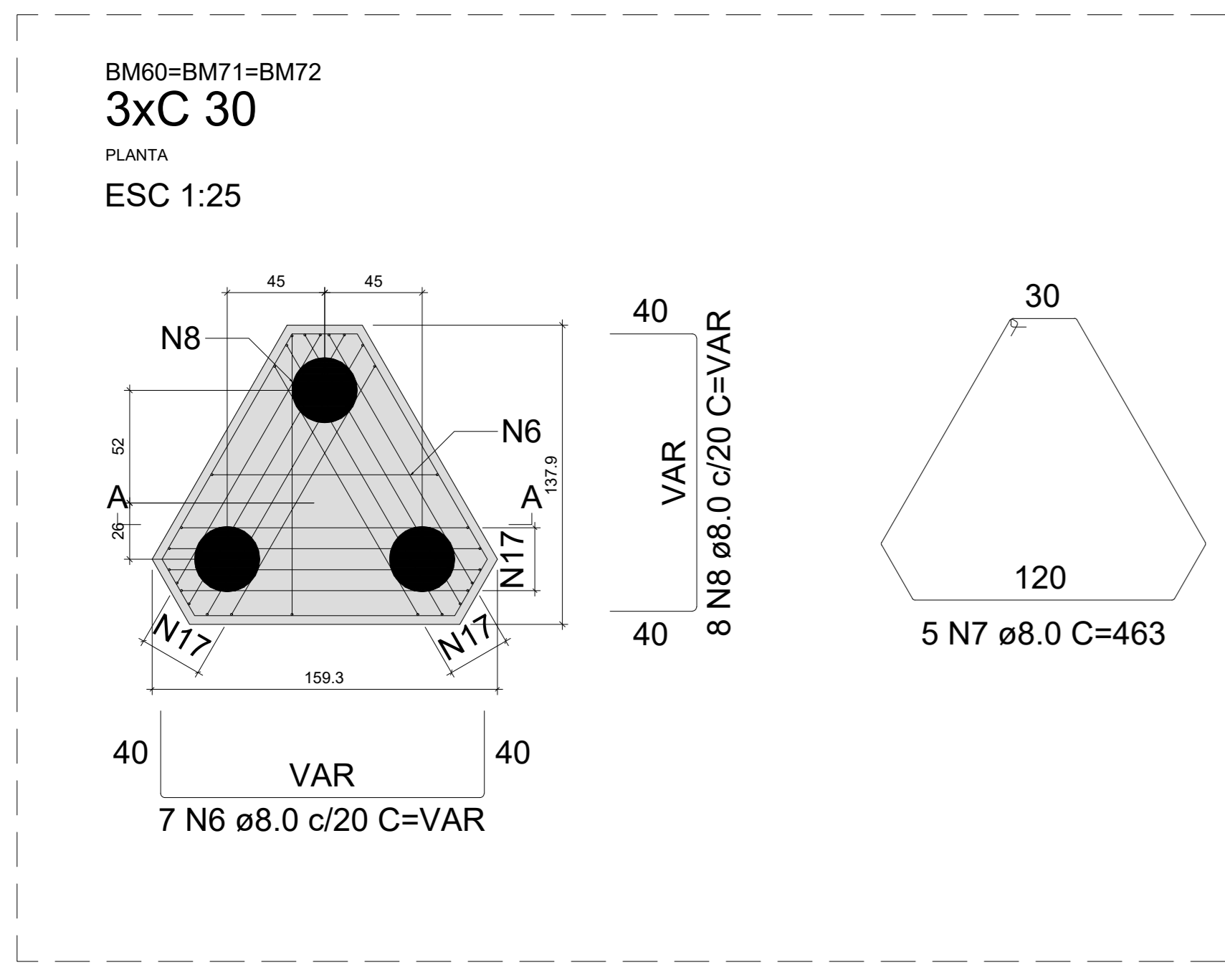
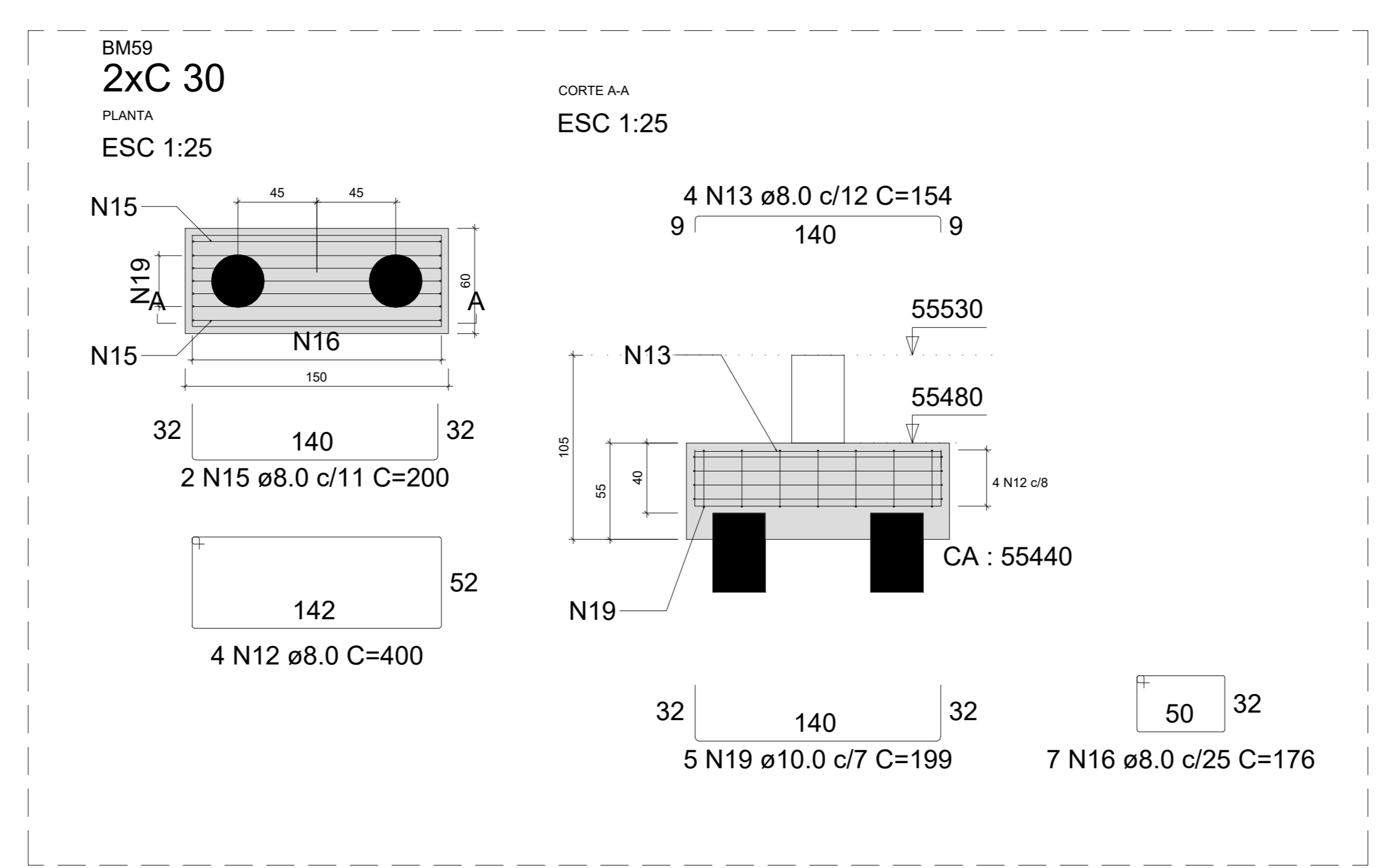
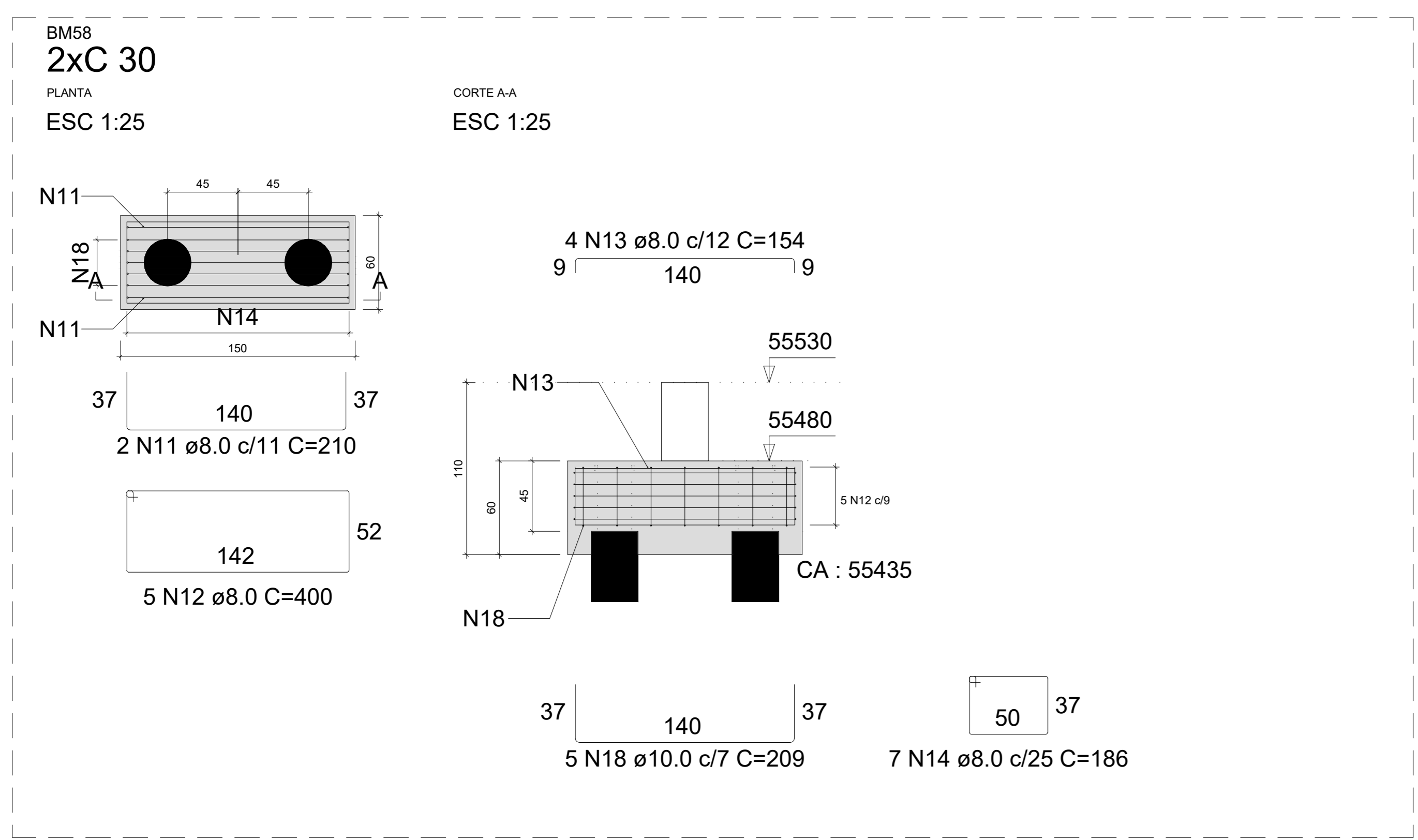
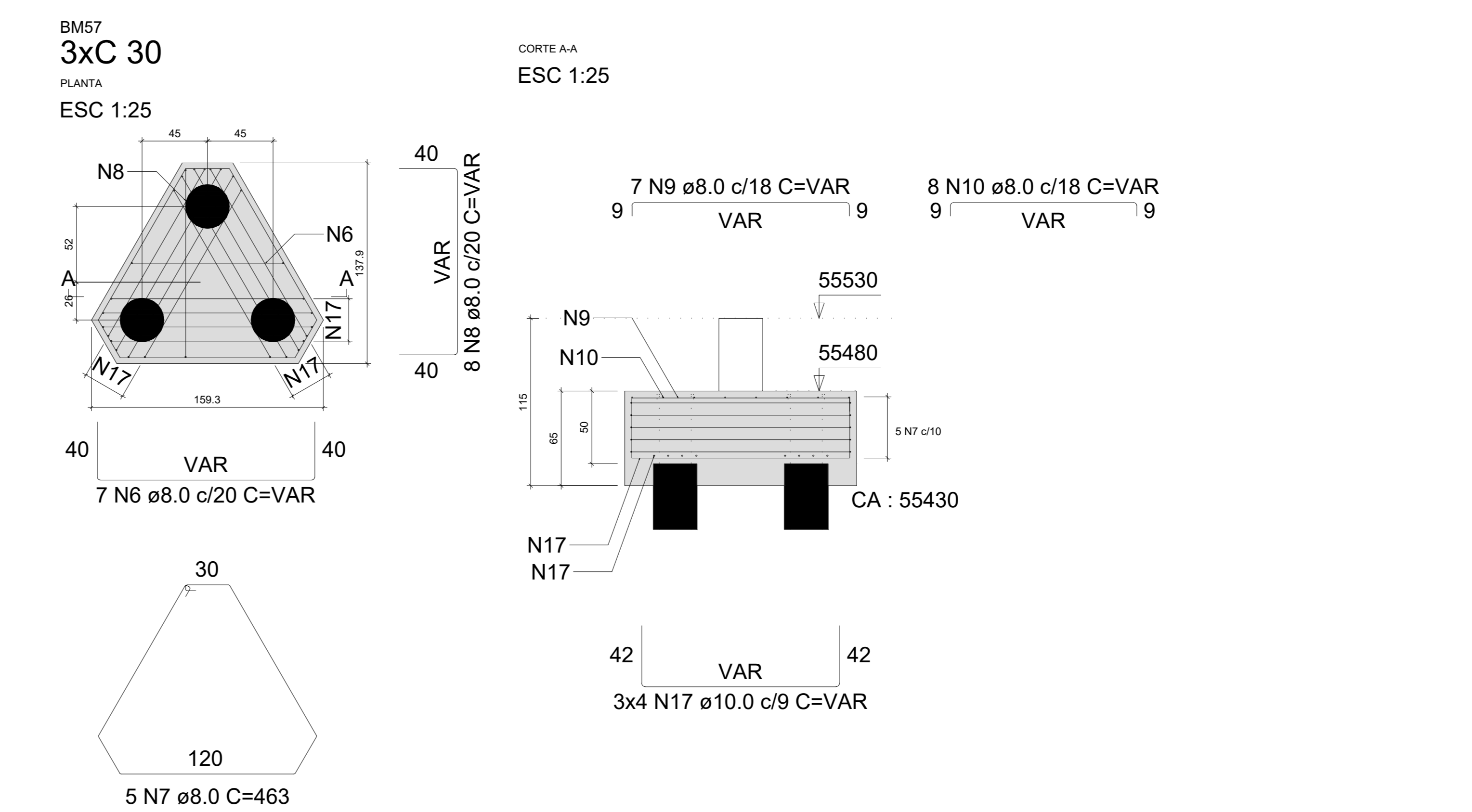
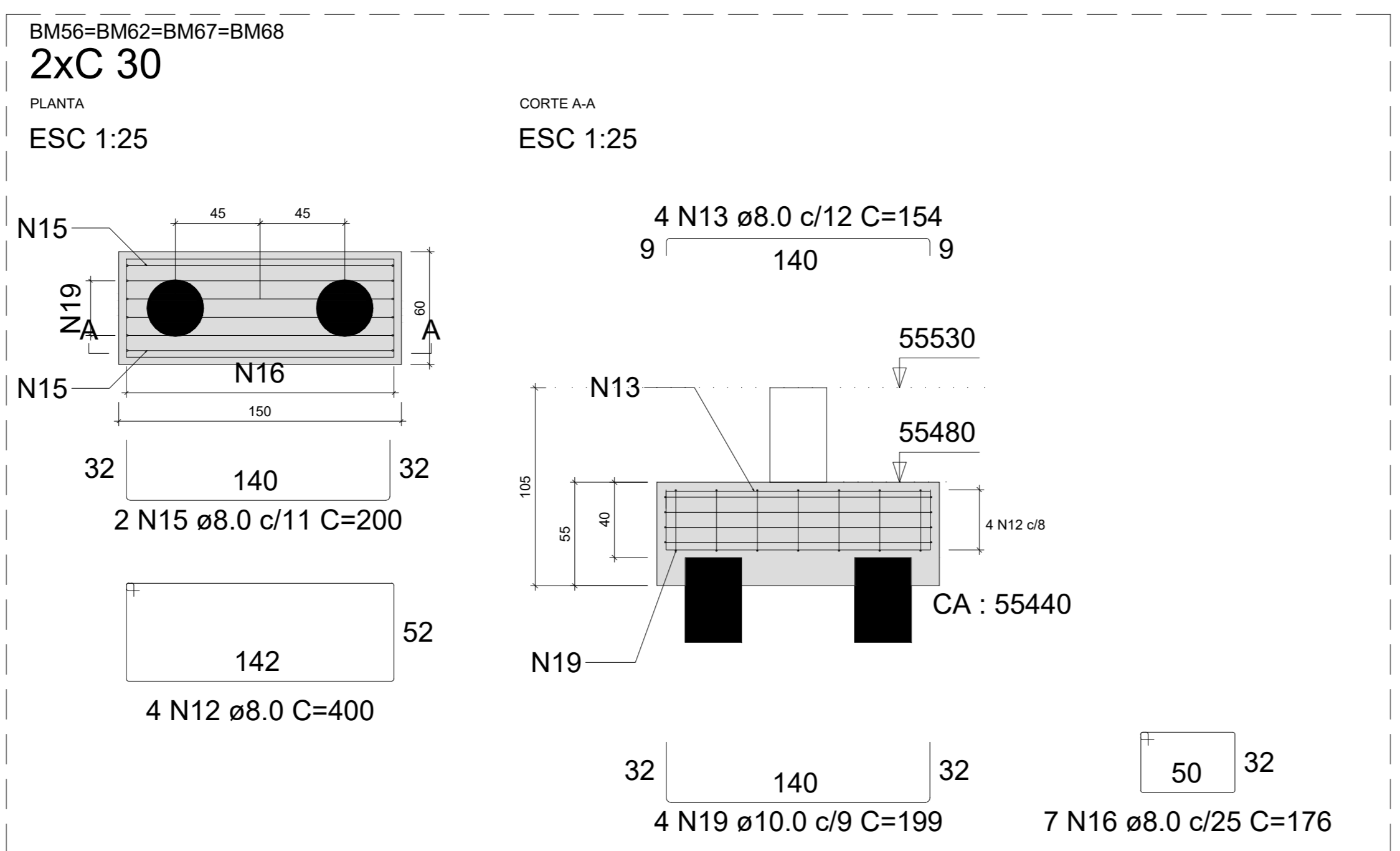
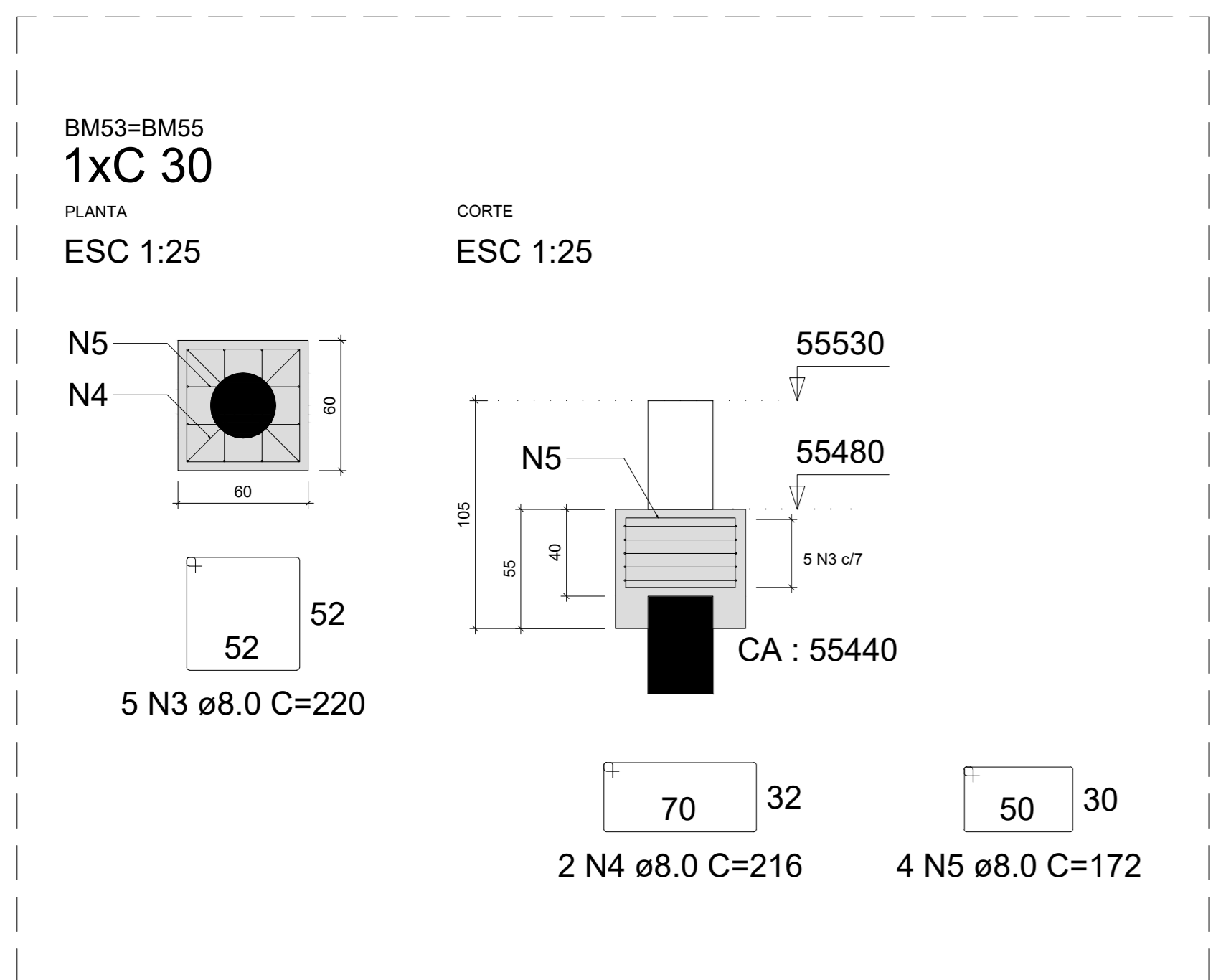
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	1	6.3	114	216	24624
	2	6.3	228	172	39216
	3	8.0	295	220	64900
	4	8.0	4	216	864
	5	8.0	8	172	1376
	6	8.0	28	VAR	VAR
	7	8.0	20	VAR	VAR
	8	8.0	32	VAR	VAR
	9	8.0	28	VAR	VAR
	10	8.0	32	VAR	VAR
	11	8.0	2	210	420
	12	8.0	25	400	10000
	13	8.0	24	154	3696
	14	8.0	7	186	1302
	15	8.0	10	200	2000
	16	8.0	35	176	6160
	17	10.0	48	VAR	VAR
	18	10.0	5	209	1045
	19	10.0	21	199	4179

RESUMO DO AÇO

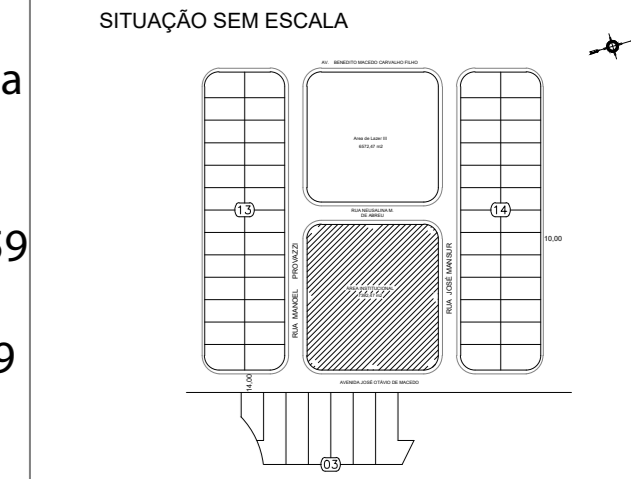
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	638.4	171.8
	8.0	1219.1	529.2
	10.0	155.4	105.4

PESO TOTAL (kg)
CA50 806.4

Volume de concreto (C-30) = 17.65 m³
Área de forma = 104.37 m²



Assinado de forma digital por
ALFREDO PADUA MANZANO:2701597015901838
Dados: 2026.01.09 11:55:37 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: **Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas**

DR. YAN LOPES ALMEIDA
PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANTA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 590209914-SP
ART: 262051651916

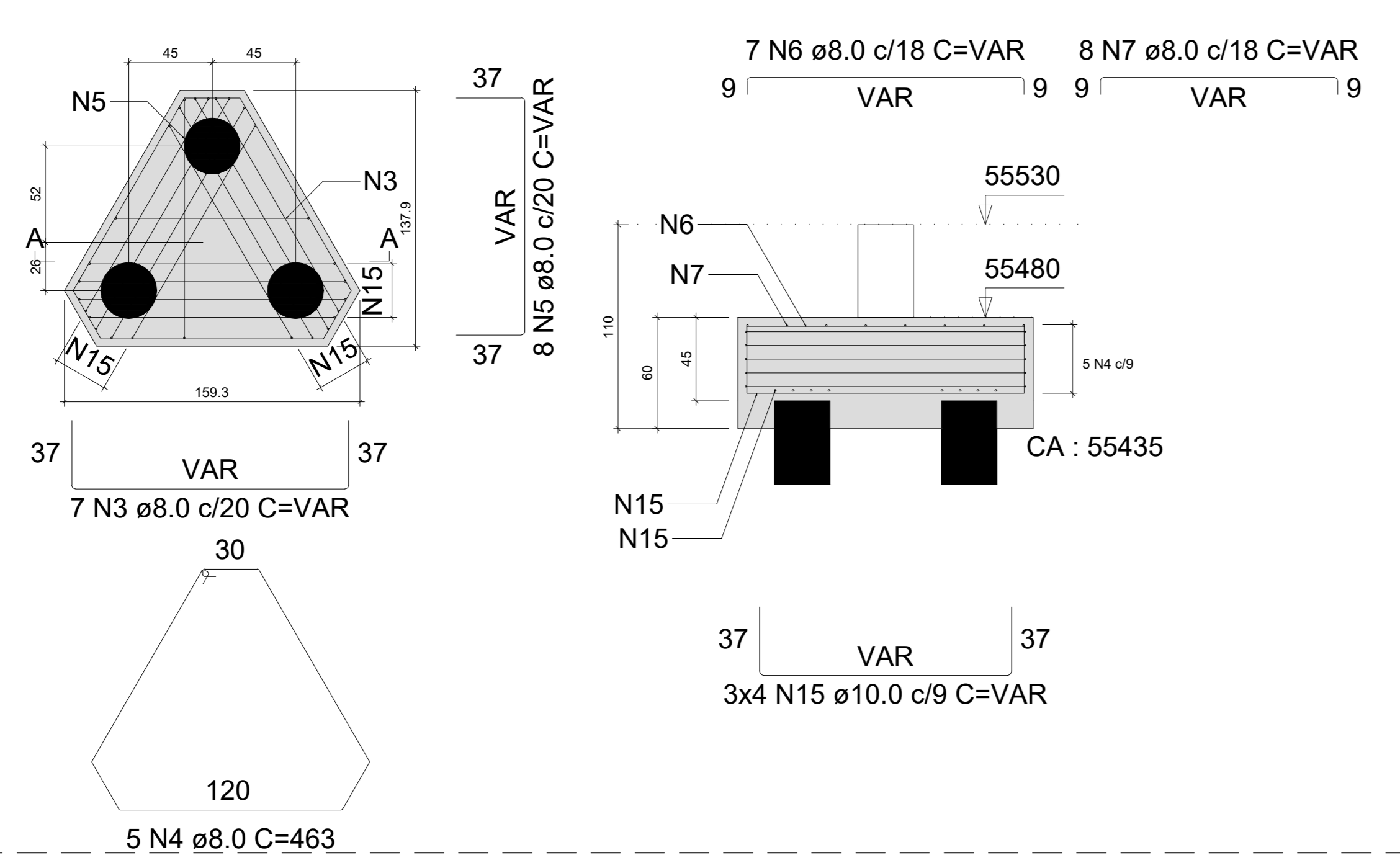
Endereço: AVENIDA JOSÉ OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Número do Processo: 2412/2024

Cliente: MUNICIPIO DE CAÇAPAVA
ÁREAS: Ver na folha ARQ 0152

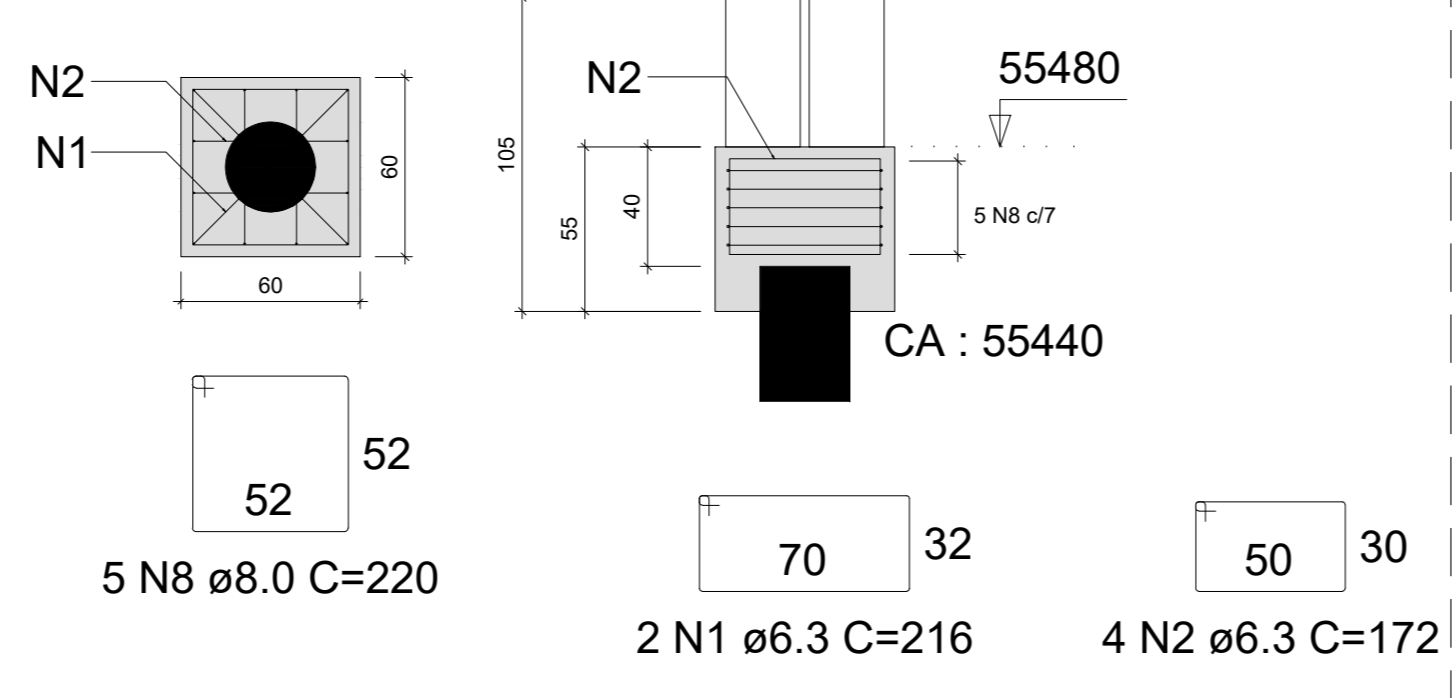
Desenho: PROJETO ESTRUTURAL
Desenho: BLOCO MURO-LOCAÇÃO
Plancha: 2840

Levantamento: Escala: Indicada
Data: NOV/2025
Revisão: R01

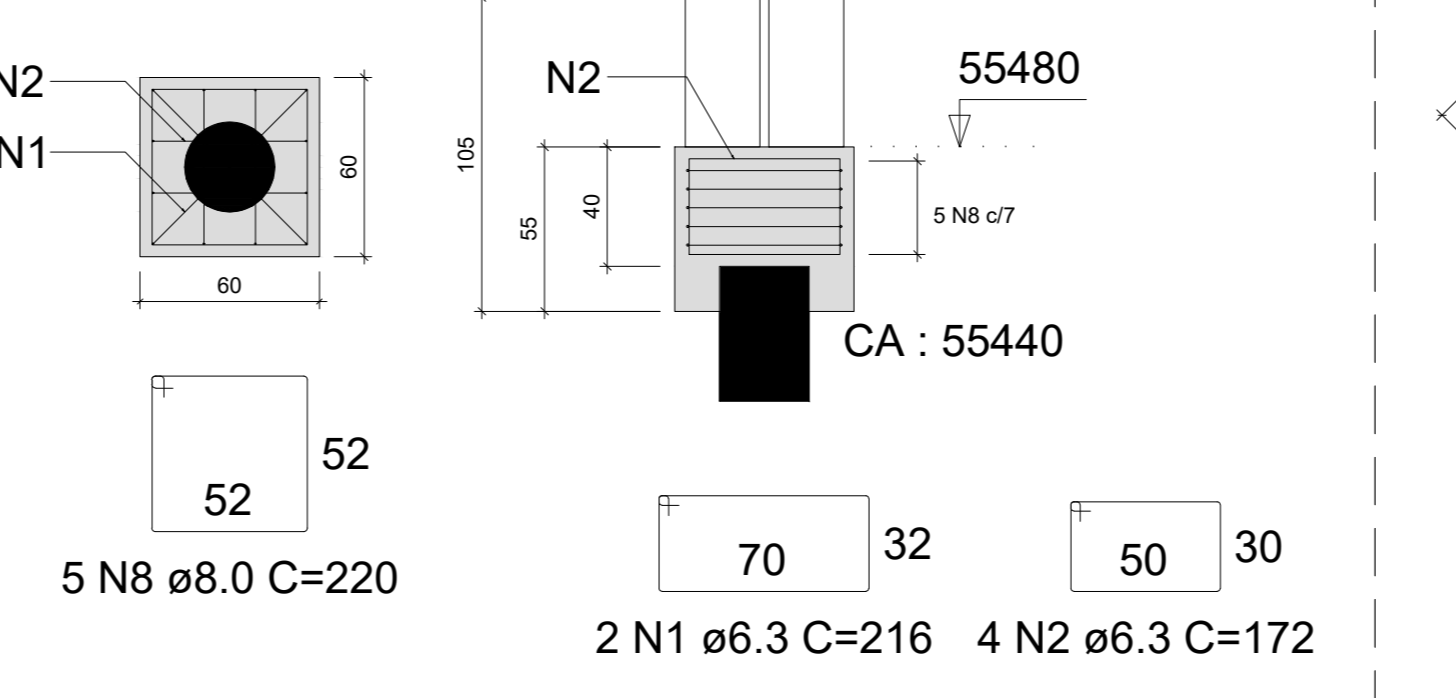
BM65
3x30
PLANTA
ESC 1:25



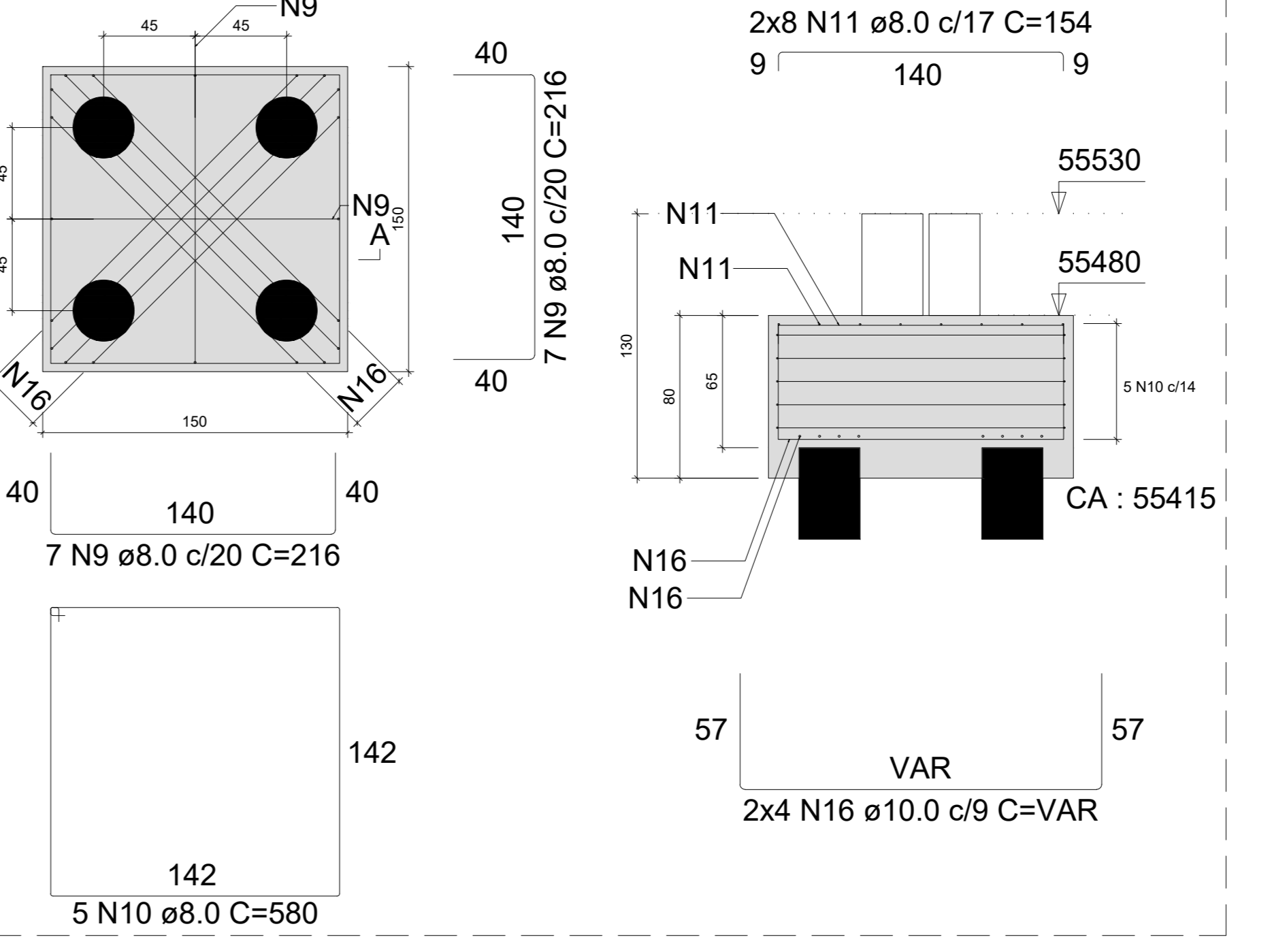
BM11-M12
1xC30 - 5M
PLANTA
ESC 1:25



BM21-M22
1xC30 - 5M
PLANTA
ESC 1:25



BM69-M70
4xC30
PLANTA
ESC 1:25



RELAÇÃO DO AÇO - BLOCO DE COROAMENTO 02/02
BM65-L1 31xBM123-L2 BM11-M12-L1
BM21-M22-L1 BM69-M70-L1 BM76-M77-L1
BM84-M85-L2 BM11-M115-L2 BM103-M101-L2
BM107-M108-L2 BM114-M115-L2 BM119-M120-L2

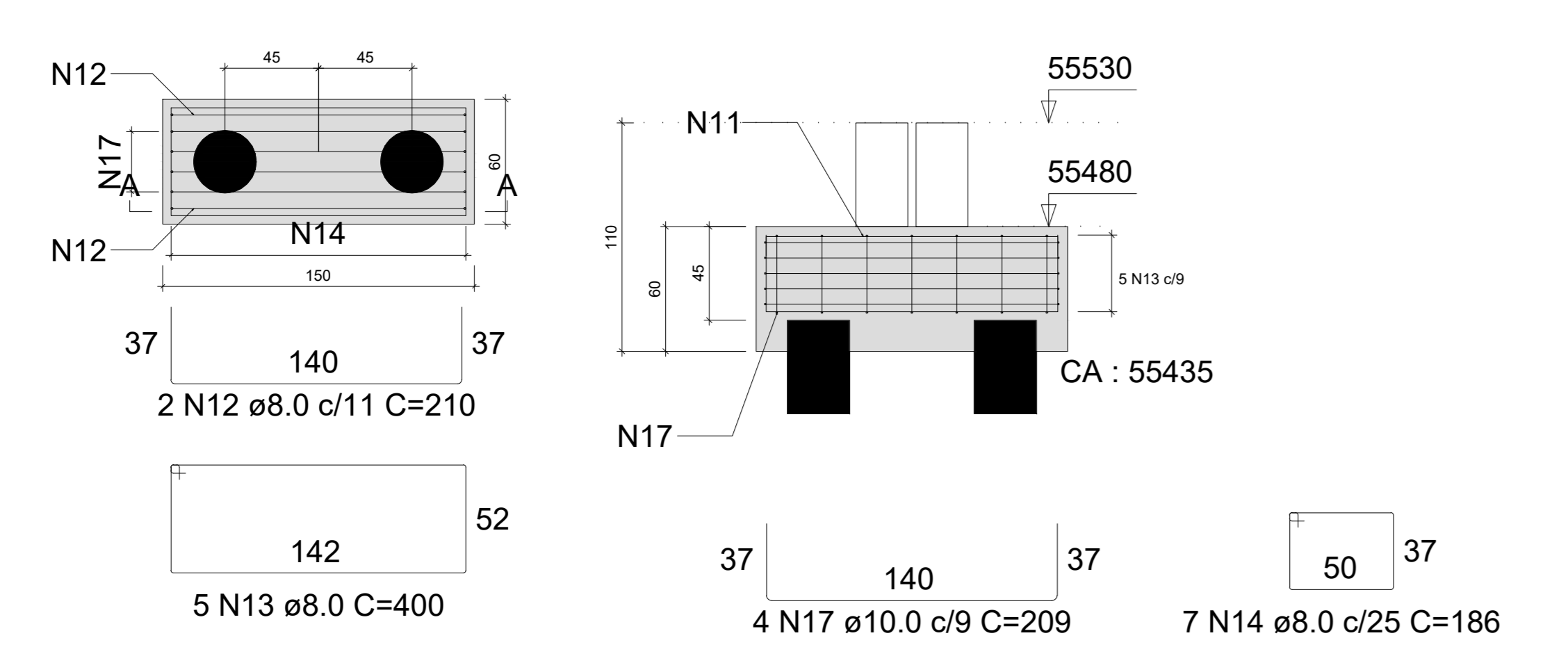
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CA50	1	6.3	66	216	14256
	2	6.3	132	172	22704
	3	8.0	7	VAR	VAR
	4	8.0	5	463	2315
	5	8.0	8	VAR	VAR
	6	8.0	7	VAR	VAR
	7	8.0	8	VAR	VAR
	8	8.0	165	220	36300
	9	8.0	14	216	3024
	10	8.0	5	580	2900
	11	8.0	37	154	5698
	12	8.0	14	210	2940
	13	8.0	35	400	14000
	14	8.0	49	186	9114
	15	10.0	12	VAR	VAR
	16	10.0	8	VAR	VAR
	17	10.0	28	209	5852

RESUMO DO AÇO

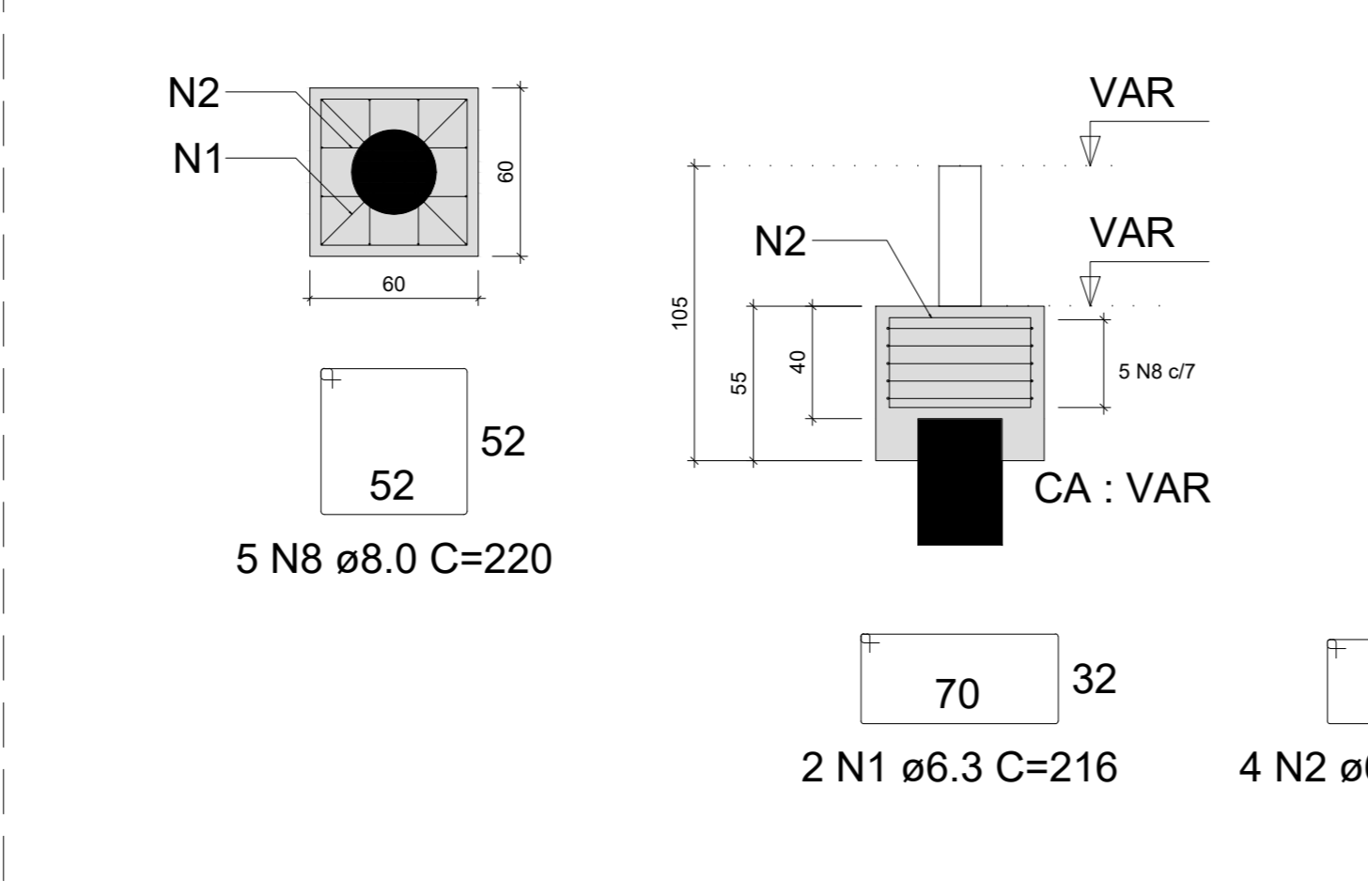
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	369.6	99.5
	8.0	816.9	354.5
	10.0	106.1	71.9
PESO TOTAL (kg)			526

Volume de concreto (C-30) = 12.42 m³
Área de forma = 68.87 m²

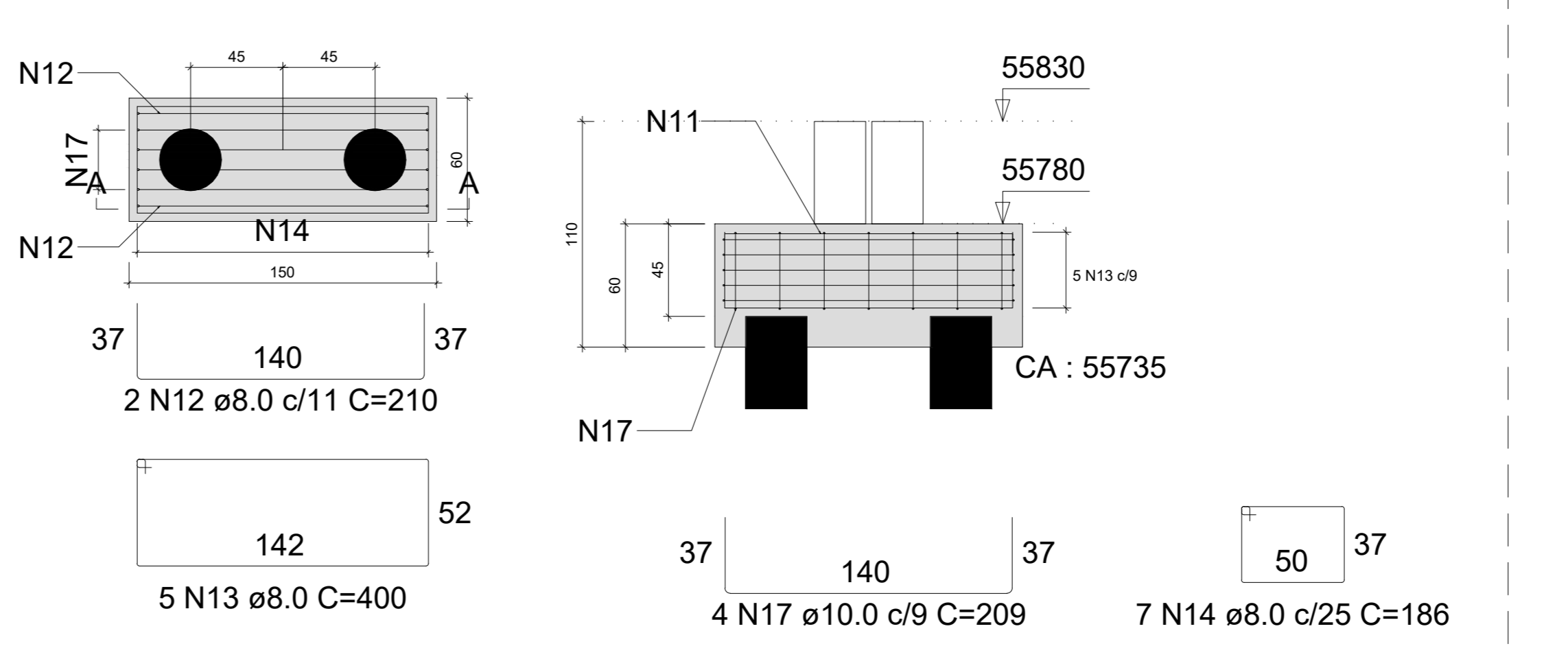
BM76-M77
2xC30
PLANTA
ESC 1:25



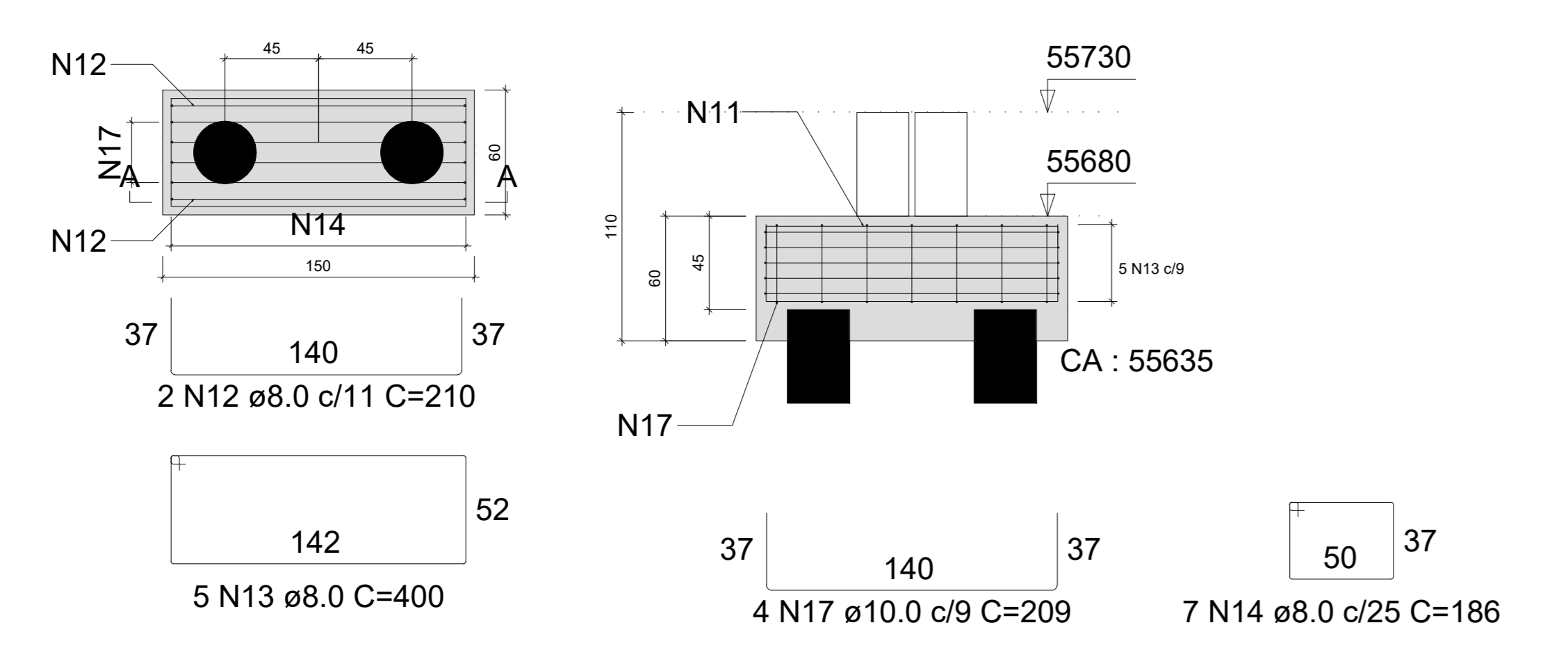
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1xC30
PLANTA
ESC 1:25



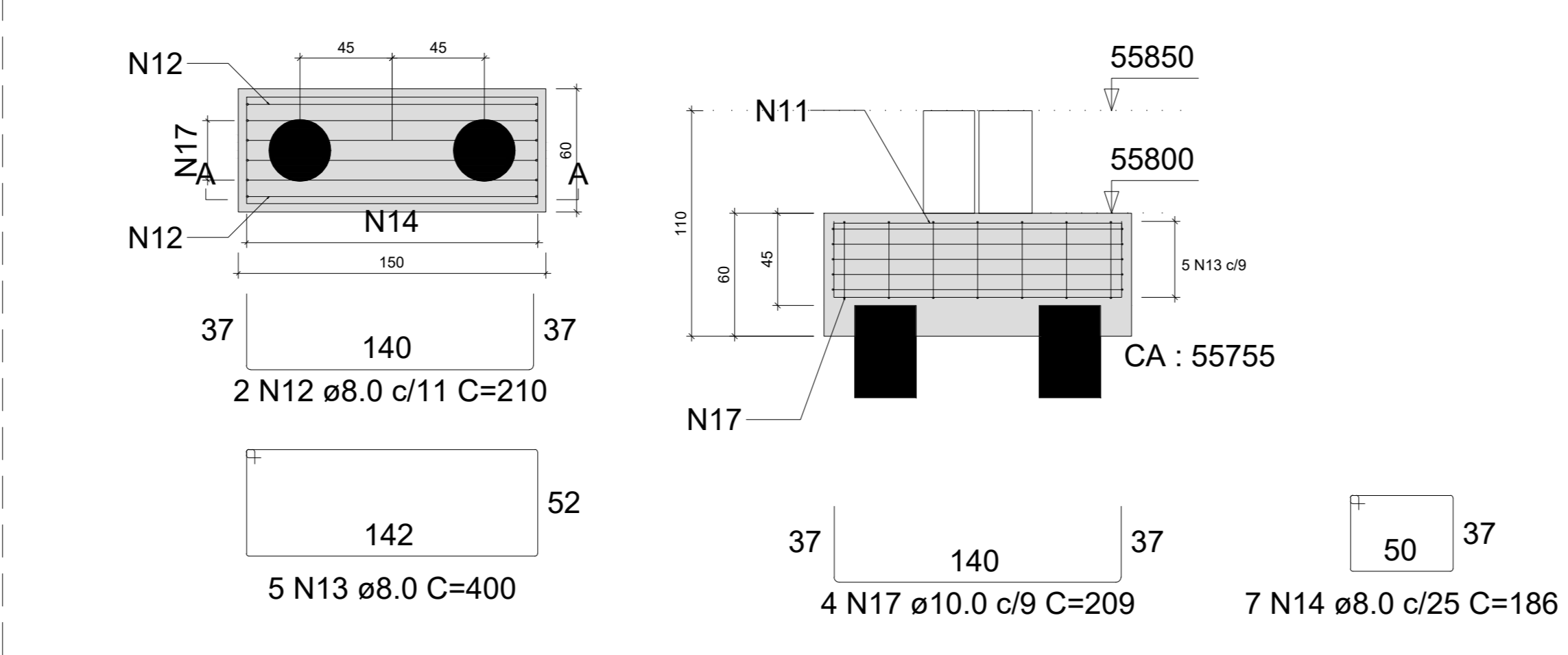
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2xC30
PLANTA
ESC 1:25



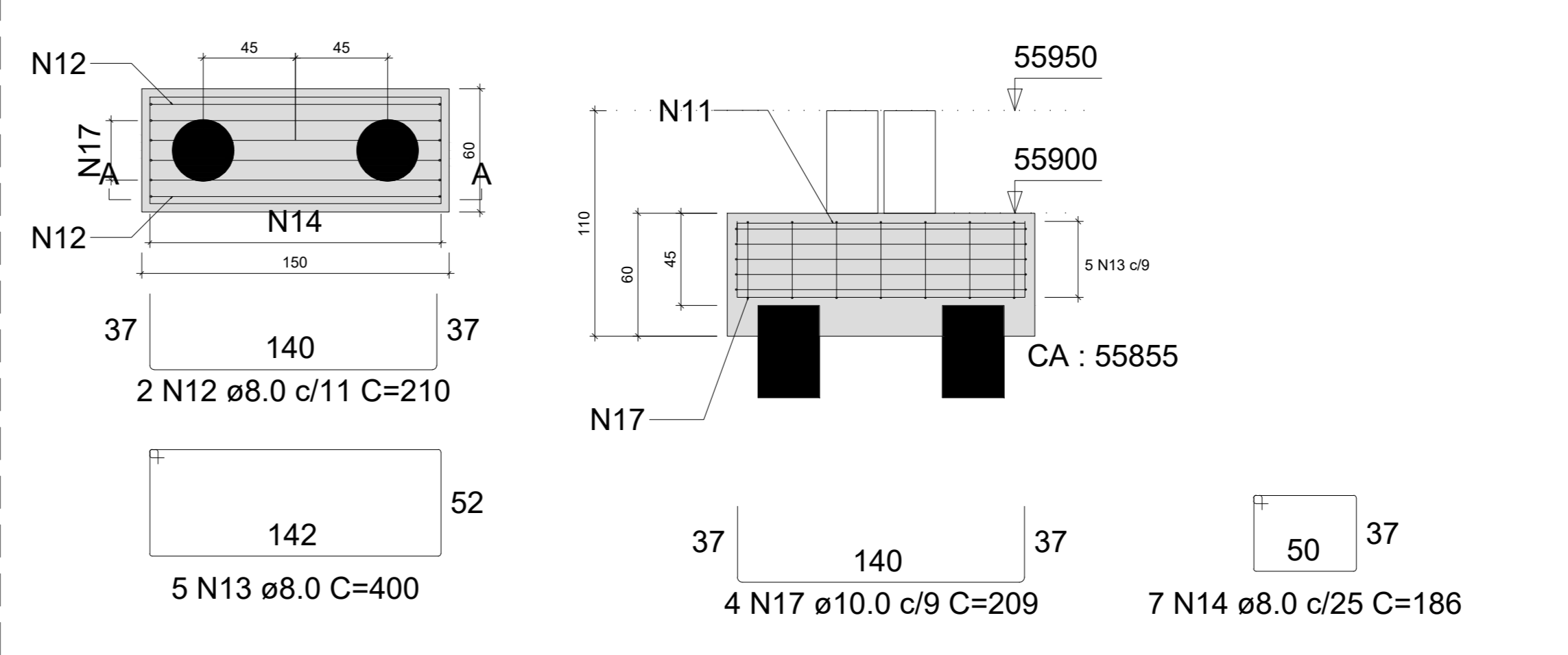
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2xC30
PLANTA
ESC 1:25



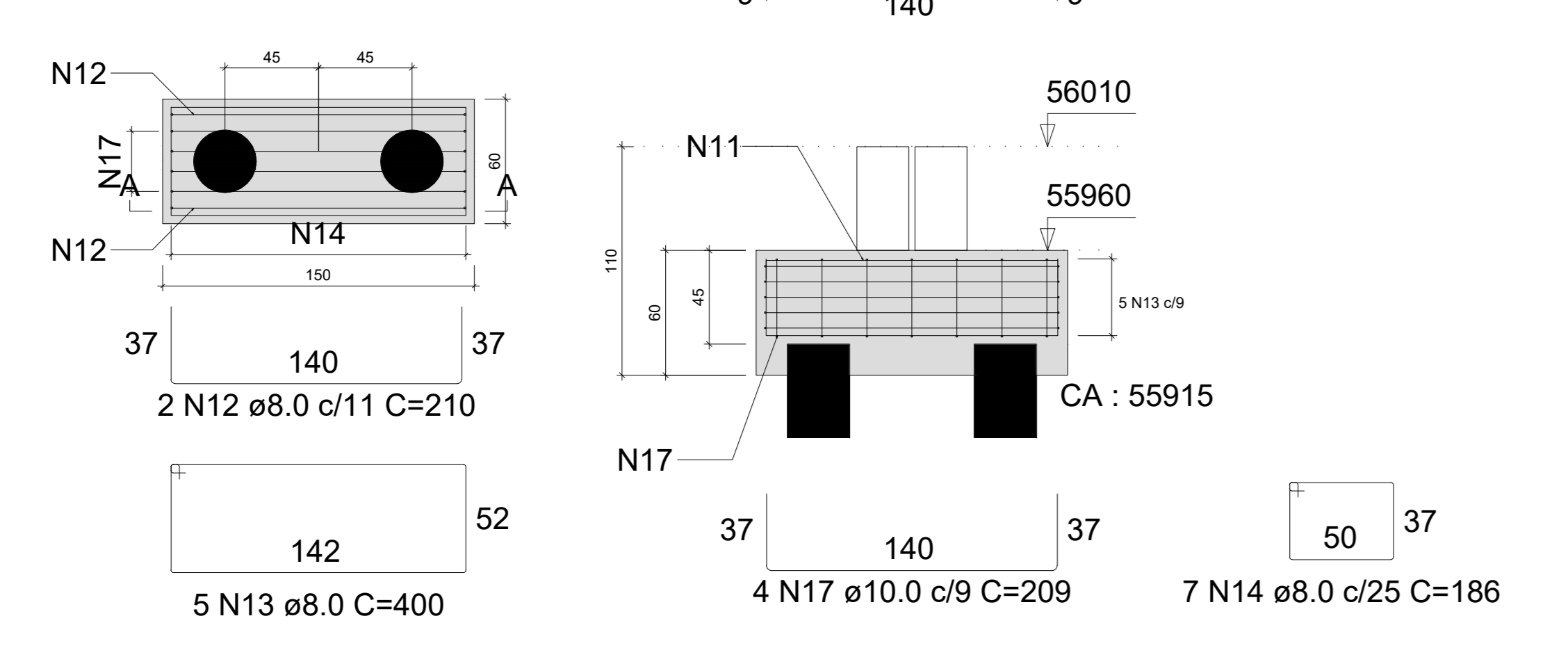
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2xC30
PLANTA
ESC 1:25



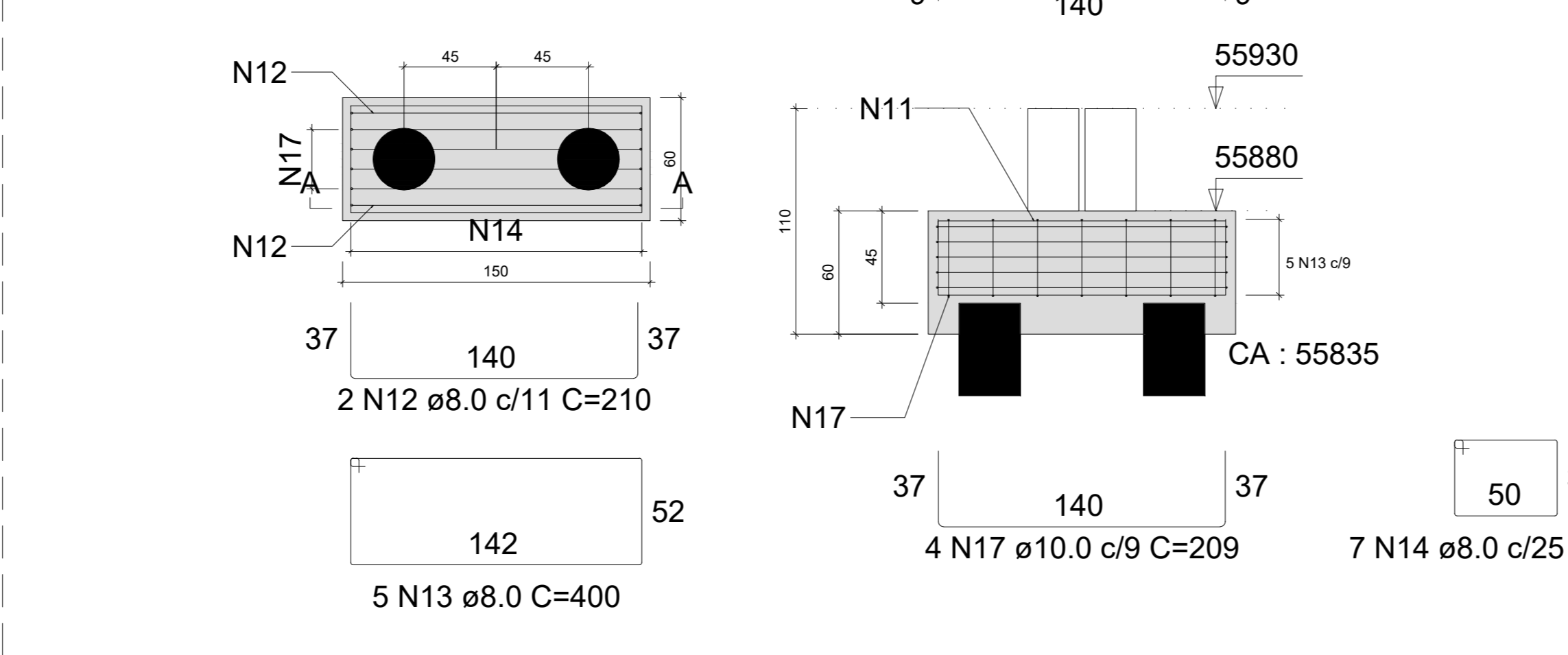
BM107-M108
2xC30
PLANTA
ESC 1:25



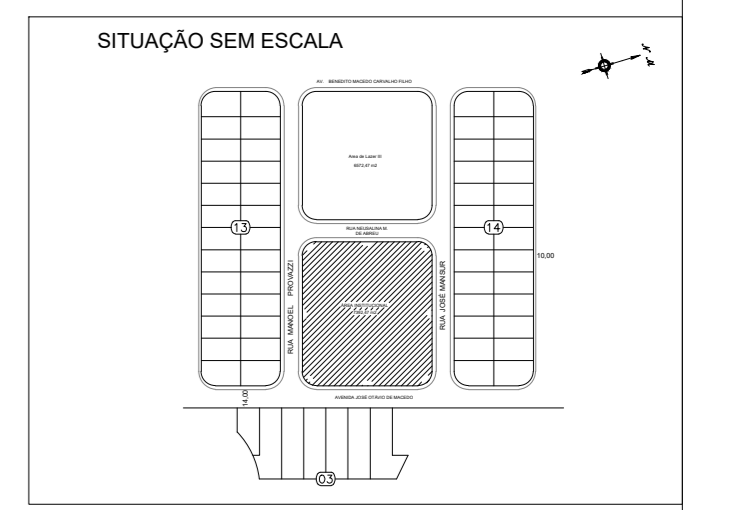
BM114-M115
2xC30
PLANTA
ESC 1:25



BM118-M120
2xC30
PLANTA
ESC 1:25



ALFREDO PADUA MANZANO:27015901838
Assinado de forma digital por ALFREDO PADUA MANZANO:27015901838
Dados: 2026.01.09 11:54:54 -03'00'

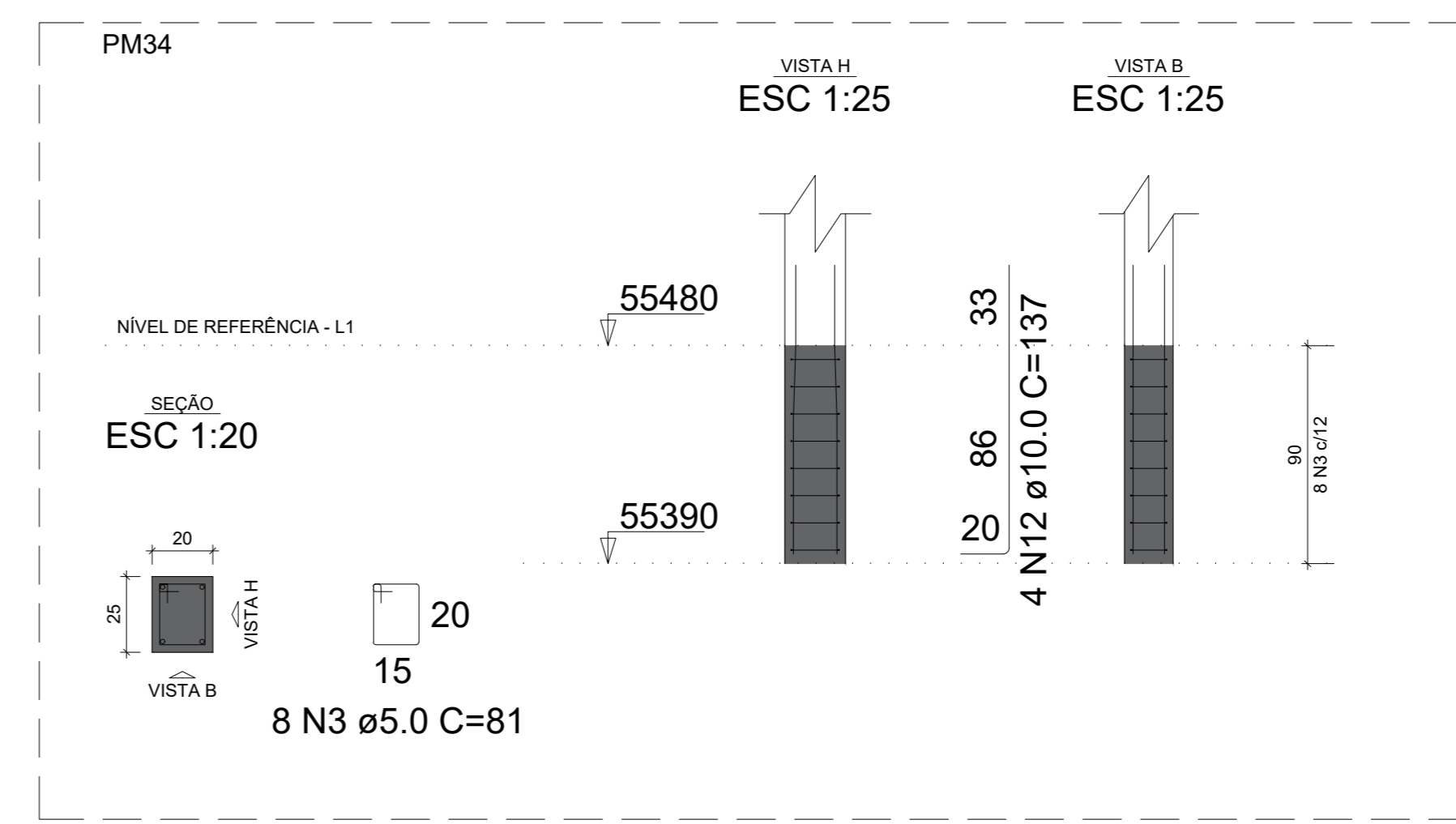
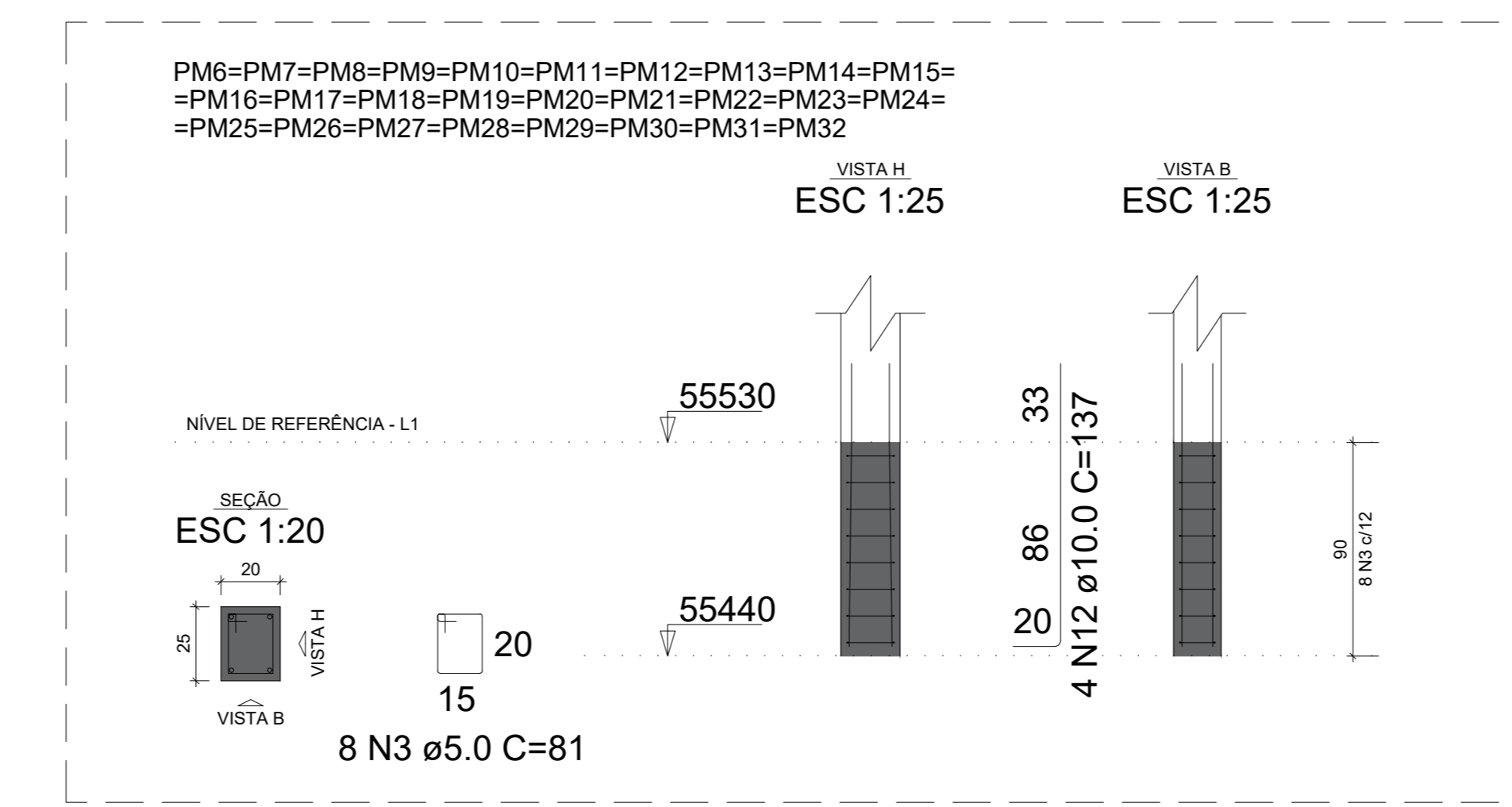
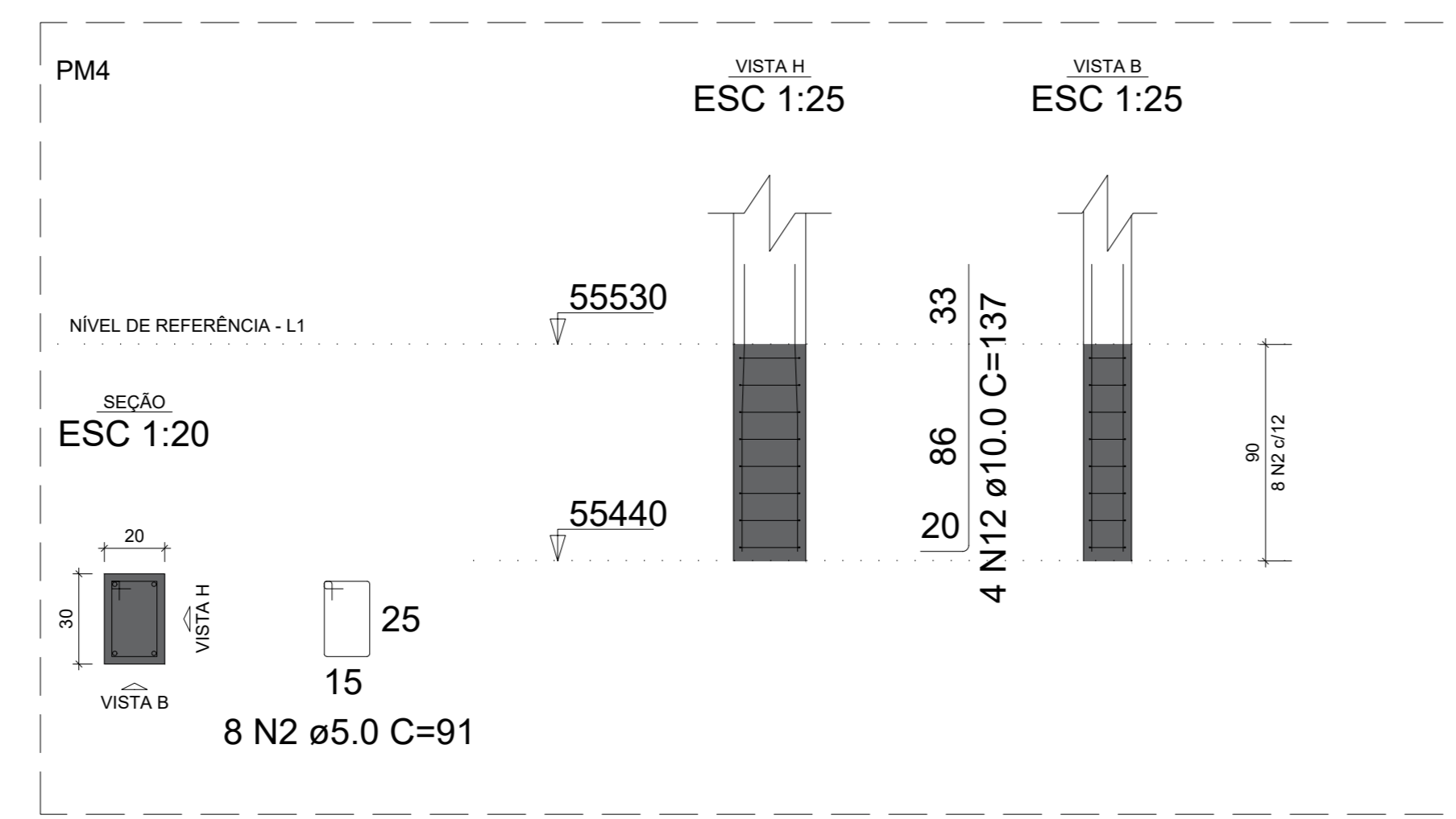
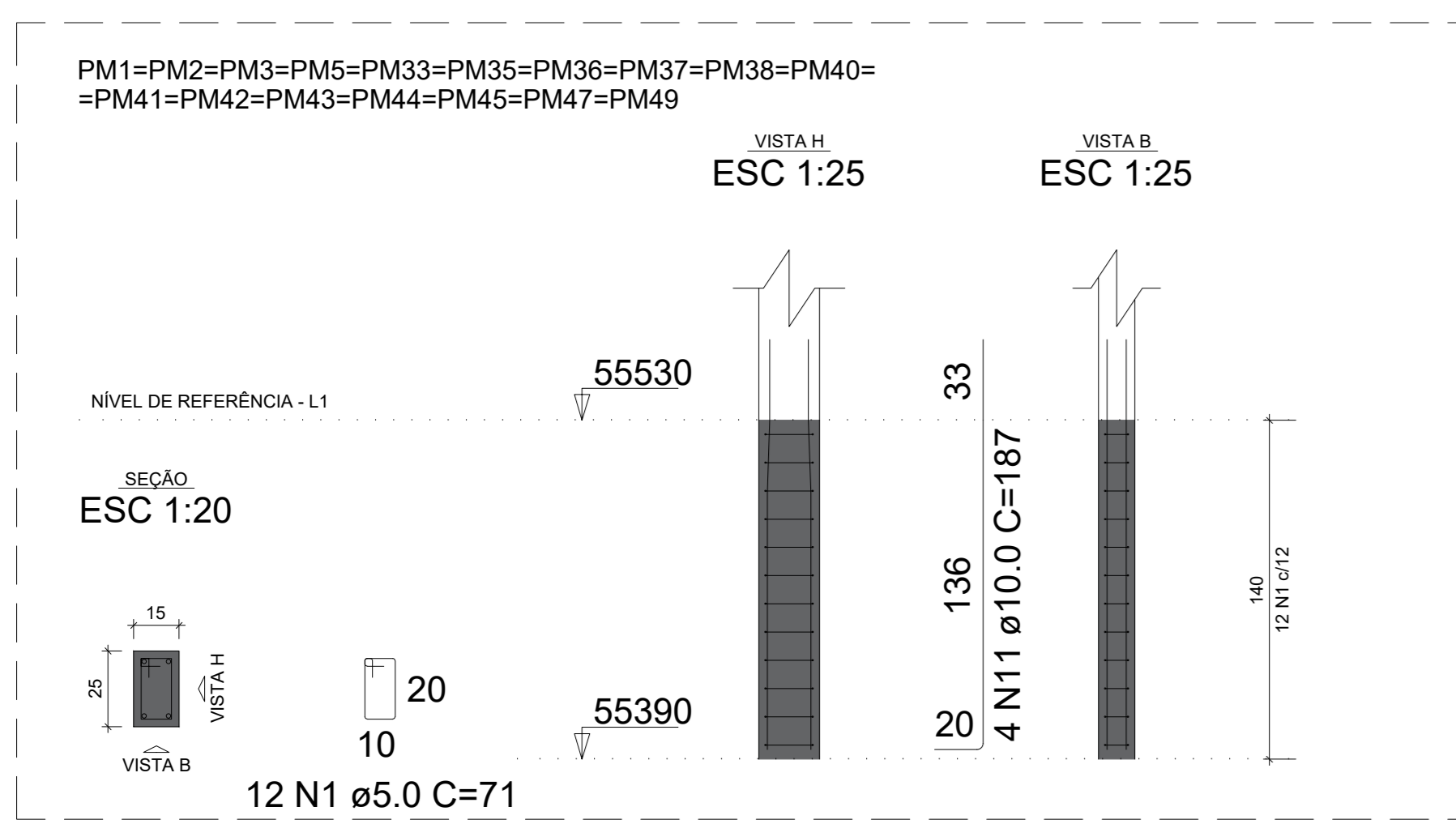


PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL
ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO
ENG. ALFREDO PADUA MANZANO
CREA: 196239/04-08
ART: 262051801916

Emprego:	AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número de Processo:	5.613204
Cliente:	MUNICIPIO DE CAÇAPAVA	ÁREA:	Ver na folha ARQ 01/52
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO- LOCAÇÃO
Levantamento:		Escala:	Indicada
		Data:	NOV/2025
		Revisão:	RD1



RELAÇÃO DO AÇO - PILAR 01/05

33xPM1-L2	17xPM1-L1	PM4-L2
PM4-L1	27xPM6-L2	27xPM6-L1
PM34-L1	PM34-L1	PM46-L1
13xPM48-L1	2xPM53-L1	PM55-L1
PM57-L1	PM58-L1	PM59-L1
PM60-L1	PM62-L1	PM65-L1
PM67-L1	PM68-L1	PM69-L1
PM70-L1	2xPM71-L1	PM73-L1
2xPM76-L1		

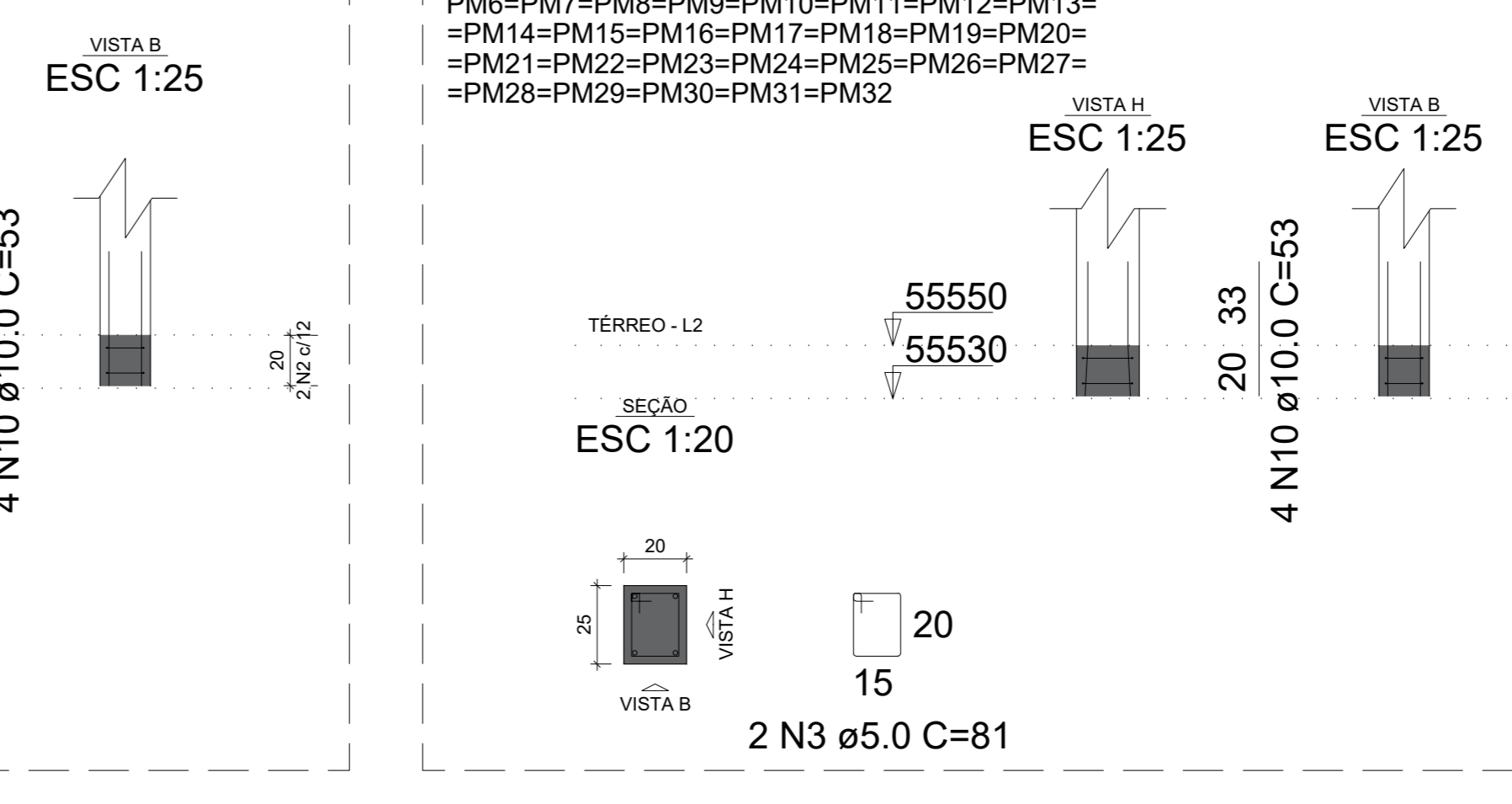
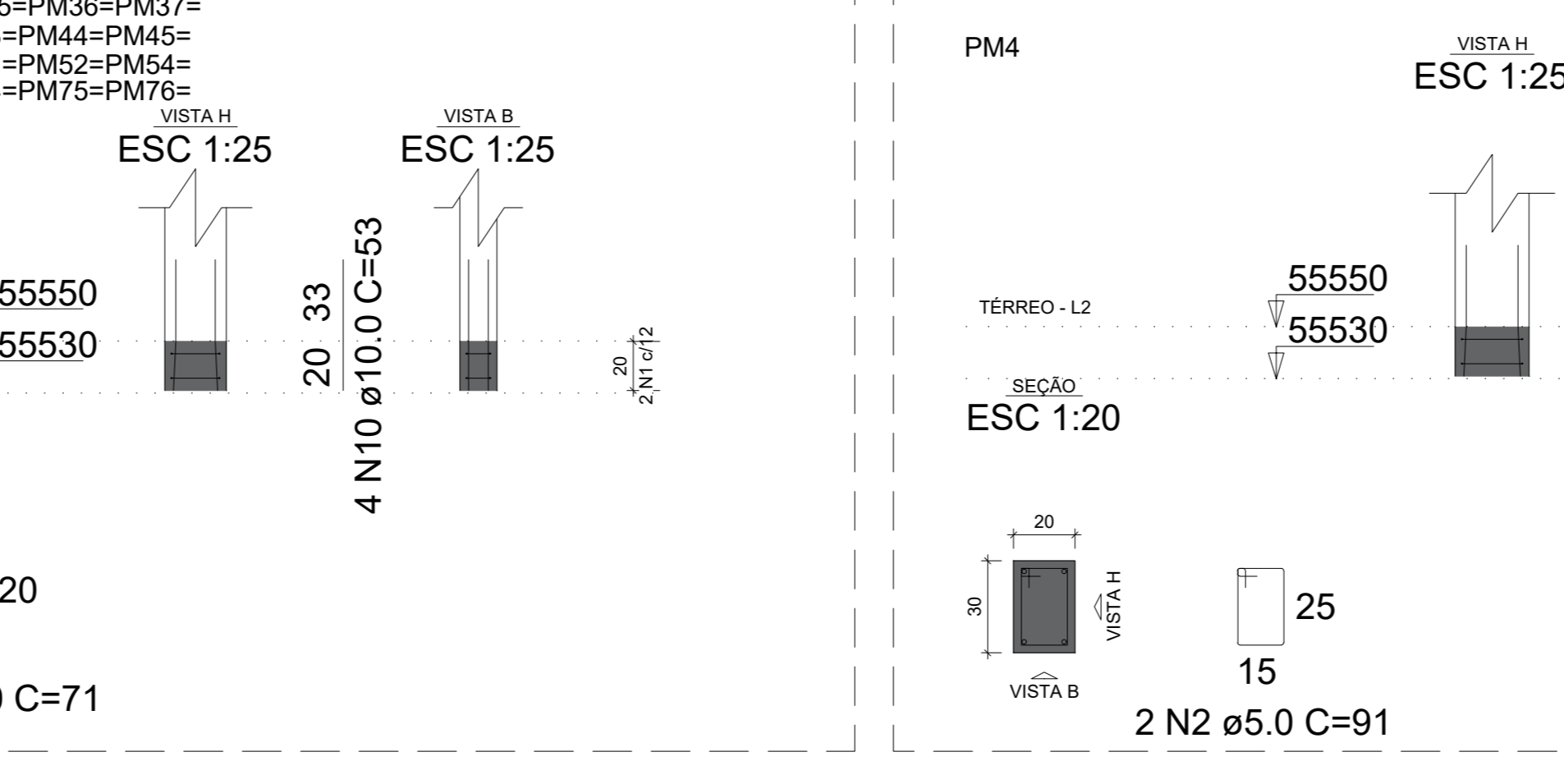
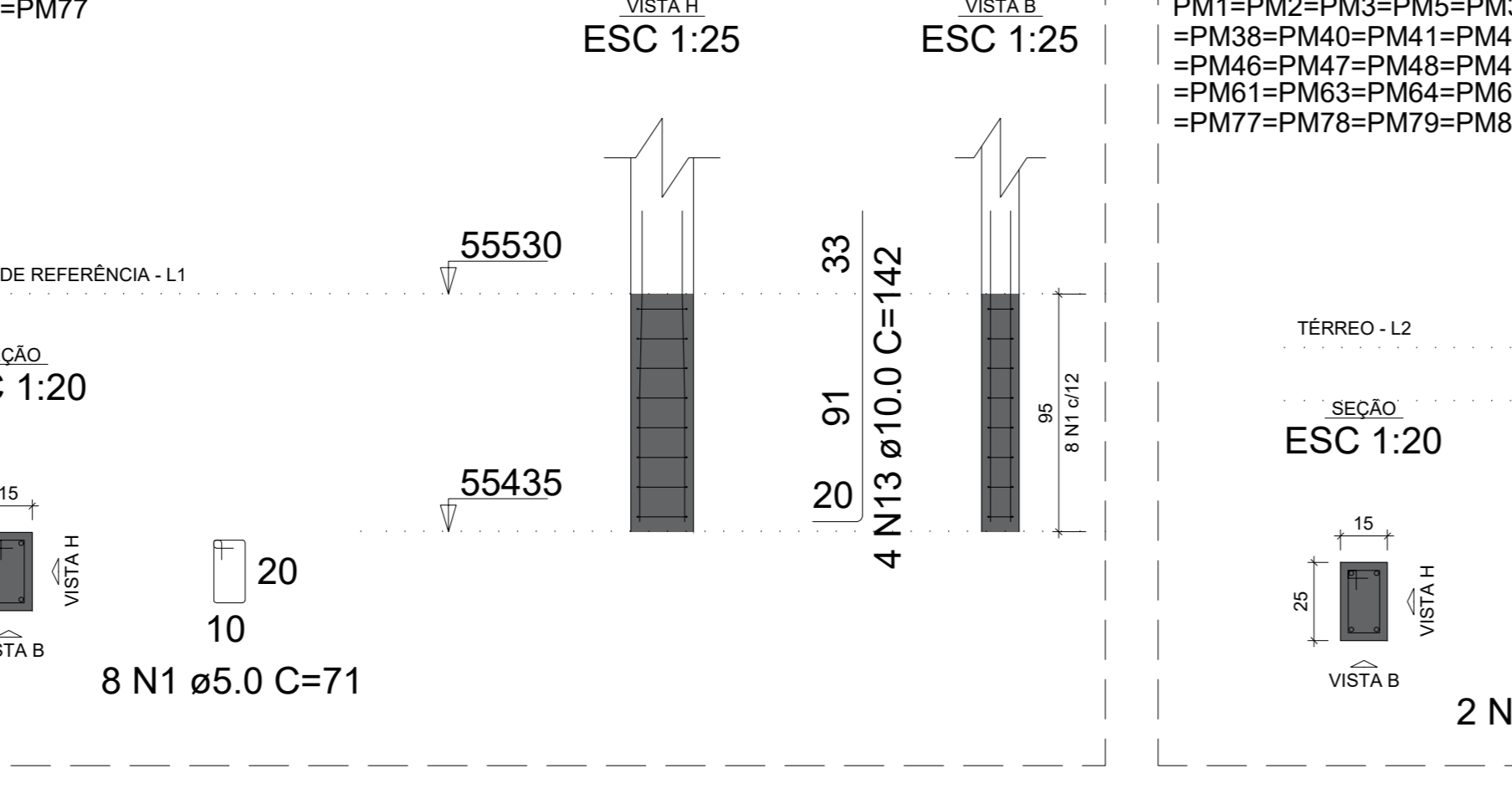
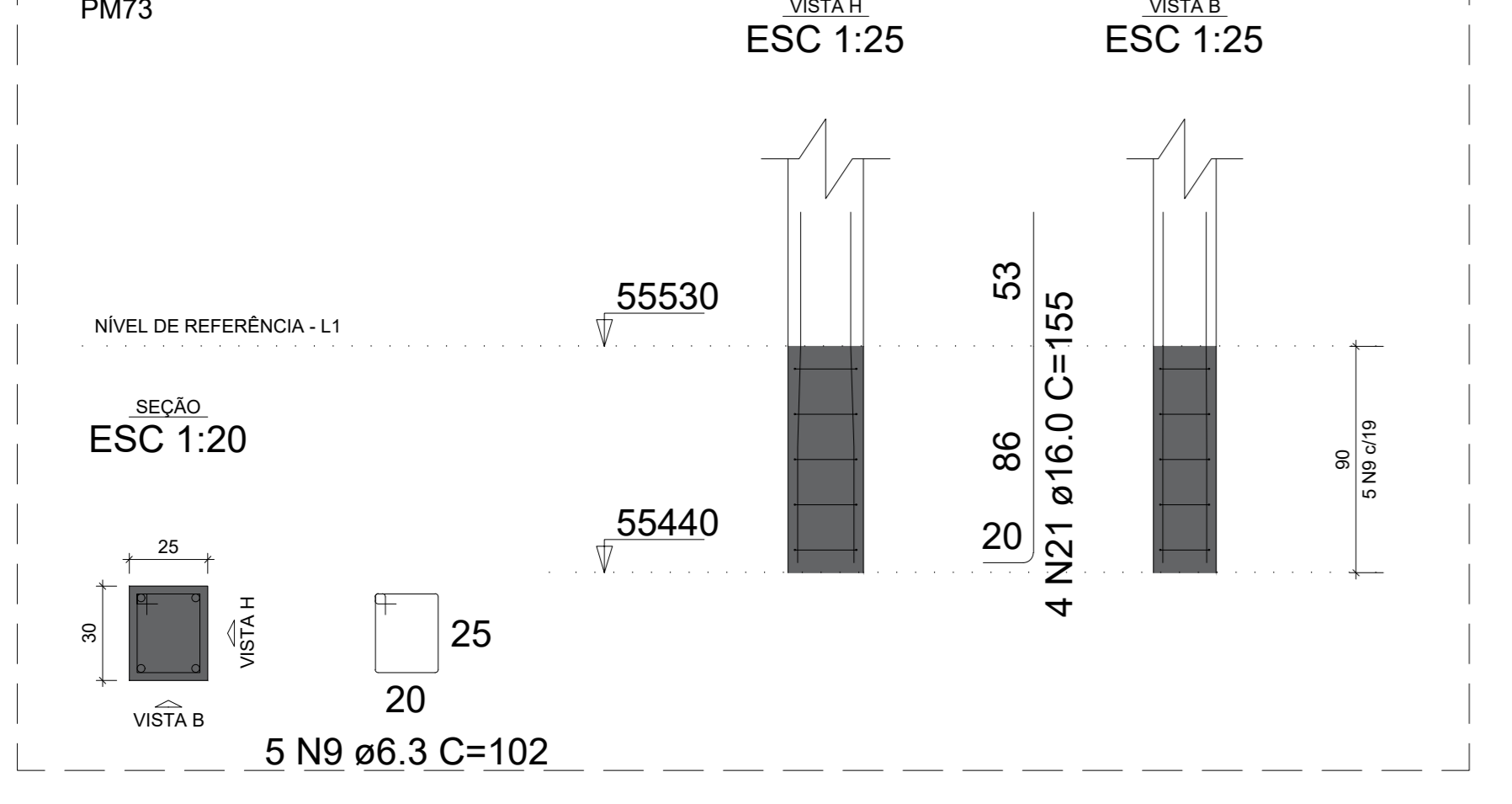
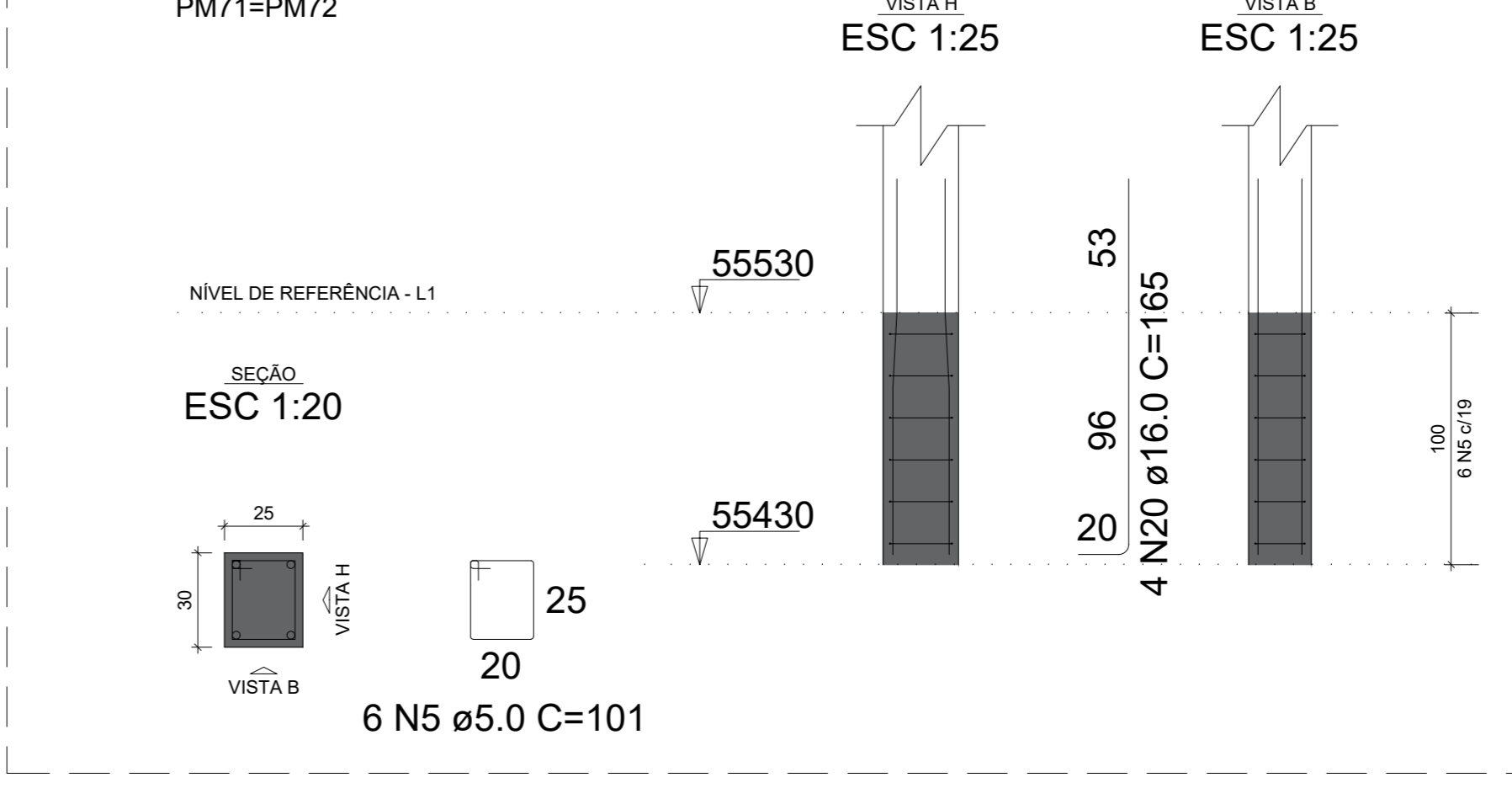
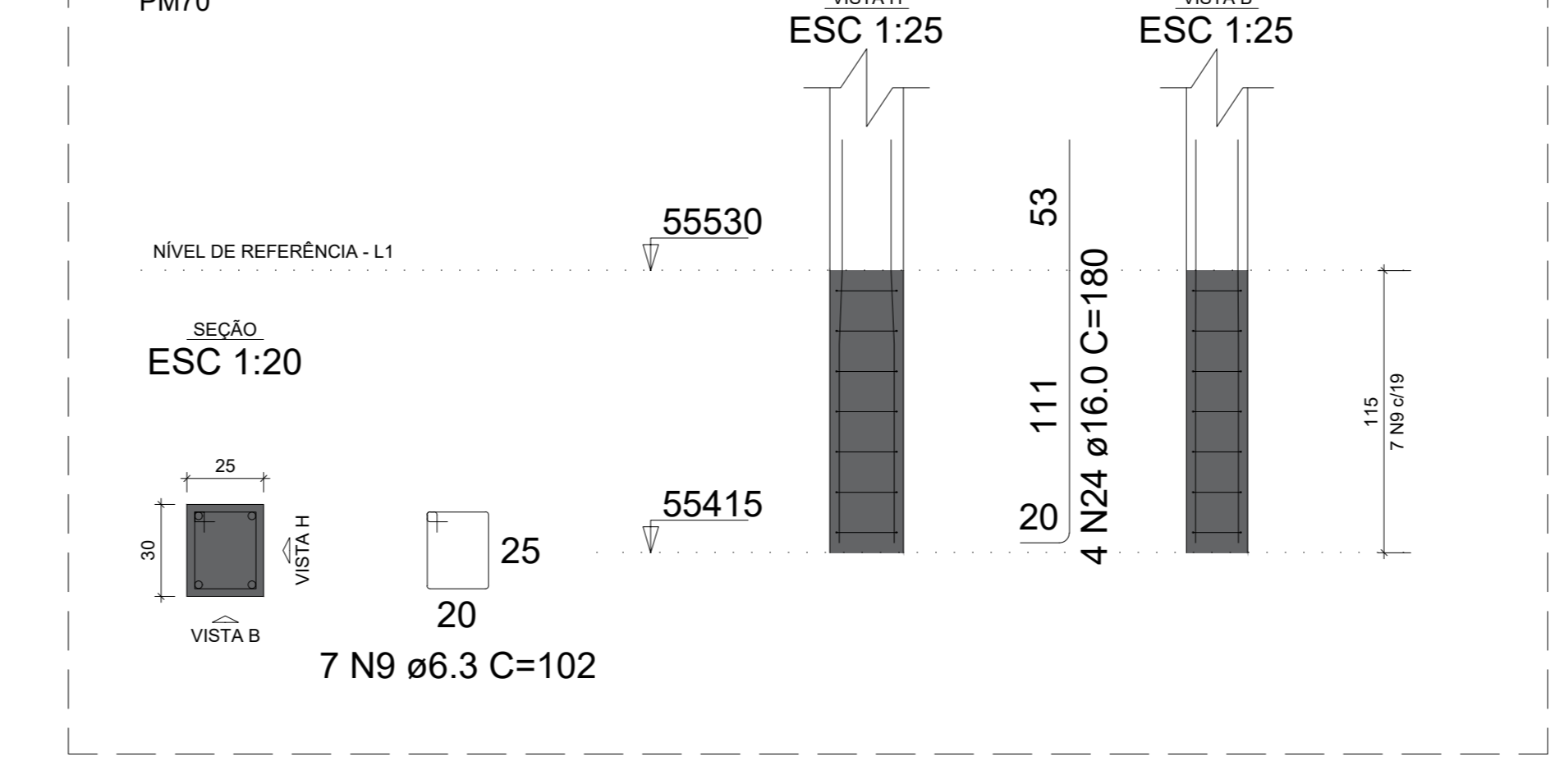
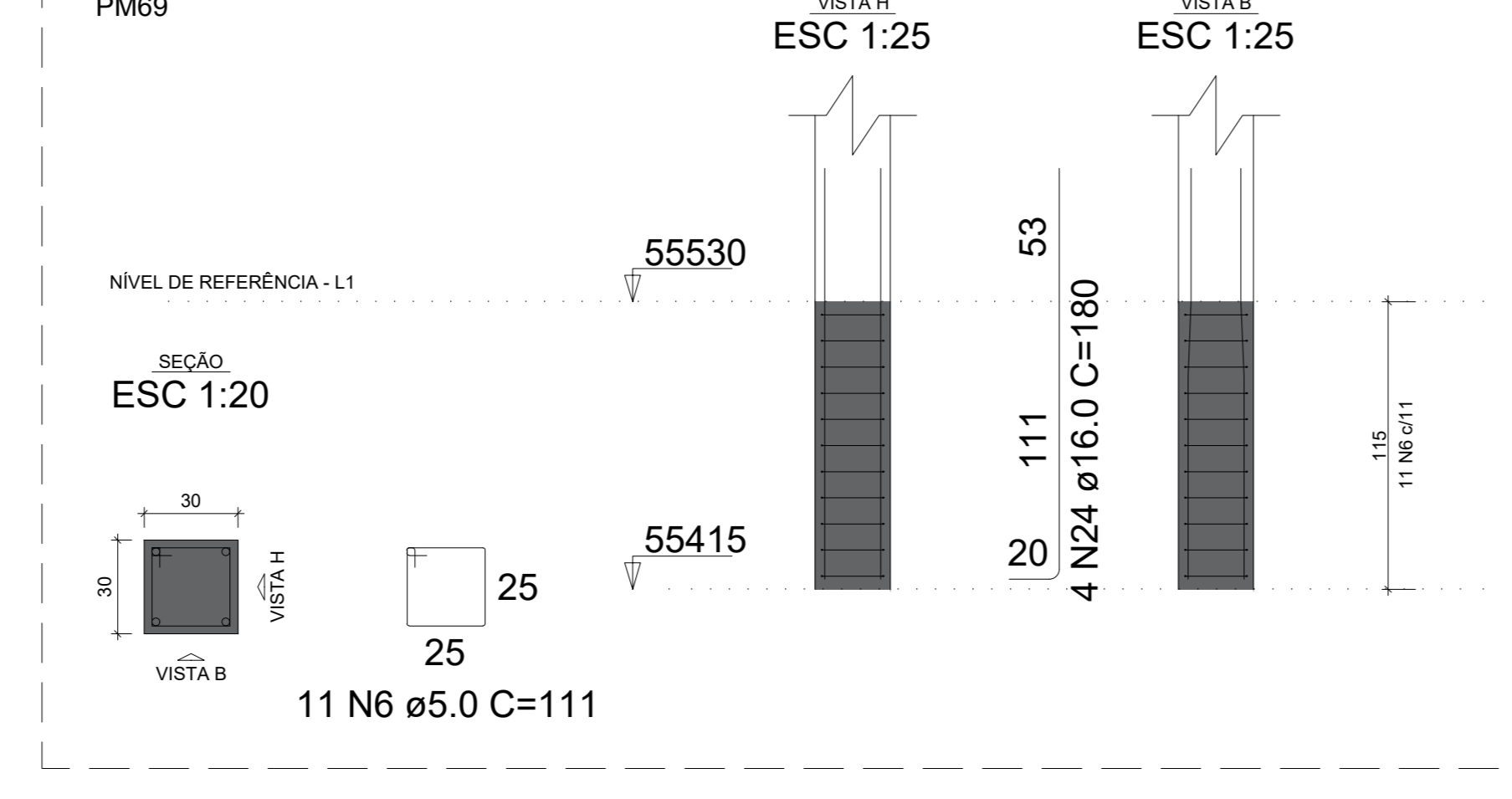
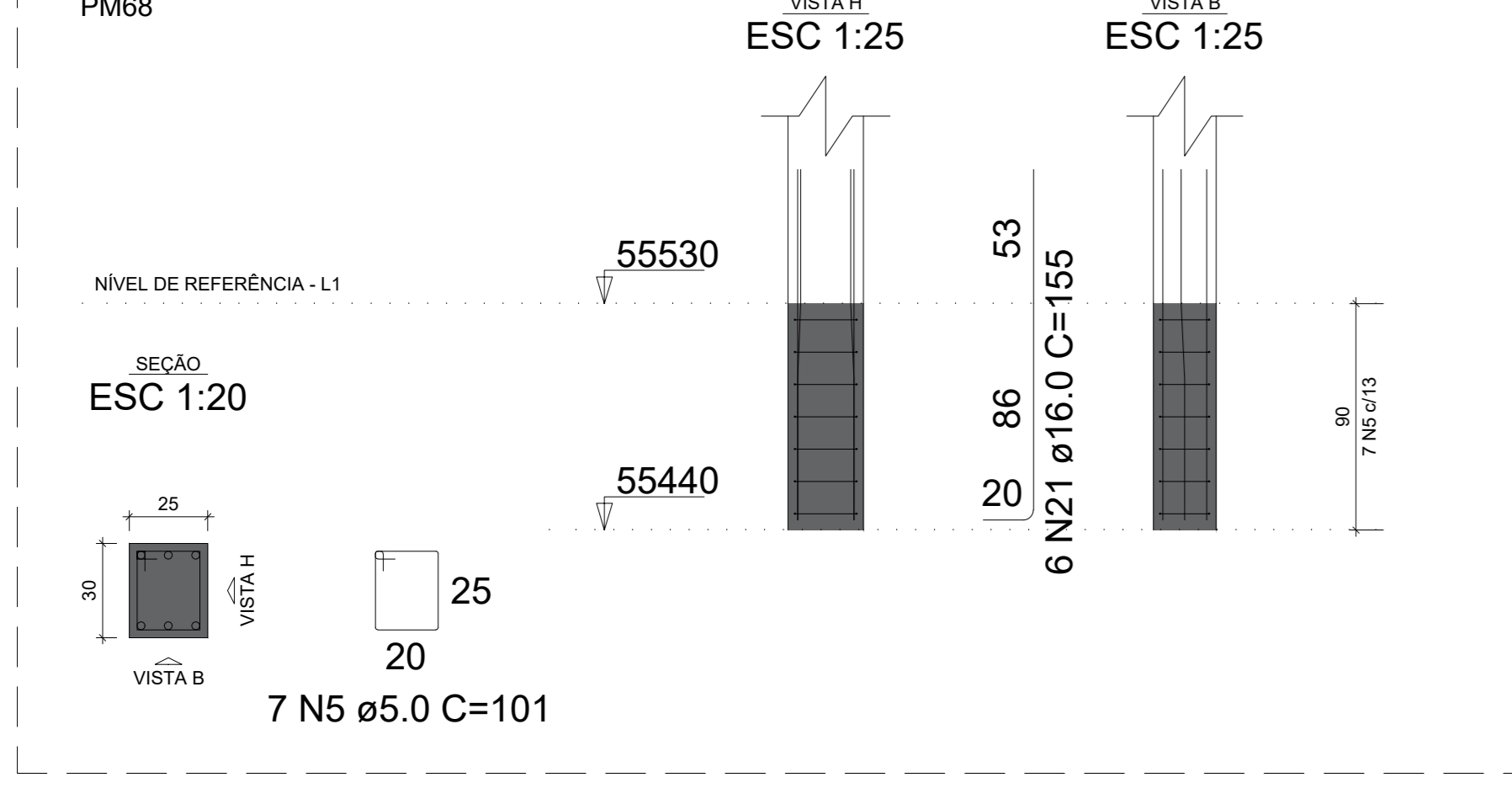
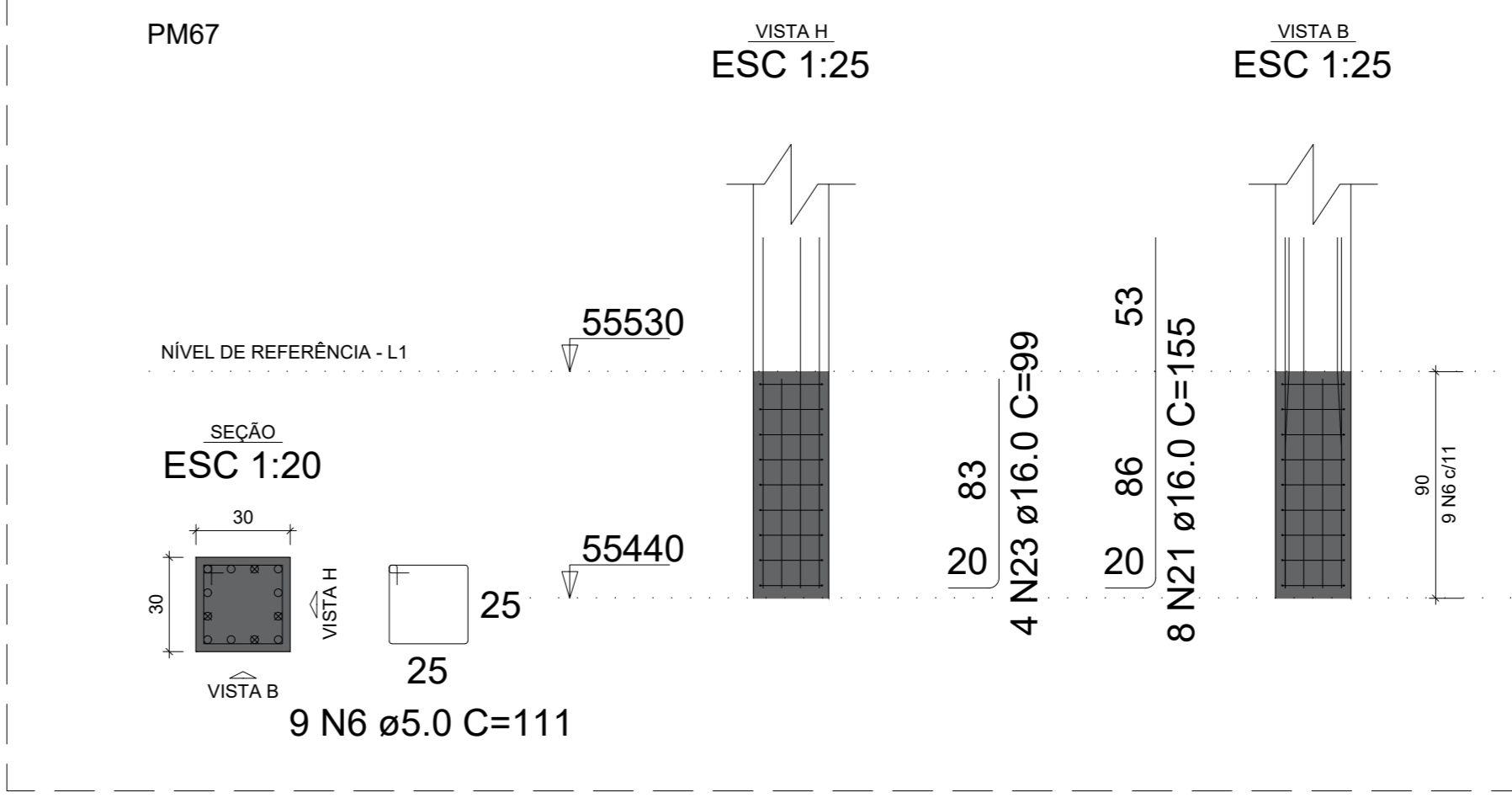
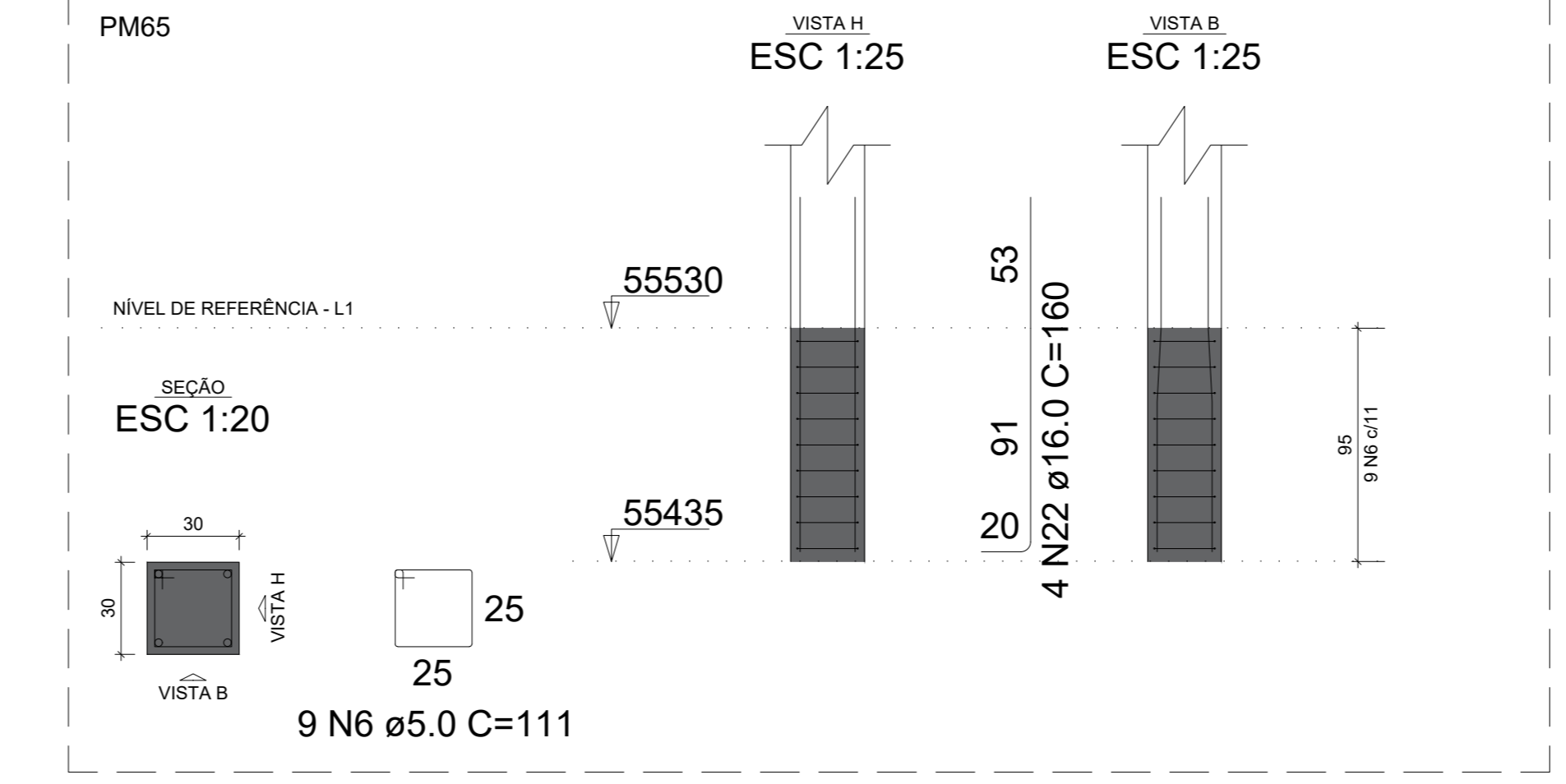
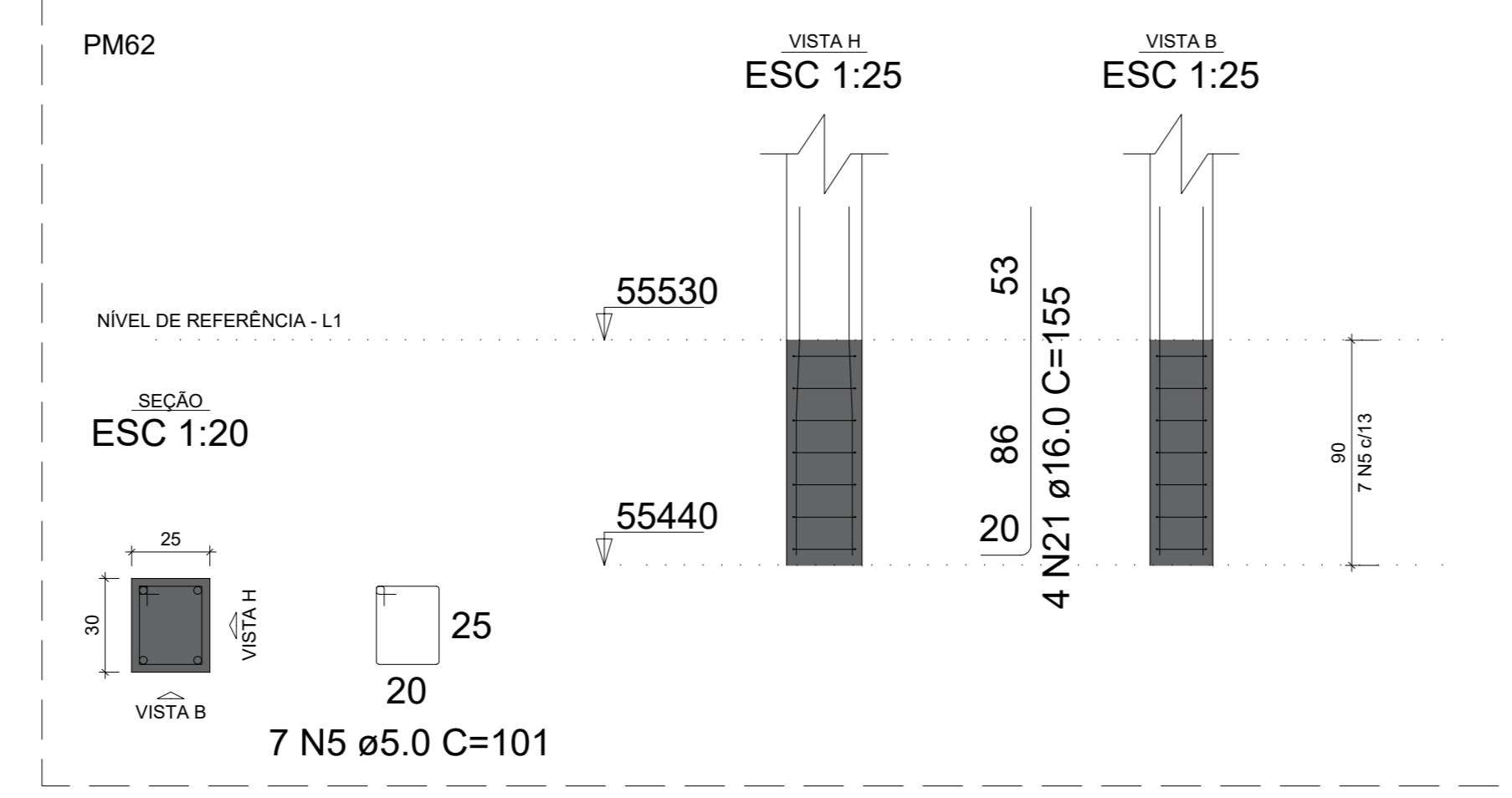
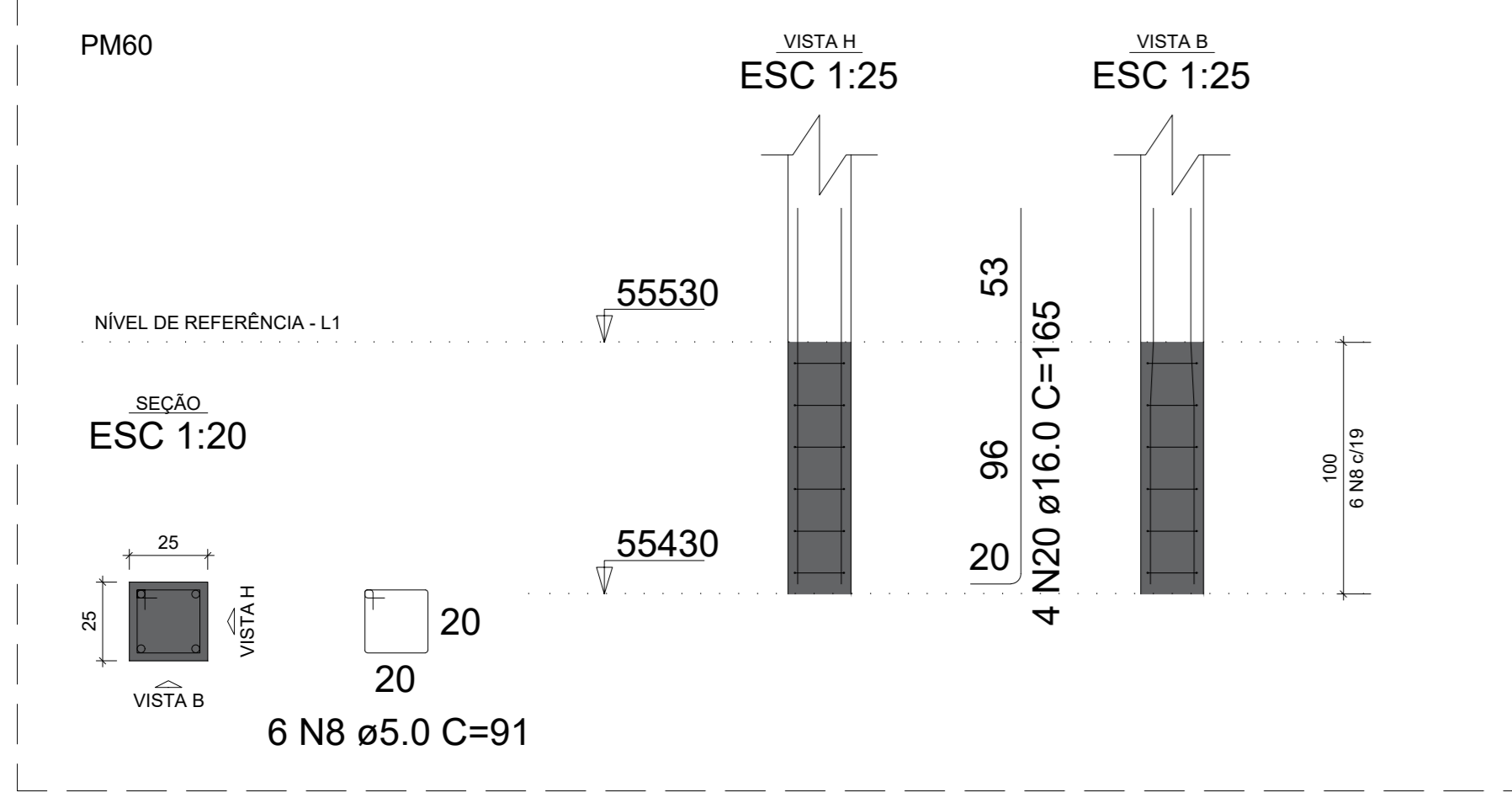
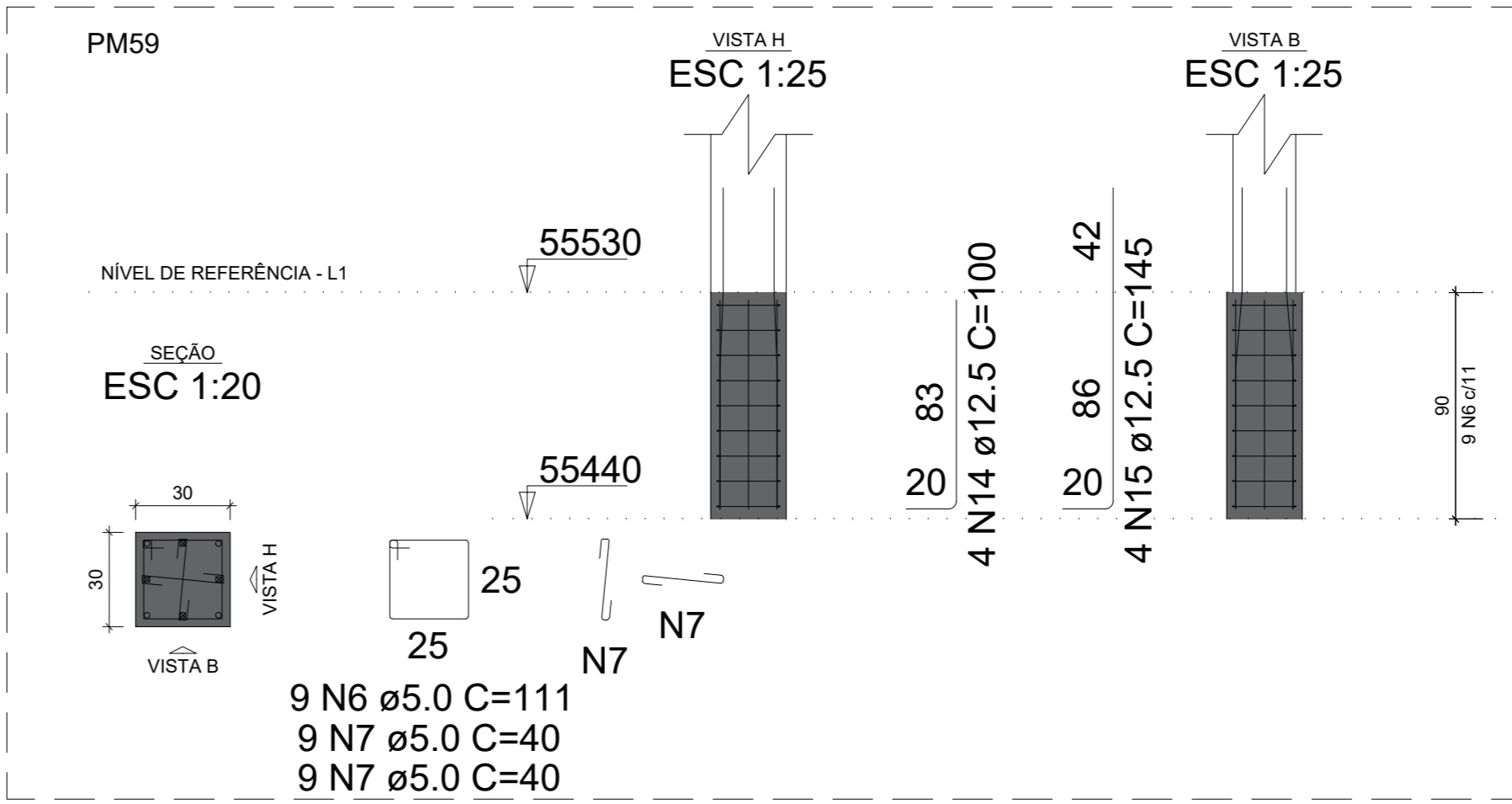
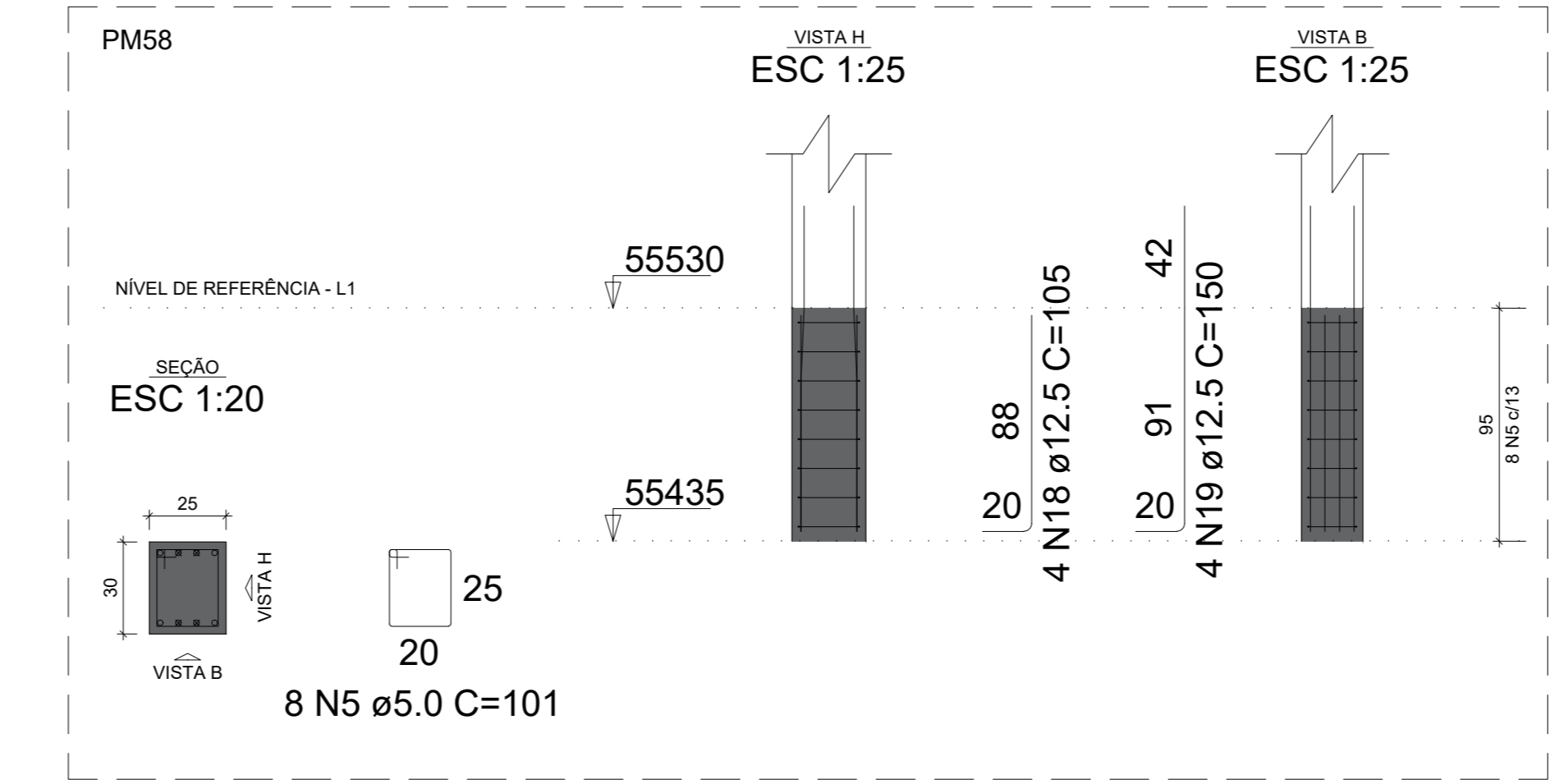
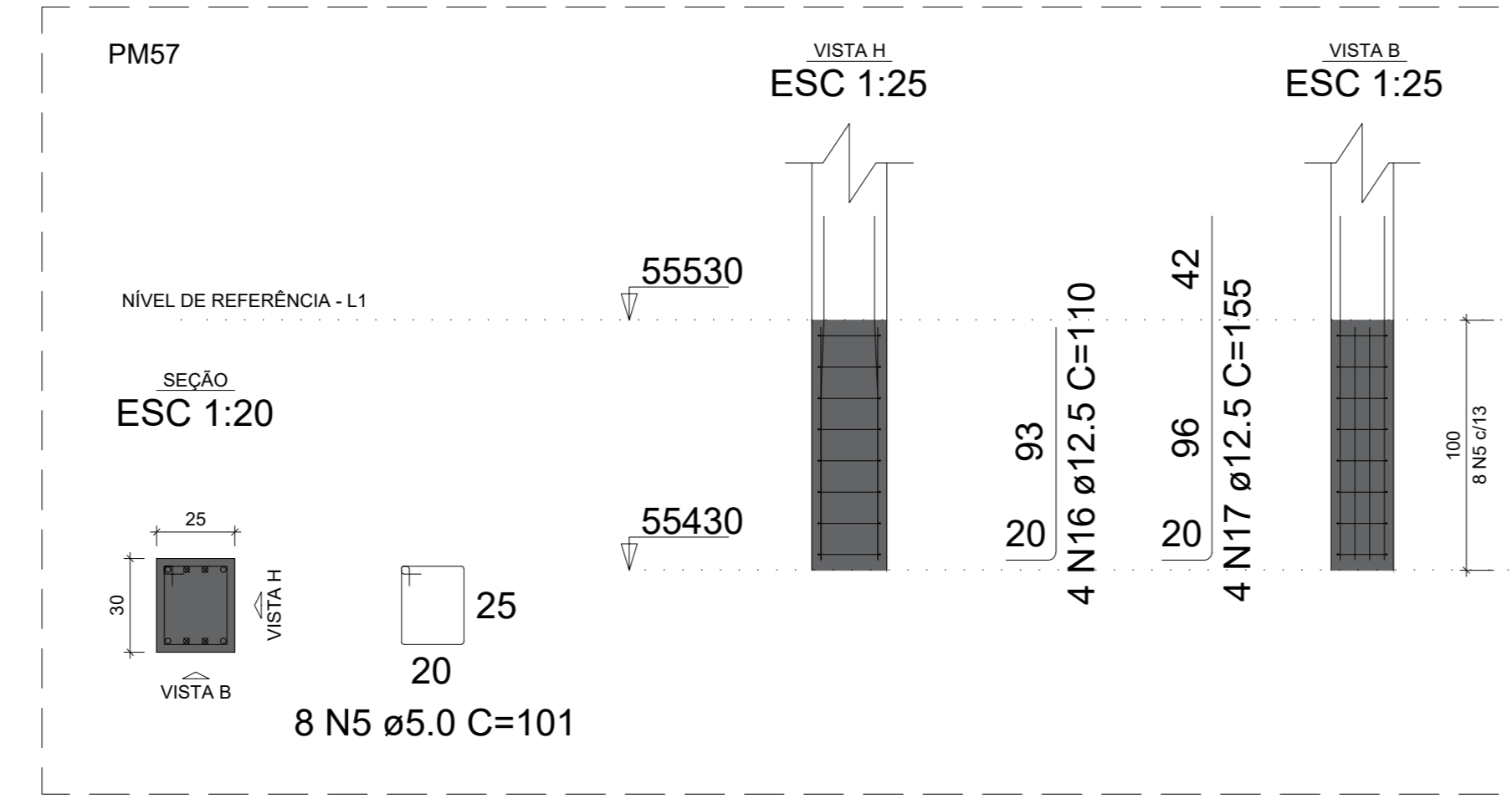
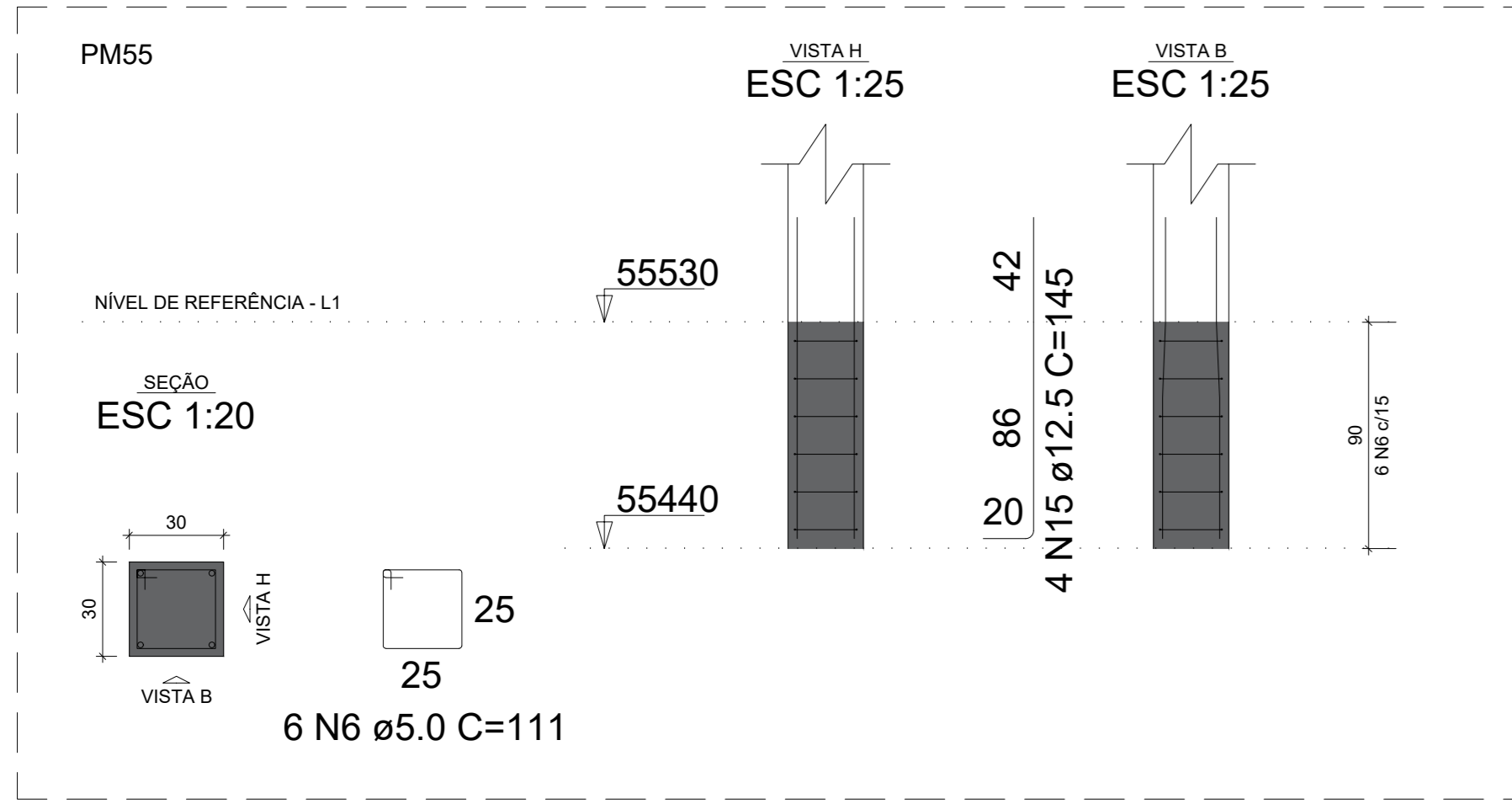
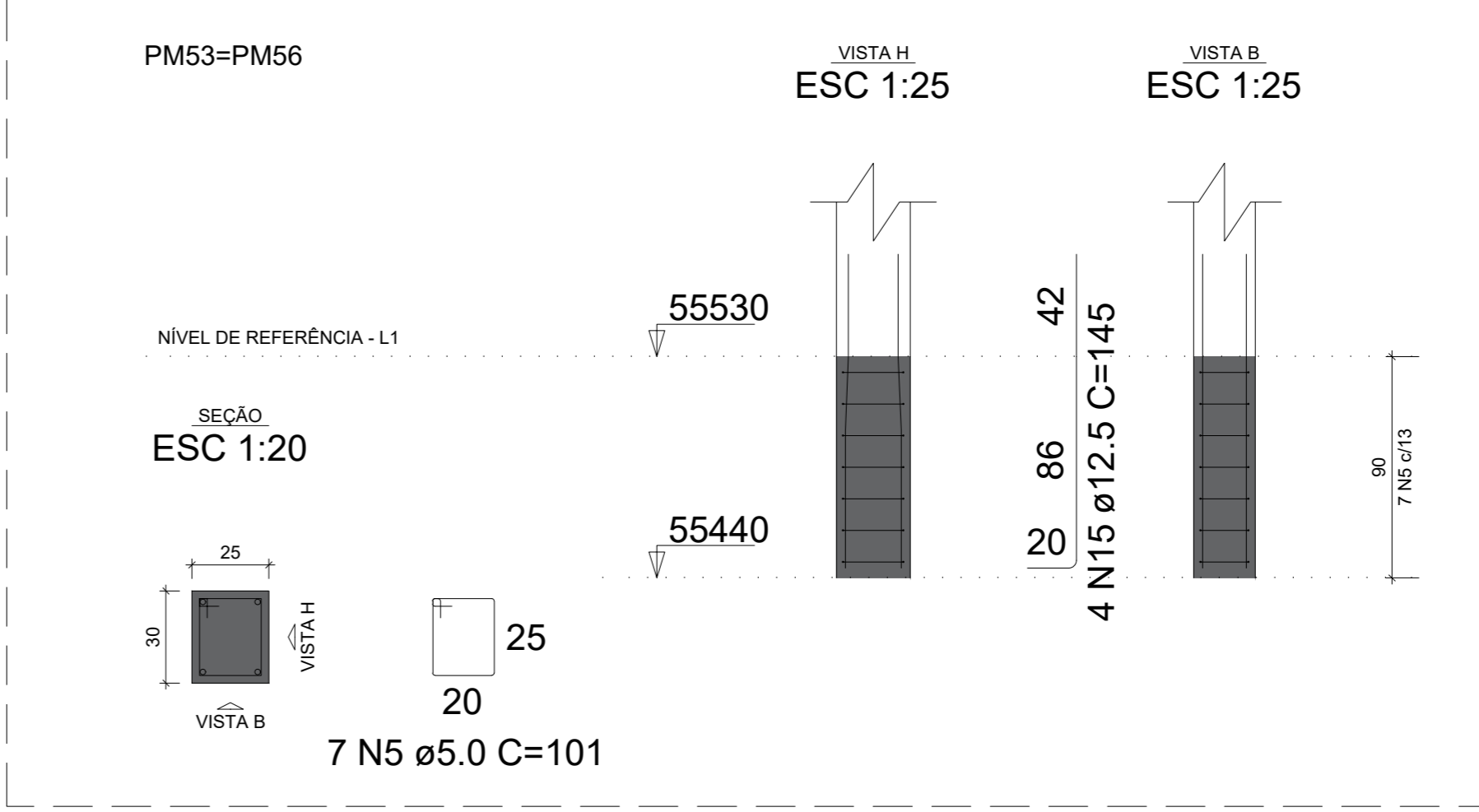
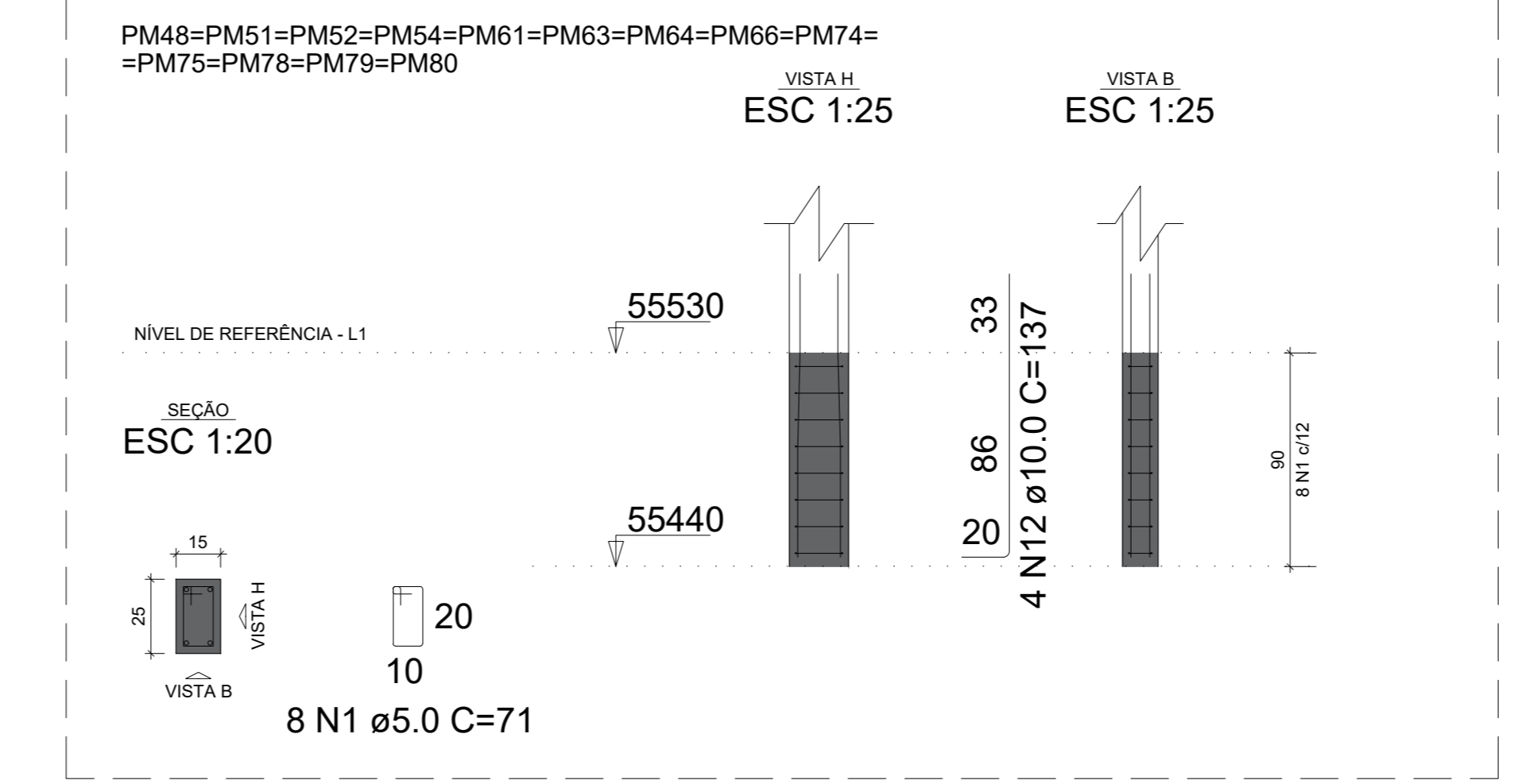
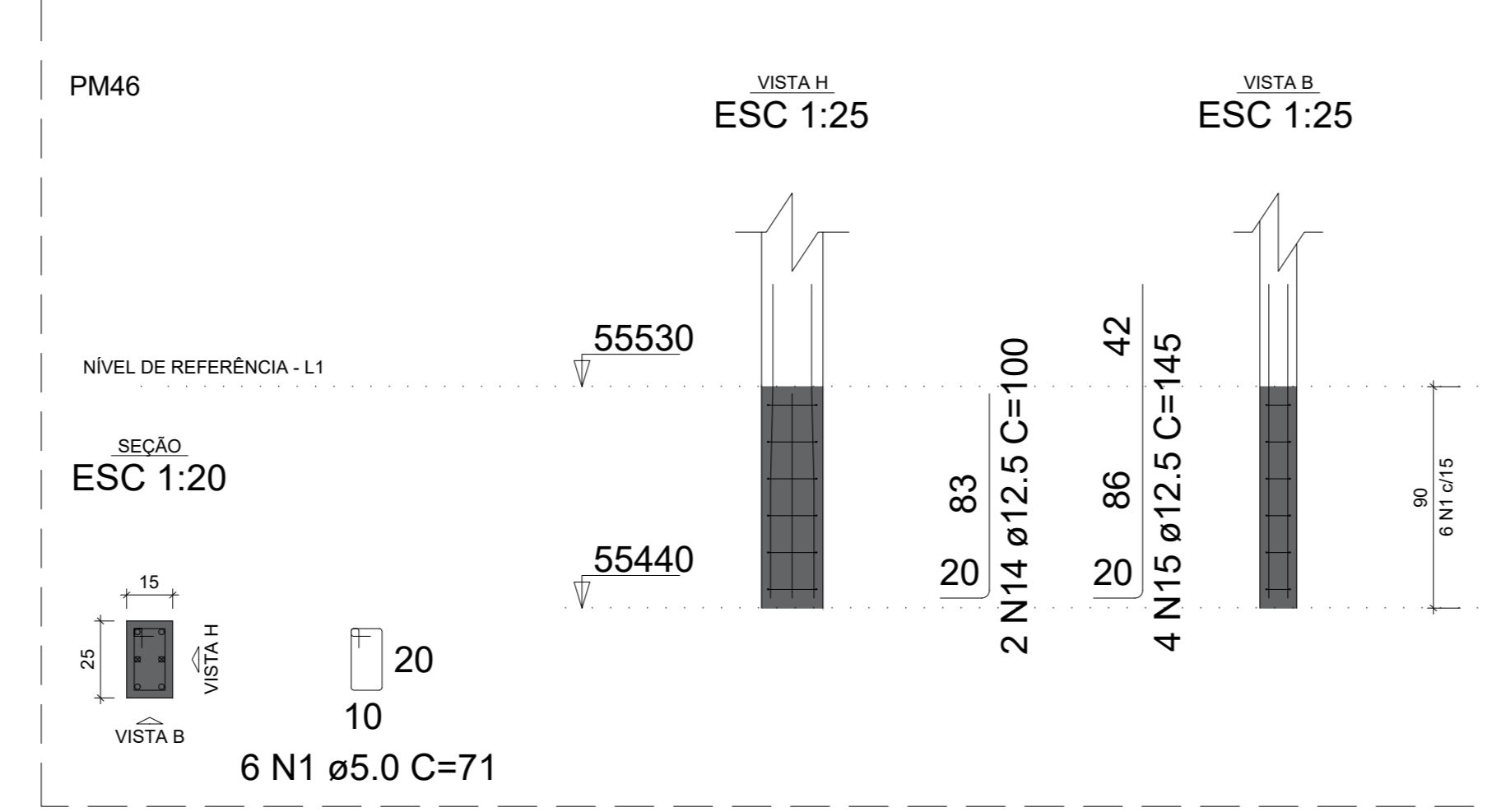
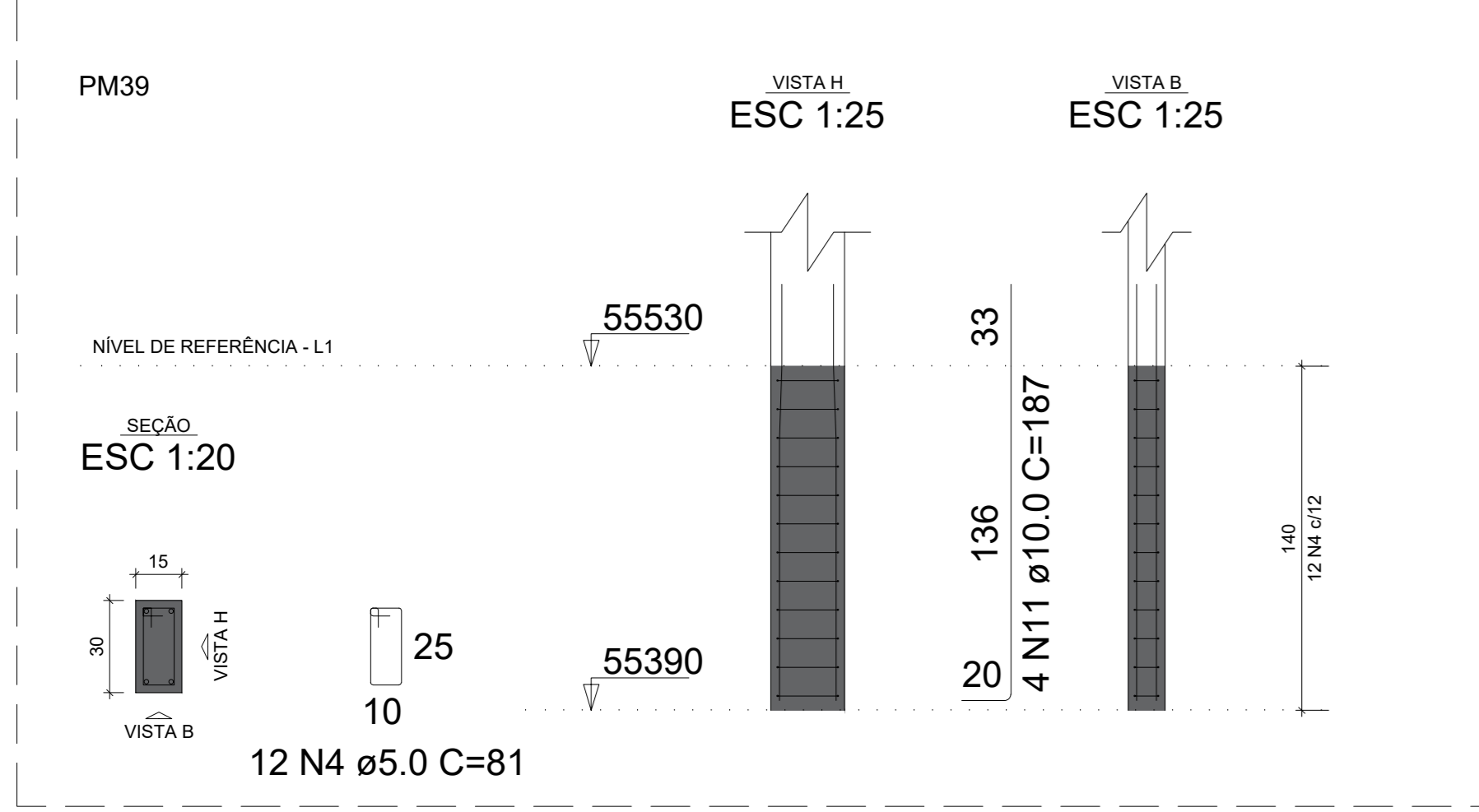
AÇO	N	DIAM (mm)	QUANT	C. UNIT (cm)	C. TOTAL (cm)
CA50	1	5.0	396	71	28116
	2	5.0	10	91	910
	3	5.0	278	81	22518
	4	5.0	12	81	972
	5	5.0	56	101	5656
	6	5.0	44	111	4884
	7	5.0	18	40	720
	8	5.0	6	91	546
	9	6.3	12	102	1224
	10	10.0	244	53	12932
	11	10.0	72	187	13464
	12	10.0	168	137	23016
	13	10.0	8	142	1136
	14	12.5	6	100	600
	15	12.5	20	145	2900
	16	12.5	4	110	440
	17	12.5	4	155	620
	18	12.5	4	105	420
	19	12.5	4	150	600
	20	16.0	12	165	1980
	21	16.0	22	155	3410
	22	16.0	4	160	640
	23	16.0	4	99	396
	24	16.0	8	180	1440

RESUMO DO AÇO

AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 10% (kg)
CA50	6.3	12.2	3.3
	10.0	505.5	342.8
	12.5	55.8	59.1
	16.0	78.7	136.6
CA60	5.0	643.2	109.1

PESO TOTAL (kg)
CA50 541.8
CA60 109.1

Volume de concreto (C-30) = 2.87 m³
Área de forma = 53.34 m²



Assinado de
ALFREDO MANZANO
Data: 2026.01.09 11:57:25 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL

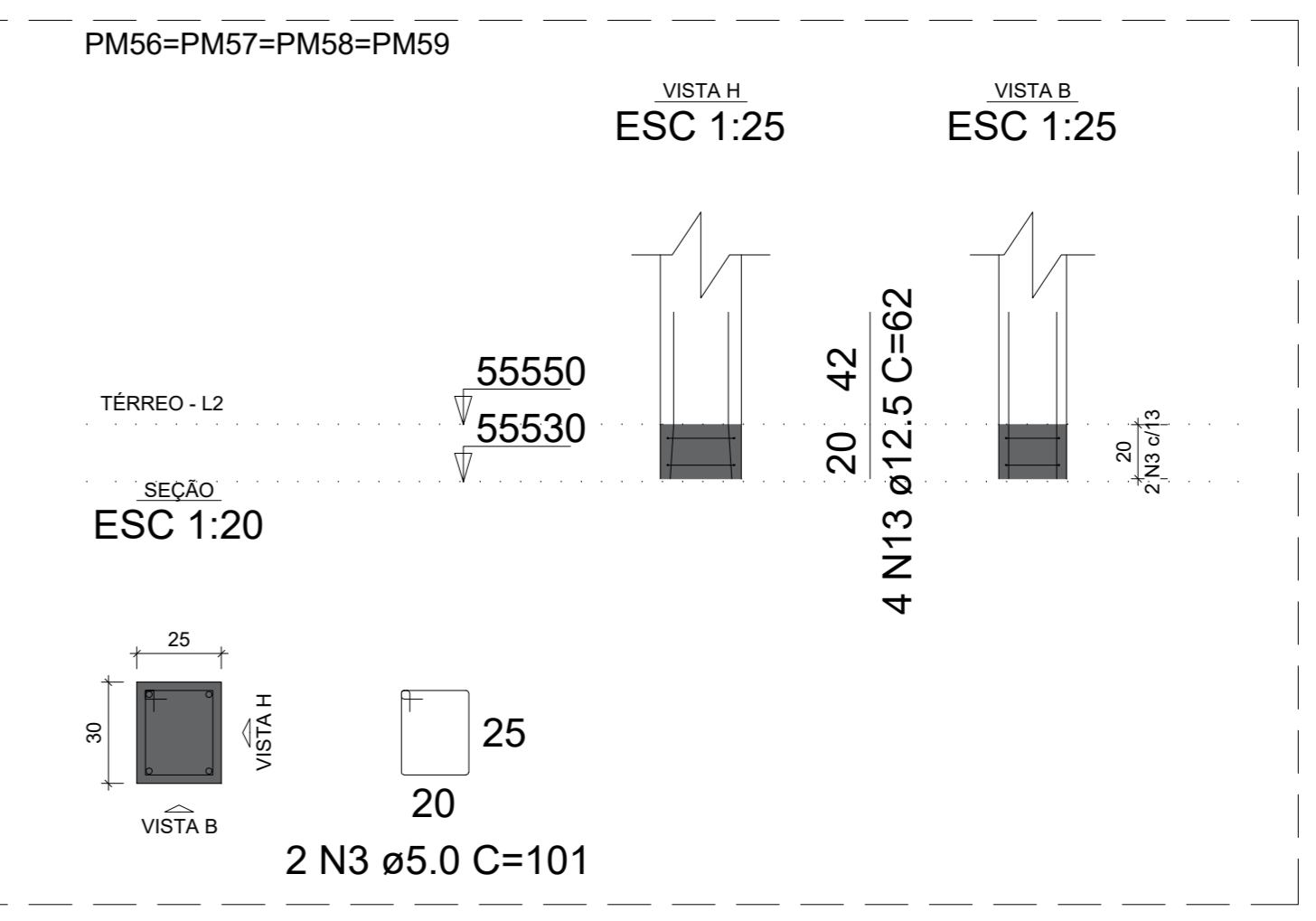
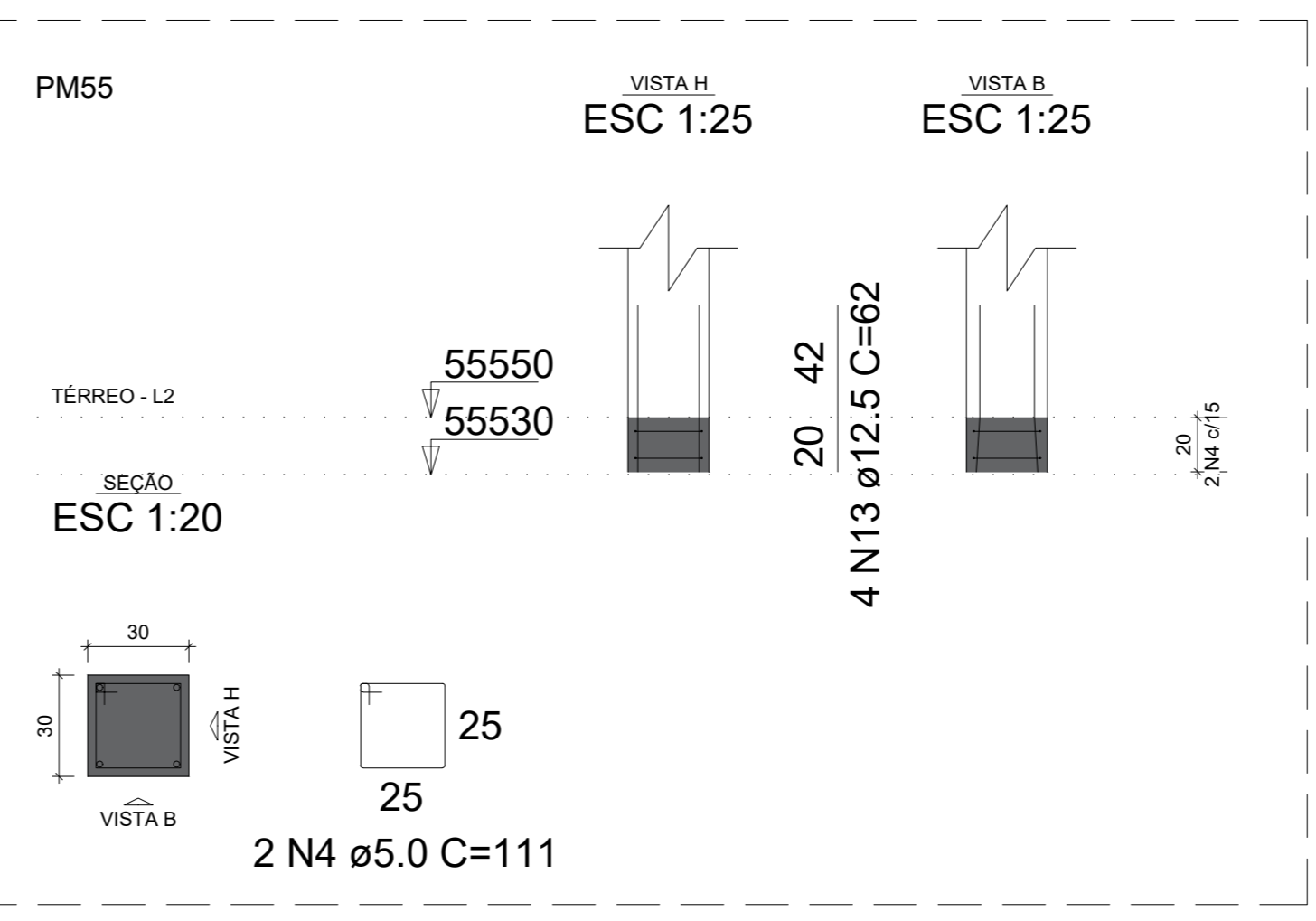
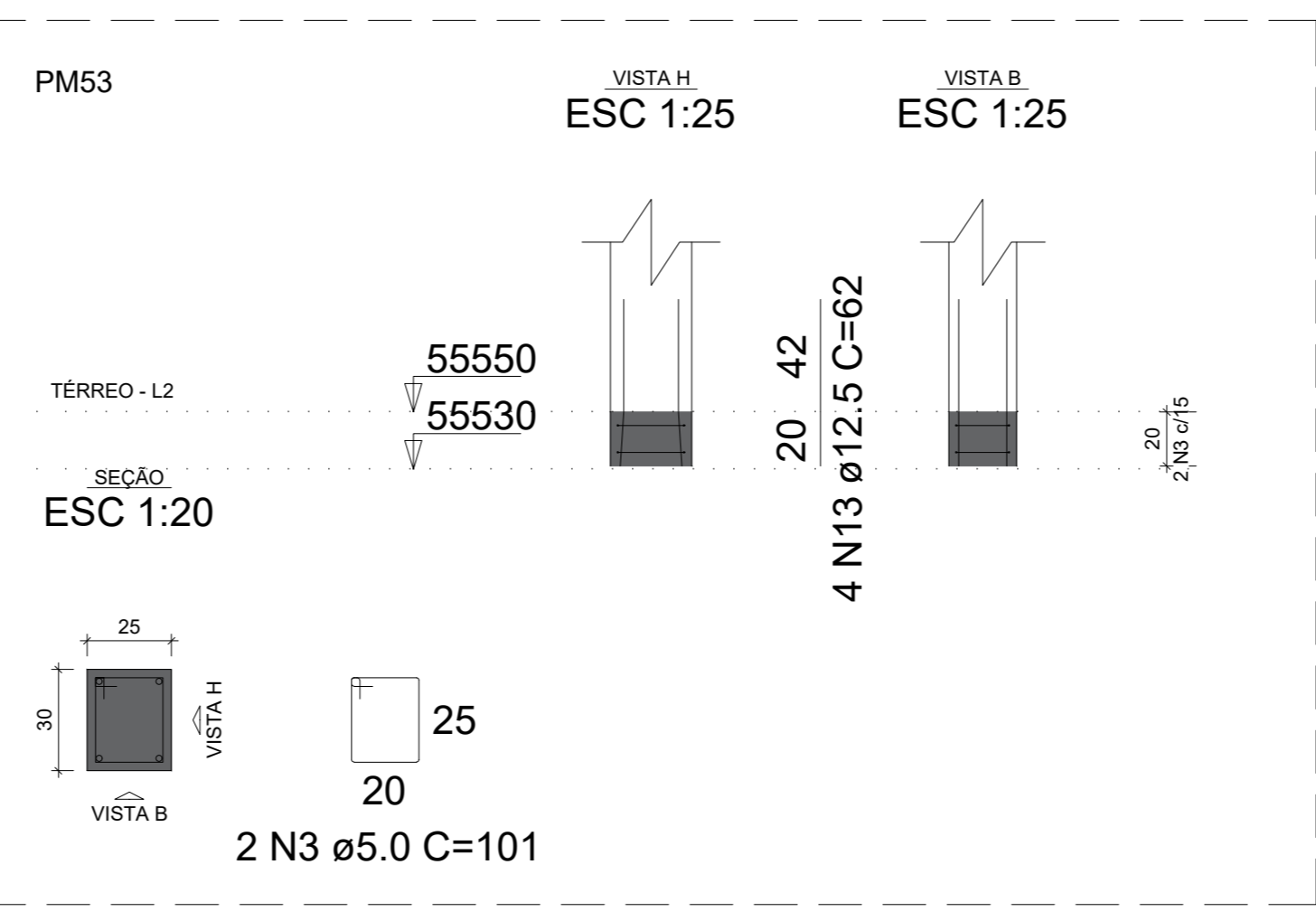
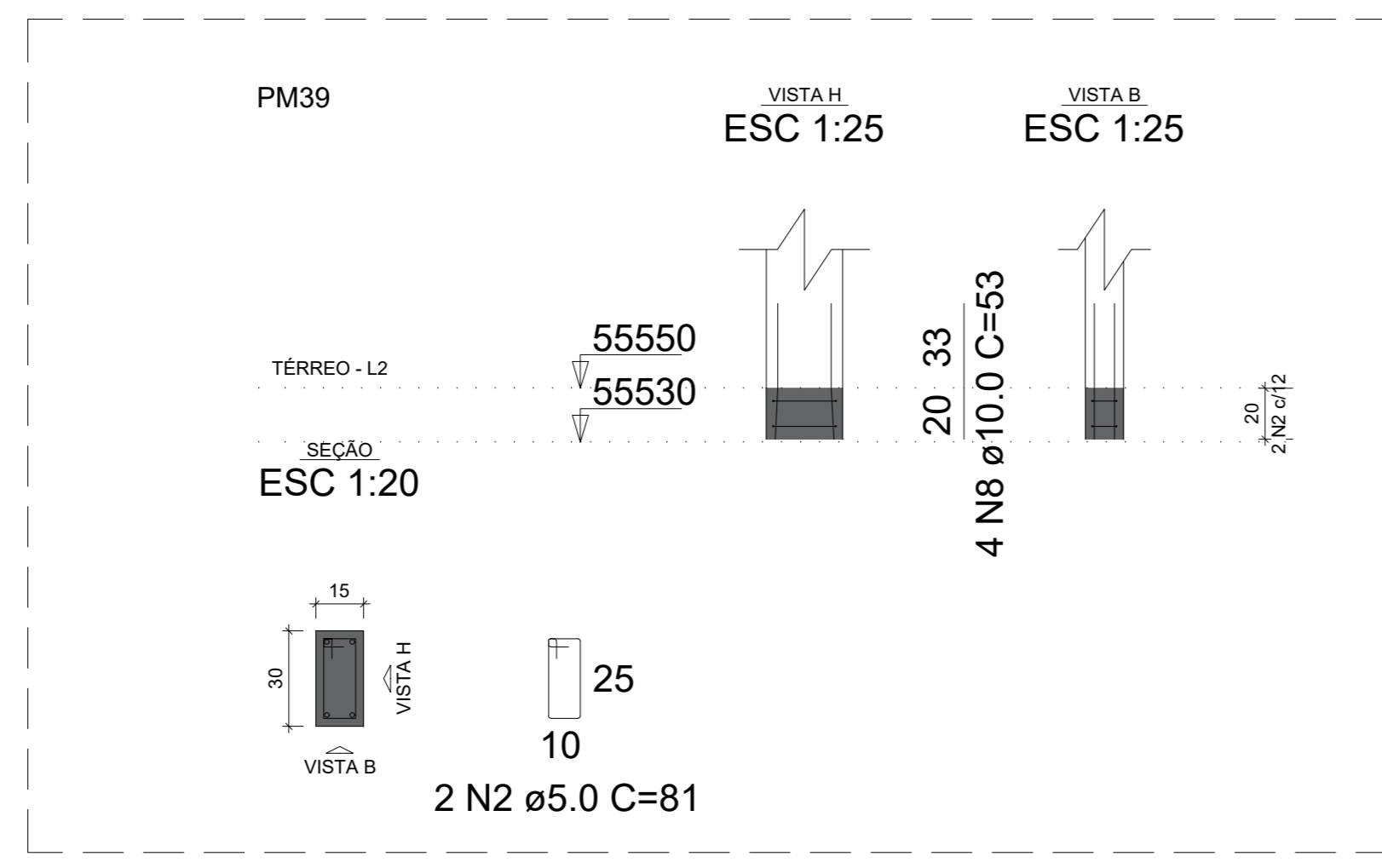
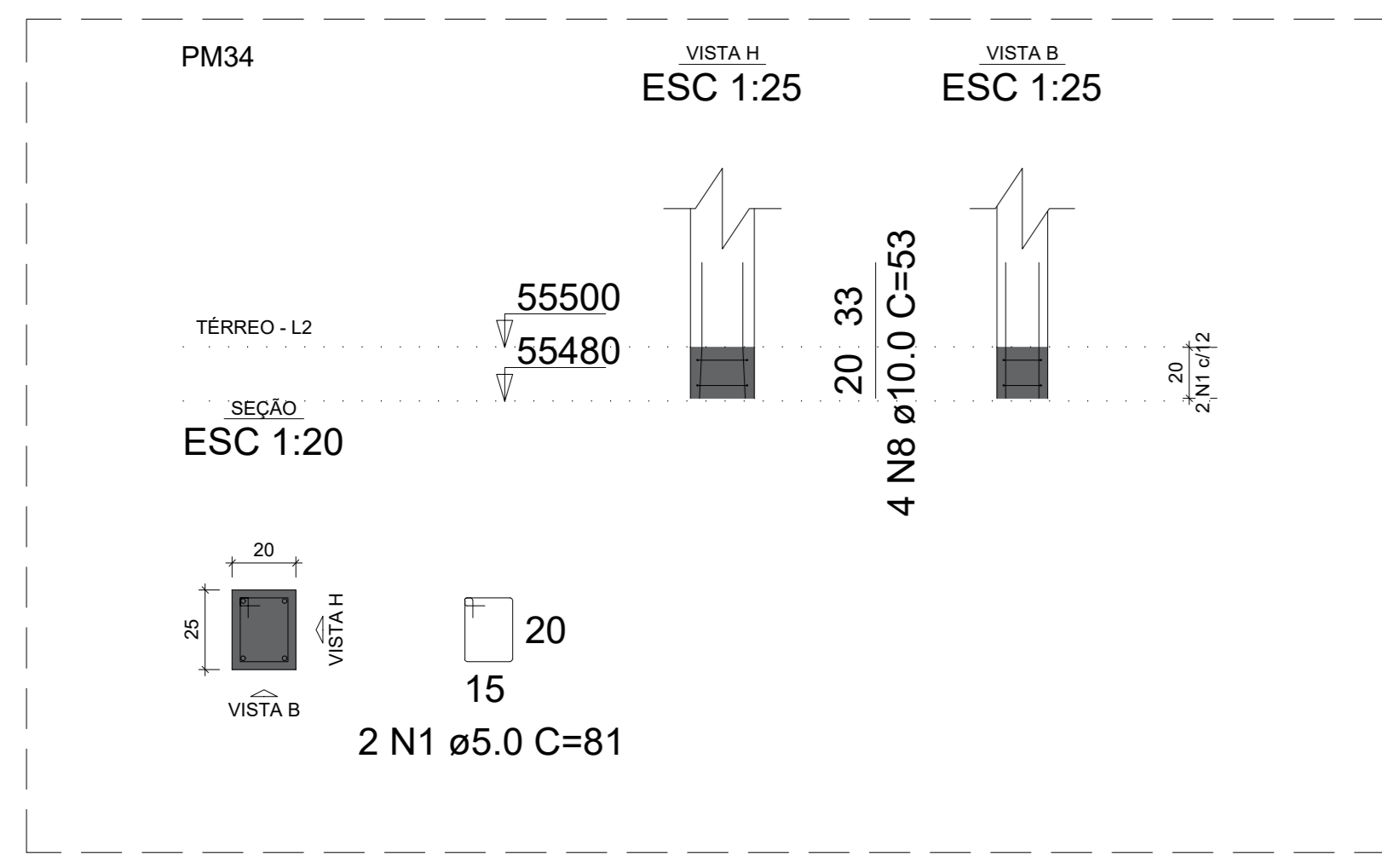
ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANTIA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 196299/BA-08
ART: 262051901916

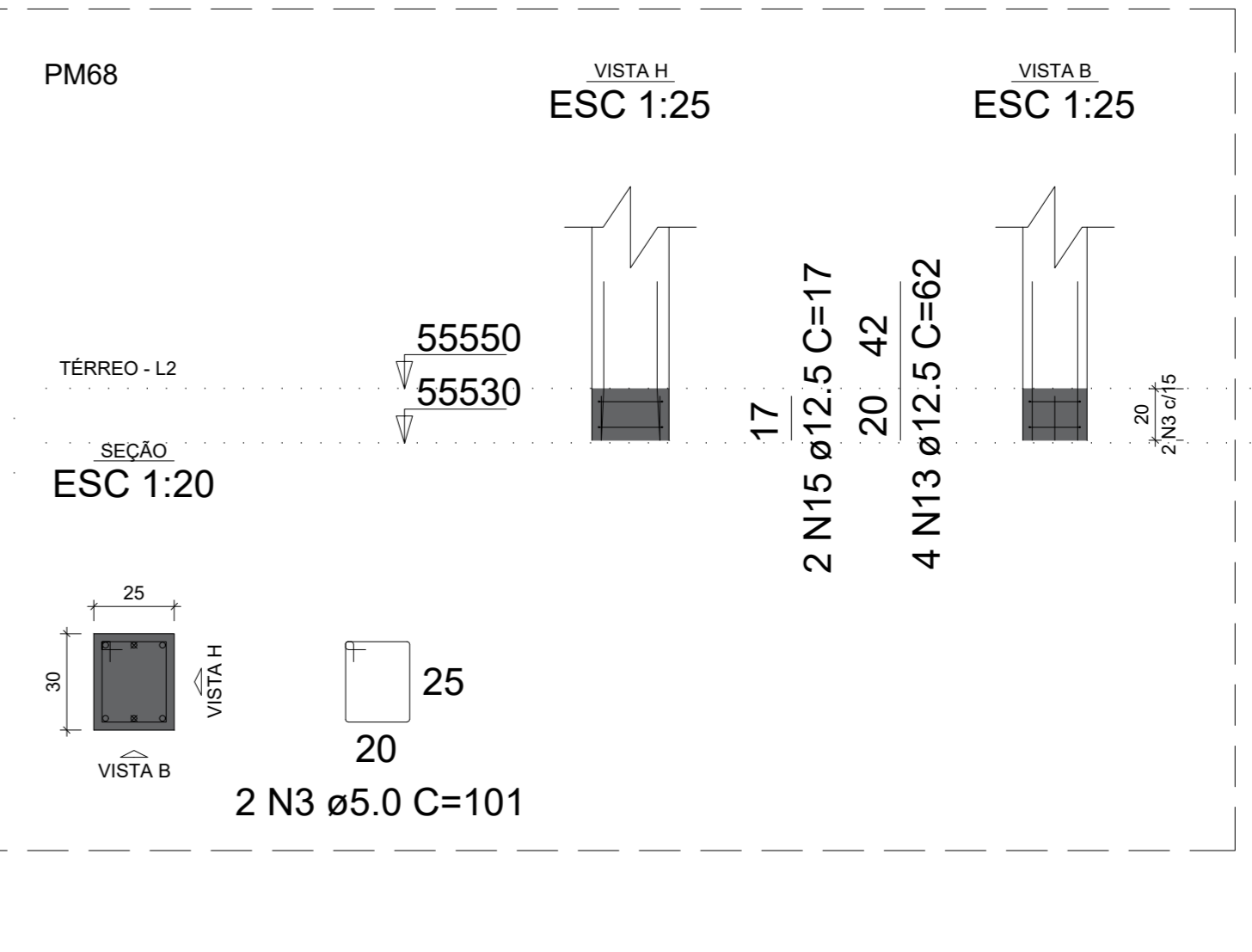
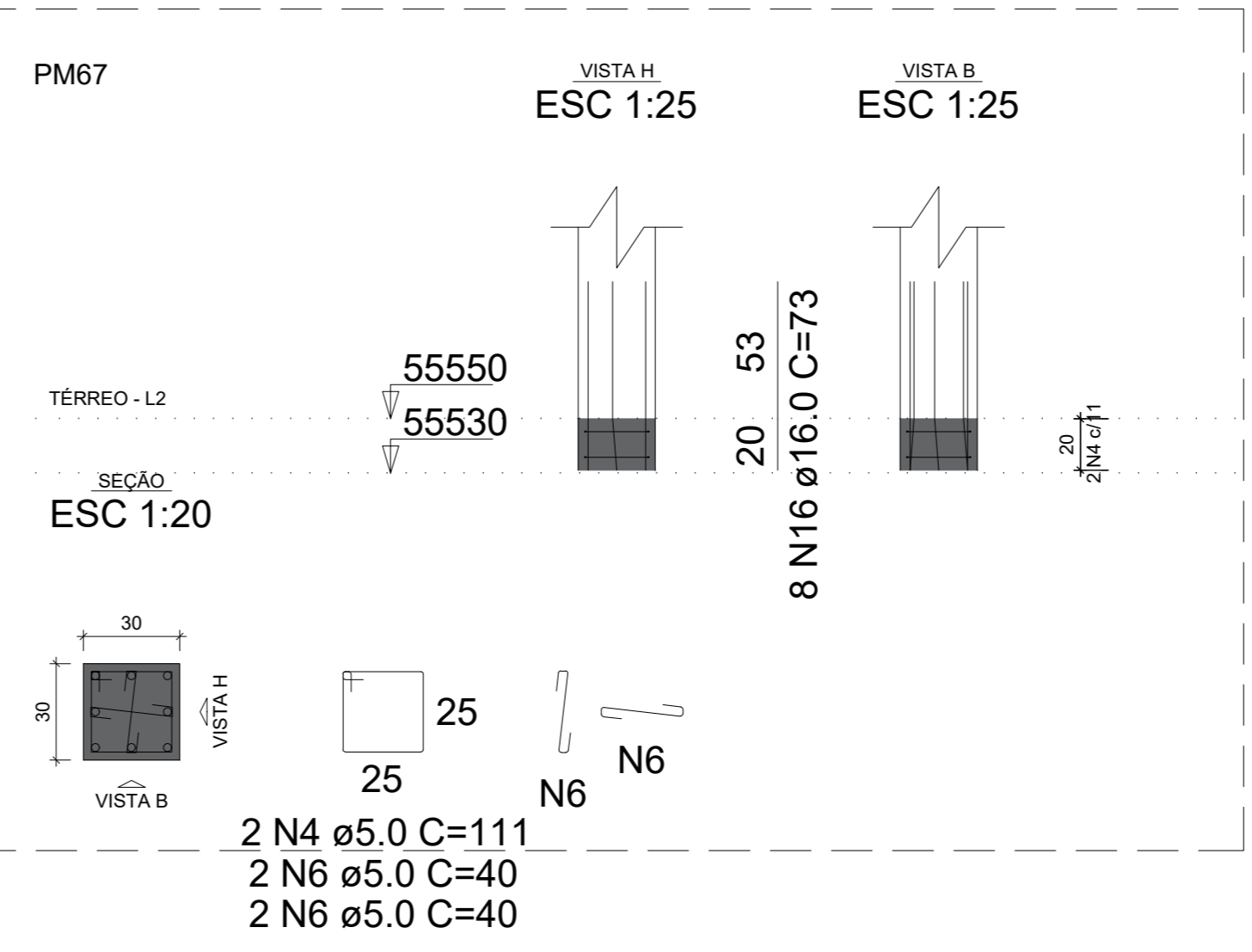
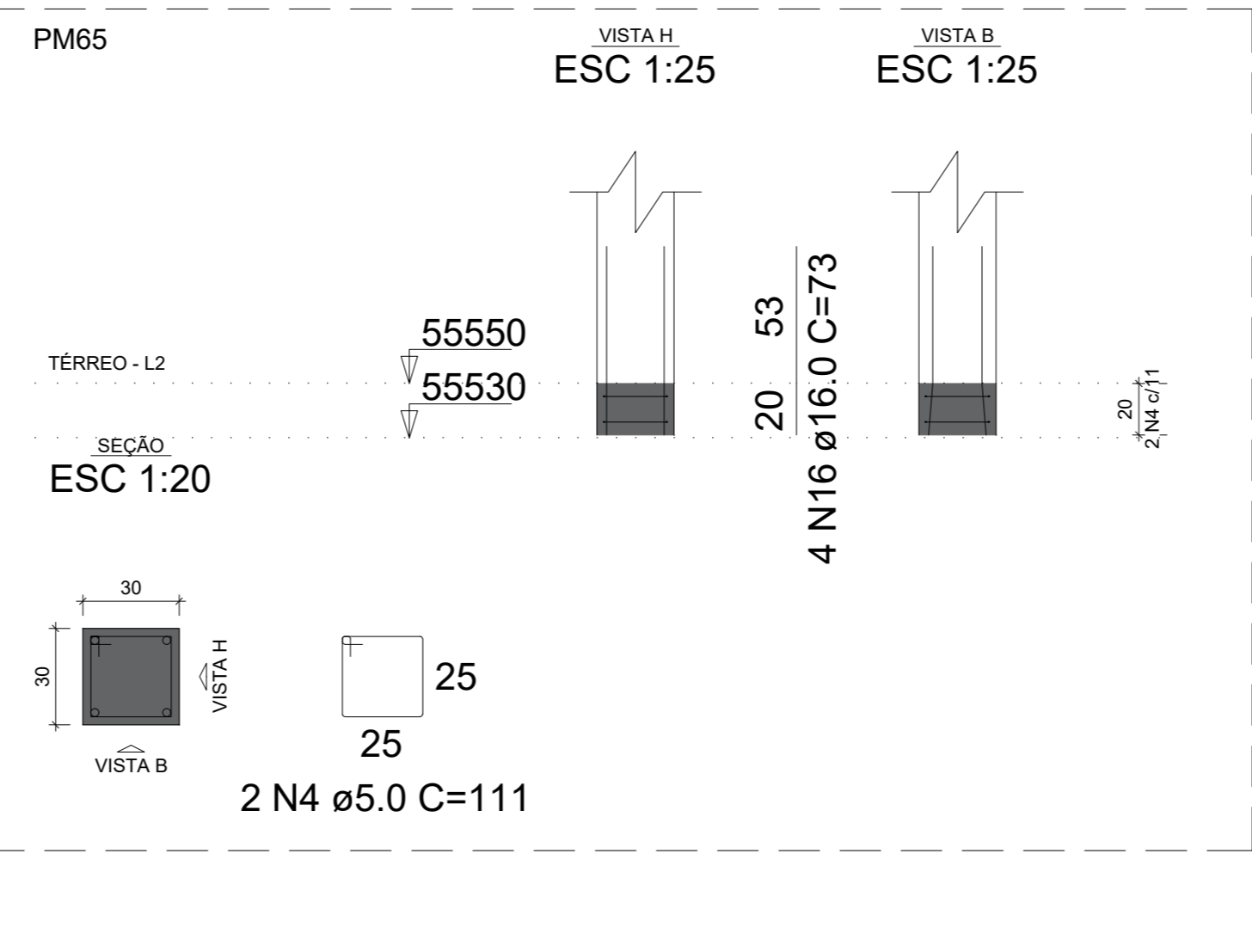
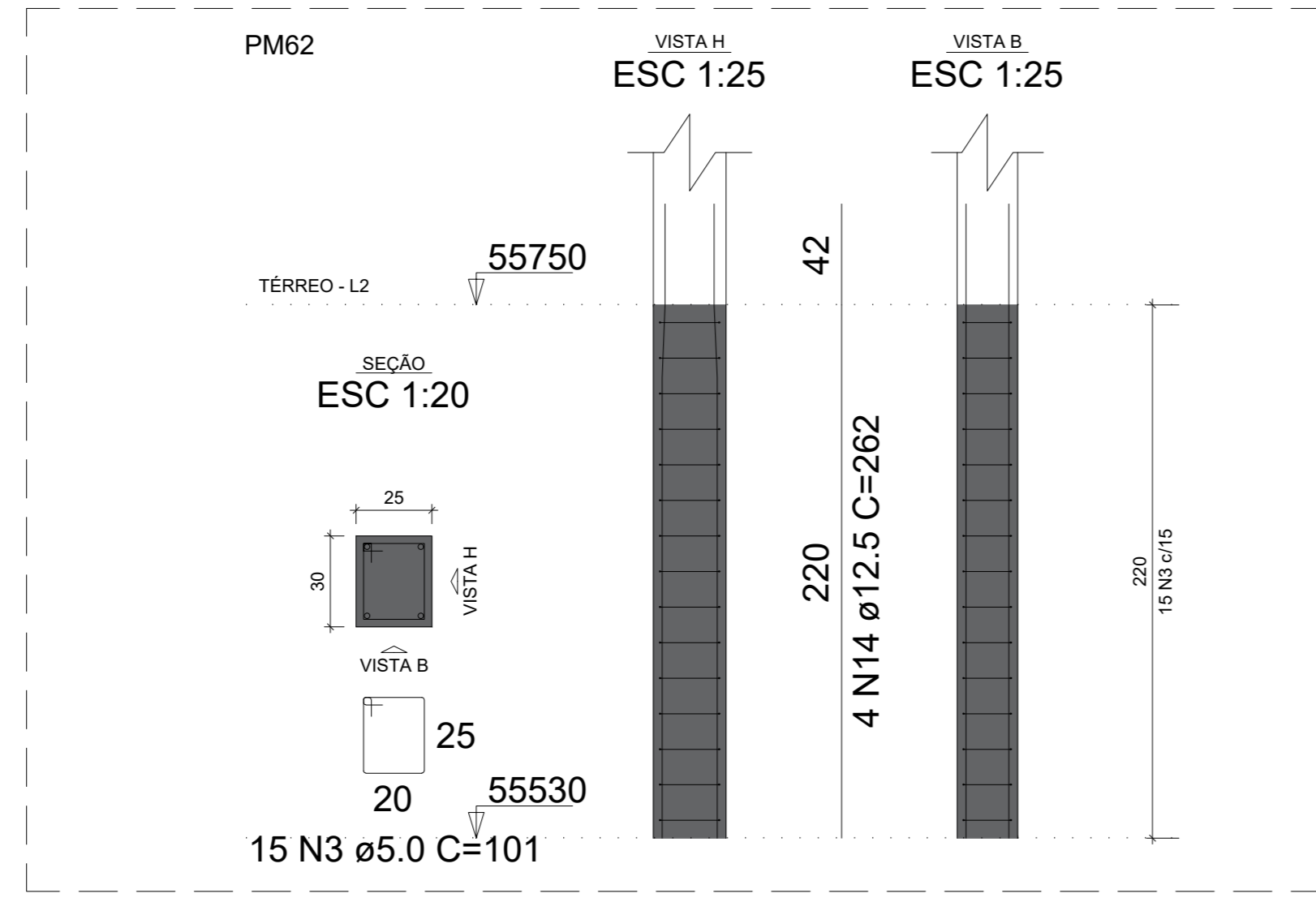
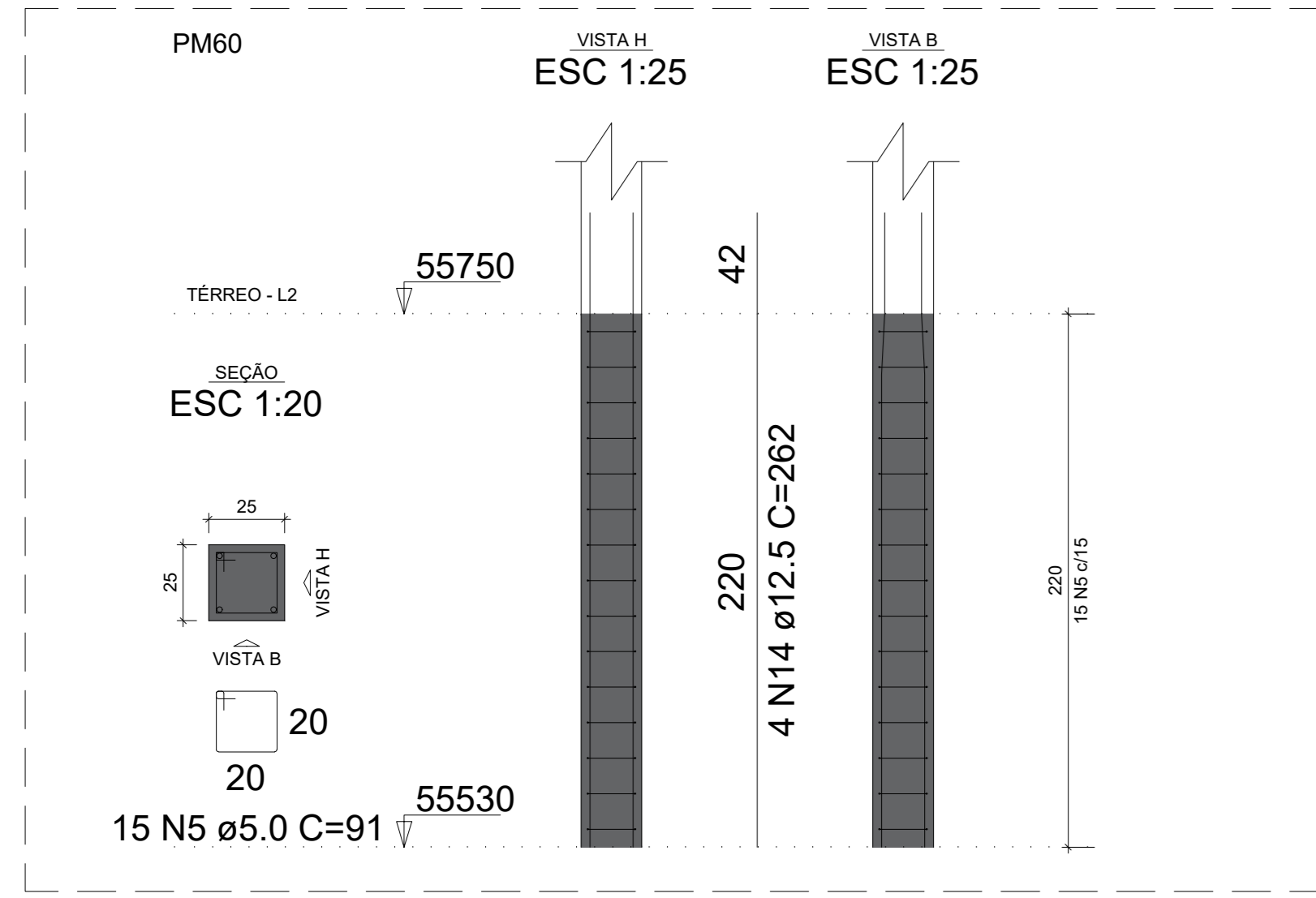
Endereço: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Cidade: MUNICÍPIO DE CAÇAPAVA
Projeto: PROJETO ESTRUTURAL
Descrição: BLOCO MURO- LOCAÇÃO

Escala: Indicação
Data: NOV/2025
Revisão: R01



RELAÇÃO DO AÇO - PILAR 02/05

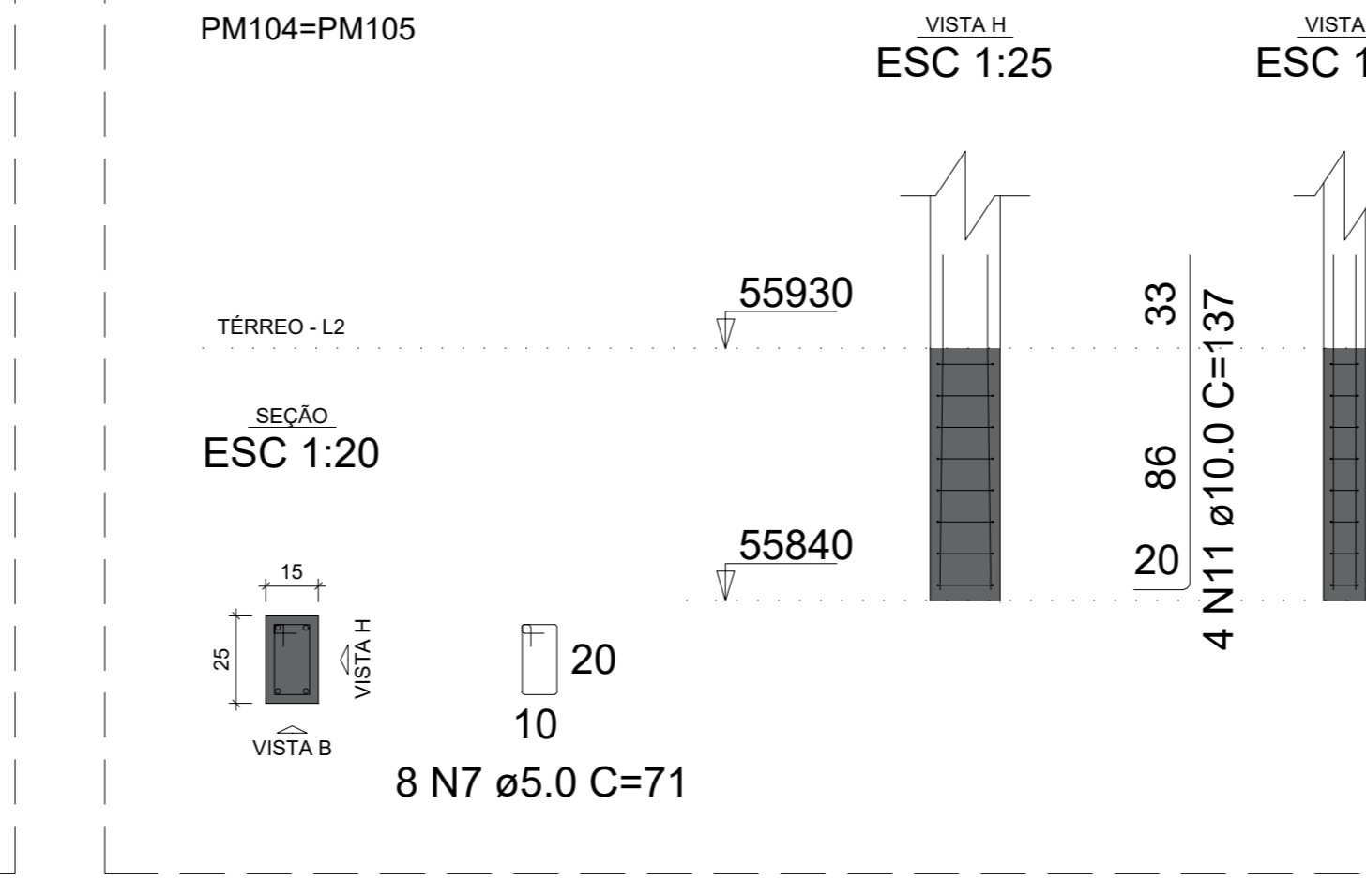
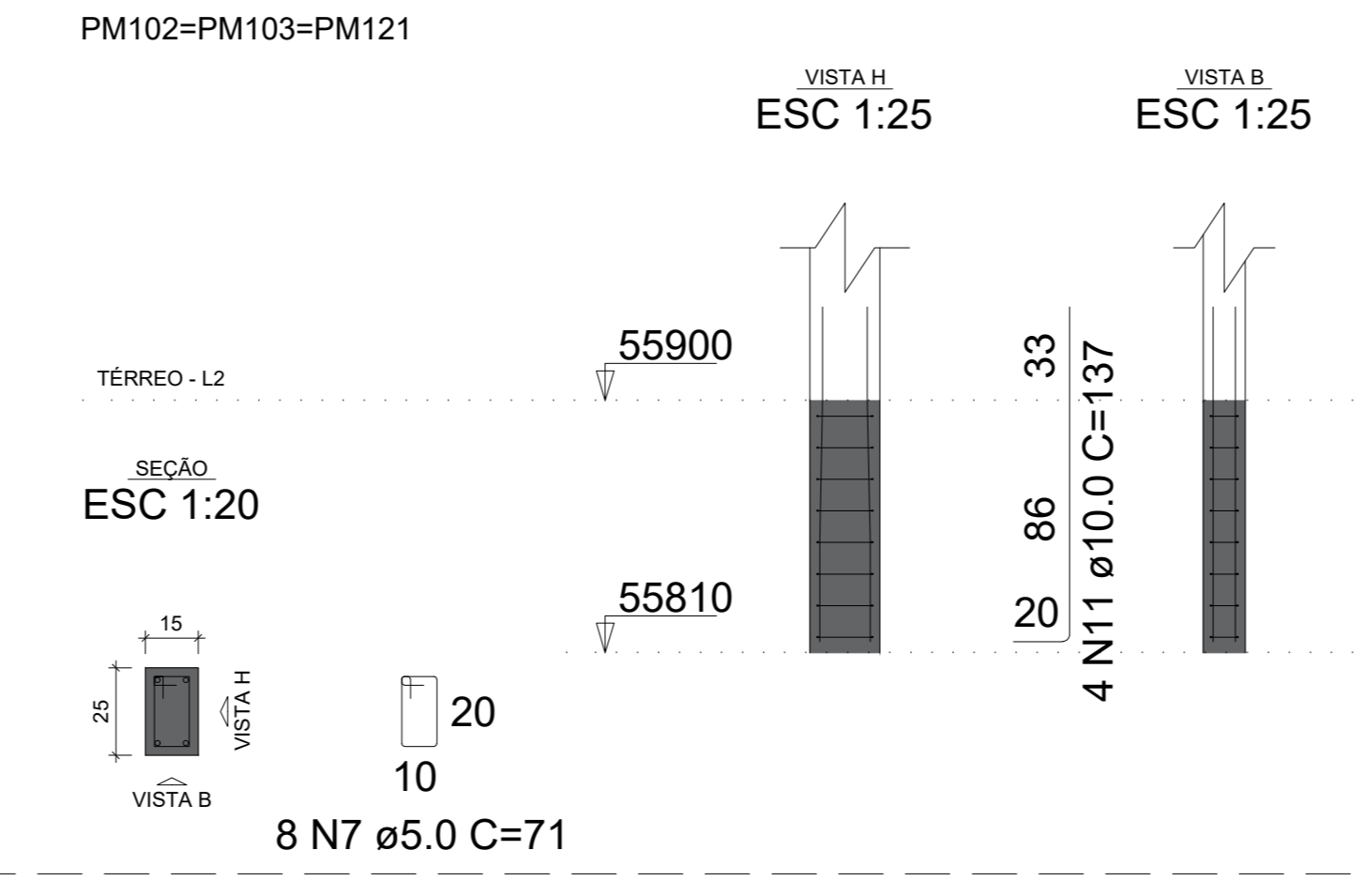
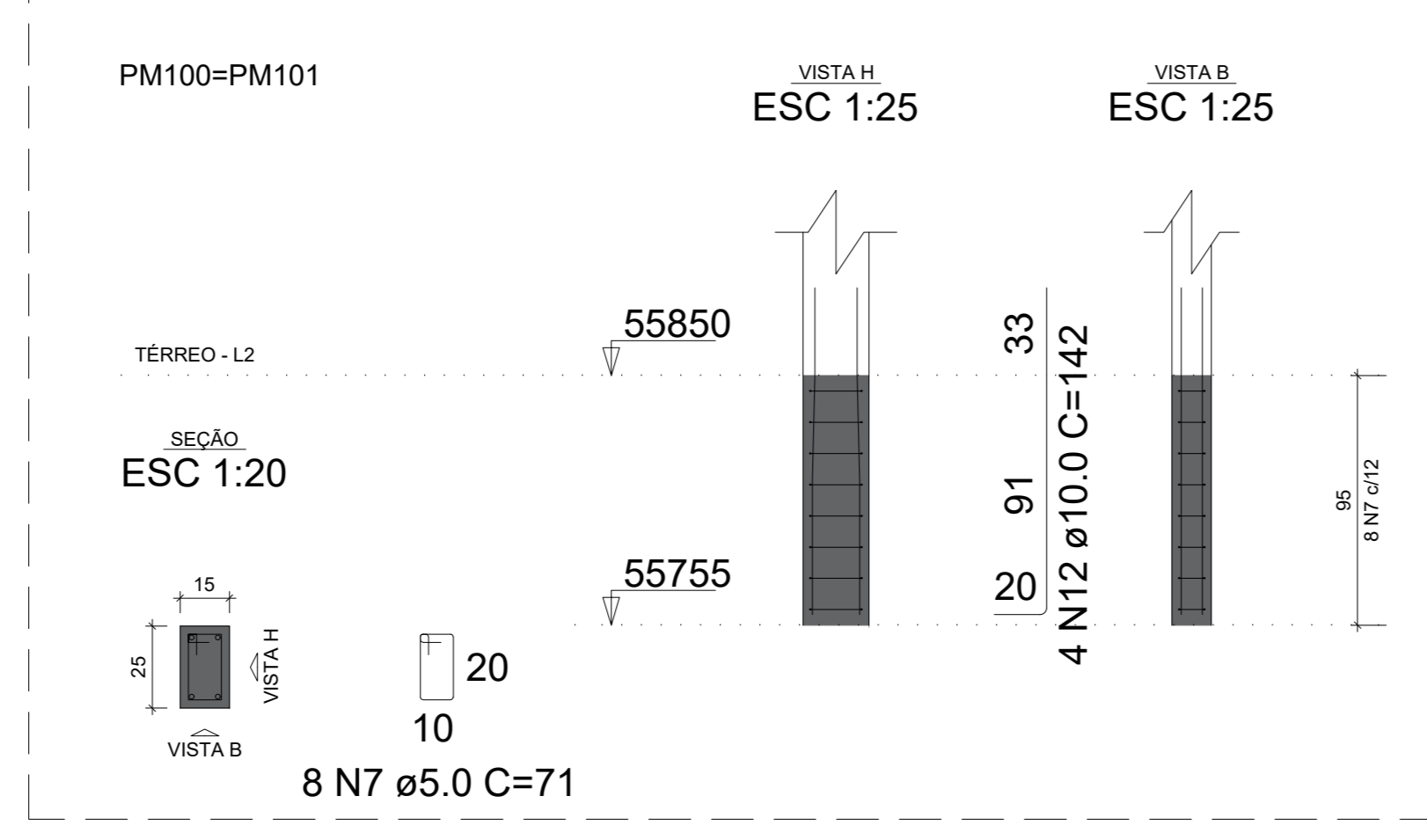
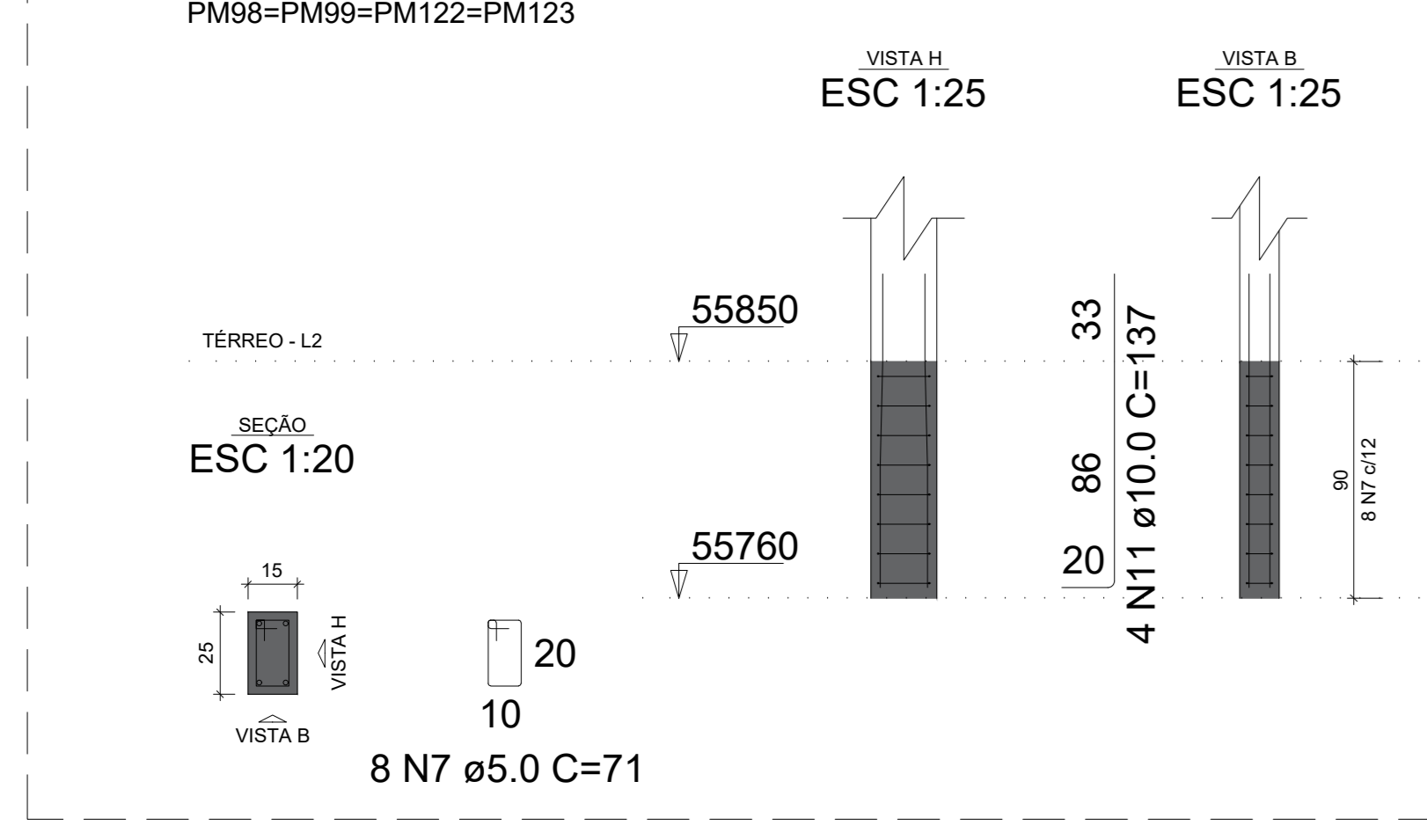
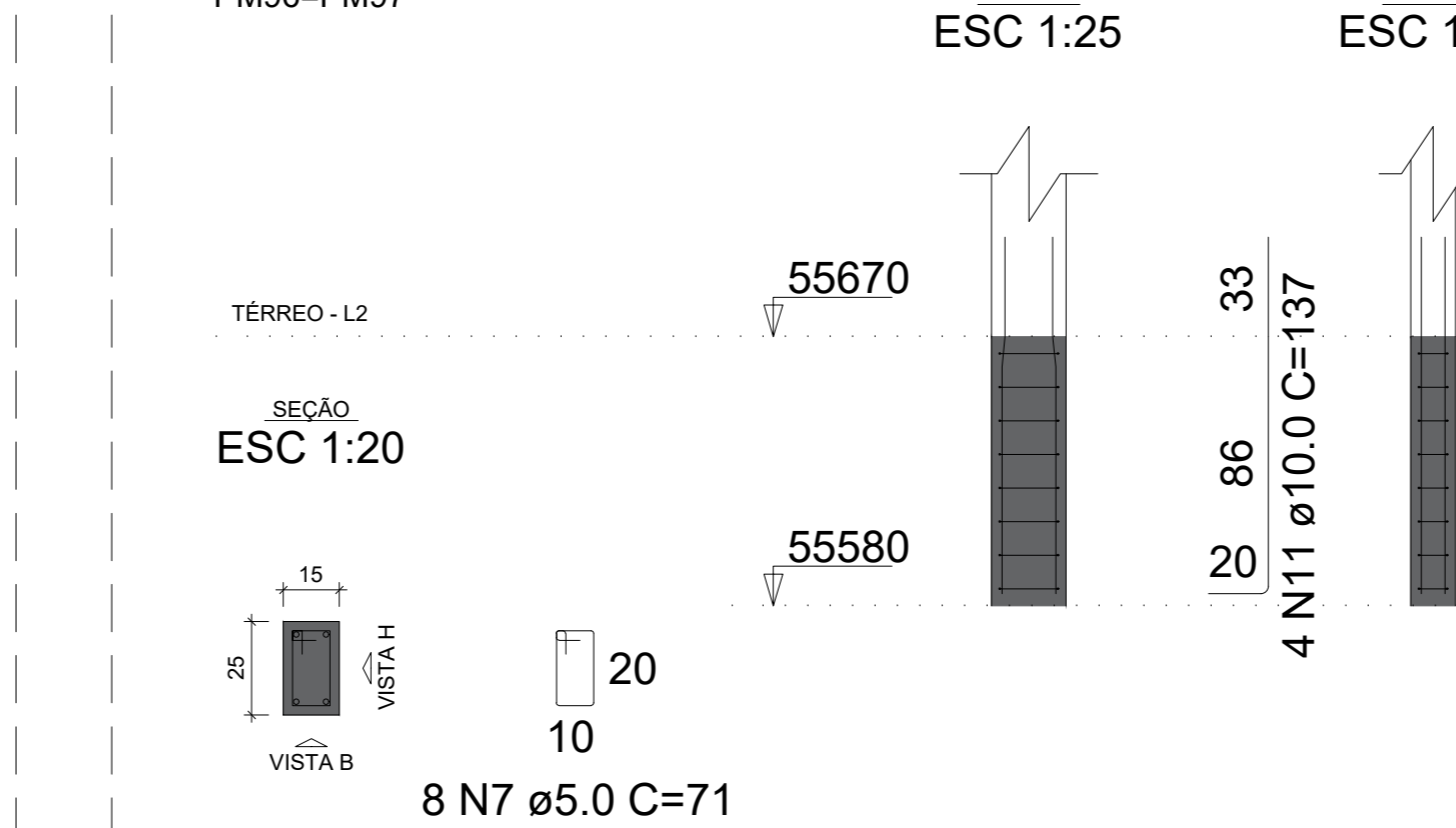
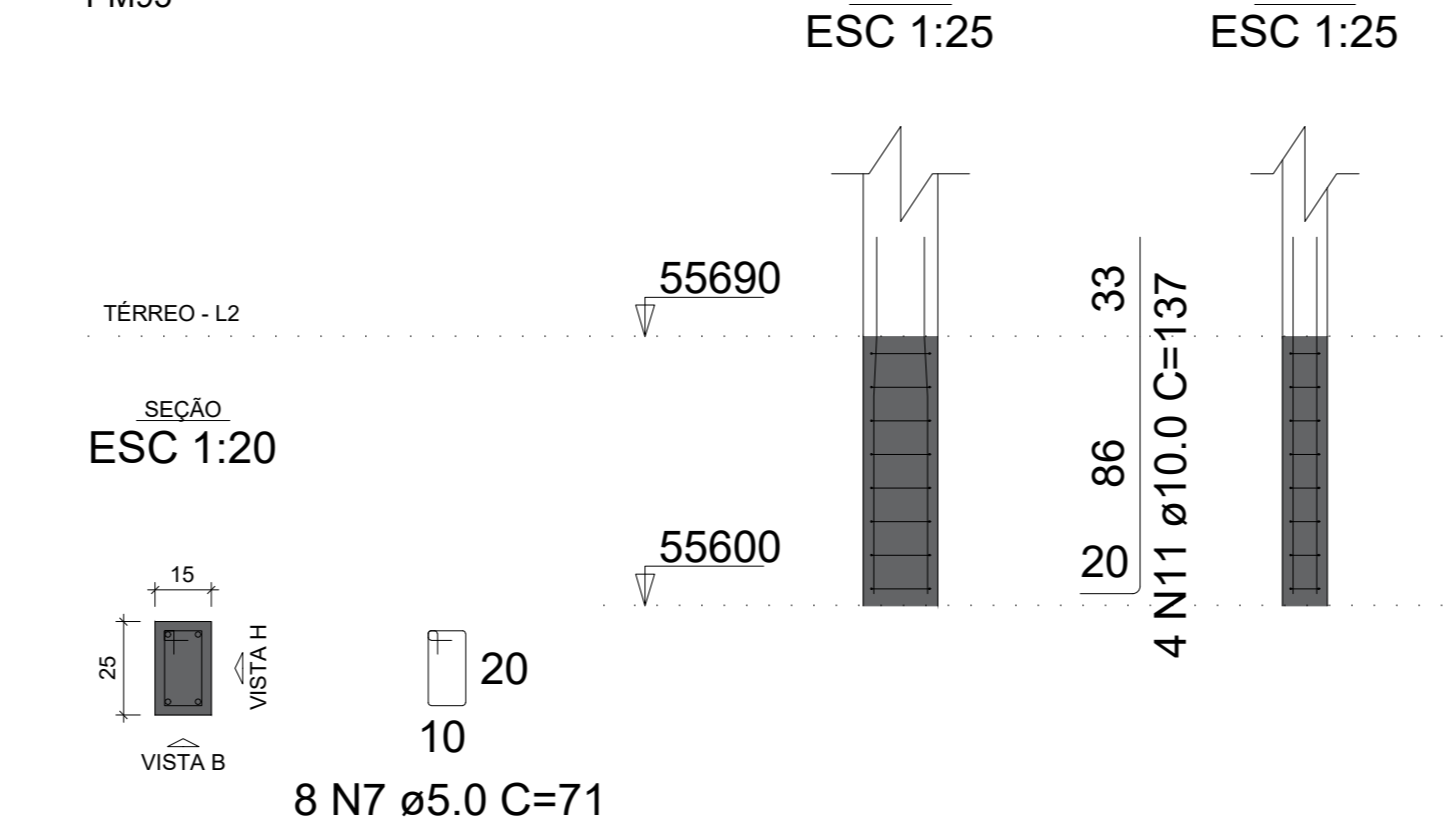
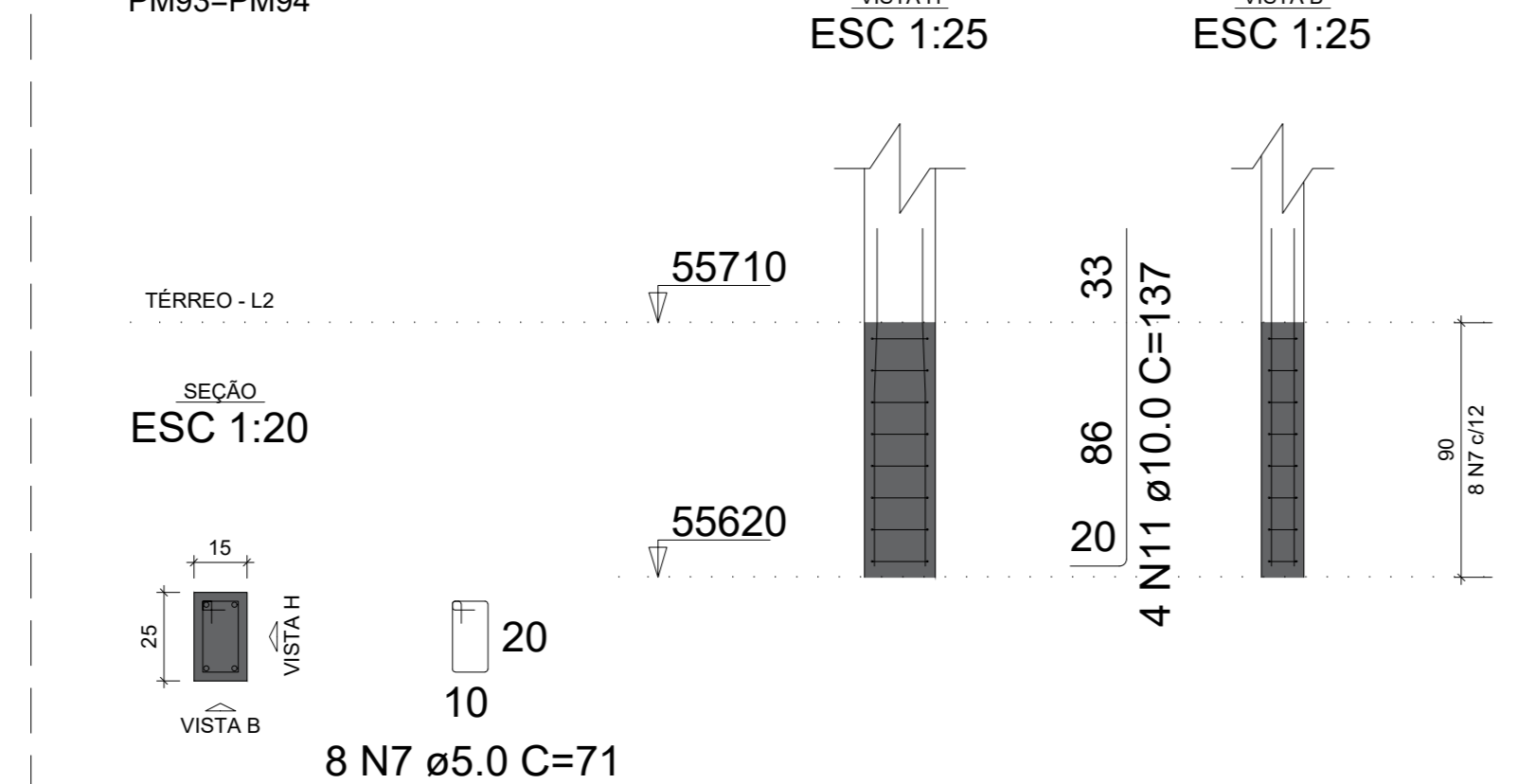
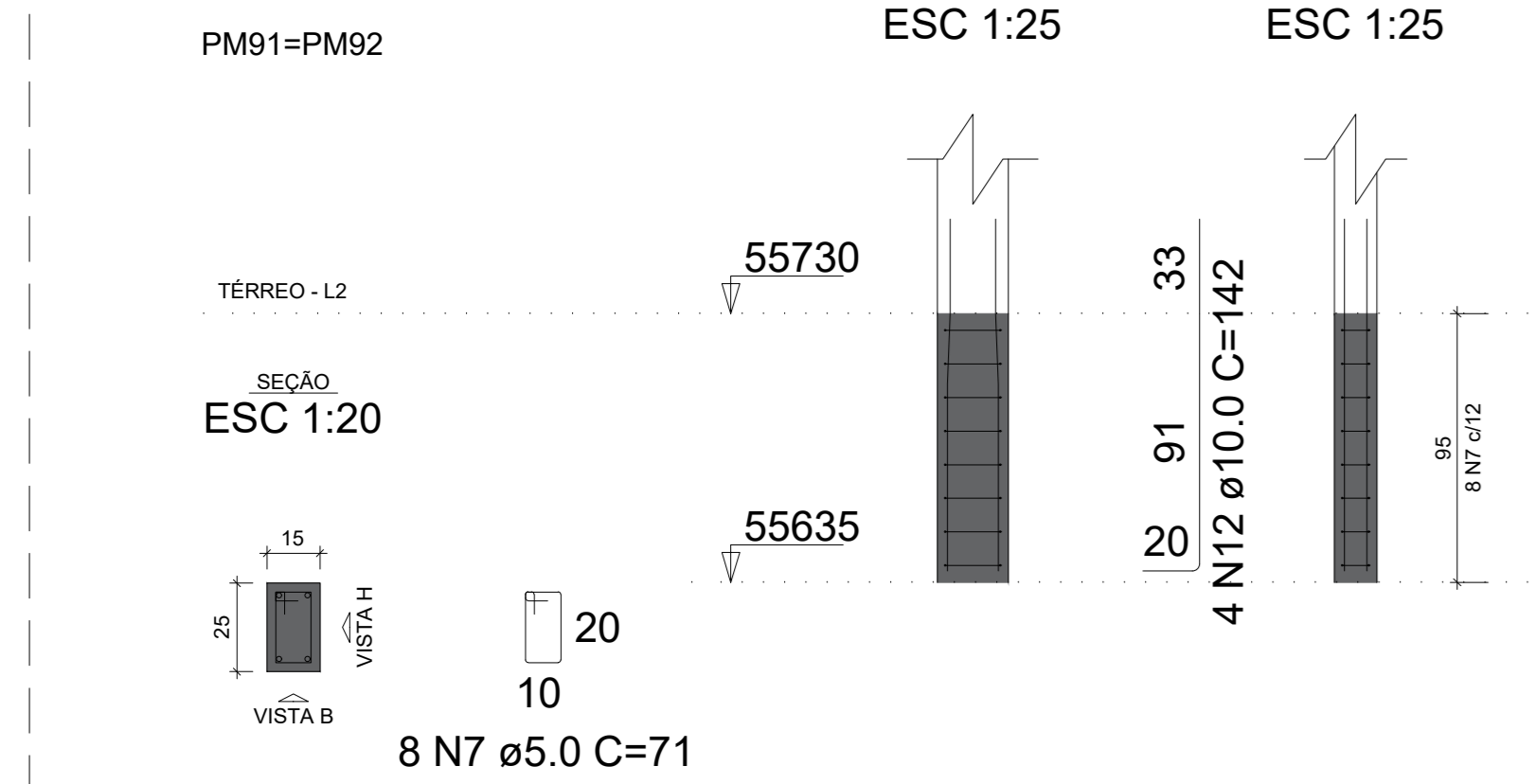
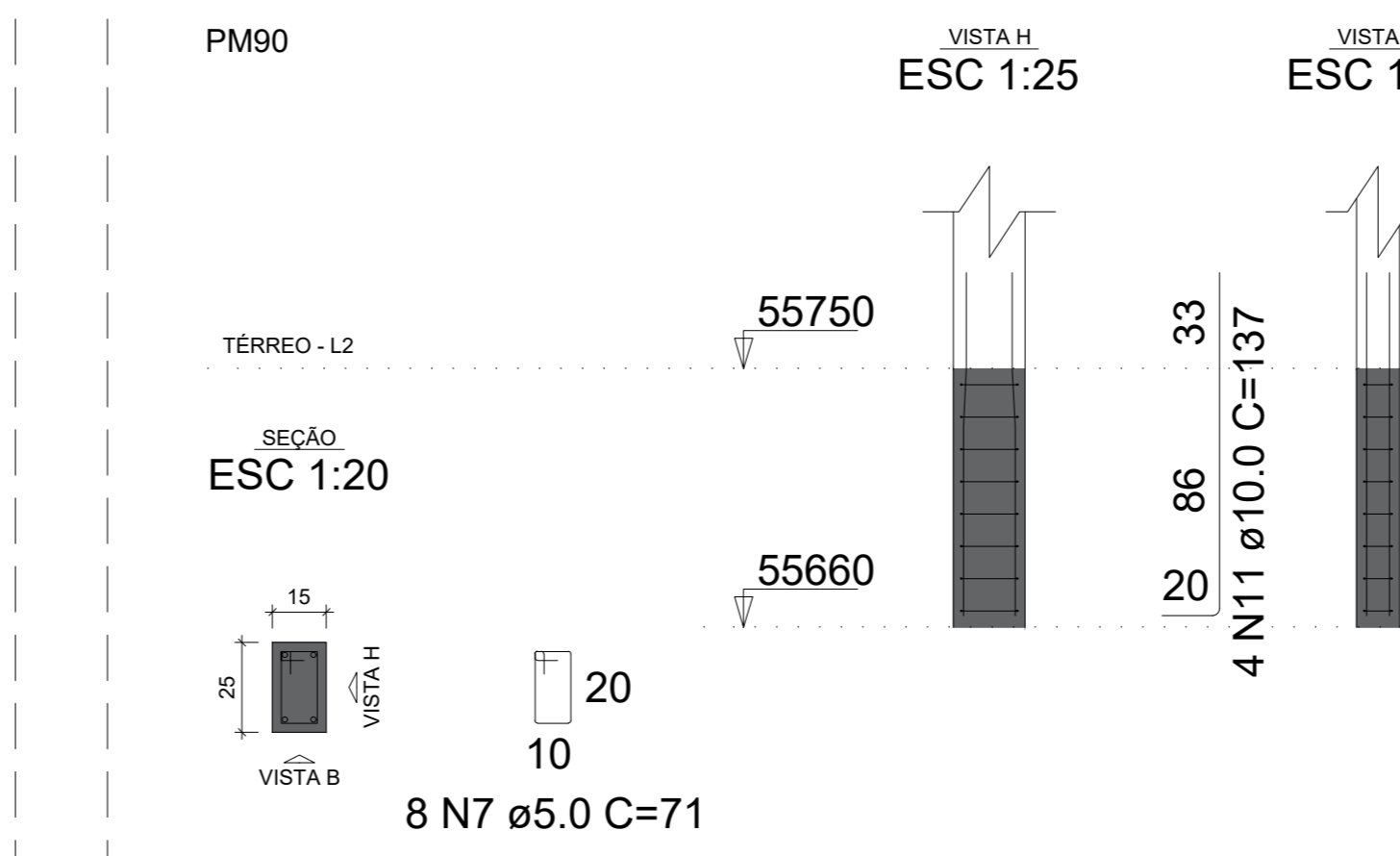
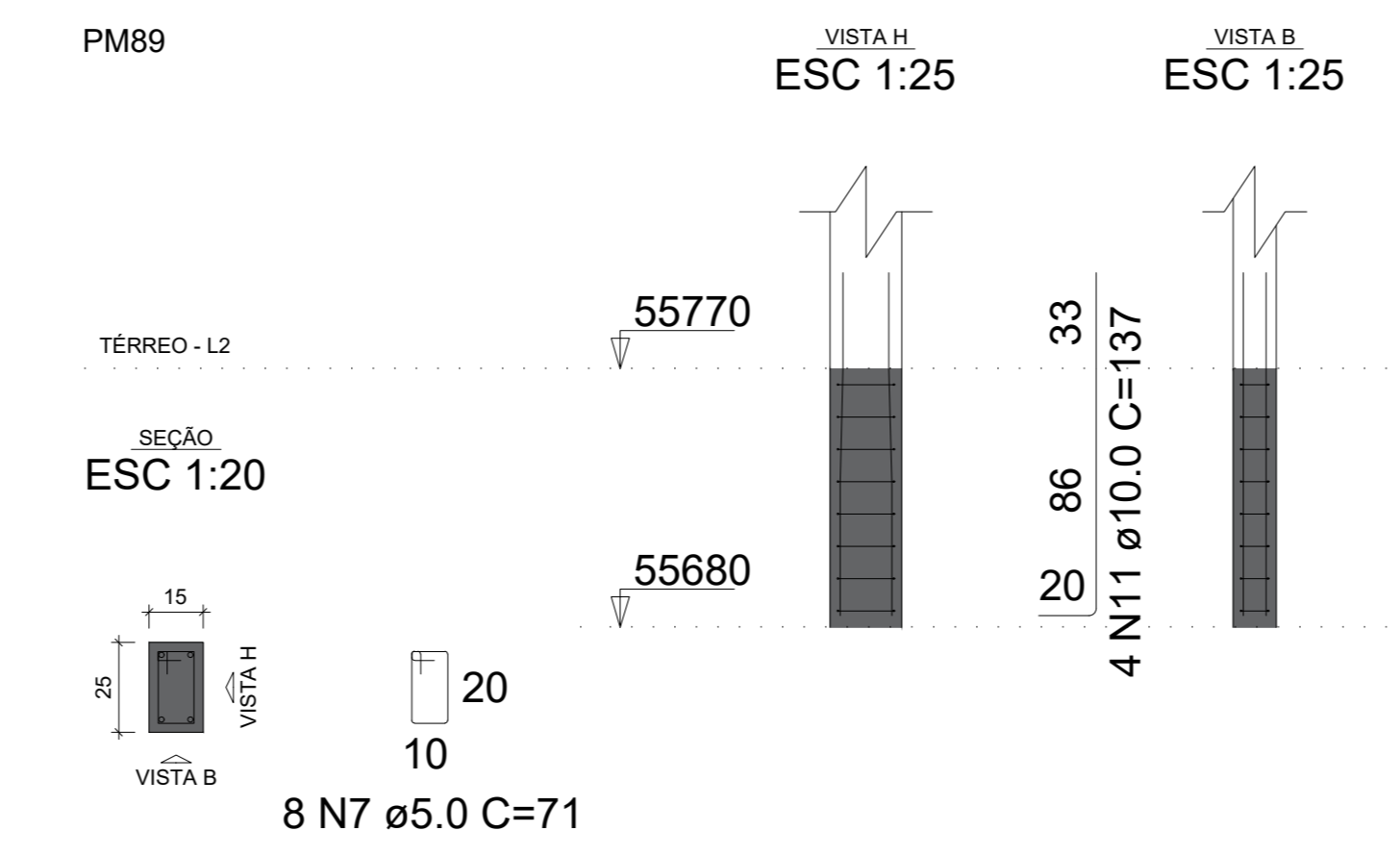
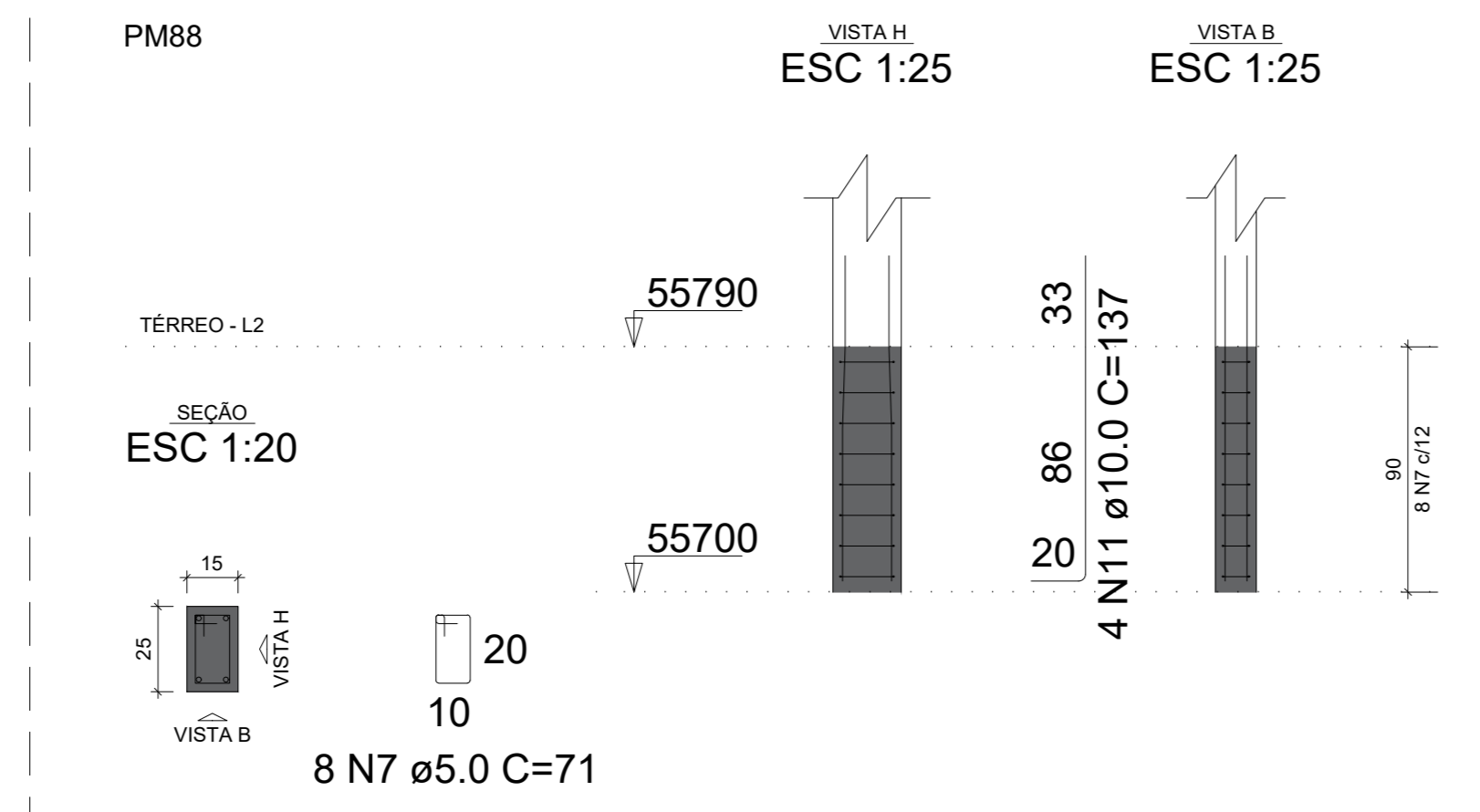
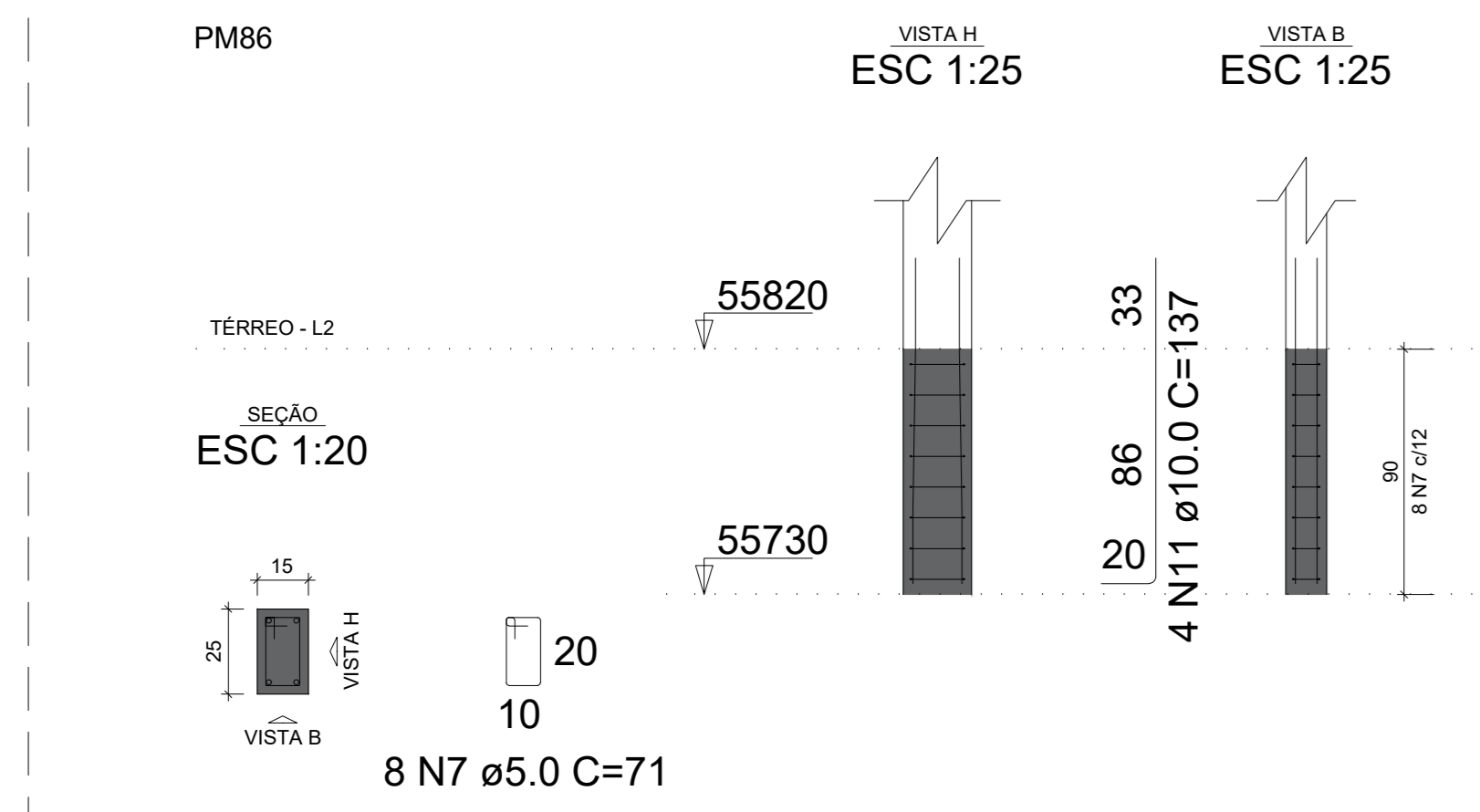
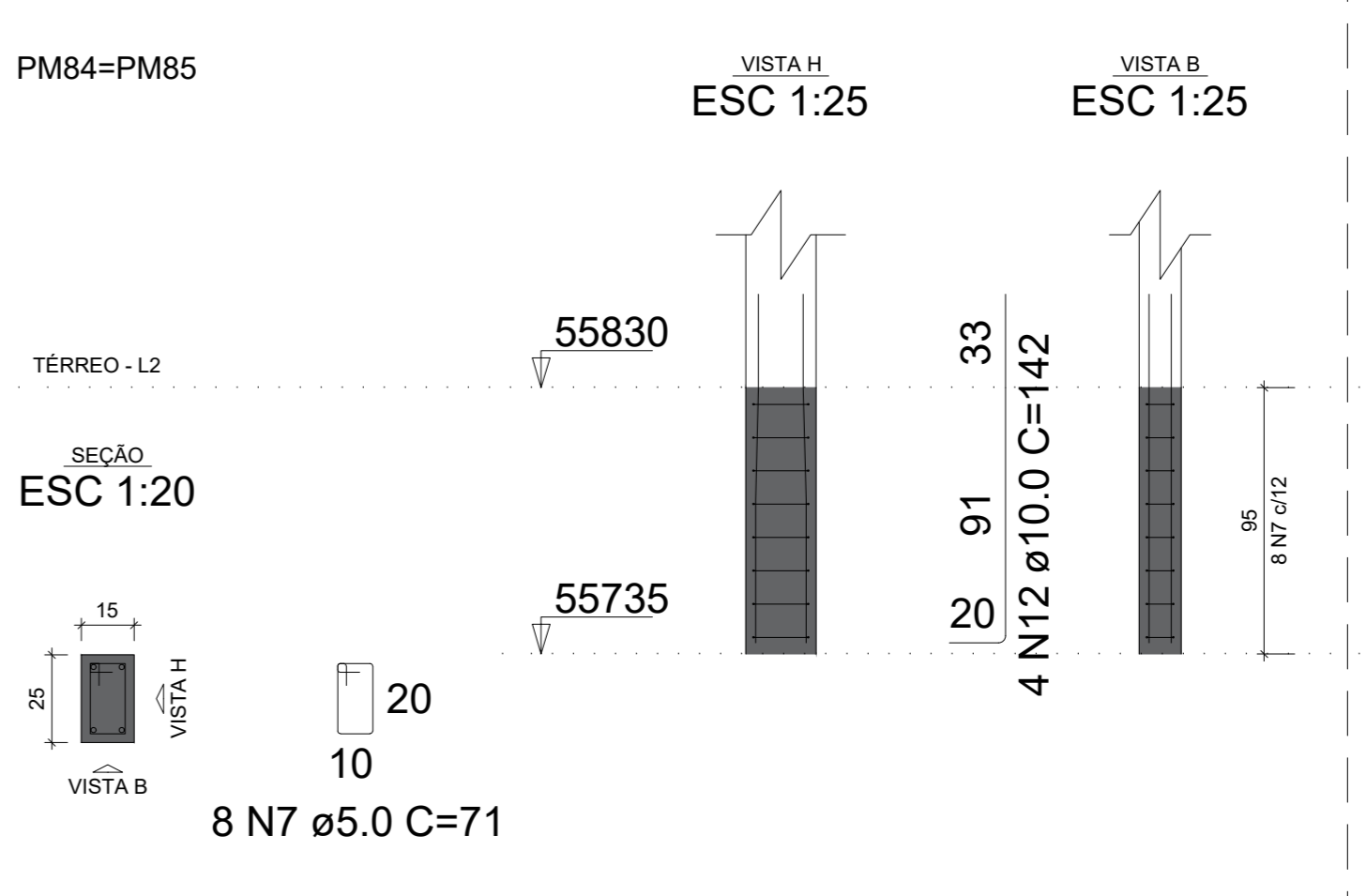
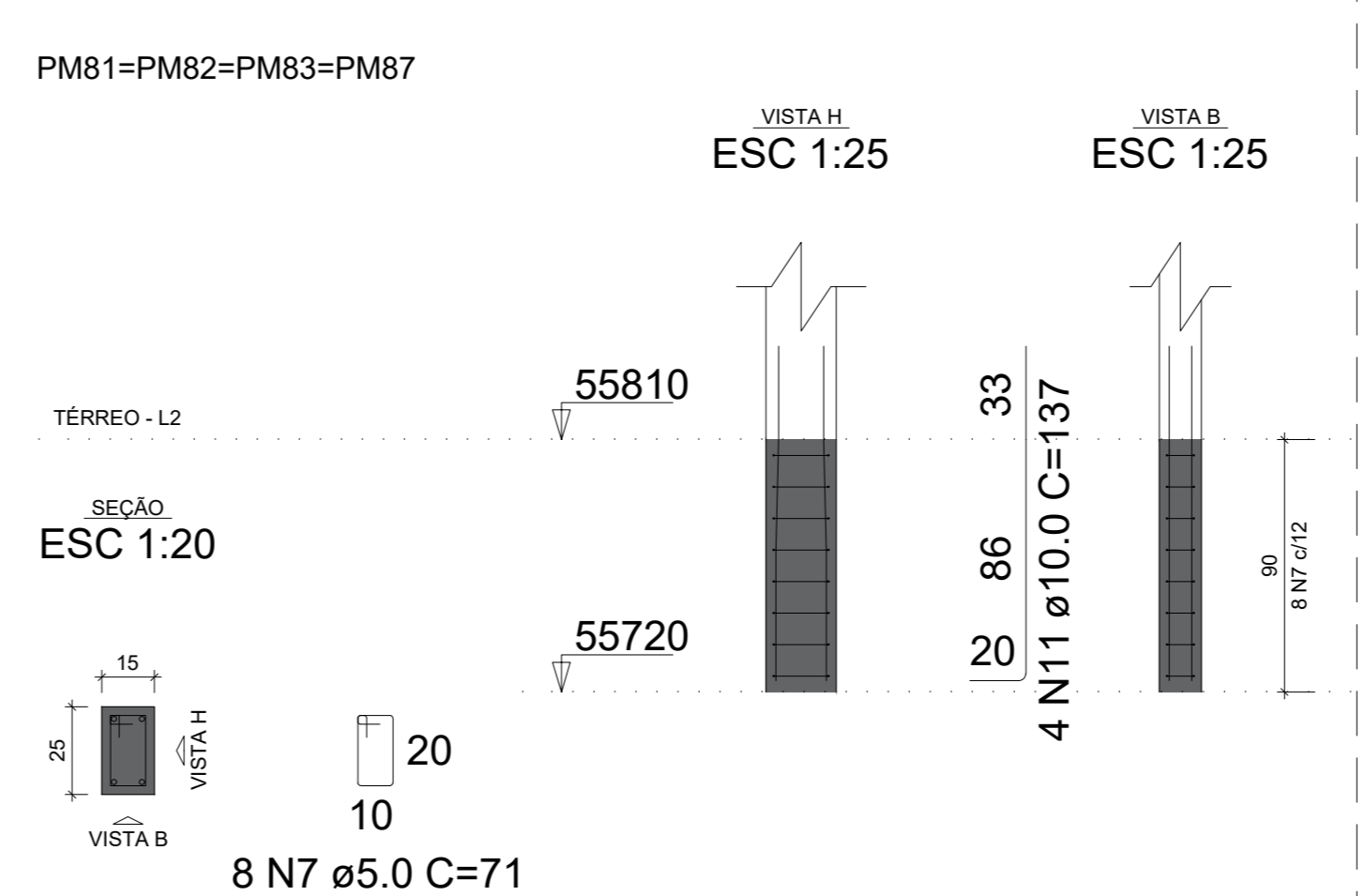
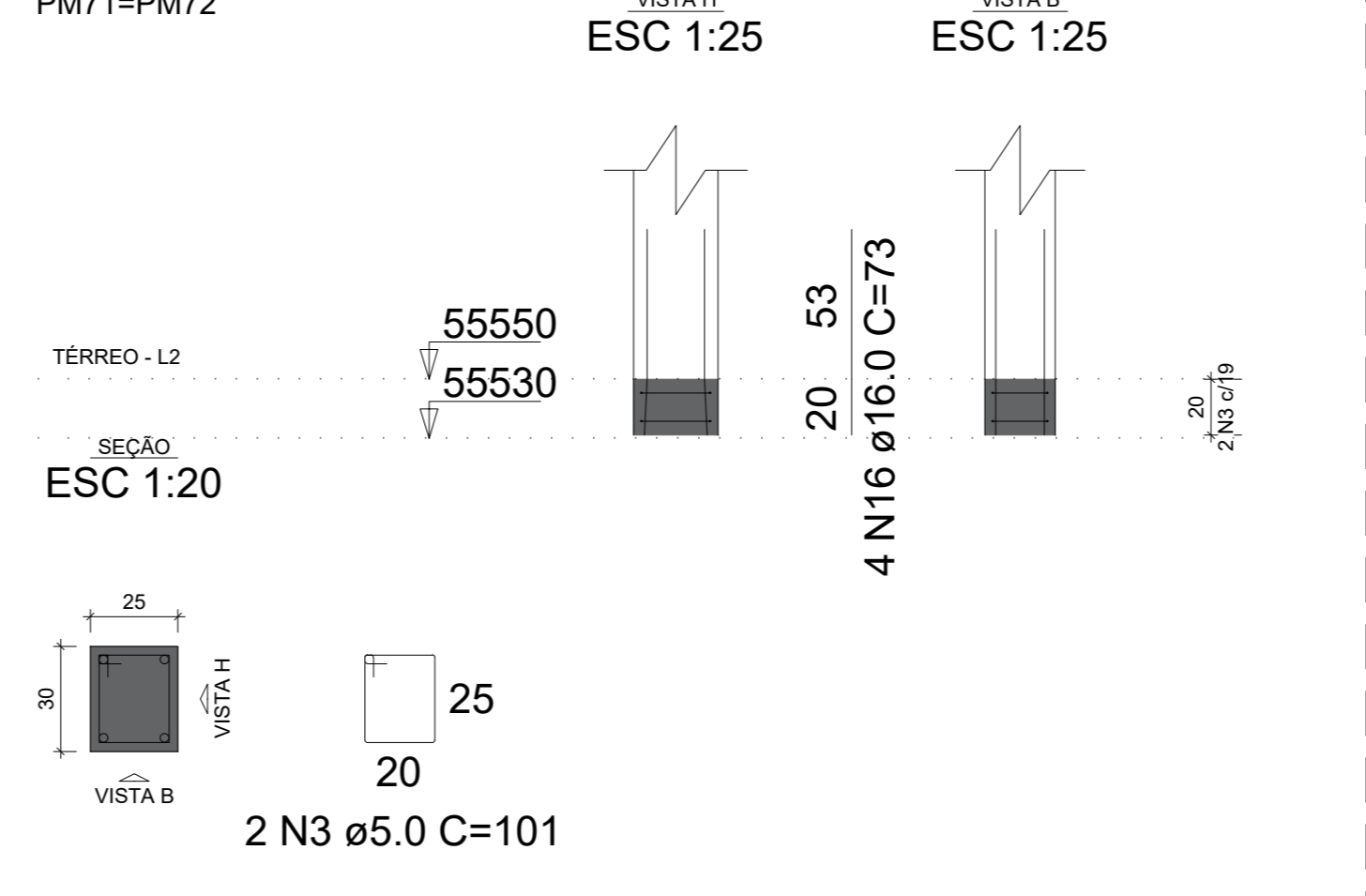
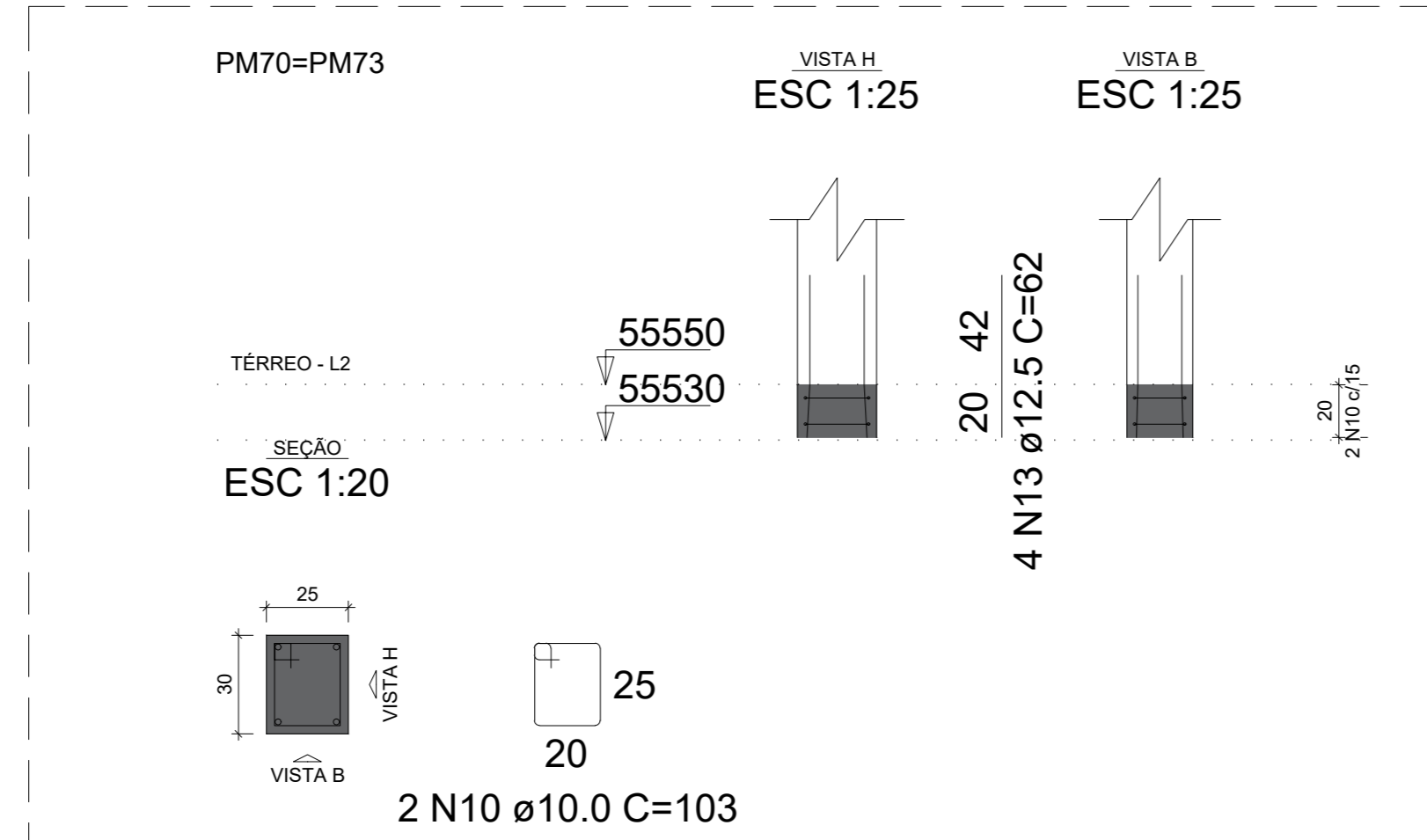
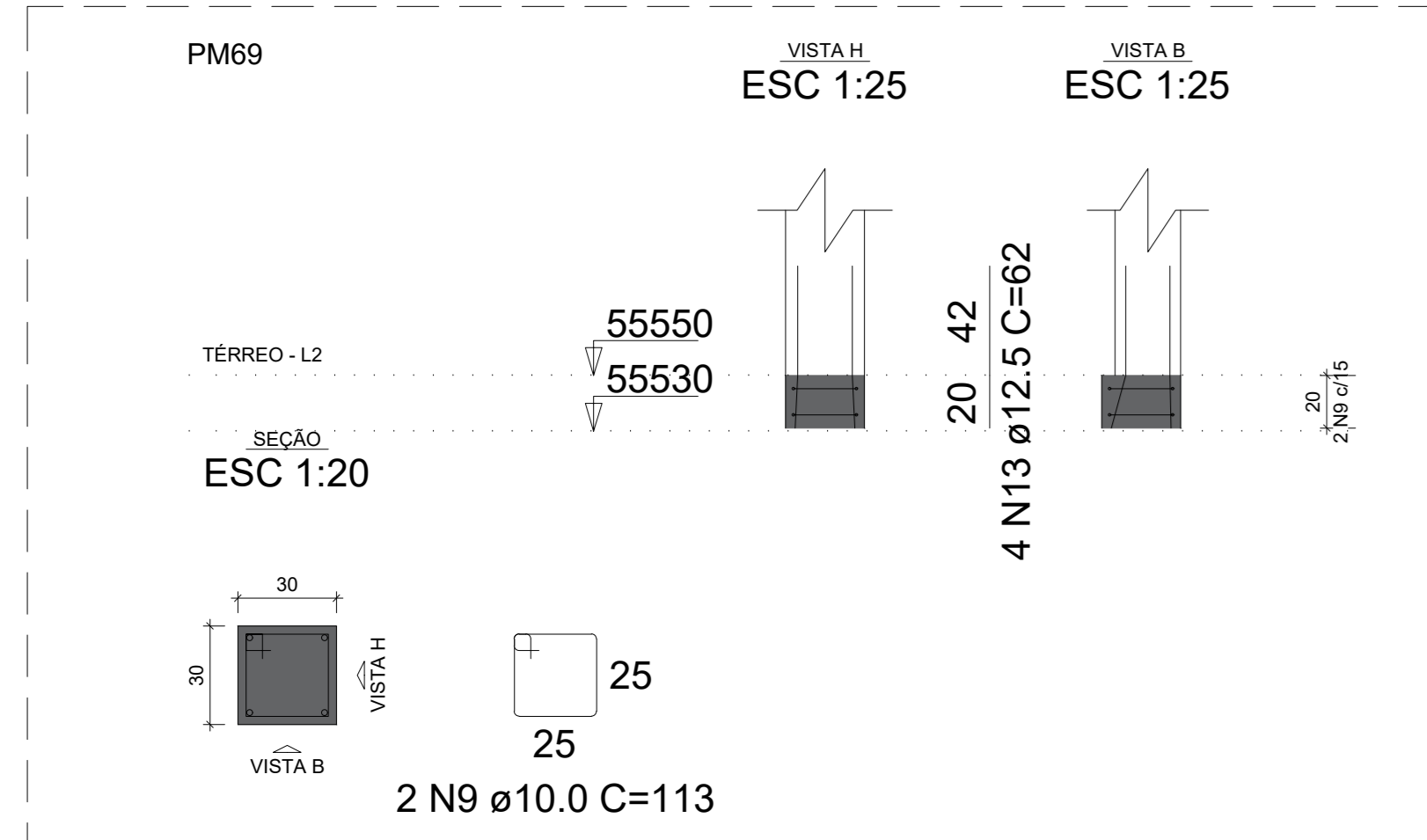
AÇO	N	DIAM (mm)	QUANT	C. UNIT (cm)	C. TOTAL (cm)
CA60	1	5.0	2	81	162
	2	5.0	2	81	162
	3	5.0	31	101	3131
	4	5.0	6	111	666
	5	5.0	15	91	1365
	6	5.0	4	40	160
CA50	7	5.0	224	71	15904
	8	10.0	8	53	424
	9	10.0	2	113	226
	10	10.0	4	103	412
	11	10.0	88	137	12056
	12	10.0	24	142	3408
	13	12.5	40	62	2480
	14	12.5	8	262	2096
	15	12.5	2	17	34
	16	16.0	20	73	1460



RESUMO DO AÇO

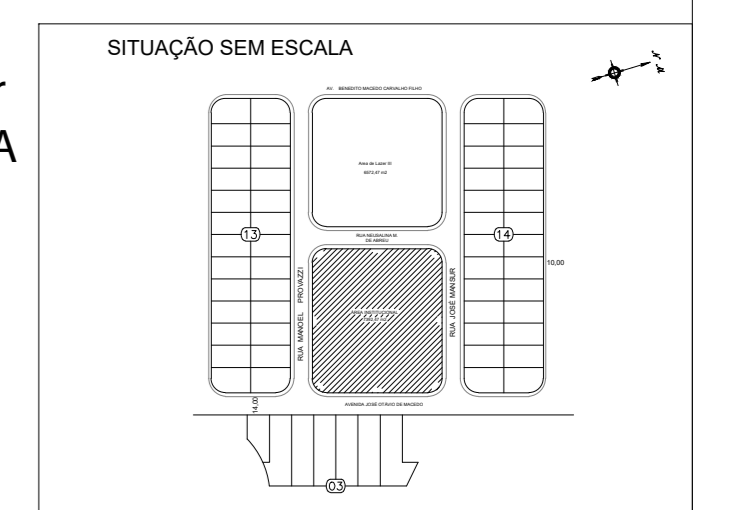
AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 10% (kg)
CA50	10.0	165.3	112.1
	12.5	46.1	48.9
	16.0	14.6	25.3
CA60	5.0	215.5	36.5
PESO TOTAL (kg)			
CA50		186.3	
CA60		36.5	

Volume de concreto (C-30) = 1.07 m³
Área de forma = 19.34 m²



ALFREDO PADUA MANZAN O:270159 01838

Assinado de forma digital por ALFREDO PADUA MANZANO:27015901838
Dados: 2026.01.09 12:00:10 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

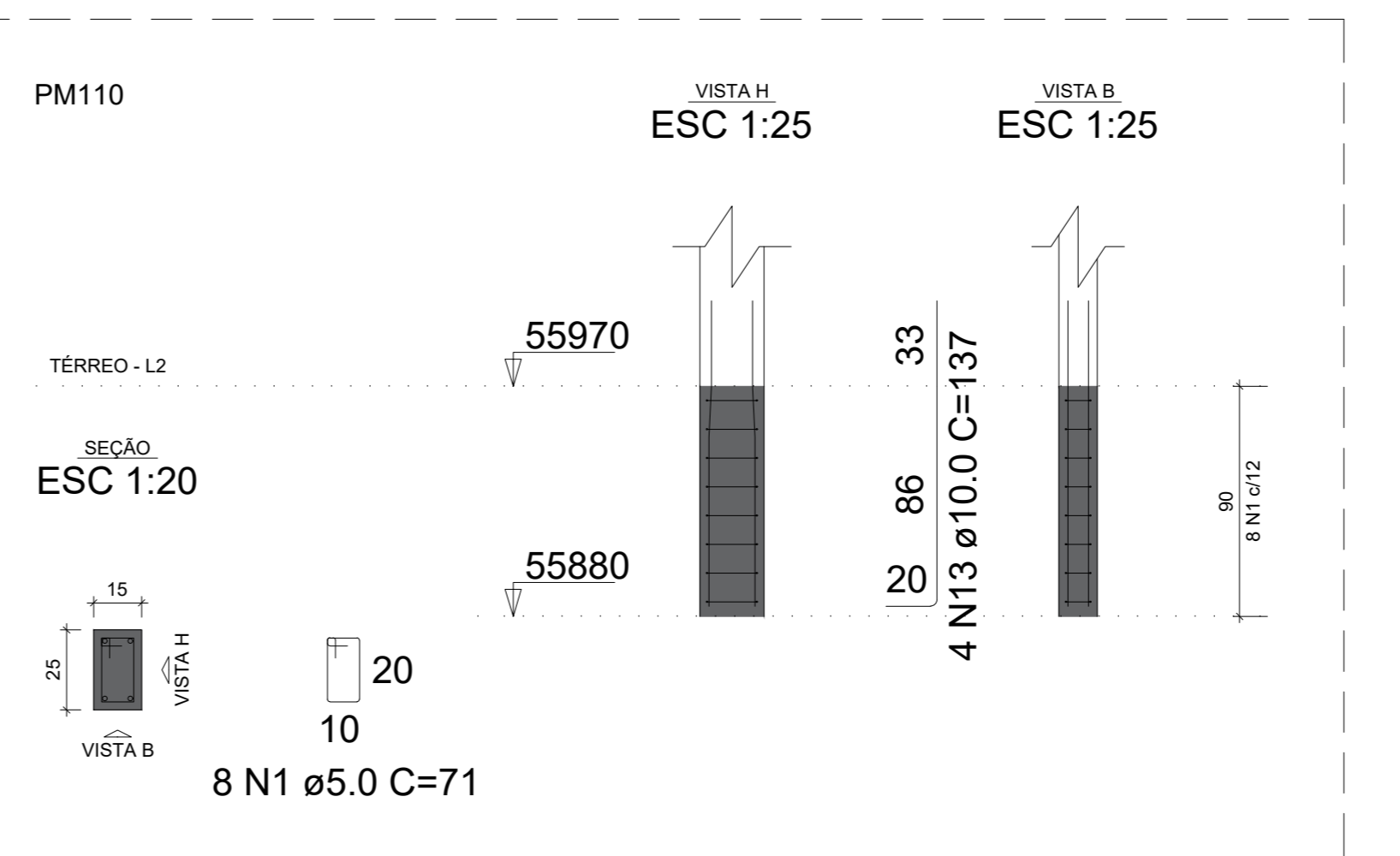
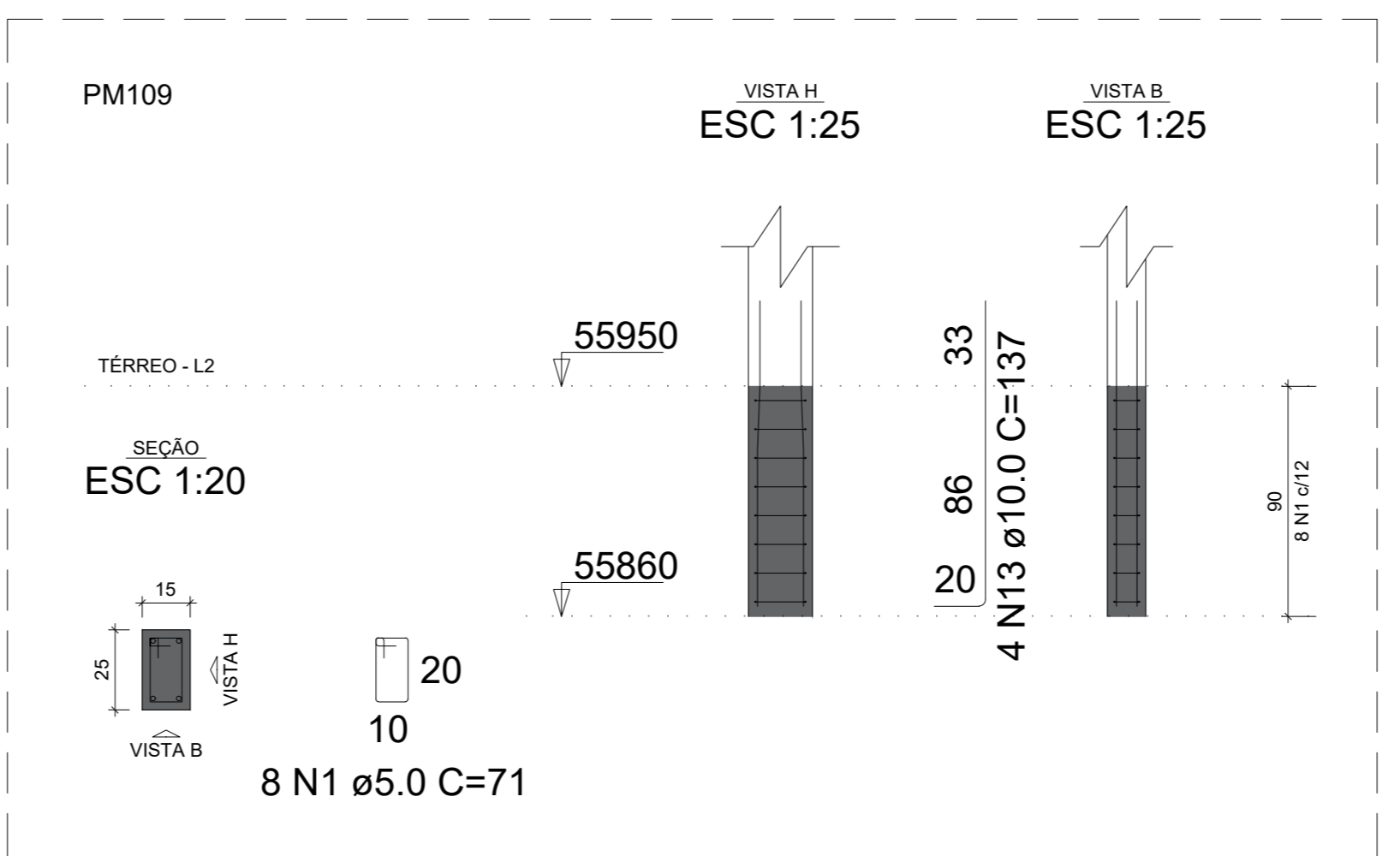
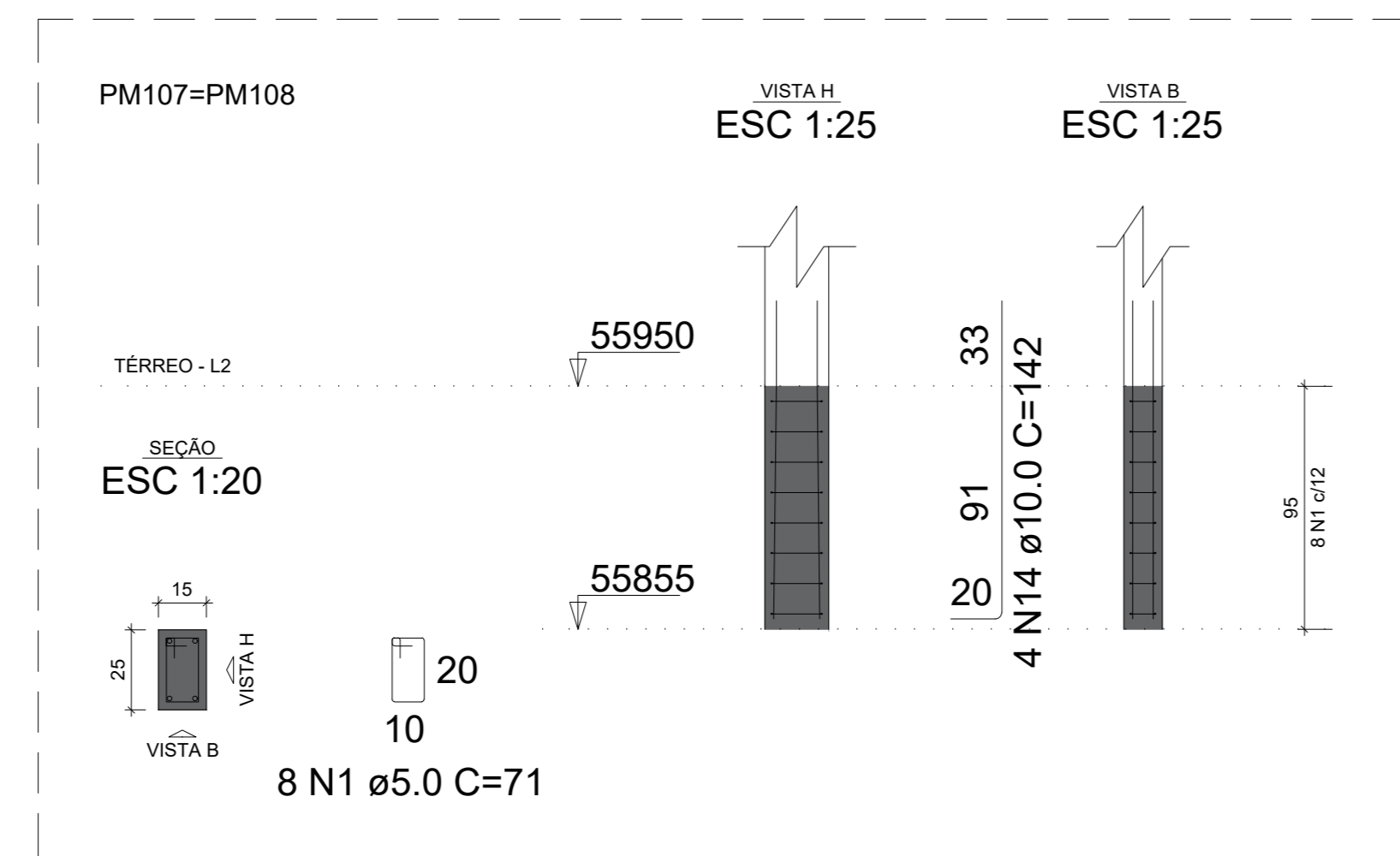
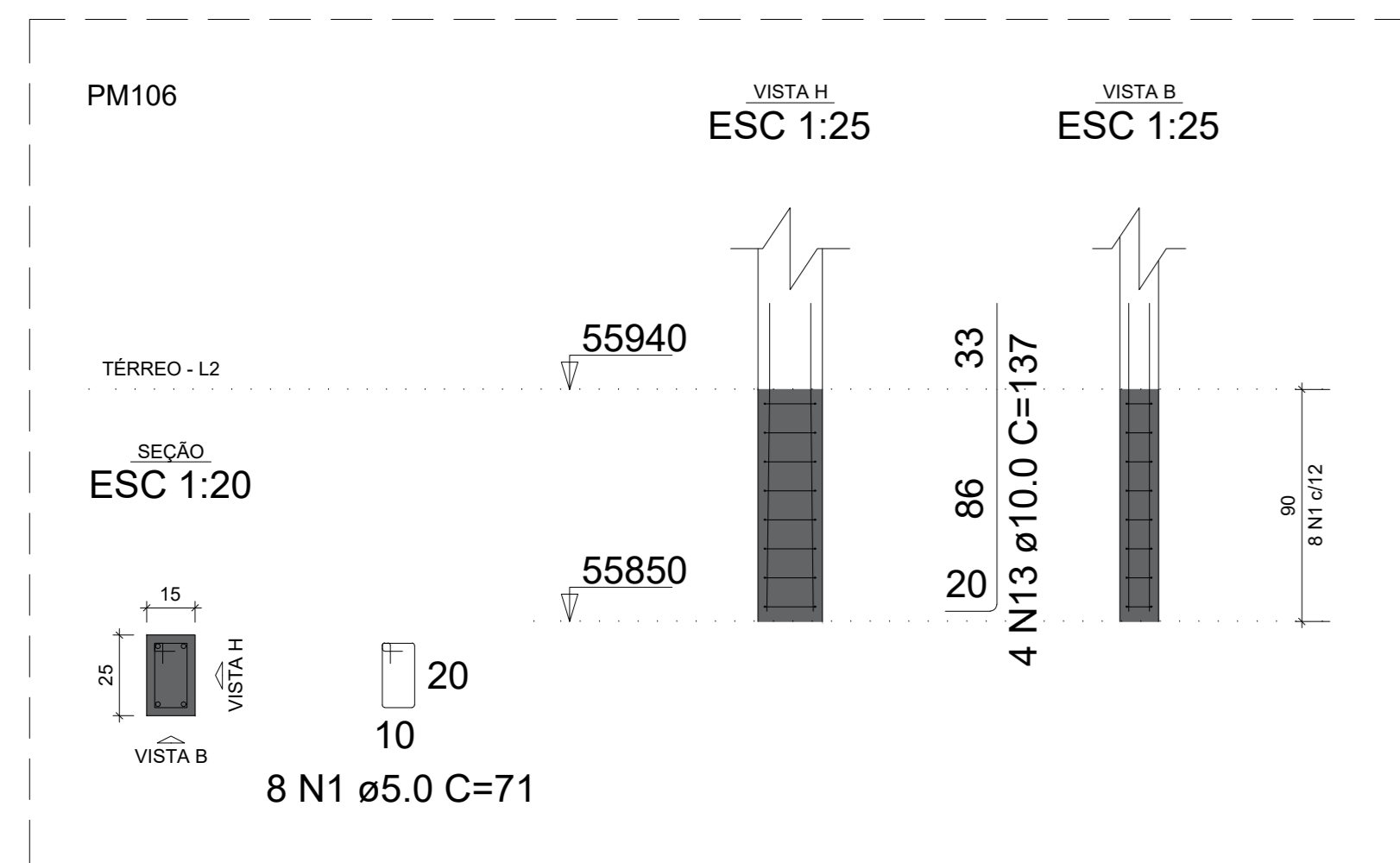
DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 186239/A-08
ART: 2620518019/16

Emprego:	AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Processo de Processo:	5.6132004
Cliente:	MUNICIPIO DE CAÇAPAVA	ÁREA:	Ver na folha ARQ 01/52
Desenho:	PROJETO ESTRUTURAL	Descrição:	BLOCO MURO- LOCAÇÃO
Levantamento:		Escala:	Indicada
		Data:	NOV/2025
		Revisão:	RD1



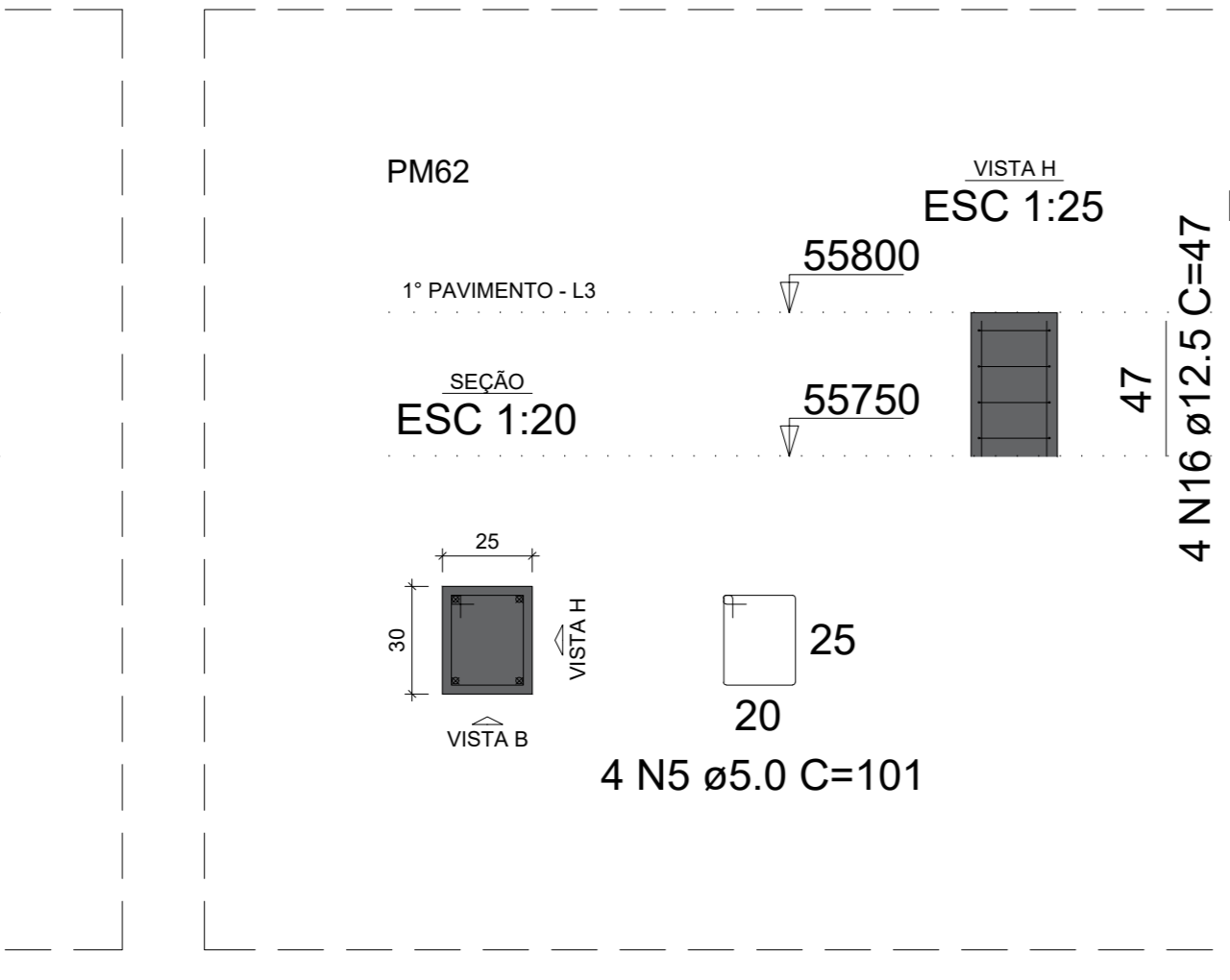
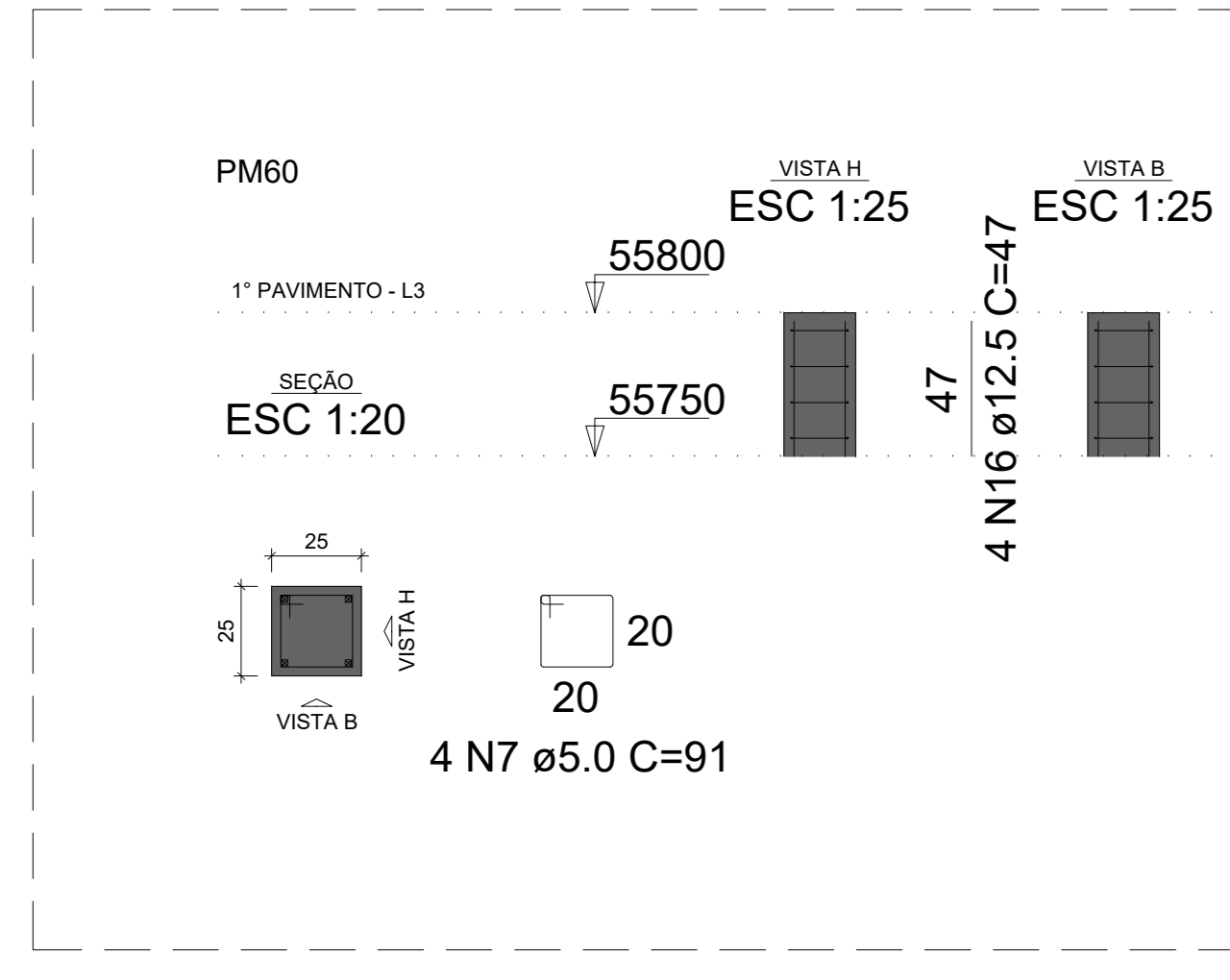
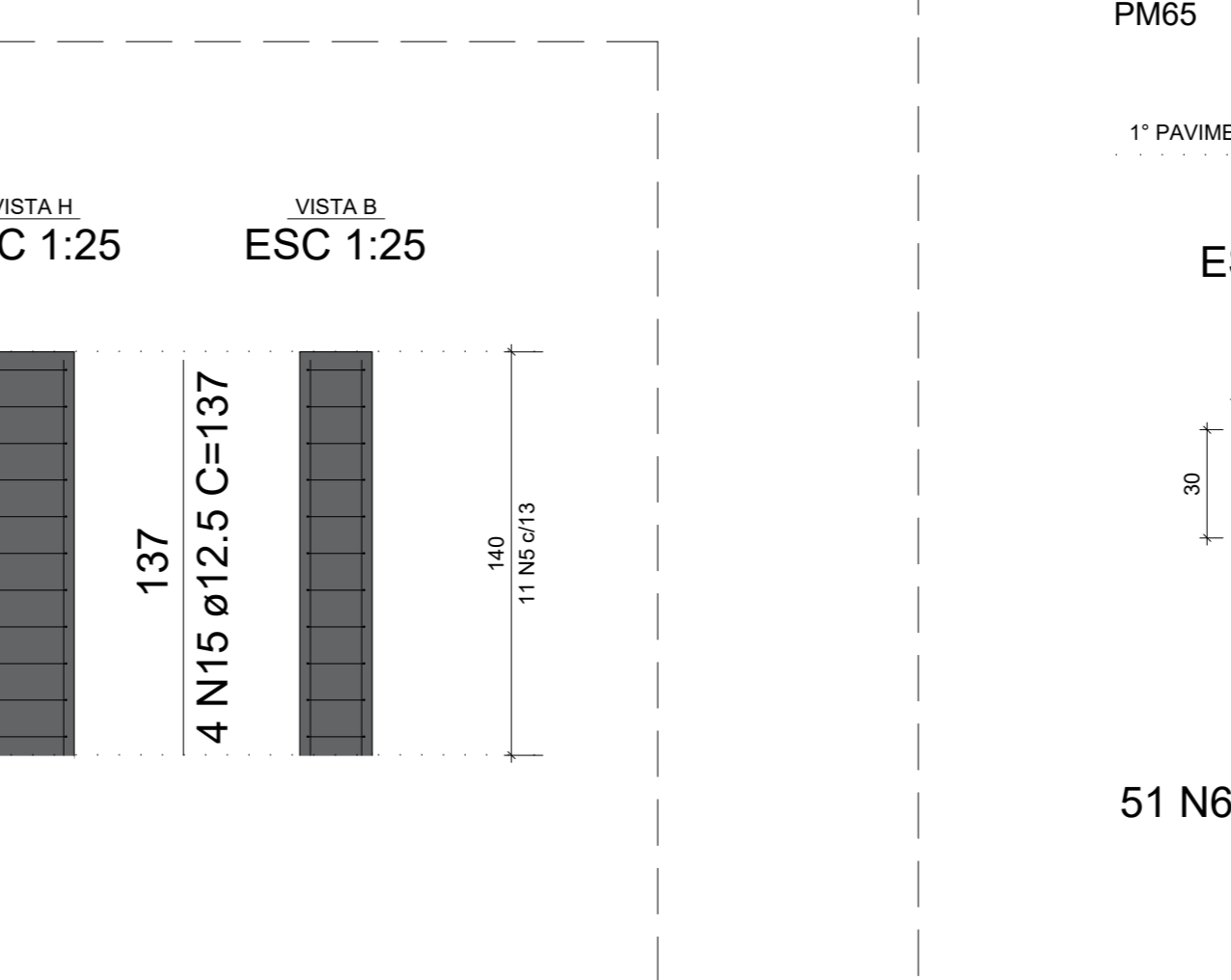
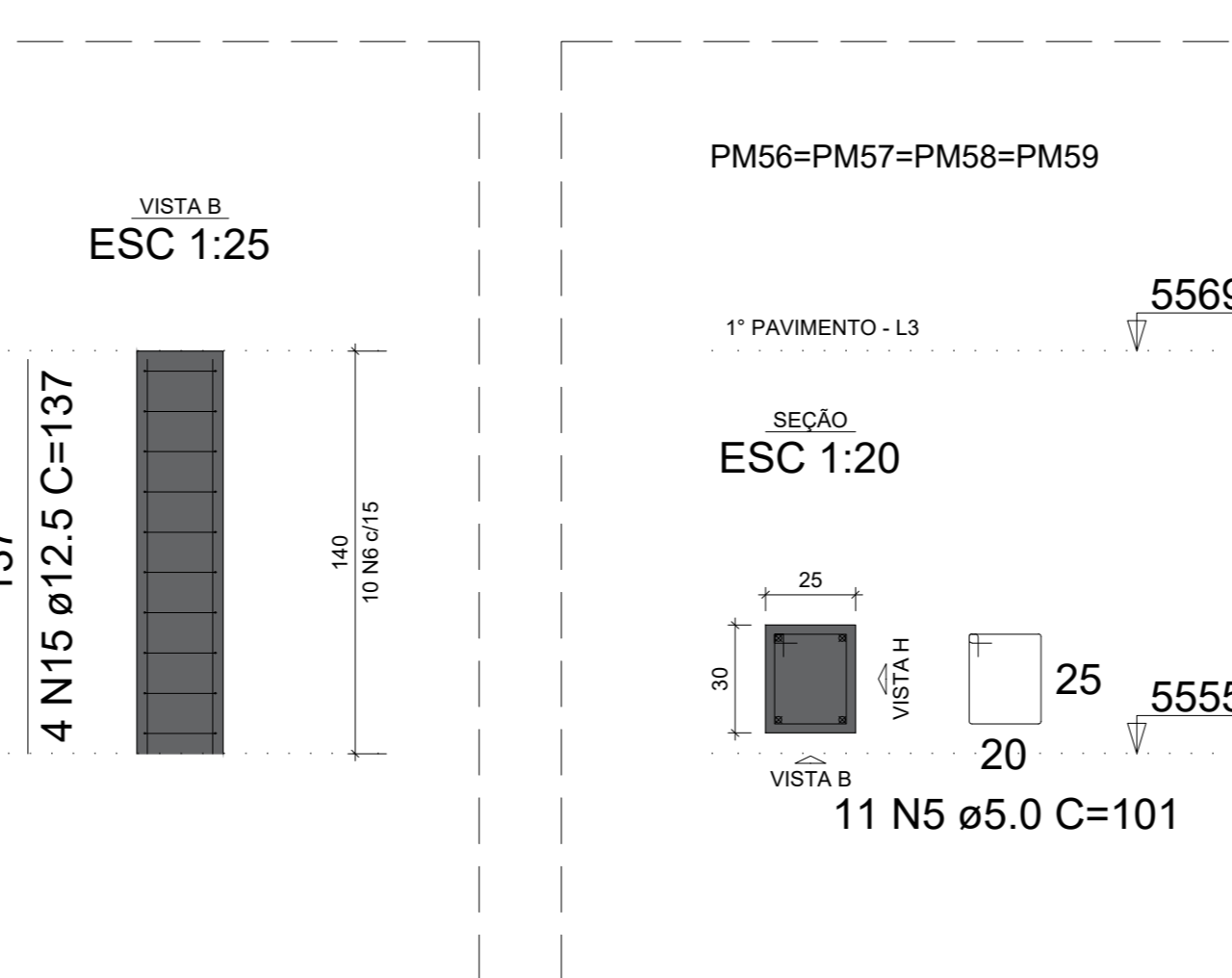
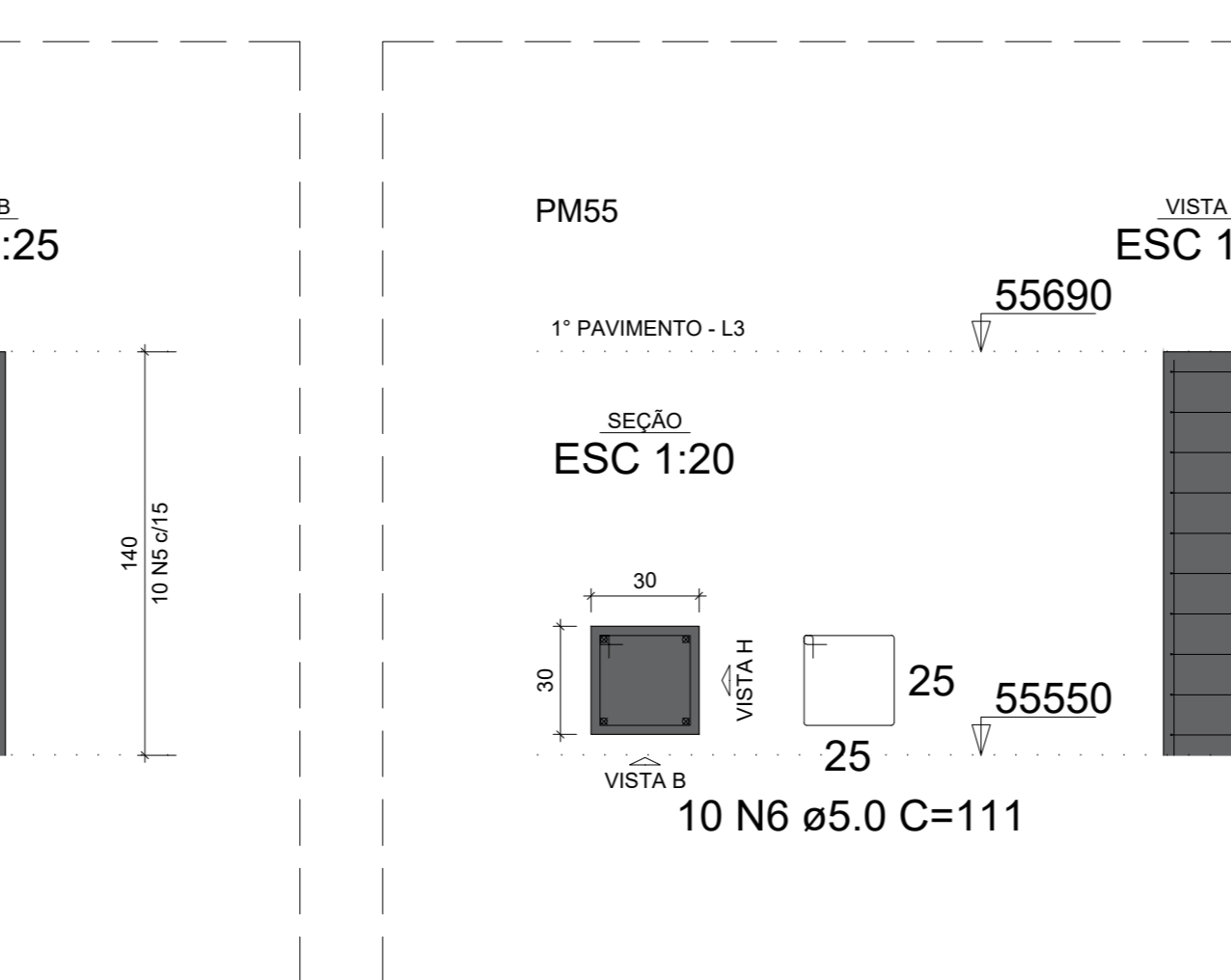
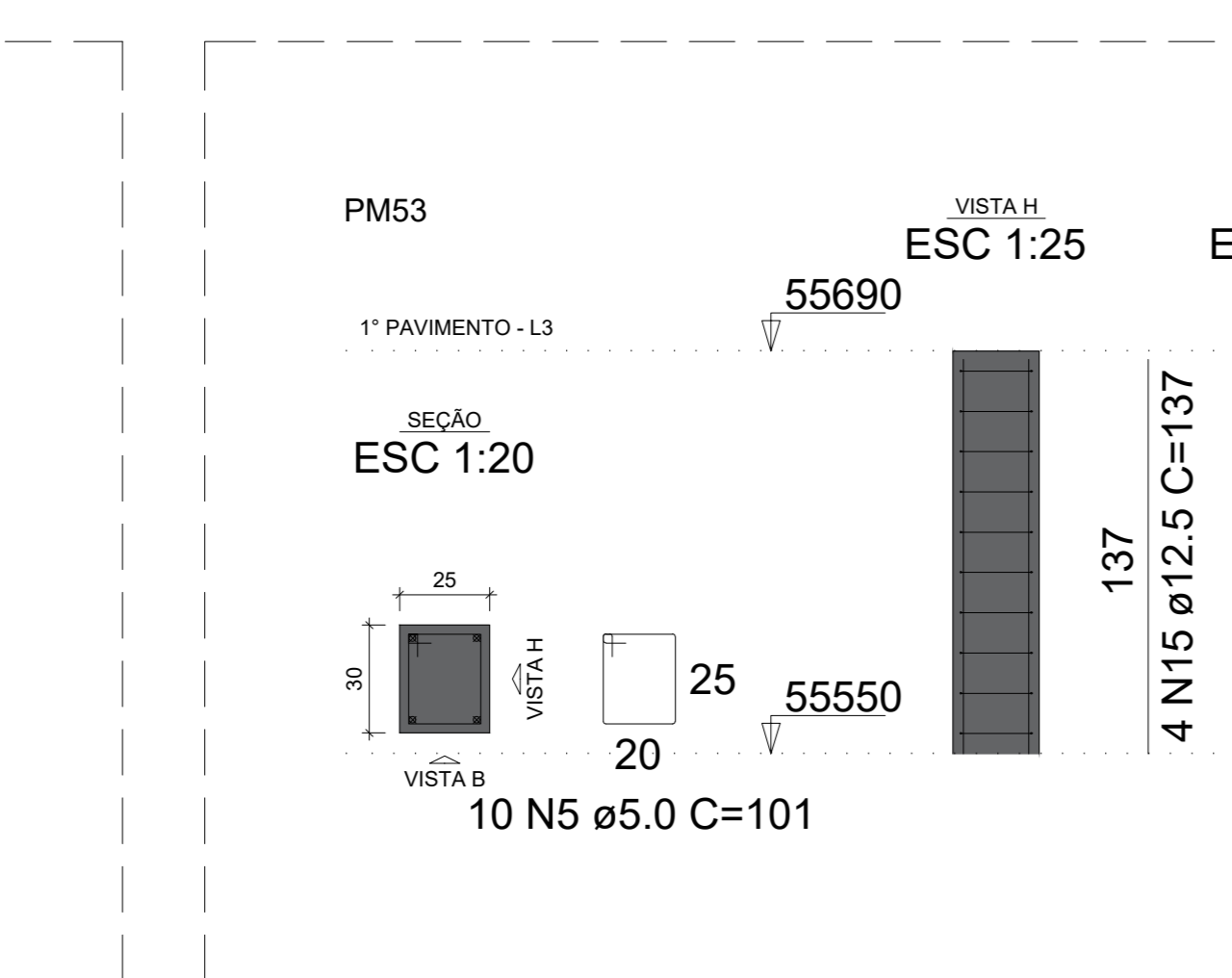
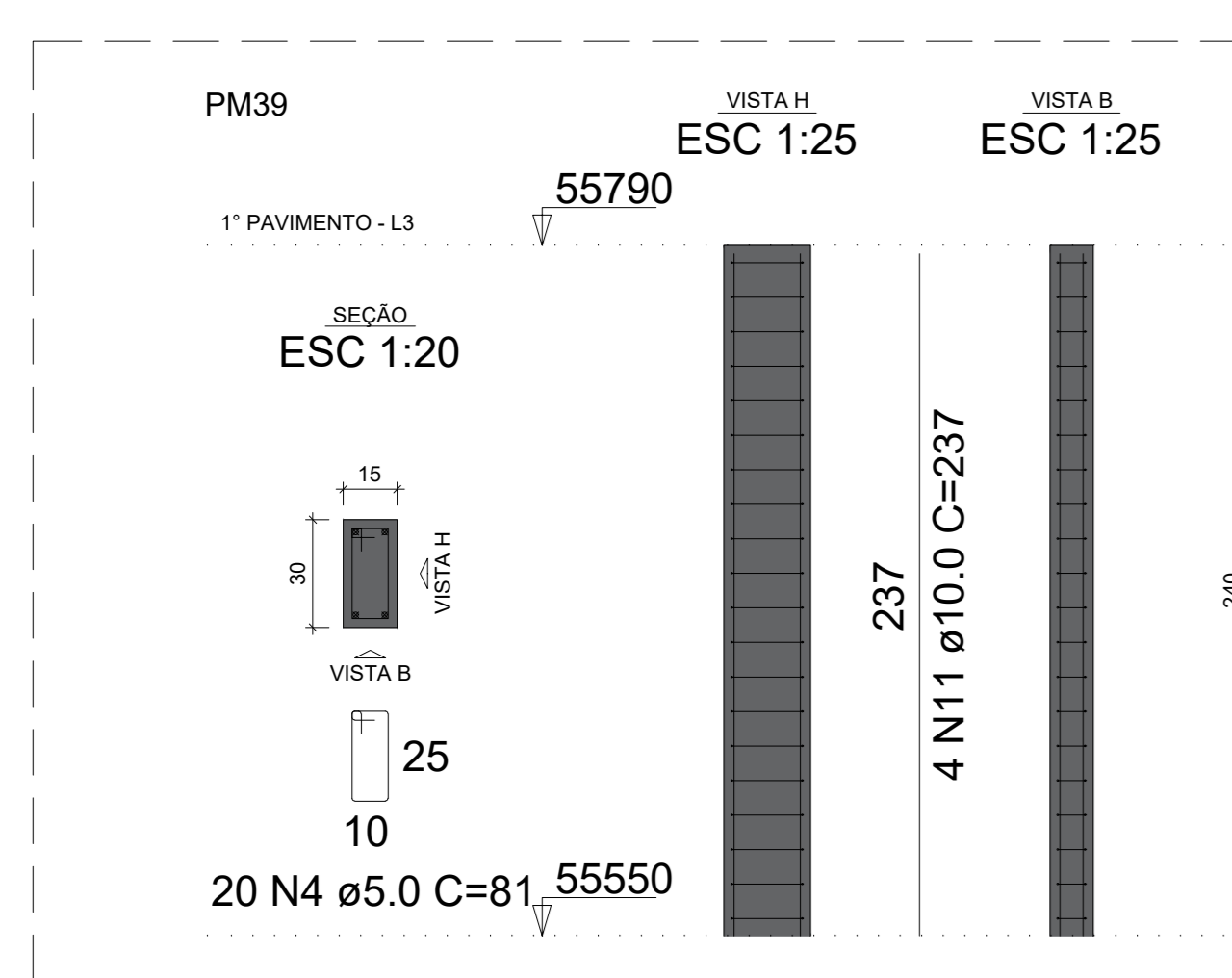
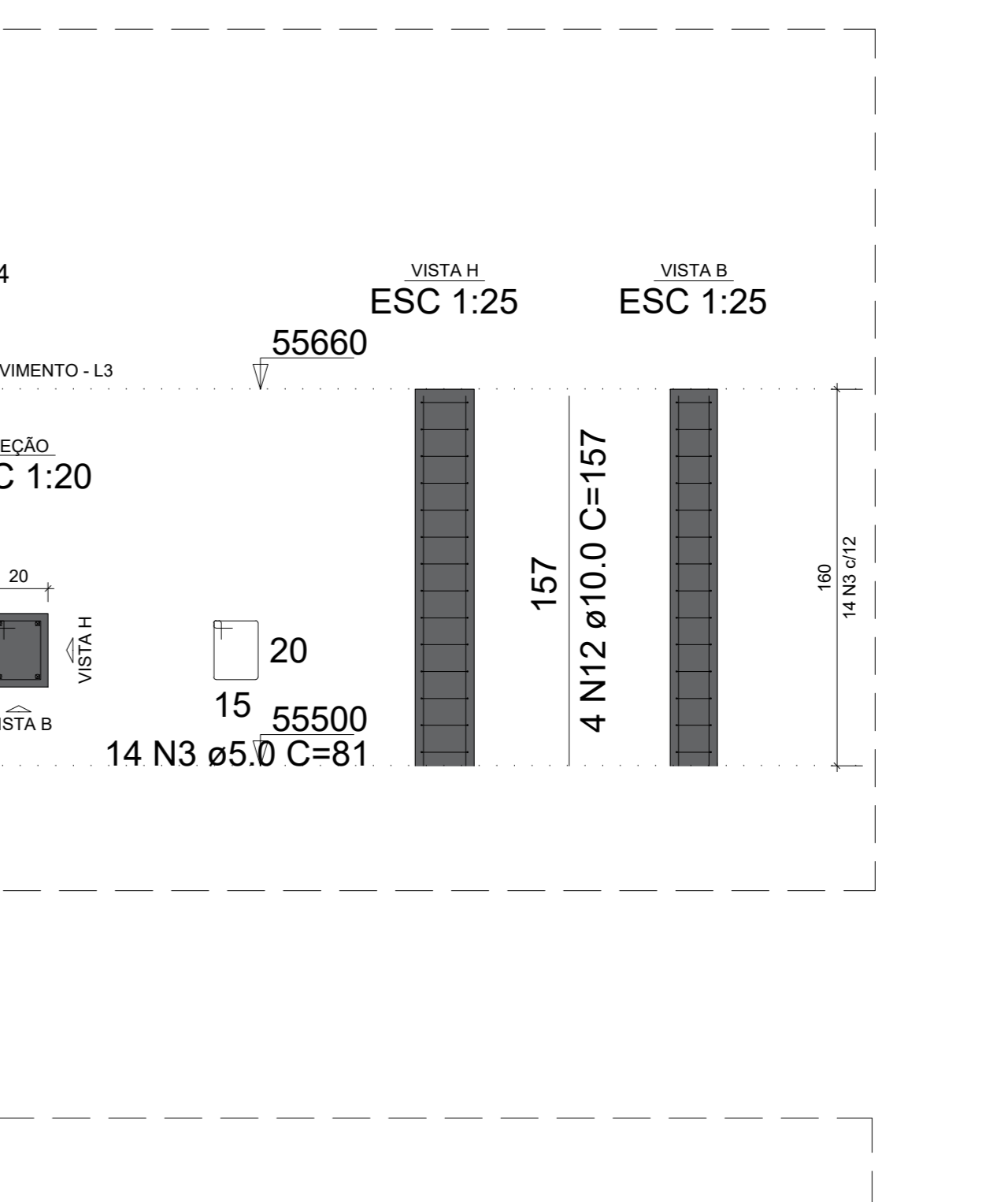
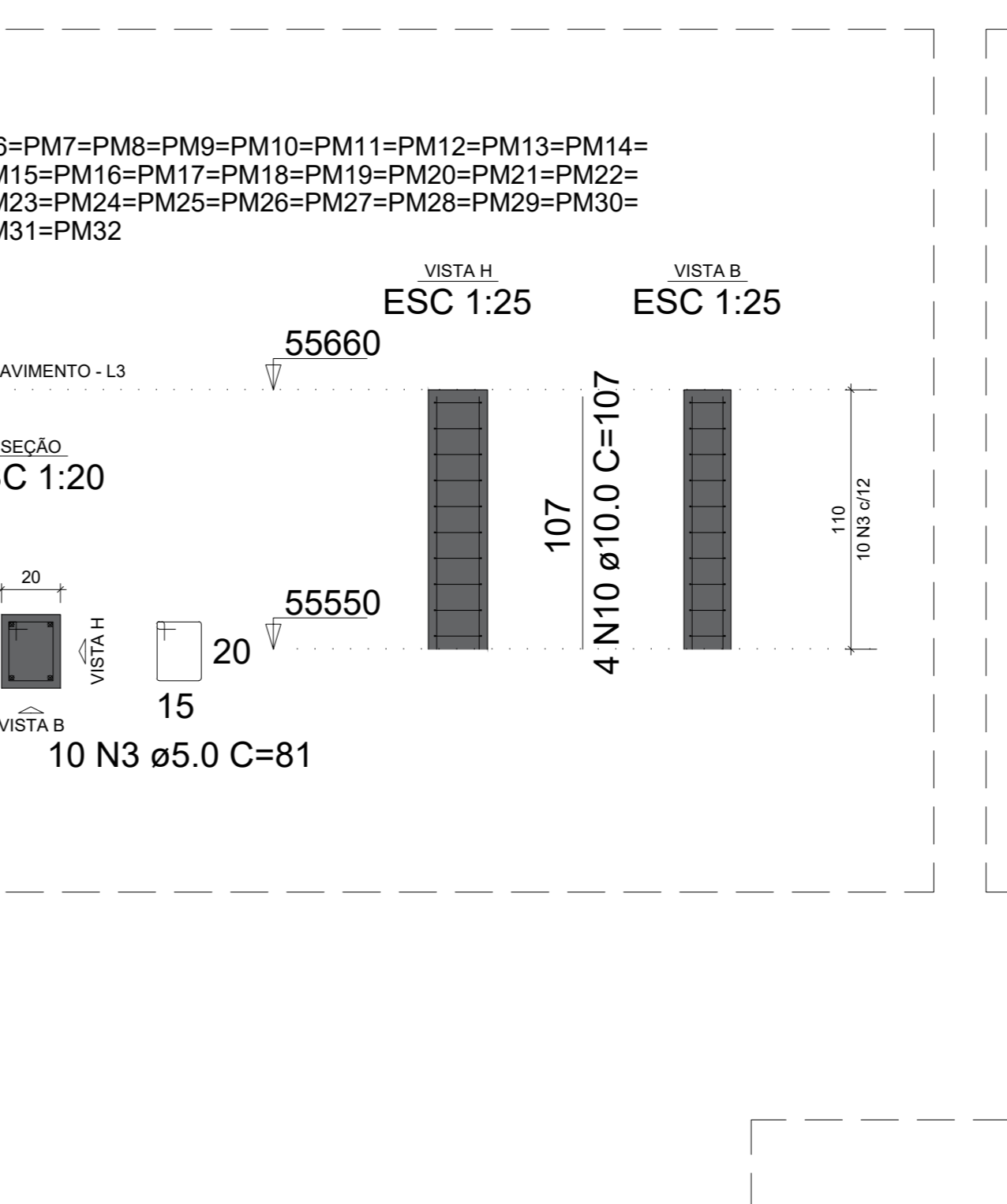
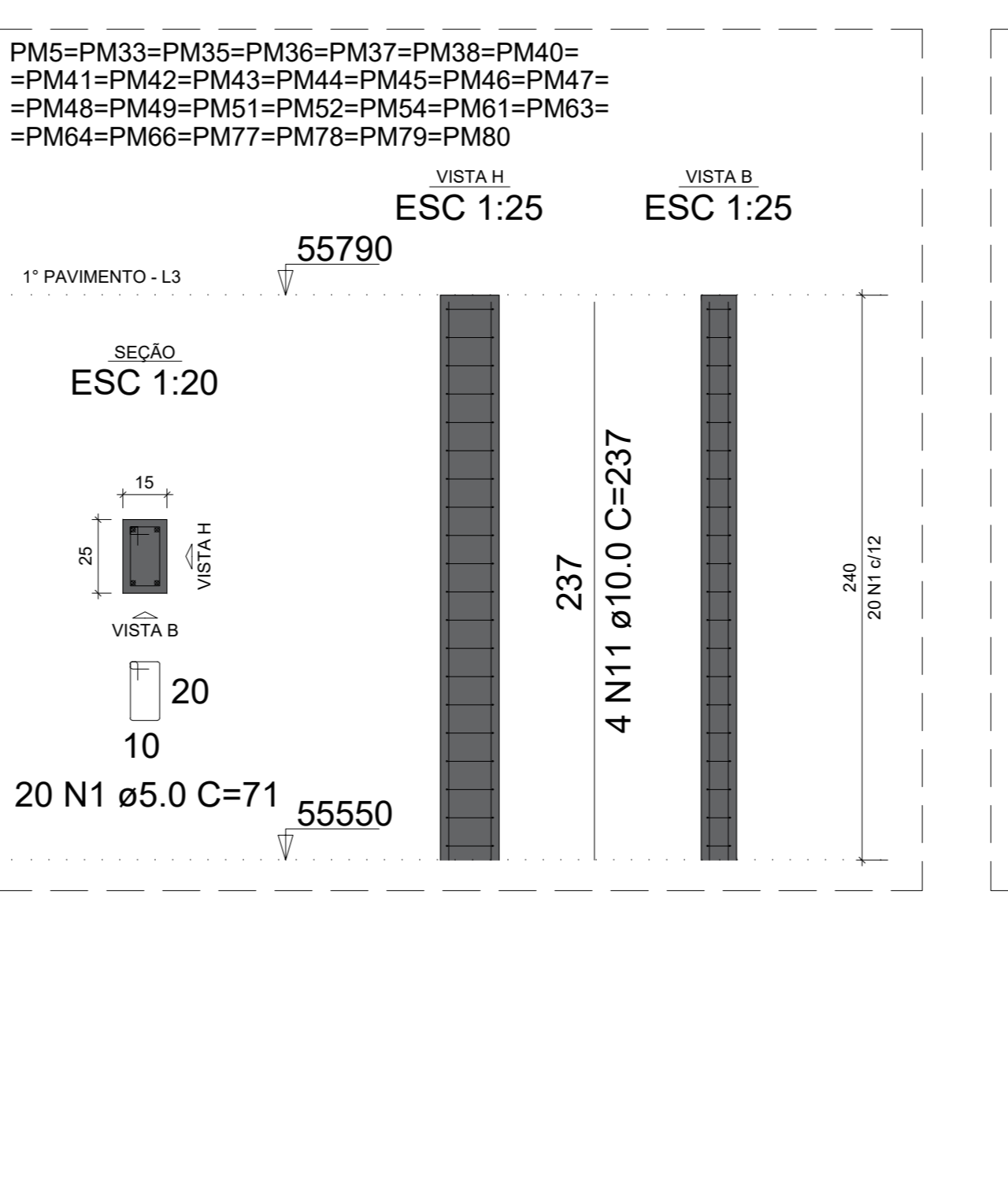
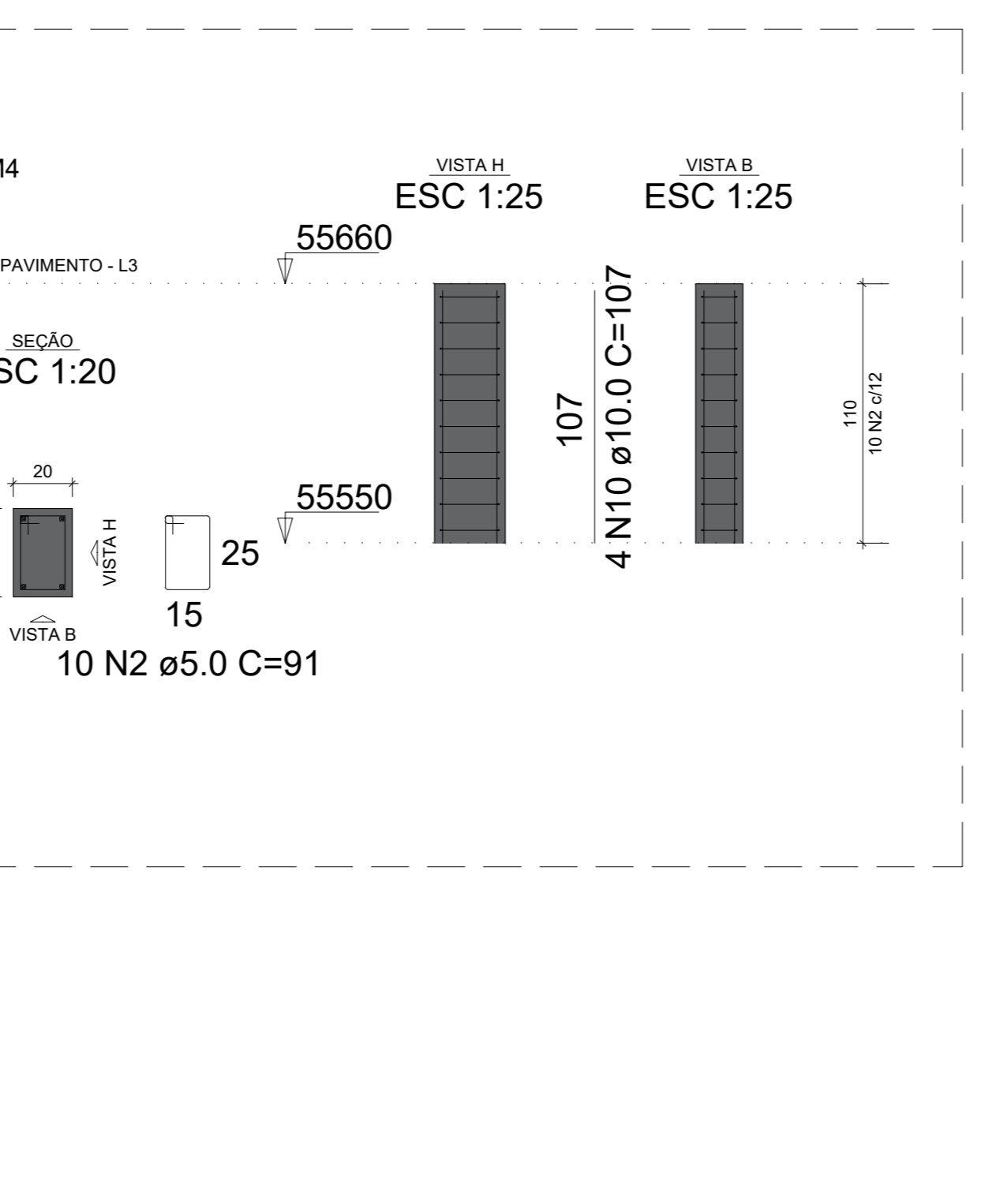
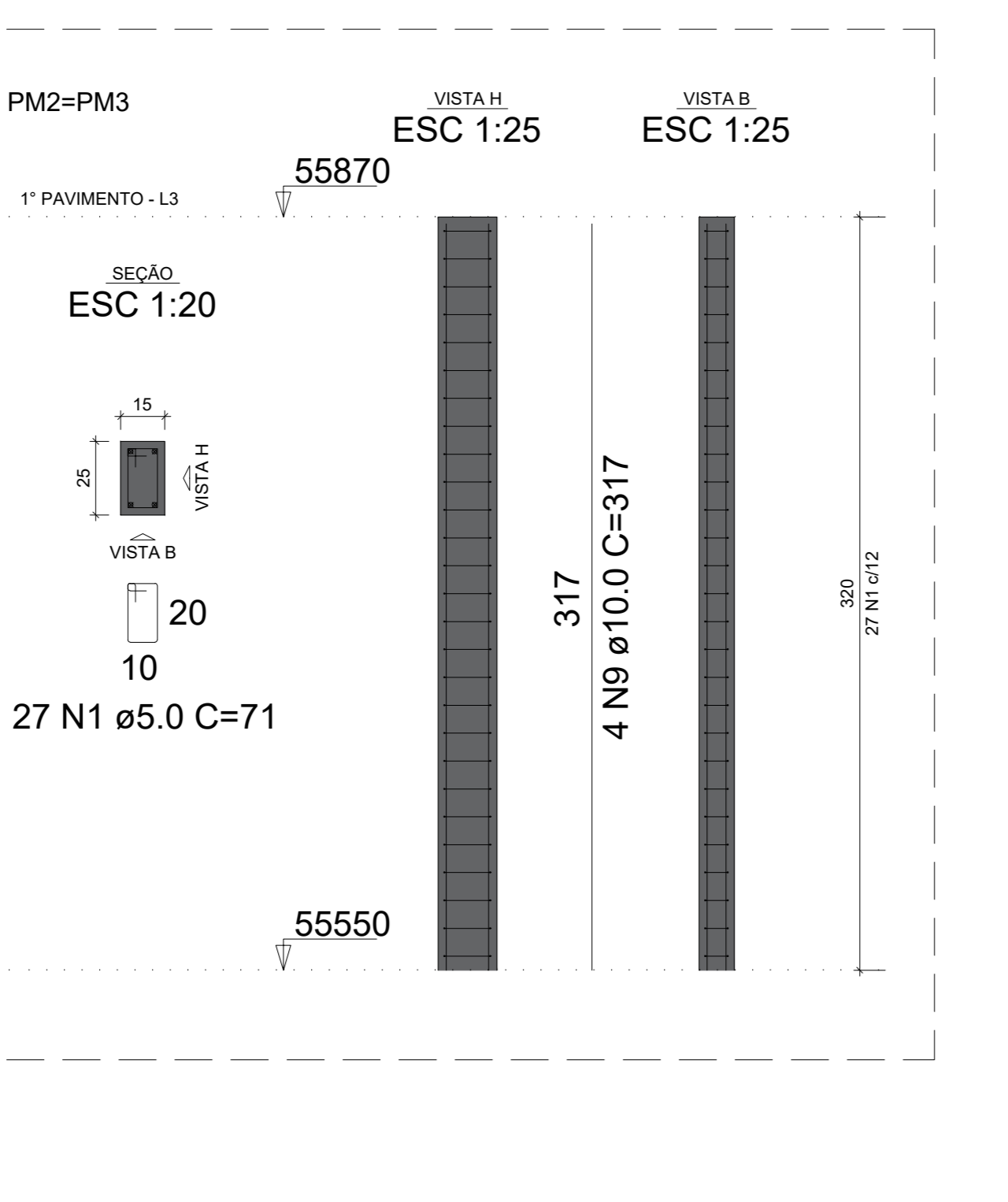
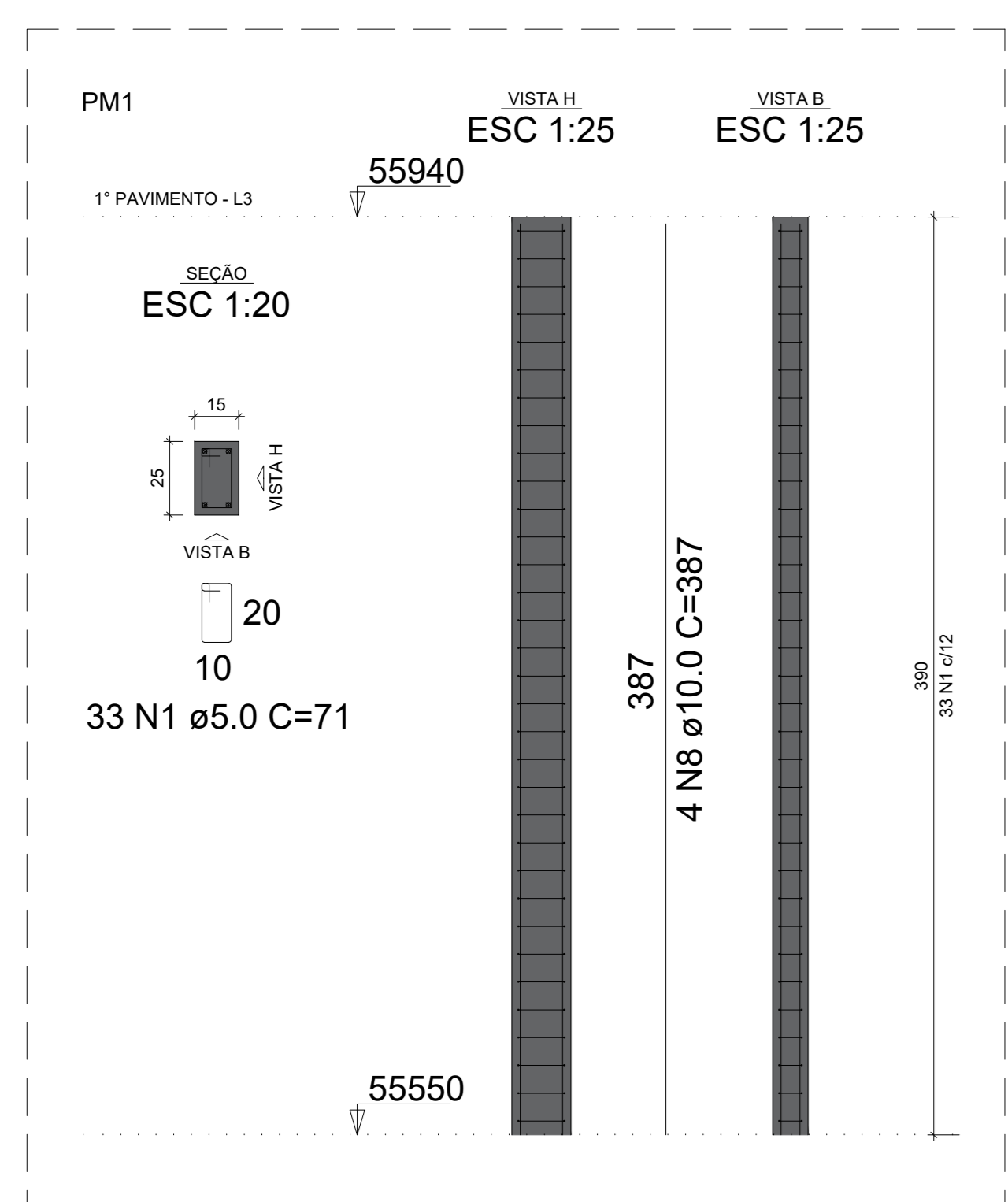
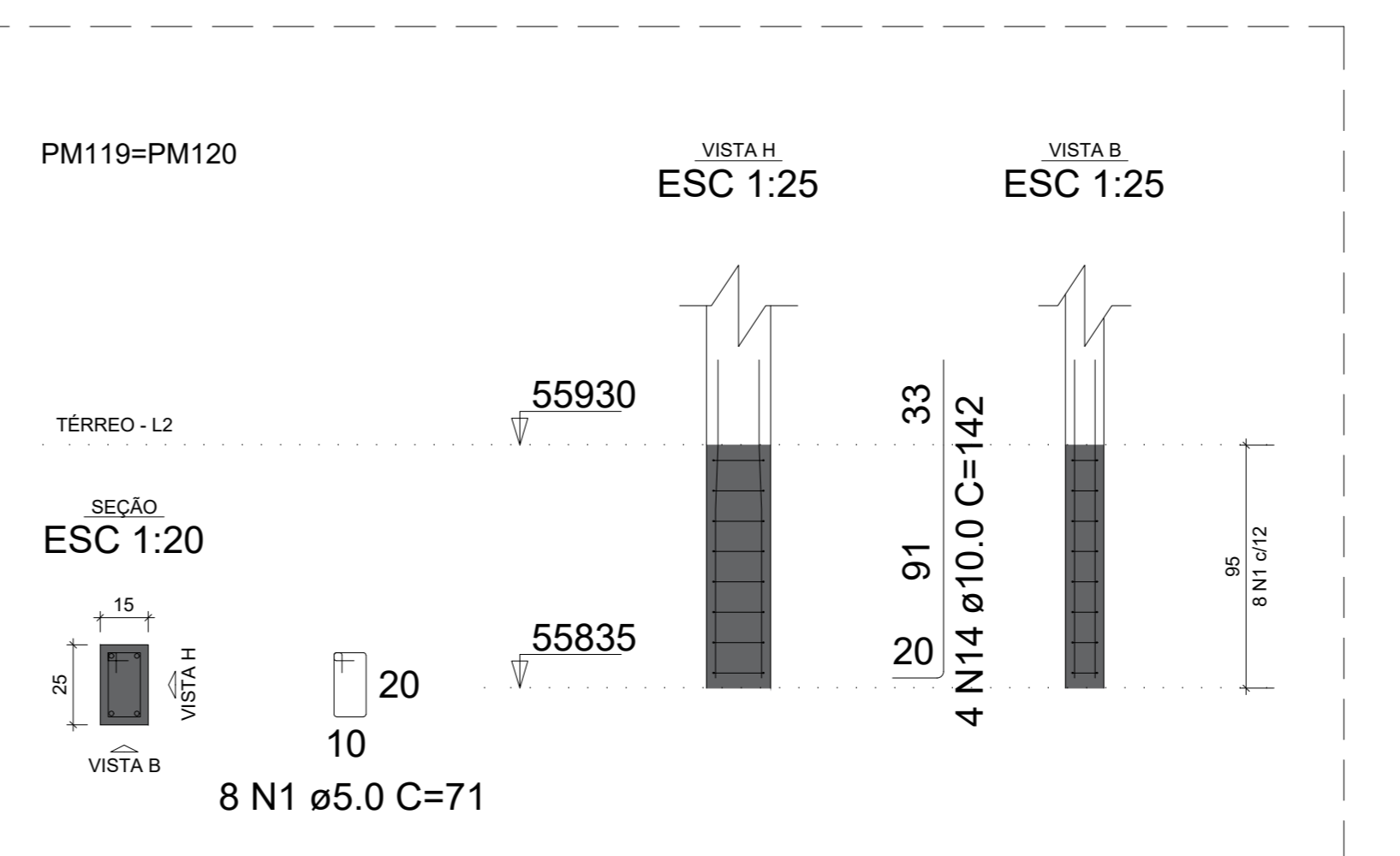
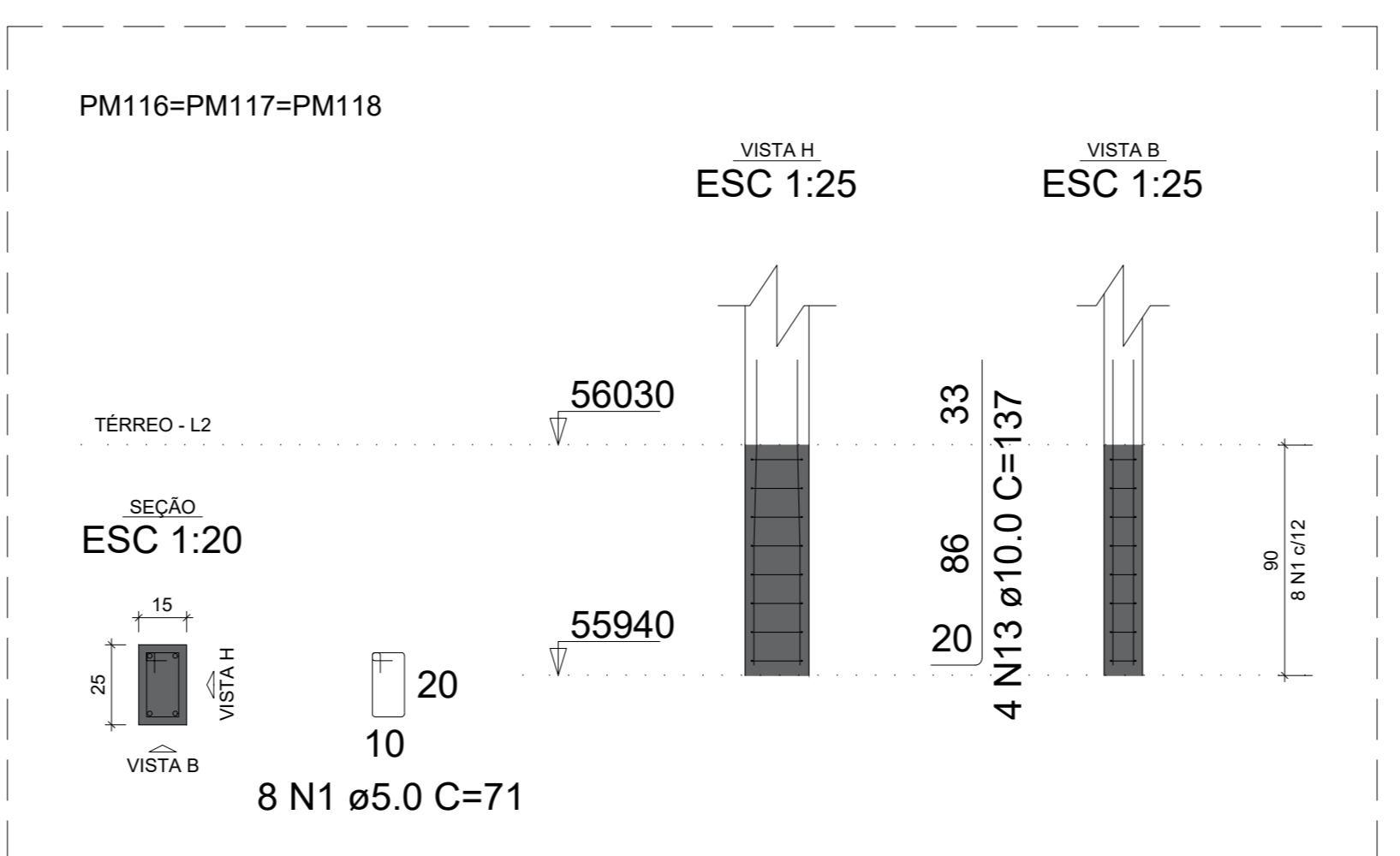
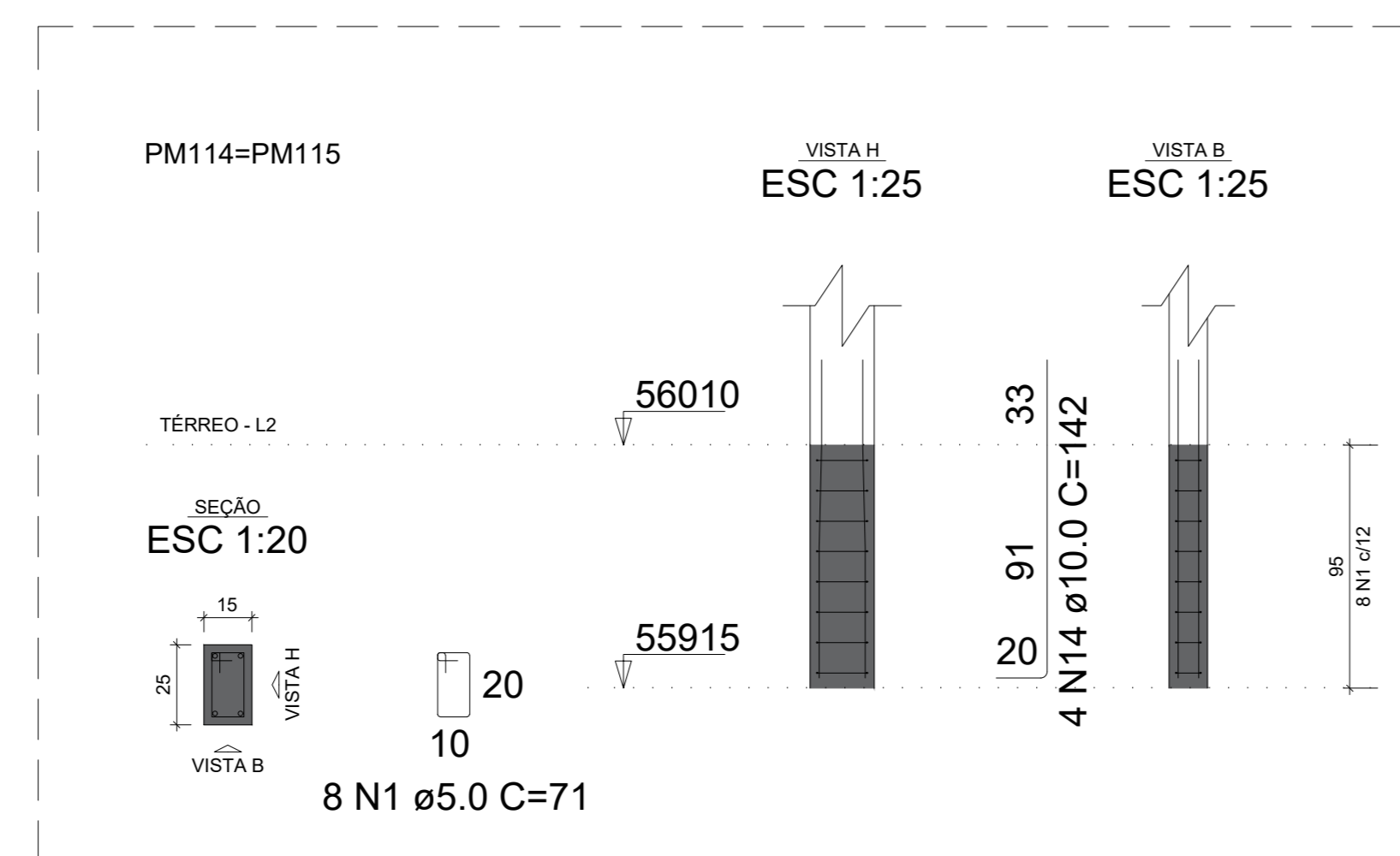
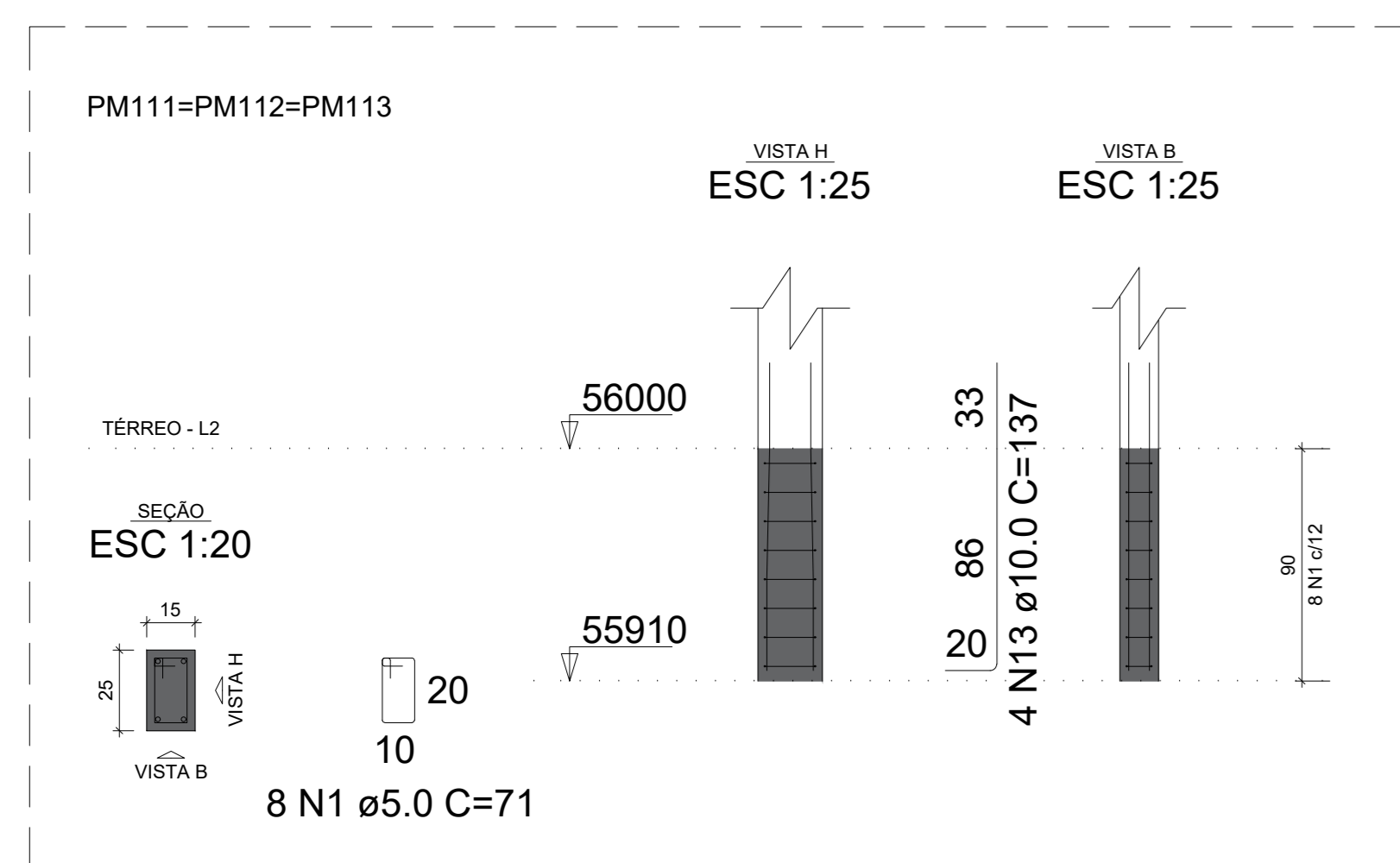
RELAÇÃO DO AÇO - PILAR 03/05

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	747	71	53037
CA60	2	5.0	10	91	910
CA60	3	5.0	284	81	23004
CA60	4	5.0	20	81	1620
CA60	5	5.0	58	101	5858
CA60	6	5.0	61	111	6771
CA60	7	5.0	4	91	364
CA60	8	10.0	4	387	1548
CA60	9	10.0	8	317	2536
CA60	10	10.0	112	107	11984
CA60	11	10.0	112	237	26544
CA60	12	10.0	4	157	628
CA60	13	10.0	36	137	4932
CA60	14	10.0	24	142	3408
CA60	15	12.5	24	137	3288
CA60	16	12.5	8	47	376
CA60	17	16.0	4	557	2228

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	515.8	349.8
CA50	12.5	36.6	38.8
CA60	16.0	22.3	38.7
CA60	5.0	915.6	155.2

PESO TOTAL (kg): CA50 427.3, CA60 155.2

Volume de concreto (C-30) = 6.06 m³
Área de forma = 114.66 m²



ALFREDO PADUA MANZANO
Assinado de forma digital por ALFREDO PADUA MANZANO:27015901838
O:27015901838
Data: 2025.01.09 12:02:09 -03'00'

PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
SECRETARIO MUNICIPAL DE EDUCACAO

ENG. ALFREDO PADUA MANZANO
CREA: 186239/A-08
ART: 262051801916

Endereço: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Cidade: MUNICIPIO DE CAÇAPAVA
Projeto: PROJETO ESTRUTURAL
Levantamento:

Forma de Projeto: 5/6/2024
ÁREA: Ver na folha ARQ 01/52
Folha: 32/60
Escala: Indecida
Data: NOV/2025
Revisão: R01



RELAÇÃO DO AÇO - PILAR 04/05

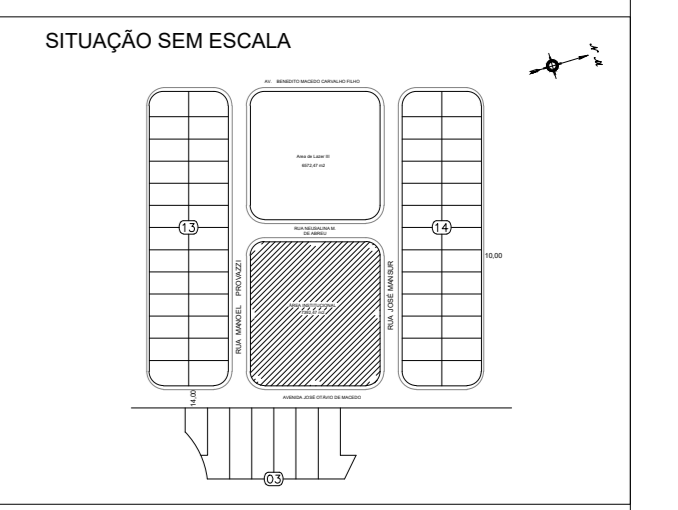
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	32	40	1280
	2	5.0	16	111	1776
	3	5.0	162	101	16362
	4	5.0	1010	71	71710
CA50	5	10.0	16	373	5968
	6	10.0	28	287	8036
	7	10.0	16	297	4752
	8	10.0	16	277	4432
	9	10.0	36	257	9252
	10	10.0	32	267	8544
	11	10.0	12	307	3684
	12	10.0	16	237	3792
	13	10.0	8	247	1976
	14	10.0	4	337	1348
	15	10.0	4	327	1308
	16	12.5	8	382	3056
	17	16.0	8	343	2744

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	530.9	360.1
	12.5	30.6	32.4
	16.0	27.4	47.6
CA60	5.0	911.3	154.5
PESO TOTAL (kg)			
CA50	440.1		
CA60	154.5		

Volume de concreto (C-30) = 6.26 m³
 Área de forma = 121.20 m²

ALFREDO PADUA MANZANO
 Assinado de forma digital por ALFREDO PADUA MANZANO: MANZANO:27015901838
 Dados: 2026.01.09 12:00:37 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 sales

DR. VAN LOPES ALMEIDA
 PREFEITO MUNICIPAL

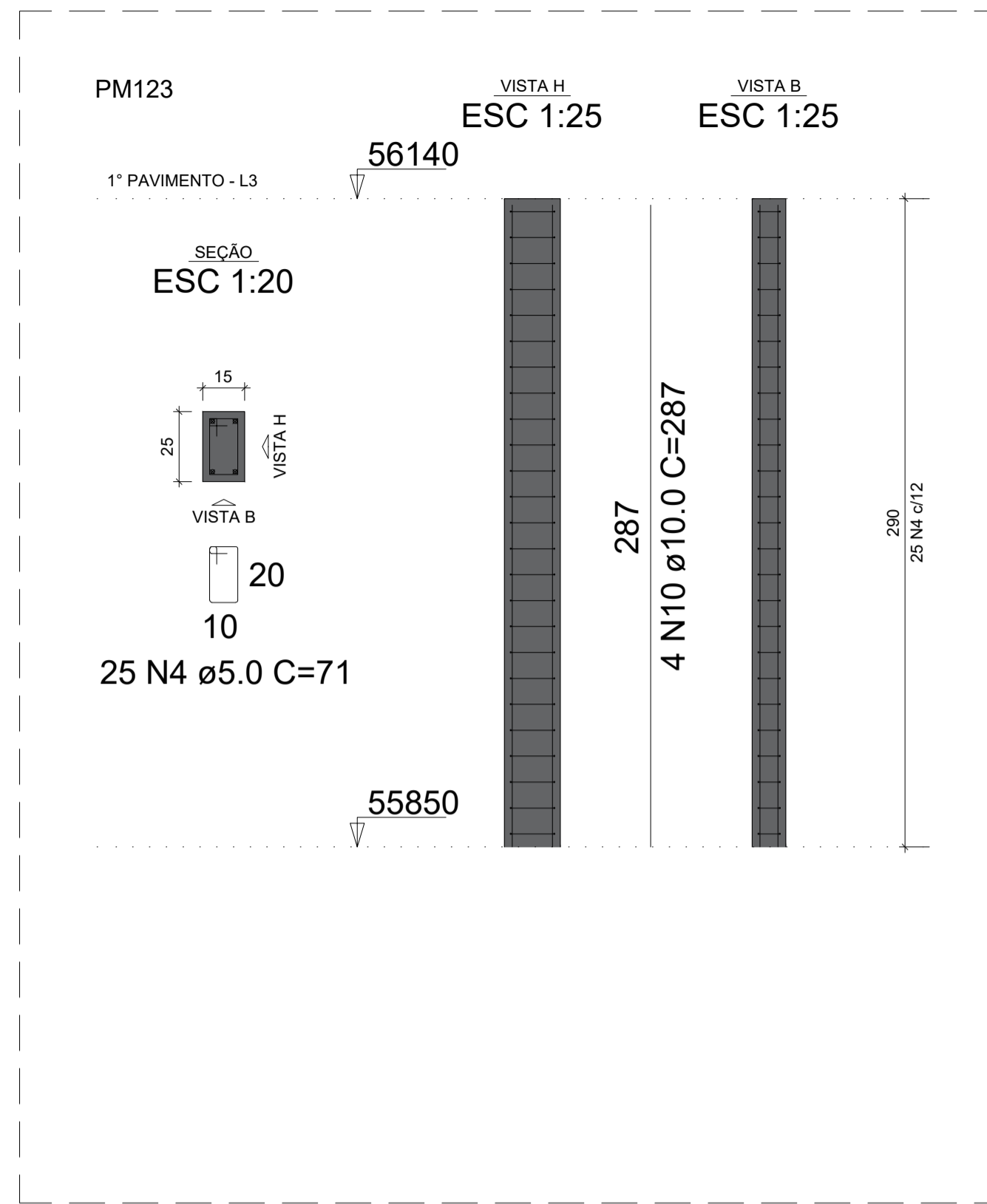
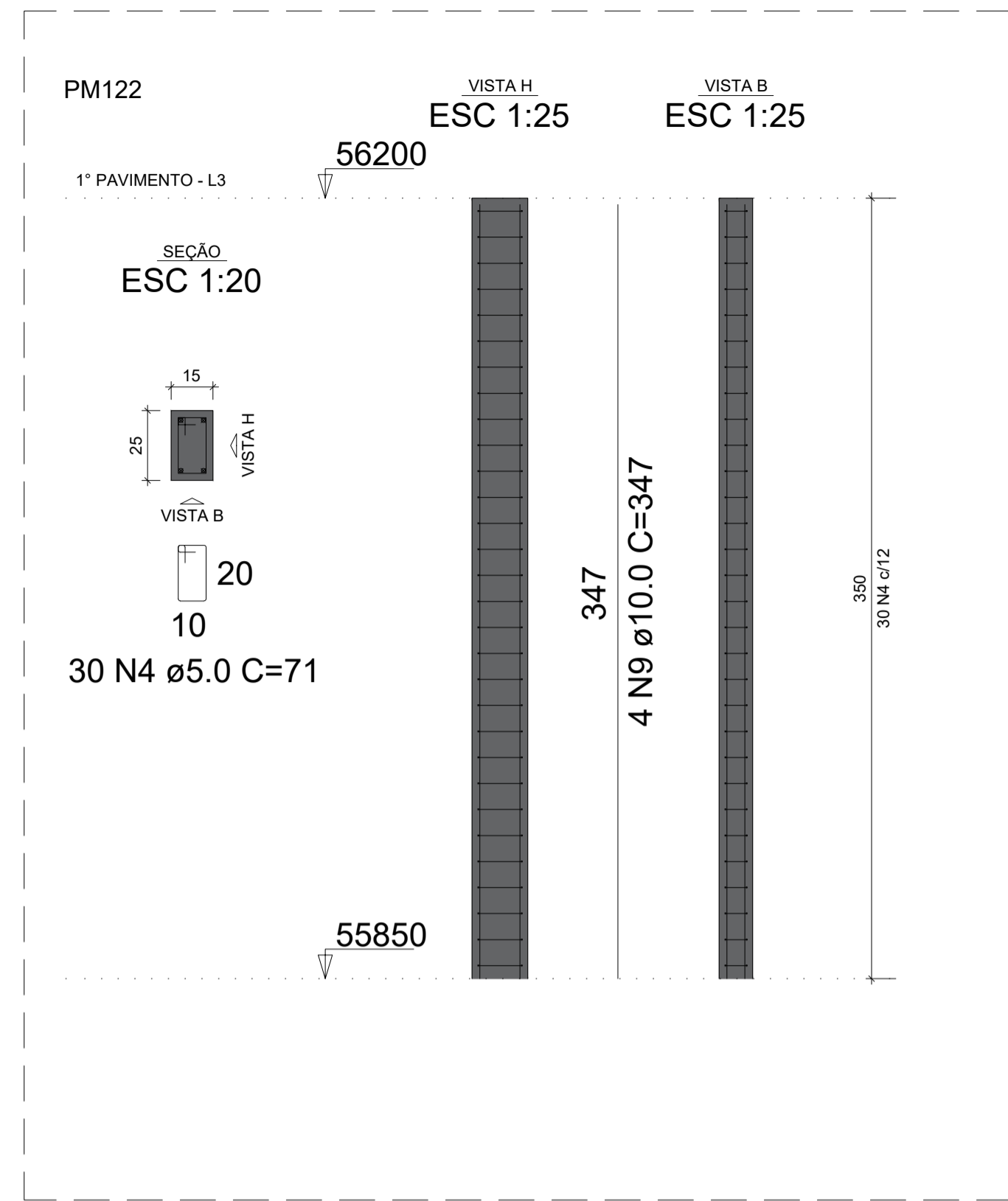
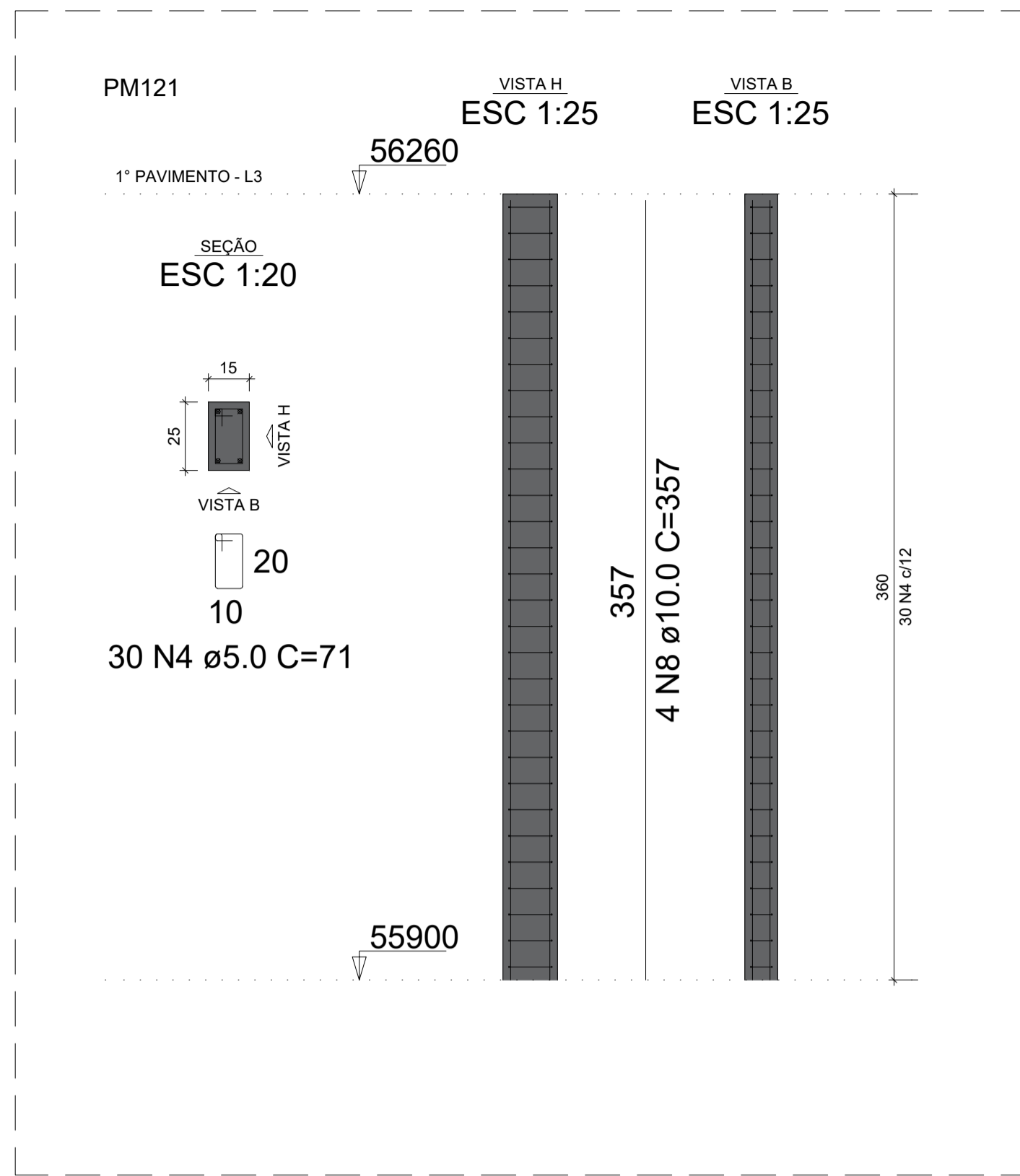
ANTONIO POTIGUARA CHAGAS FERREIRA
 SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANTIA
 SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
 CREA: 186239/A-08
 ART: 262051801916

Entrega: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
 Cliente: MUNICIPIO DE CAÇAPAVA
 Desenho: PROJETO ESTRUTURAL
 Levantamento:

Nome do Projeto: 5.6132004
 Área: Ver na folha ARG 01/52
 Folha: 33/60
 Escala: Indecida
 Data: NOV/2025
 Projeto: R01



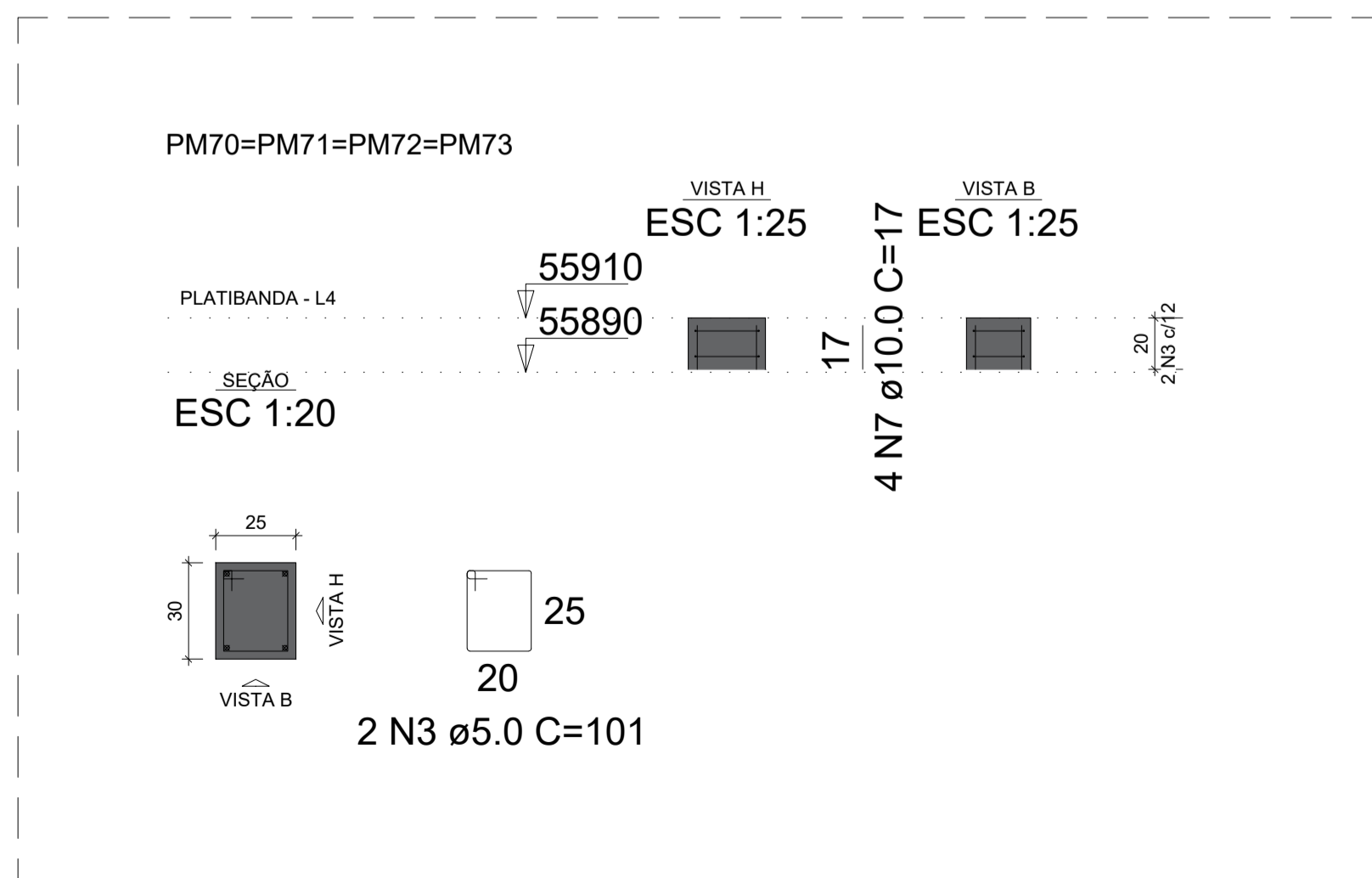
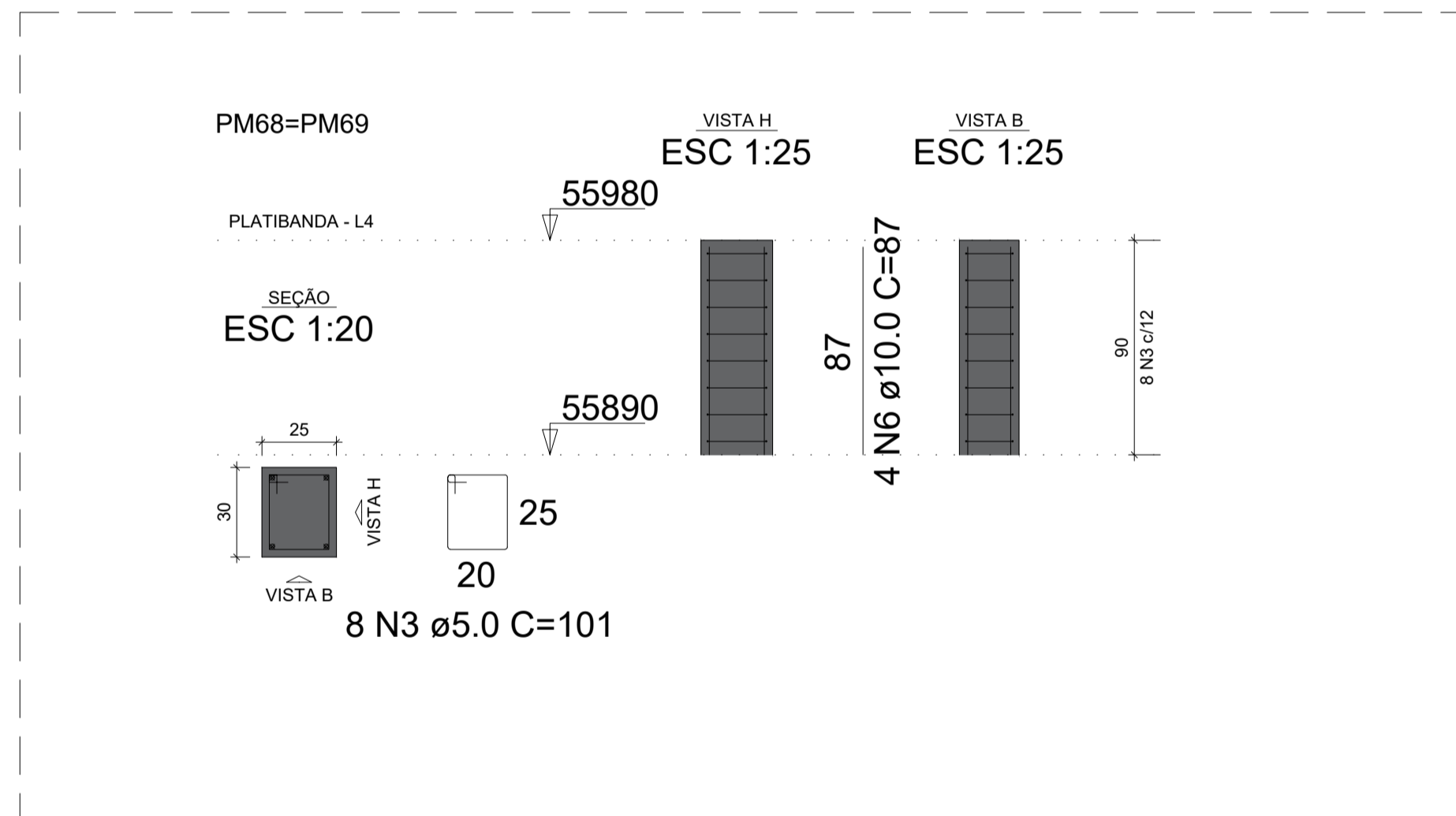
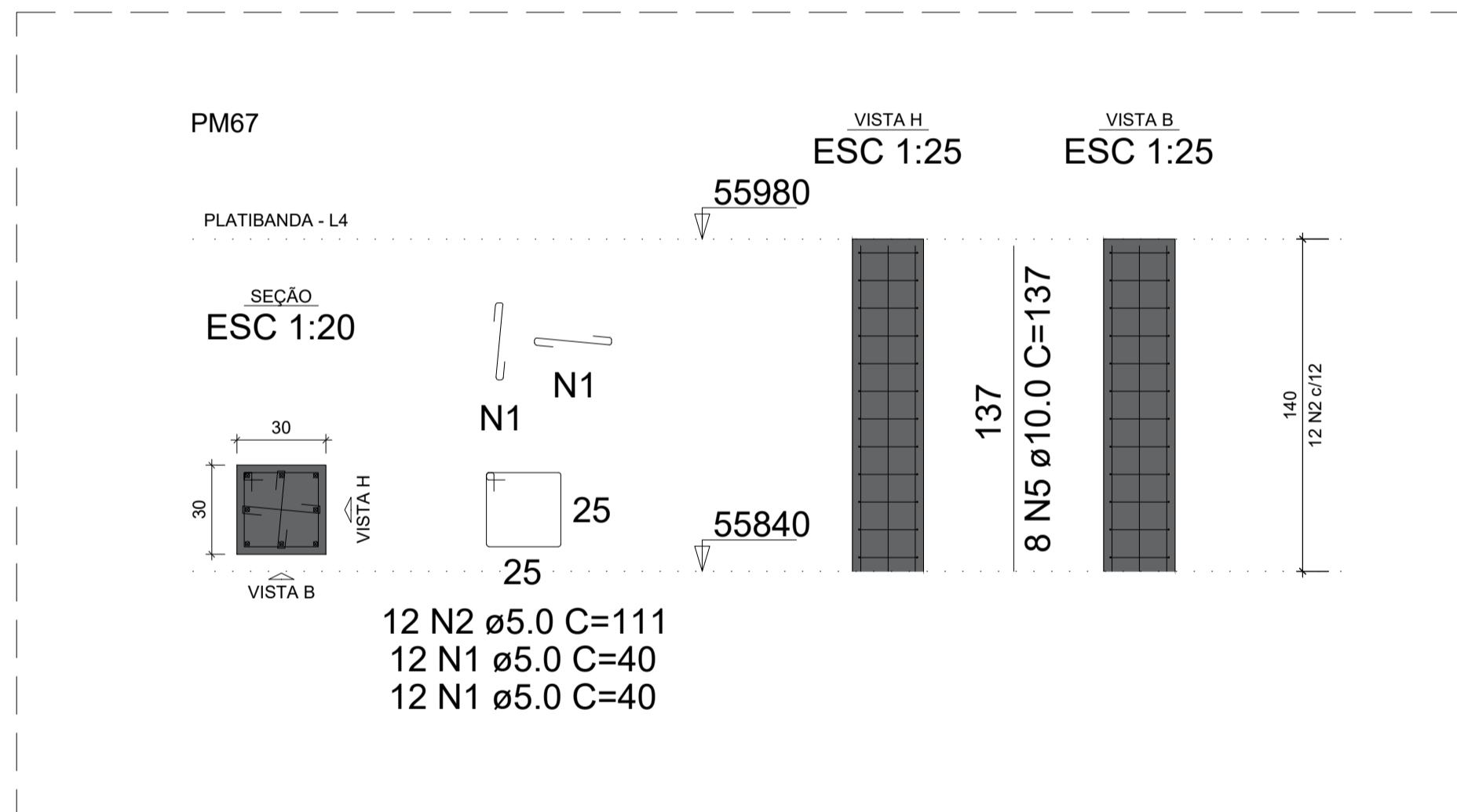
RELAÇÃO DO AÇO - PILAR 05/05

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	24	40	960
	2	5.0	12	111	1332
	3	5.0	24	101	2424
CA50	4	5.0	85	71	6035
	5	10.0	8	137	1096
	6	10.0	8	87	696
	7	10.0	16	17	272
	8	10.0	4	357	1428
	9	10.0	4	347	1388
	10	10.0	4	287	1148

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	60.3	40.9
CA60	5.0	107.5	18.2
PESO TOTAL (kg)			
CA50			40.9
CA60			18.2

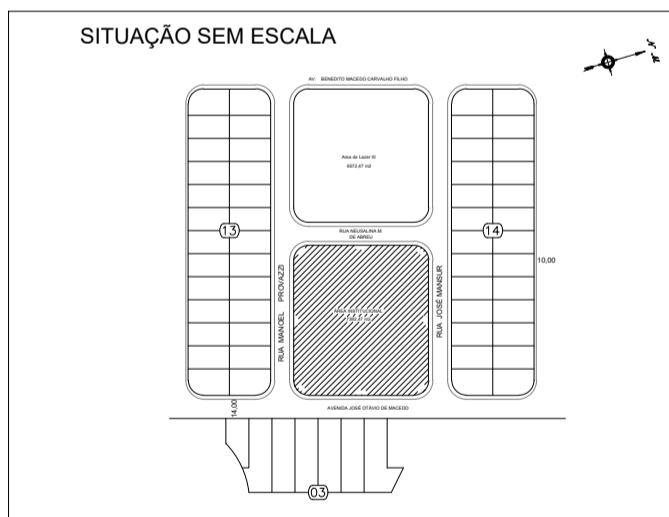
Volume de concreto (C-30) = 0.70 m³
 Área de forma = 12.54 m²



ALFREDO PADUA MANZANO: 27015901838

Assinado de forma digital por ALFREDO PADUA MANZANO:27015901838

Dados: 2026.01.08 12:00:59 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
 SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
 Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. YAN LOPES ALMEIDA
 PREFEITO MUNICIPAL



ANTÔNIO POTIGUARA CHAGAS FERREIRA
 SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
 SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
 CREA: 5062359814-SP
 ART: 2620251651916

Endereço: AVENIDA JOSÉ OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA

Número do Processo: 5.612/2024

Cliente: MUNICÍPIO DE CAÇAPAVA

ÁREAS: Ver na folha ARQ 01/52

Desenho: PROJETO ESTRUTURAL

Descrição: BLOCO MURO- LOCAÇÃO

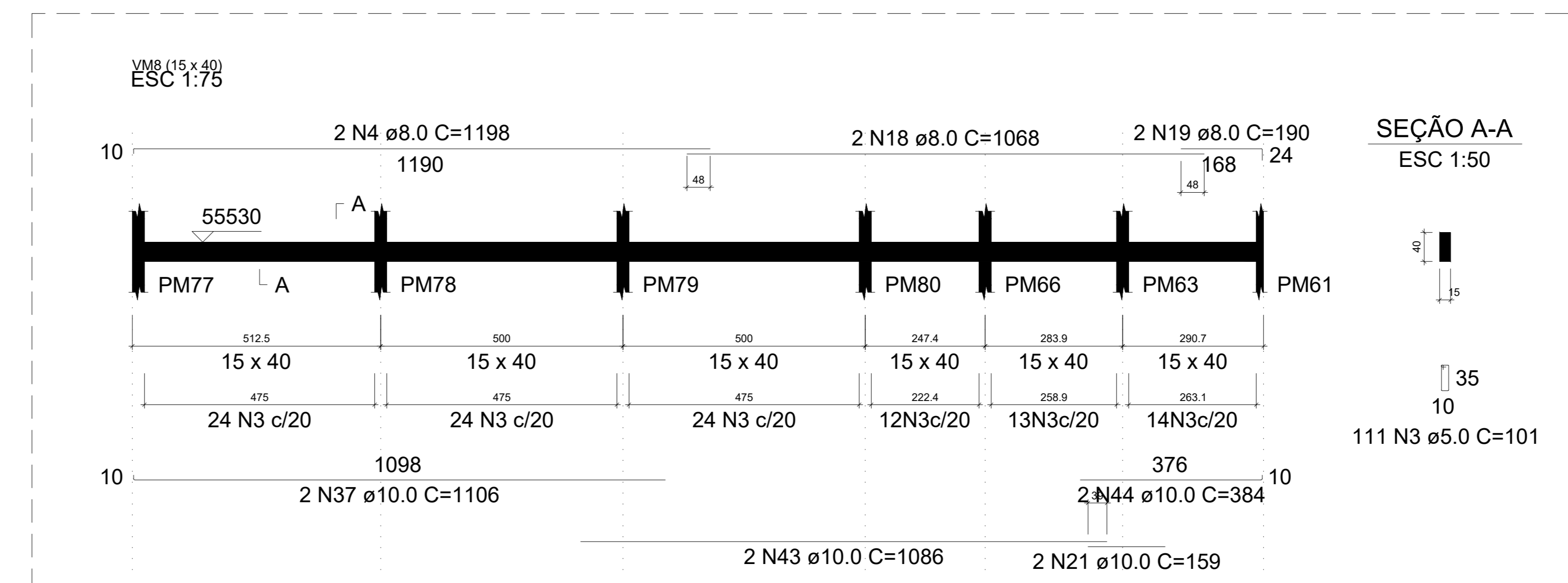
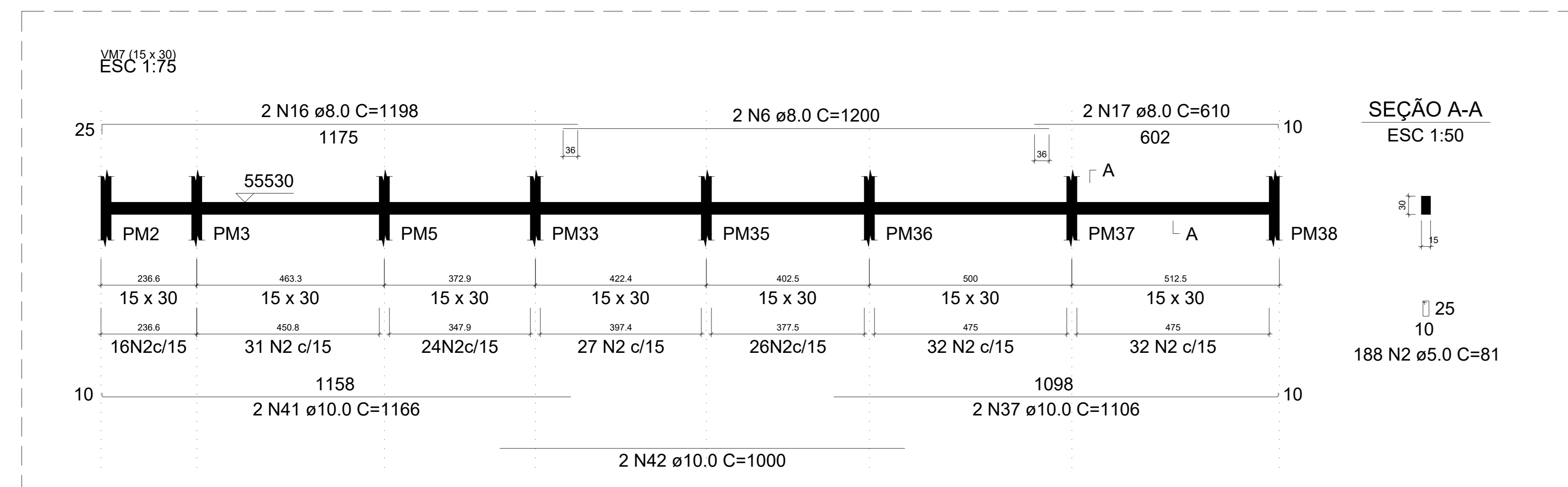
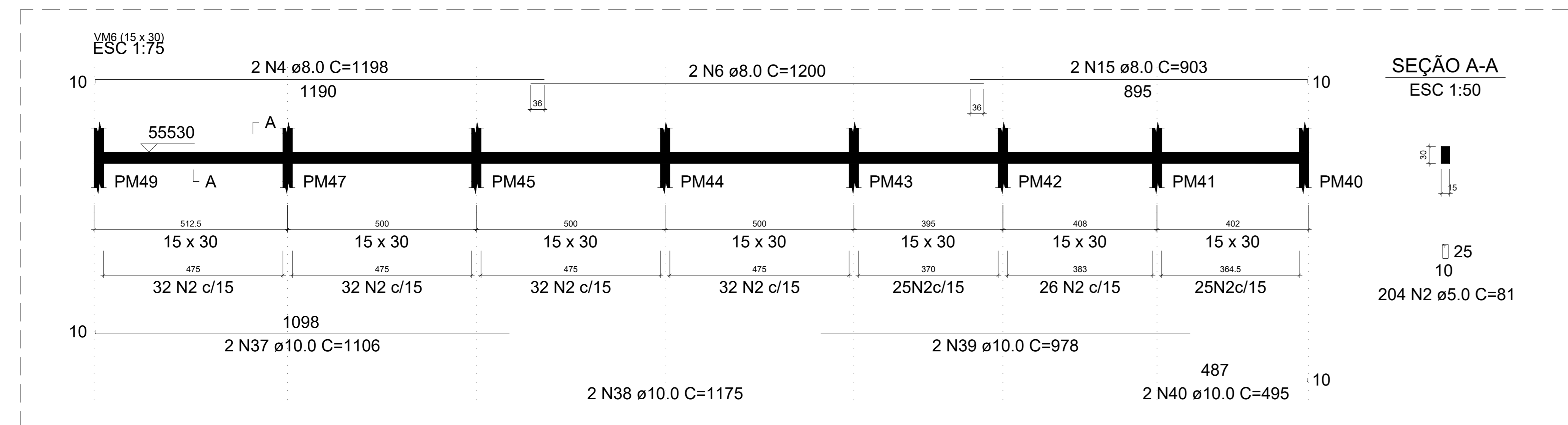
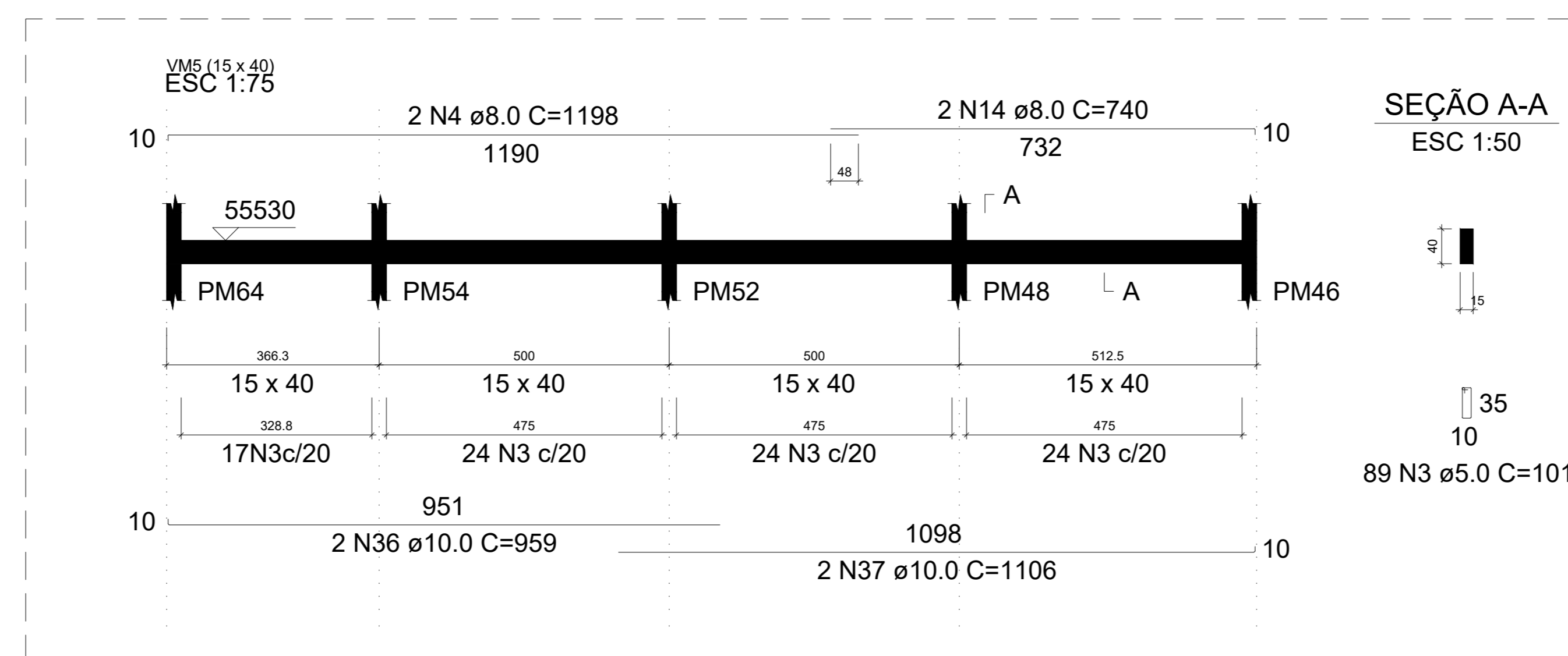
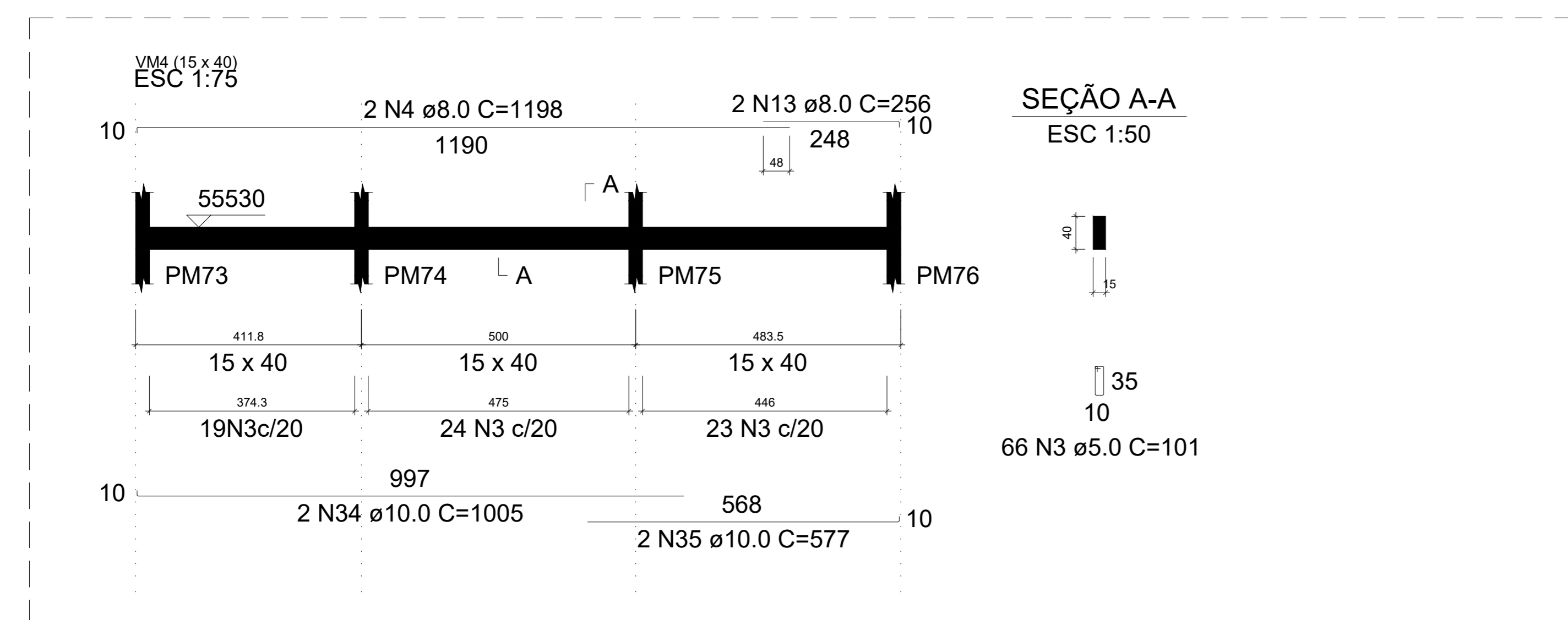
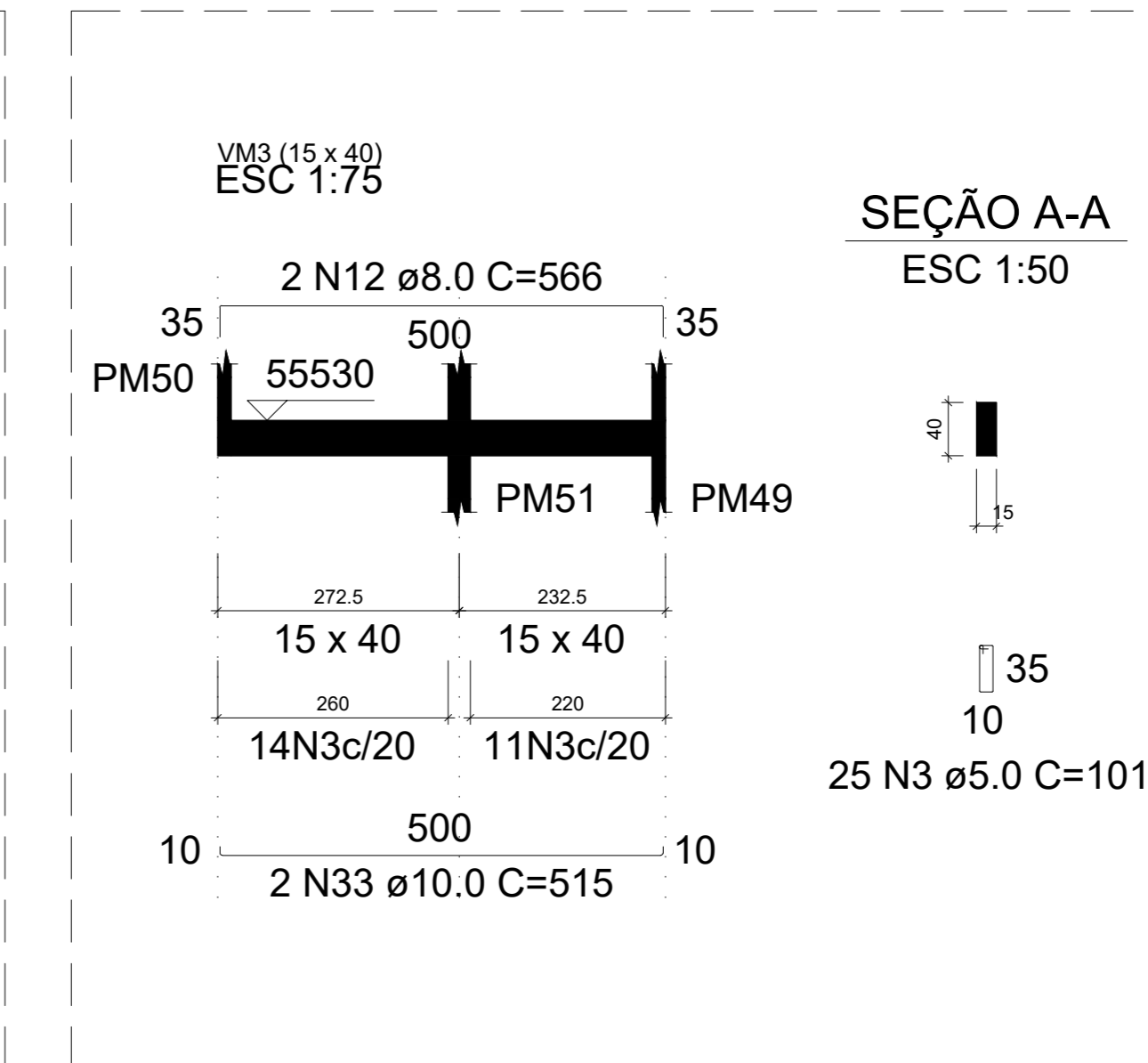
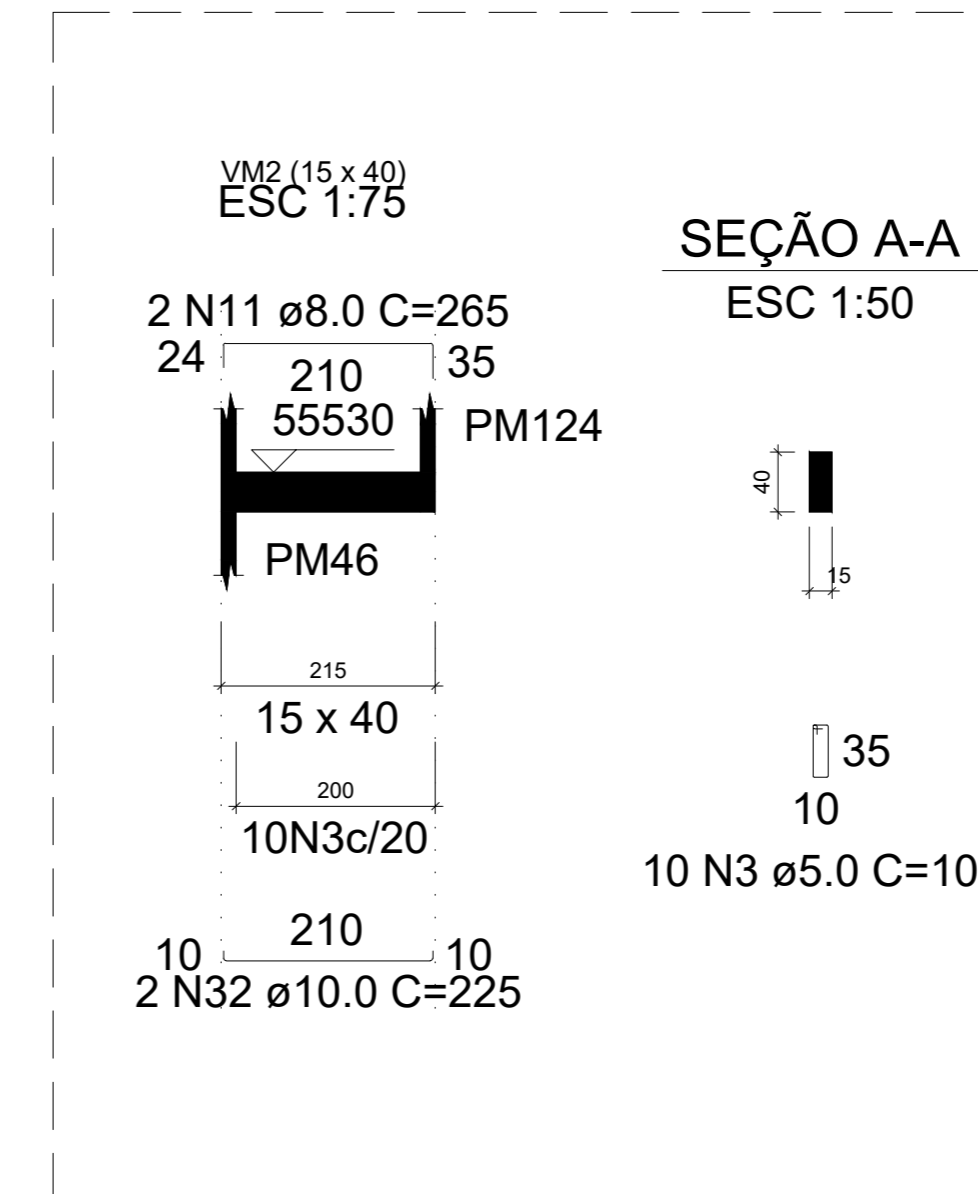
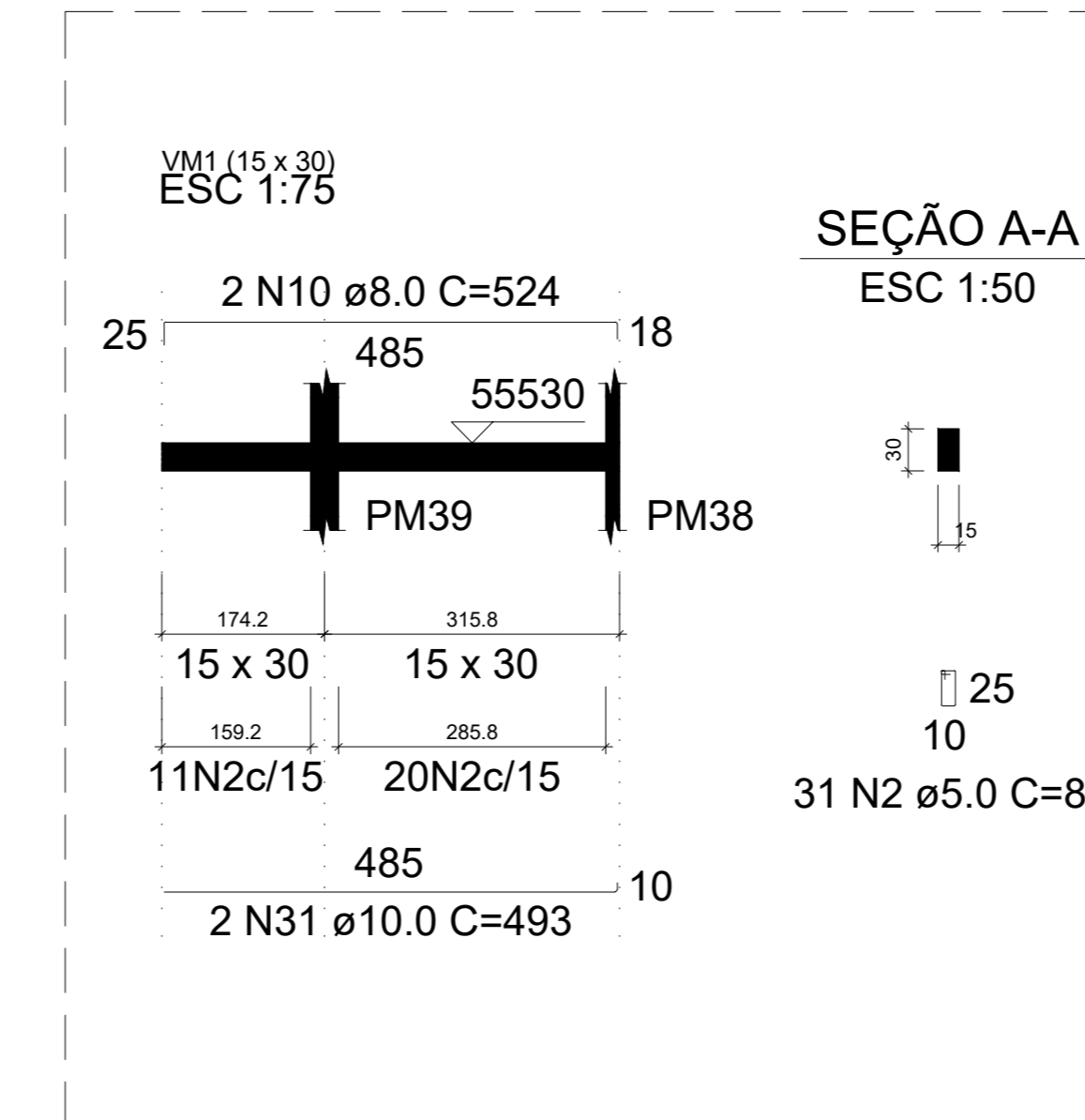
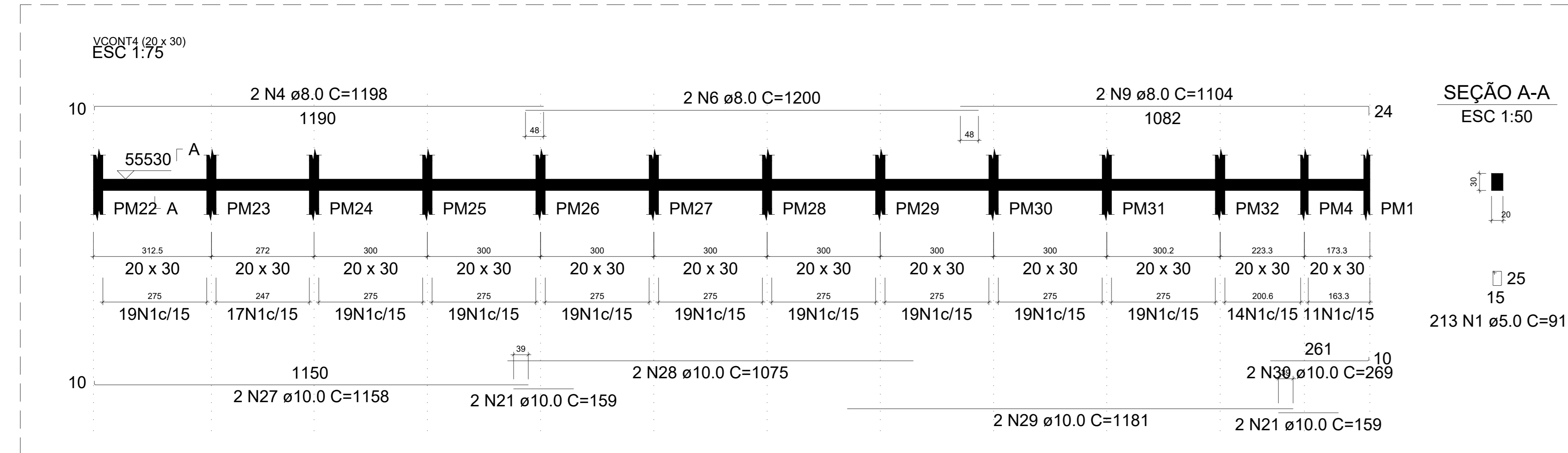
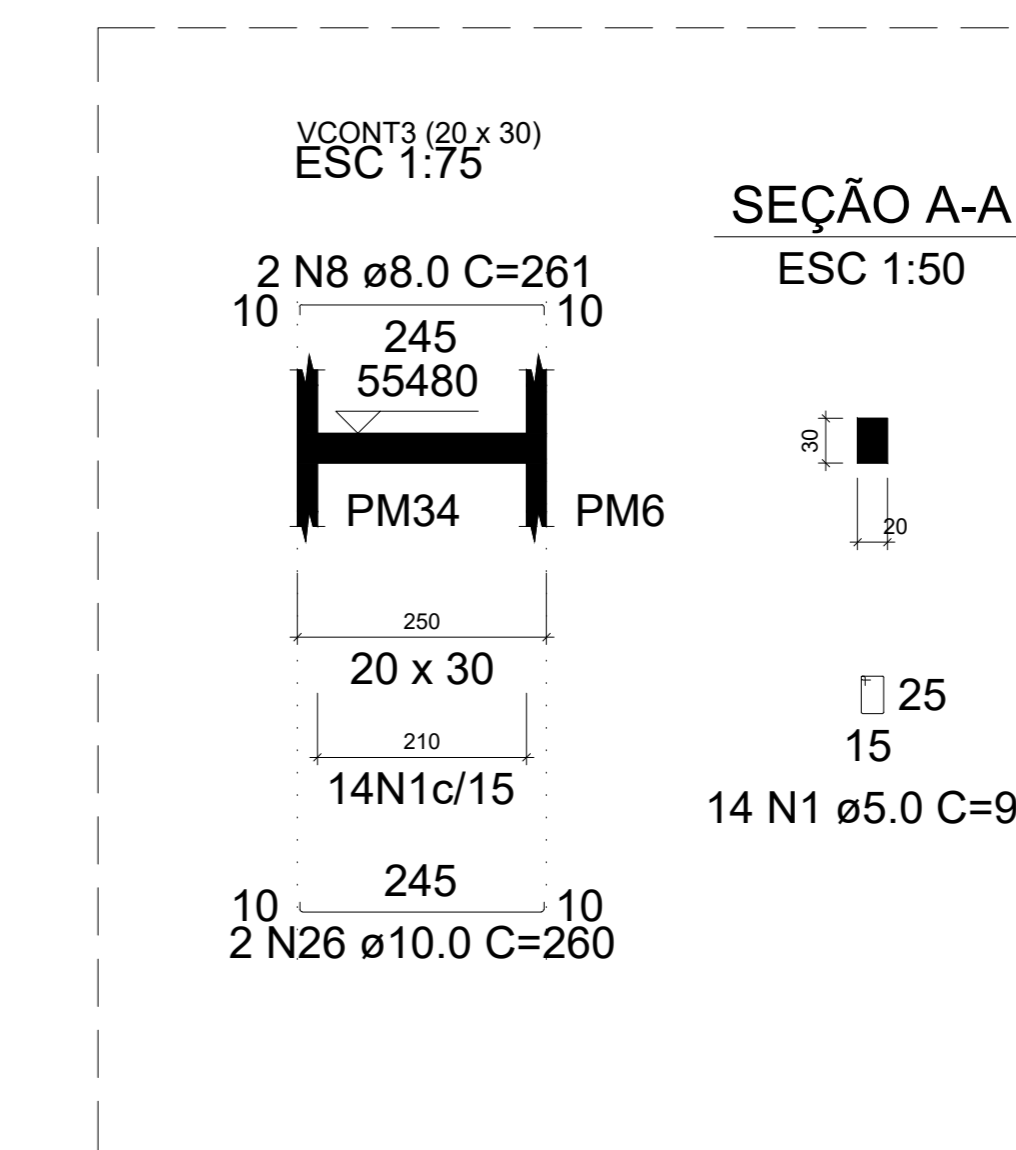
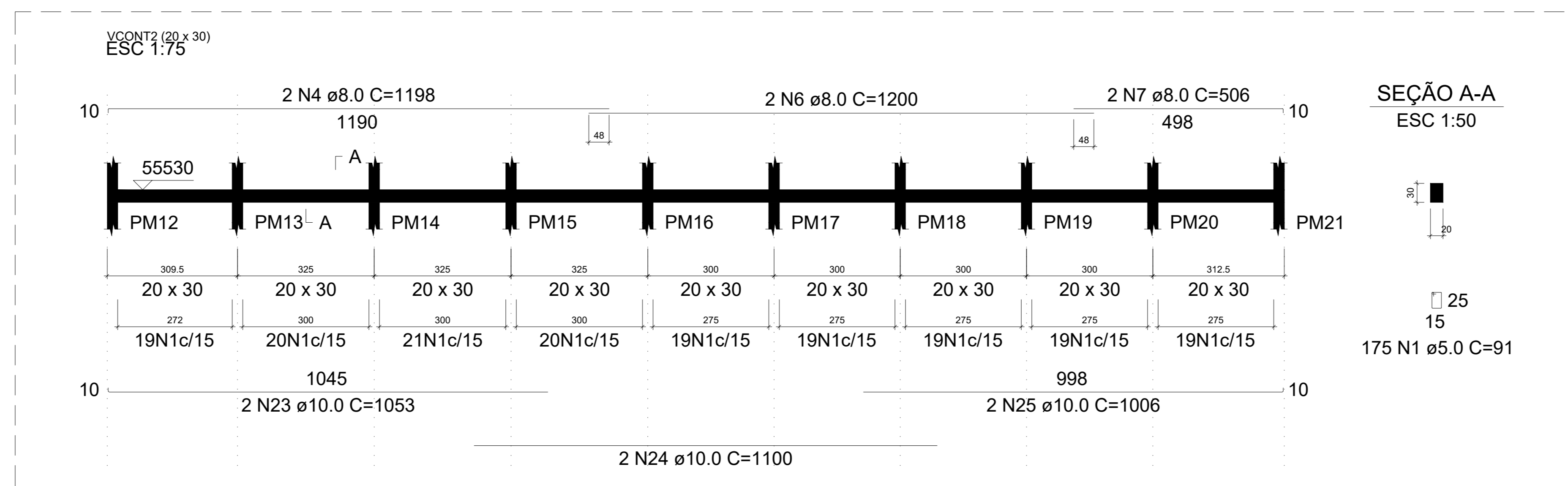
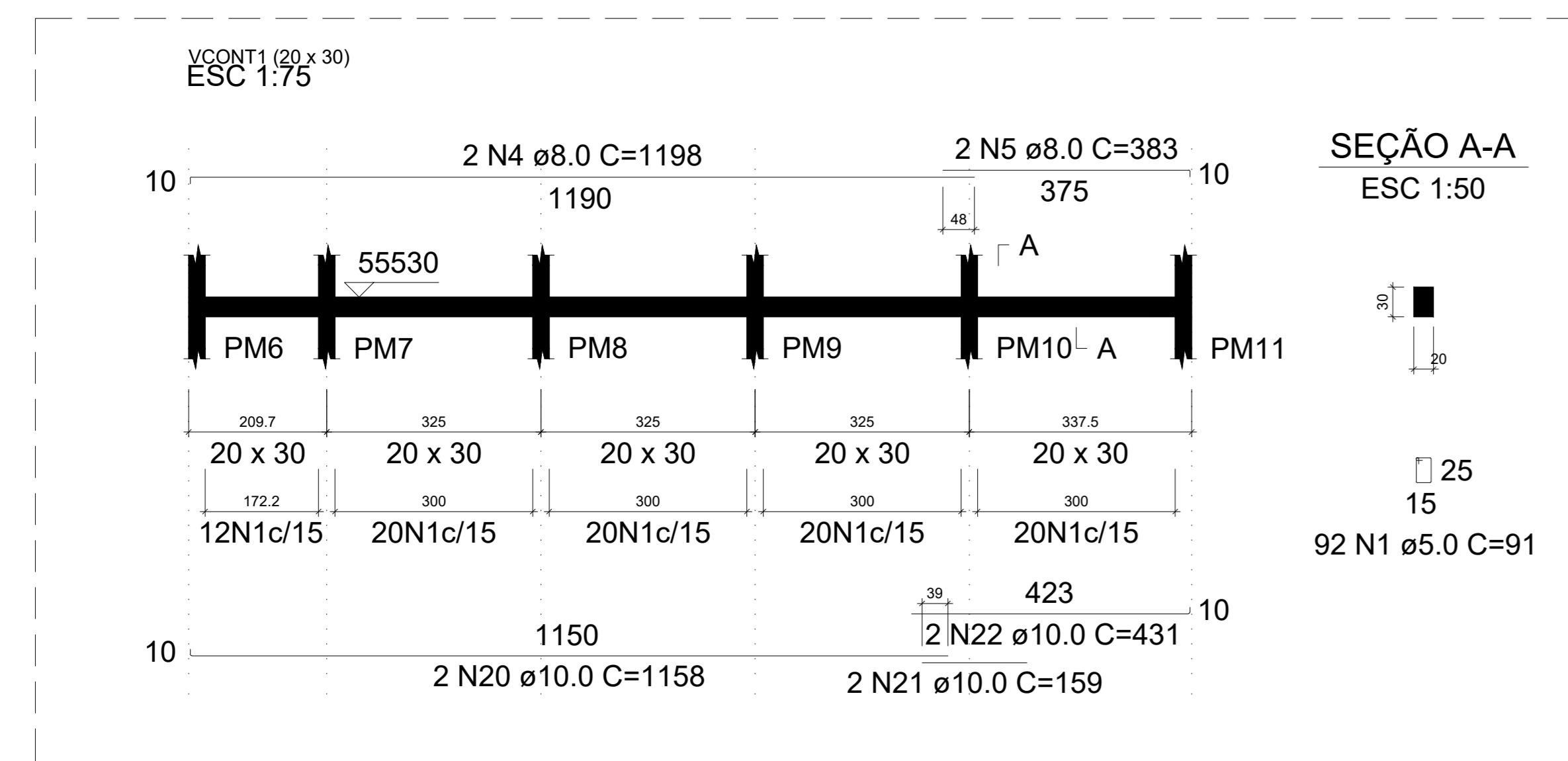
Prancha: 30/40

Levantamento:

Escala: Indicada

Data: NOV/2025

Revisão: R01



RELAÇÃO DO AÇO - VIGA BALDRAME 01/02

ACO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	494	91	44954
	3	5.0	423	81	34263
	3	5.0	301	101	30401
CA50	4	8.0	14	1198	16772
	5	8.0	2	383	766
	6	8.0	8	1200	9600
	7	8.0	2	506	1012
	8	8.0	2	281	522
	9	8.0	2	1104	2208
	10	8.0	2	524	1048
	11	8.0	2	265	530
	12	8.0	2	566	1132
	13	8.0	2	256	512
	14	8.0	2	740	1480
	15	8.0	2	903	1806
	16	8.0	2	1198	2396
	17	8.0	2	610	1220
	18	8.0	2	1068	2136
	19	8.0	2	190	380
	20	10.0	2	1158	2316
	21	10.0	8	159	1272
	22	10.0	2	431	862
	23	10.0	2	1053	2106
	24	10.0	2	1100	2200
	25	10.0	2	1006	2012
	26	10.0	2	260	520
	27	10.0	2	1158	2316
	28	10.0	2	1075	2150
	29	10.0	2	1181	2362
	30	10.0	2	269	538
	31	10.0	2	493	986
	32	10.0	2	225	450
	33	10.0	2	515	1030
	34	10.0	2	1005	2010
	35	10.0	2	577	1154
	36	10.0	2	959	1918
	37	10.0	8	1106	8848
	38	10.0	2	1175	2350
	39	10.0	2	978	1956
	40	10.0	2	495	990
	41	10.0	2	1166	2332
	42	10.0	2	1000	2000
	43	10.0	2	1086	2172
	44	10.0	2	384	768

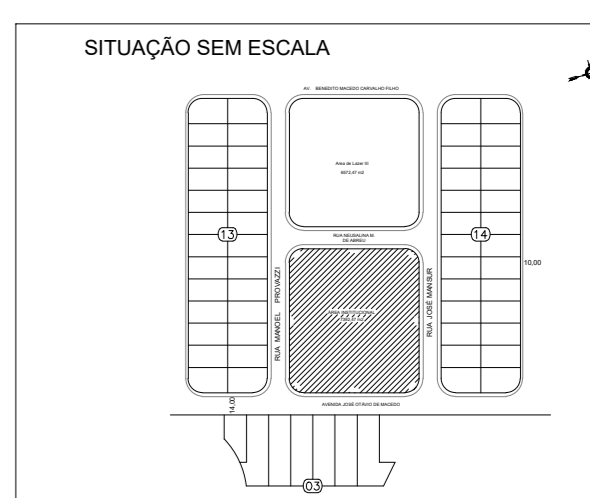
RESUMO DO AÇO

ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	435.2	188.9
CA60	10.0	476.2	322.9
CA60	5.0	1096.2	185.9

PESO TOTAL (kg)
CA50 511.8
CA60 185.9

Volume de concreto (C-30) = 10.65 m³
Área de forma = 160.15 m²

Assinado digitalmente por
ALFREDO PADUA MANZANO
MANZANO:27015 901838
:27015901 838
2026.01.09 11:59:02 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorâmica – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL
ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
ENGR. ALFREDO PADUA MANZANO
CREA: 190339/A-08
ART: 262051801916

Endereço: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Cidade: MUNICIPIO DE CAÇAPAVA
Descrição: PROJETO ESTRUTURAL
Escala: Indicação
Data: NOV/2025
Folha: 30/40
Revisão: R01

RELAÇÃO DO AÇO - VIGA BALDRAME 02/02

VM101	VM102	VM103
VM104	VM105	VM106
VM107	VM108	VM109
VM110	VM111	VM112
VM113	VM114	VM115
VM116	VM117	VM118

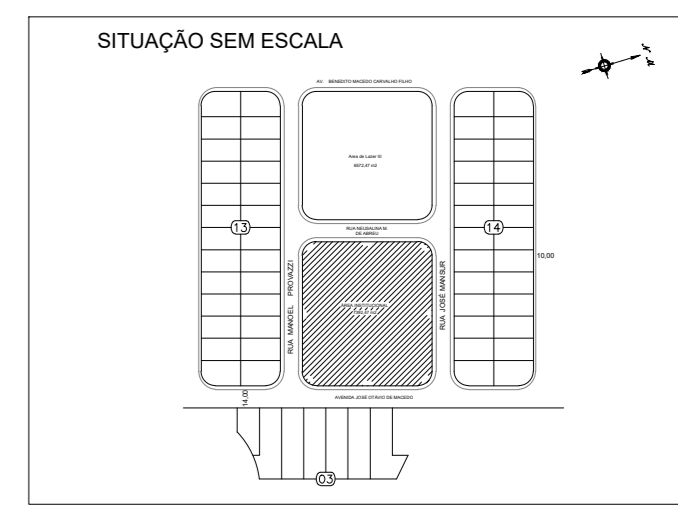
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	862	101	87062
CA50	2	8.0	1	142	142
	3	8.0	2	536	1072
	4	8.0	4	508	2032
	5	8.0	12	1198	14376
	6	8.0	8	386	3088
	7	8.0	4	1008	4032
	8	8.0	4	1036	4144
	9	8.0	2	358	716
	10	8.0	2	534	1068
	11	8.0	2	811	1622
	12	8.0	2	655	1310
	13	10.0	2	535	1070
	14	10.0	4	507	2028
	15	10.0	6	1106	6636
	16	10.0	8	606	4848
	17	10.0	4	1007	4028
	18	10.0	4	1035	4140
	19	10.0	2	1078	2156
	20	10.0	2	1198	2396
	21	10.0	2	513	1026
	22	10.0	2	533	1066
	23	10.0	2	810	1620
	24	10.0	2	989	1978
	25	10.0	2	991	1982
	26	12.5	1	390	390
	27	12.5	2	819	1638
	28	12.5	1	471	471
	29	12.5	2	823	1646
	30	12.5	3	534	1602
	31	12.5	1	535	535
	32	12.5	2	542	1084
	33	12.5	3	696	2088
	34	12.5	1	697	697
	35	12.5	2	704	1408

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	336	145.8
	10.0	349.7	237.2
	12.5	115.6	122.5
CA60	5.0	870.6	147.6
PESO TOTAL (kg)			
CA50		505.5	
CA60		147.6	

Volume de concreto (C-30) = 10.14 m³
Área de forma = 160.51 m²

ALFREDO PADUA MANZANO:27015901838
Assinado de forma digital por ALFREDO PADUA MANZANO:27015901838
Dados: 2026.01.09 11:59:52 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL

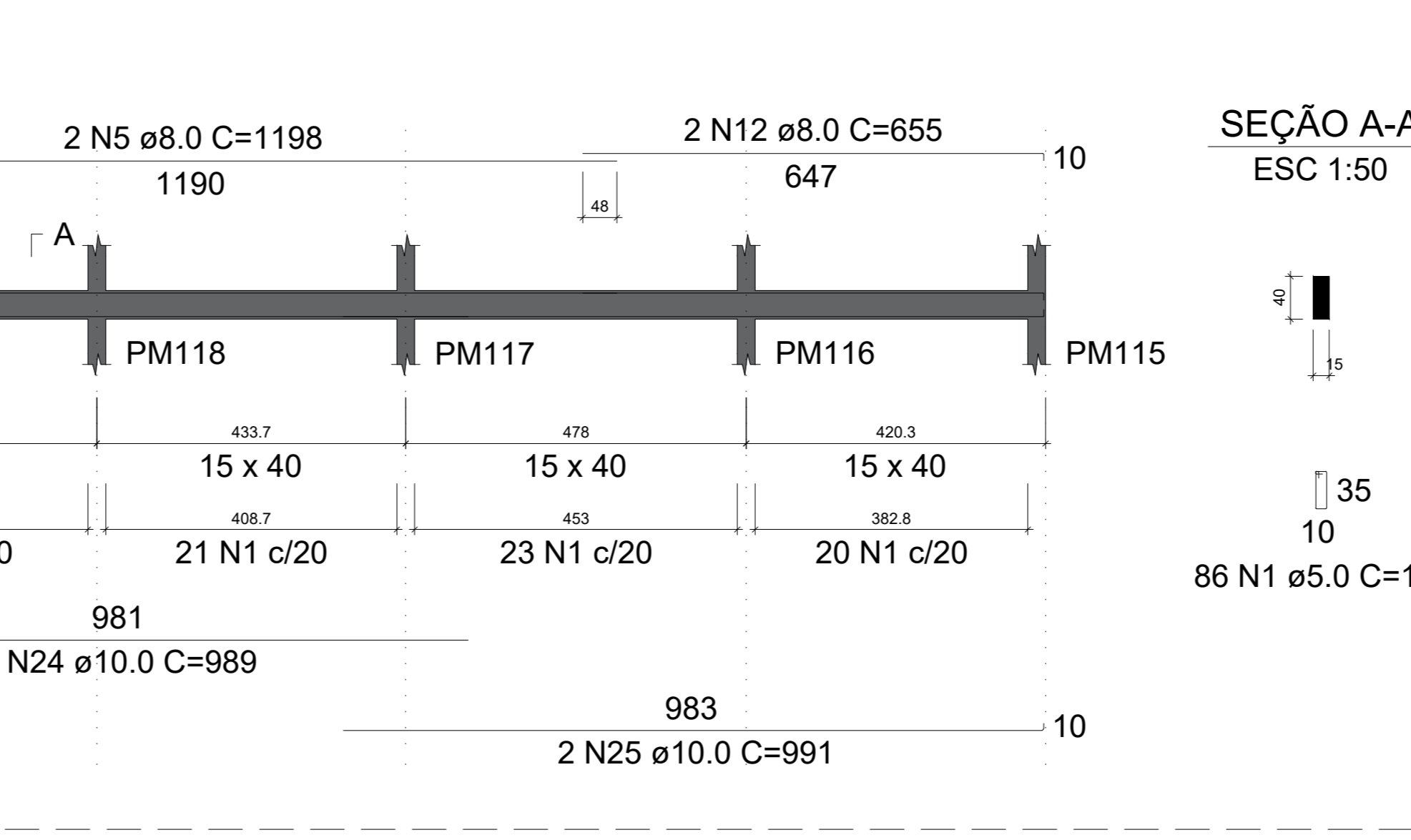
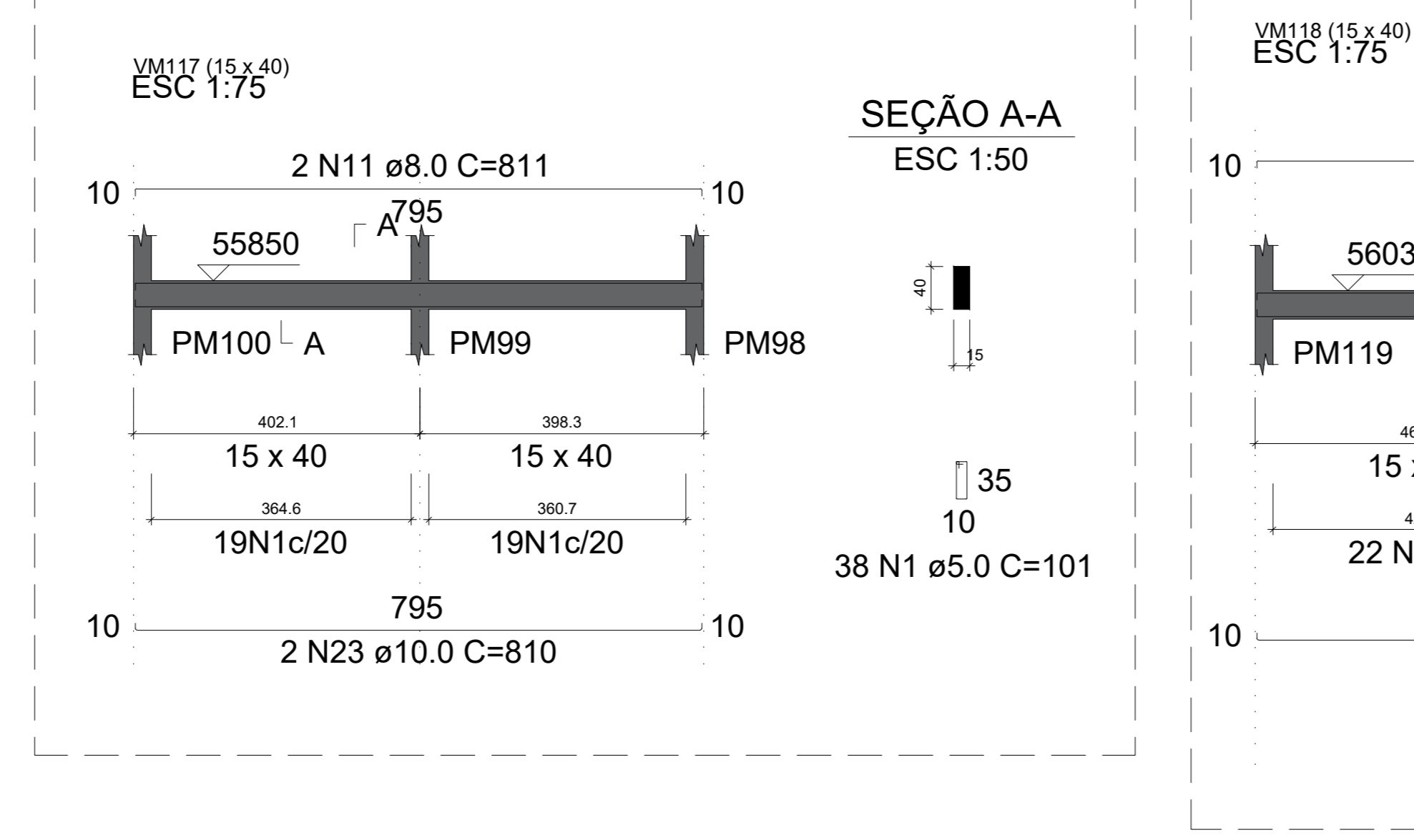
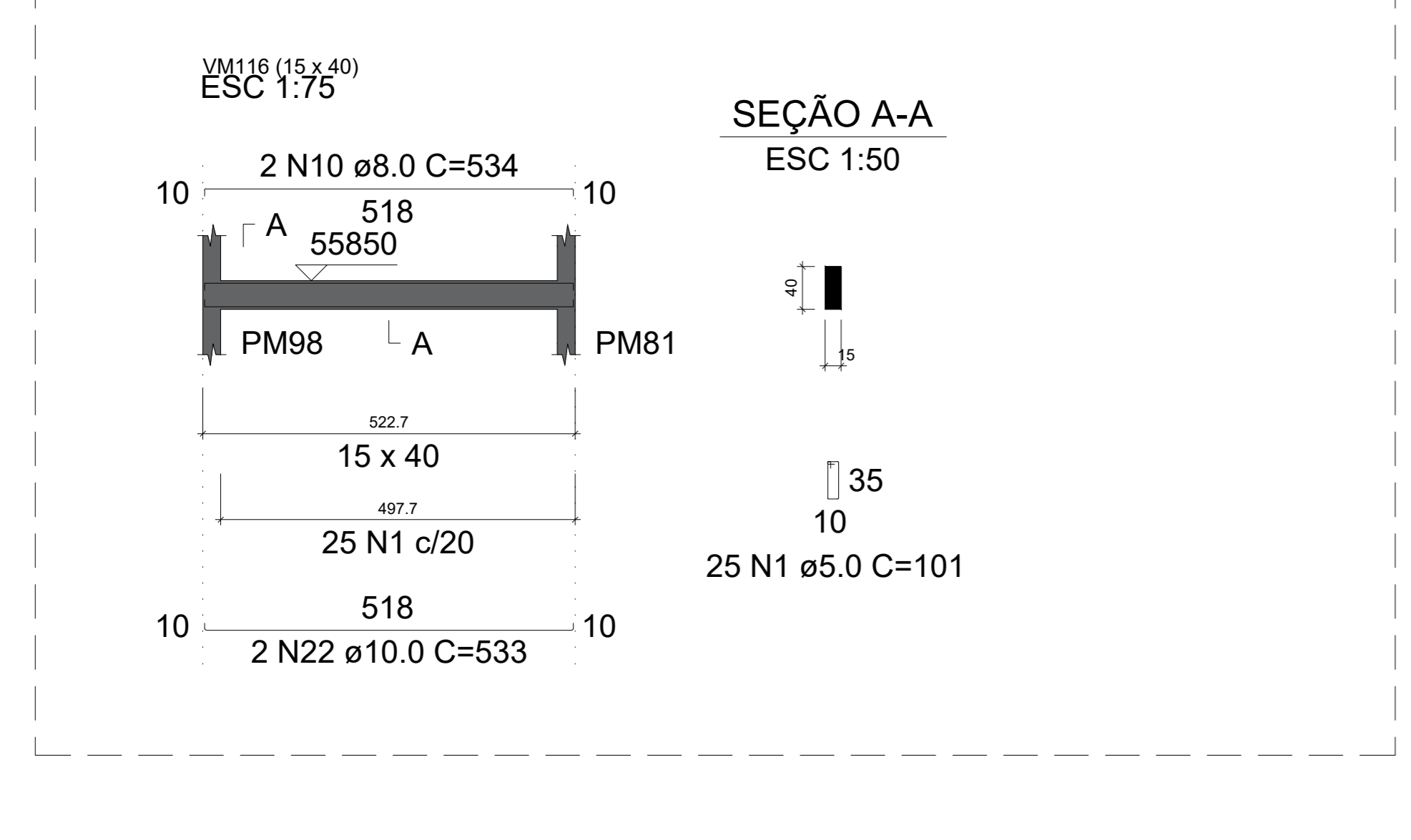
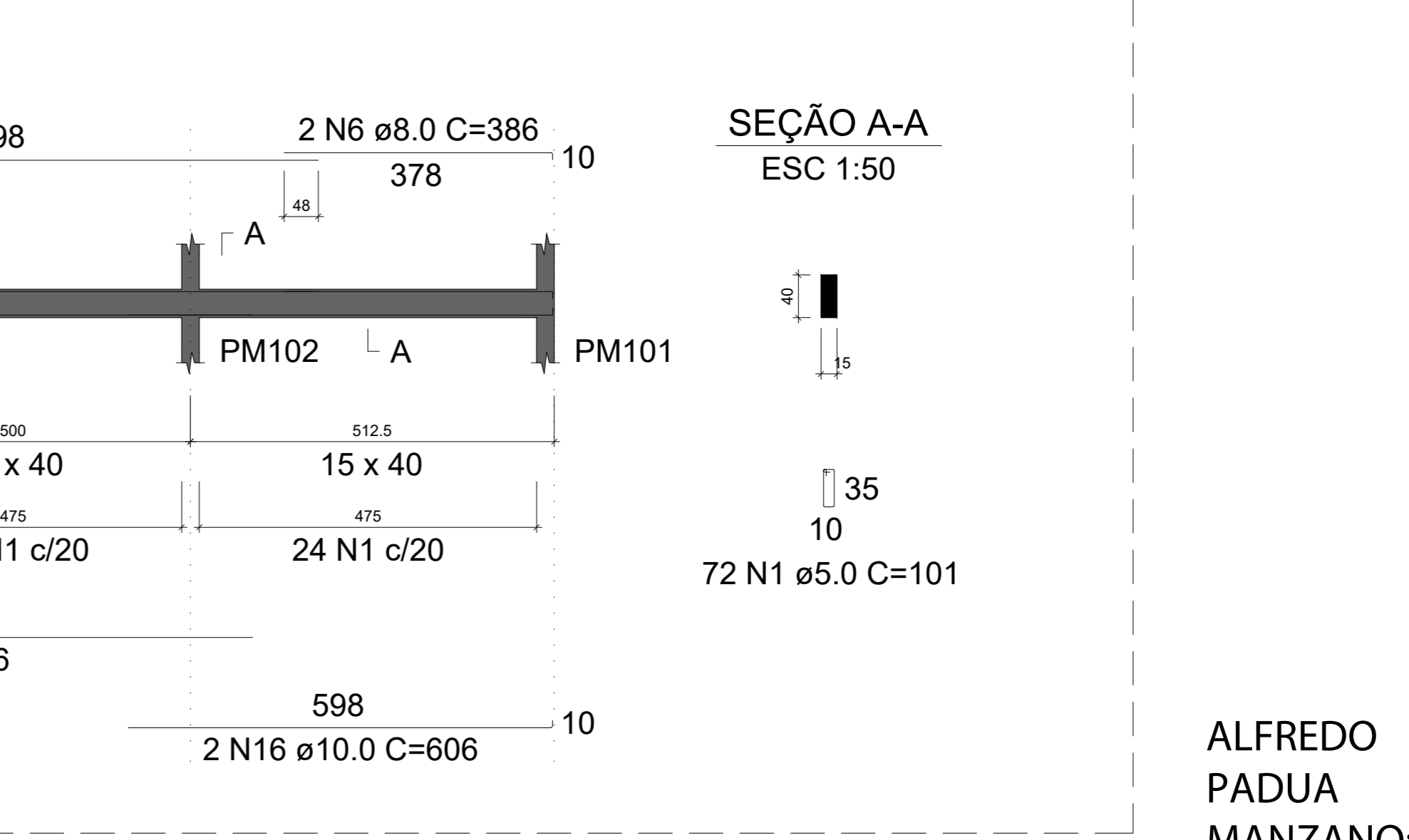
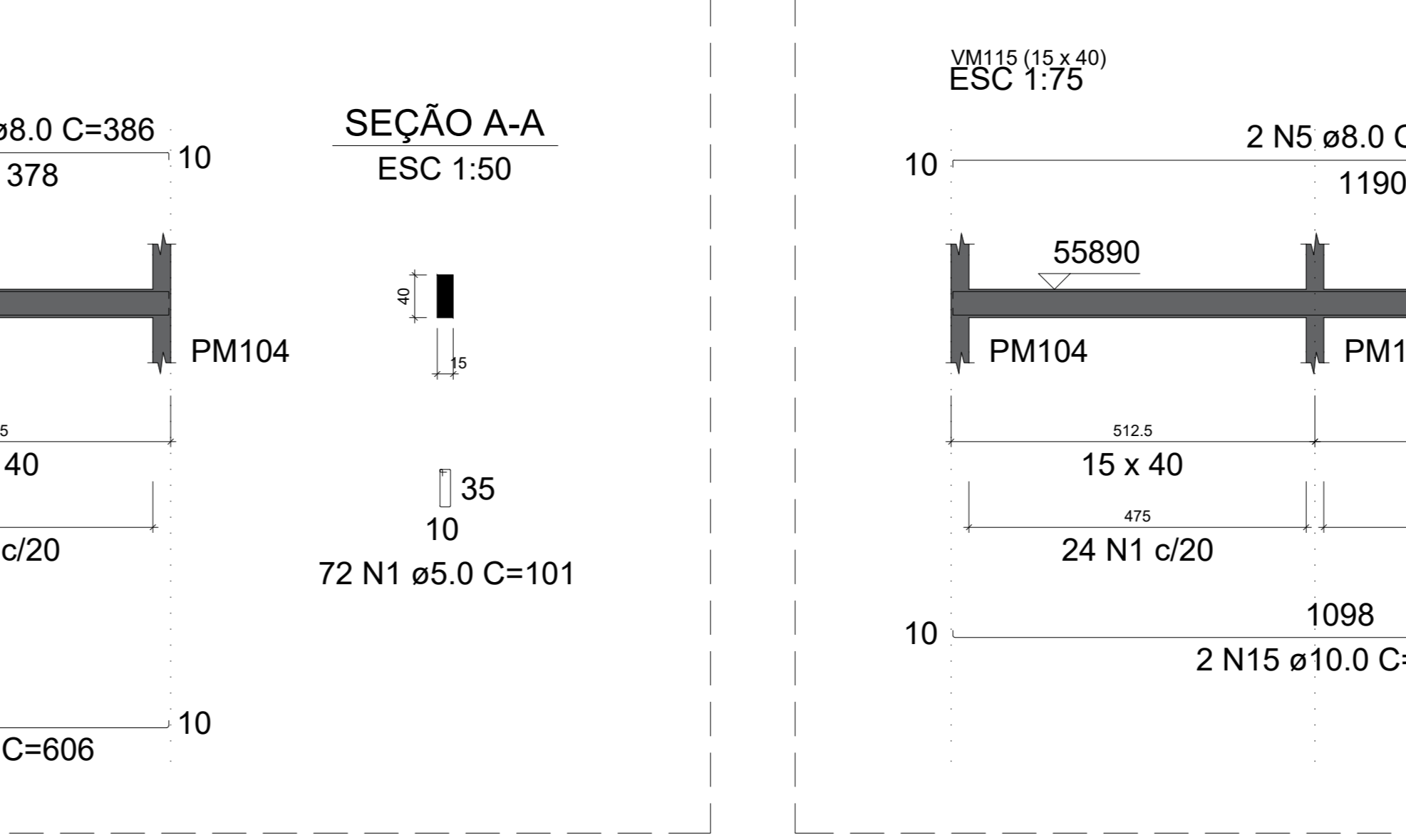
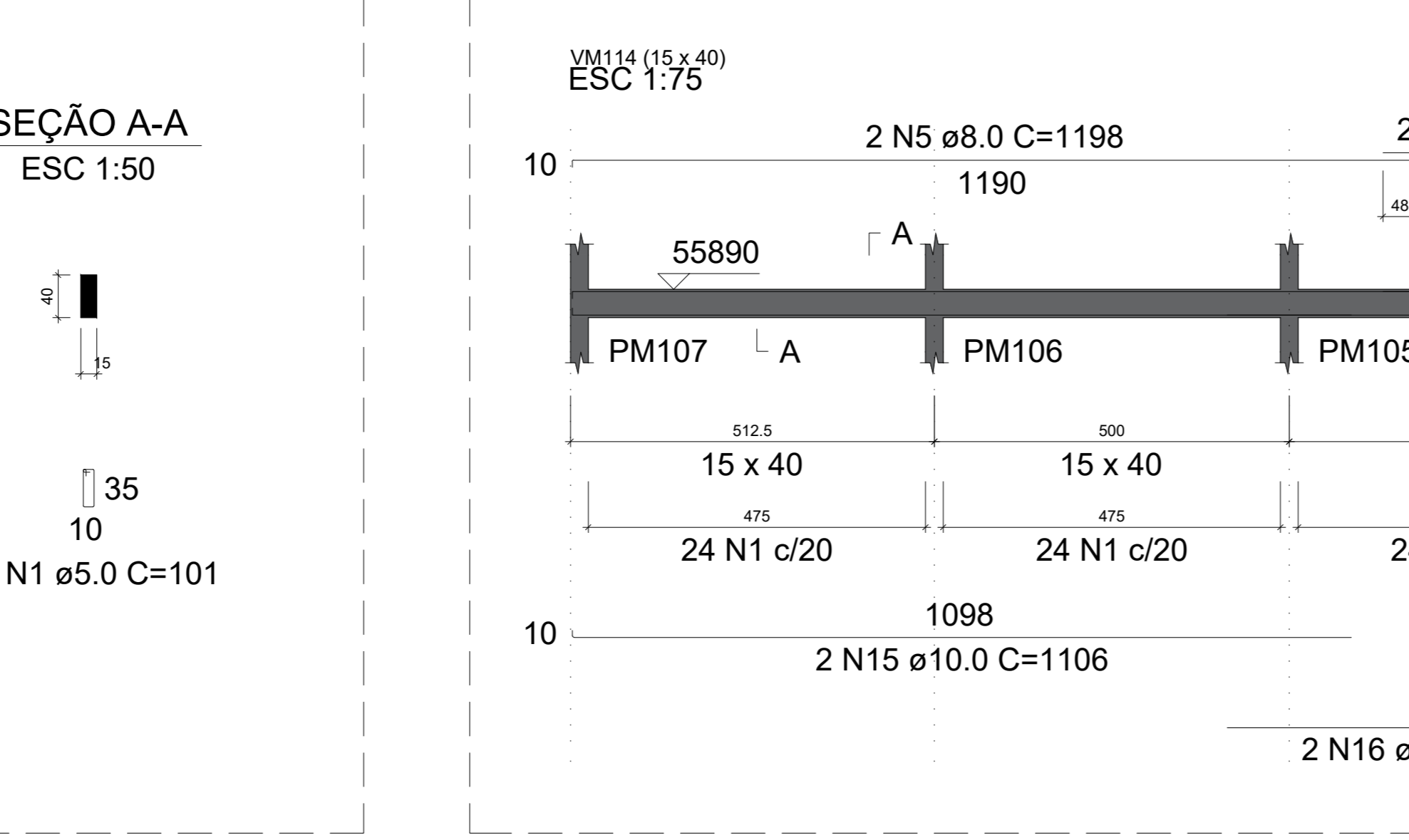
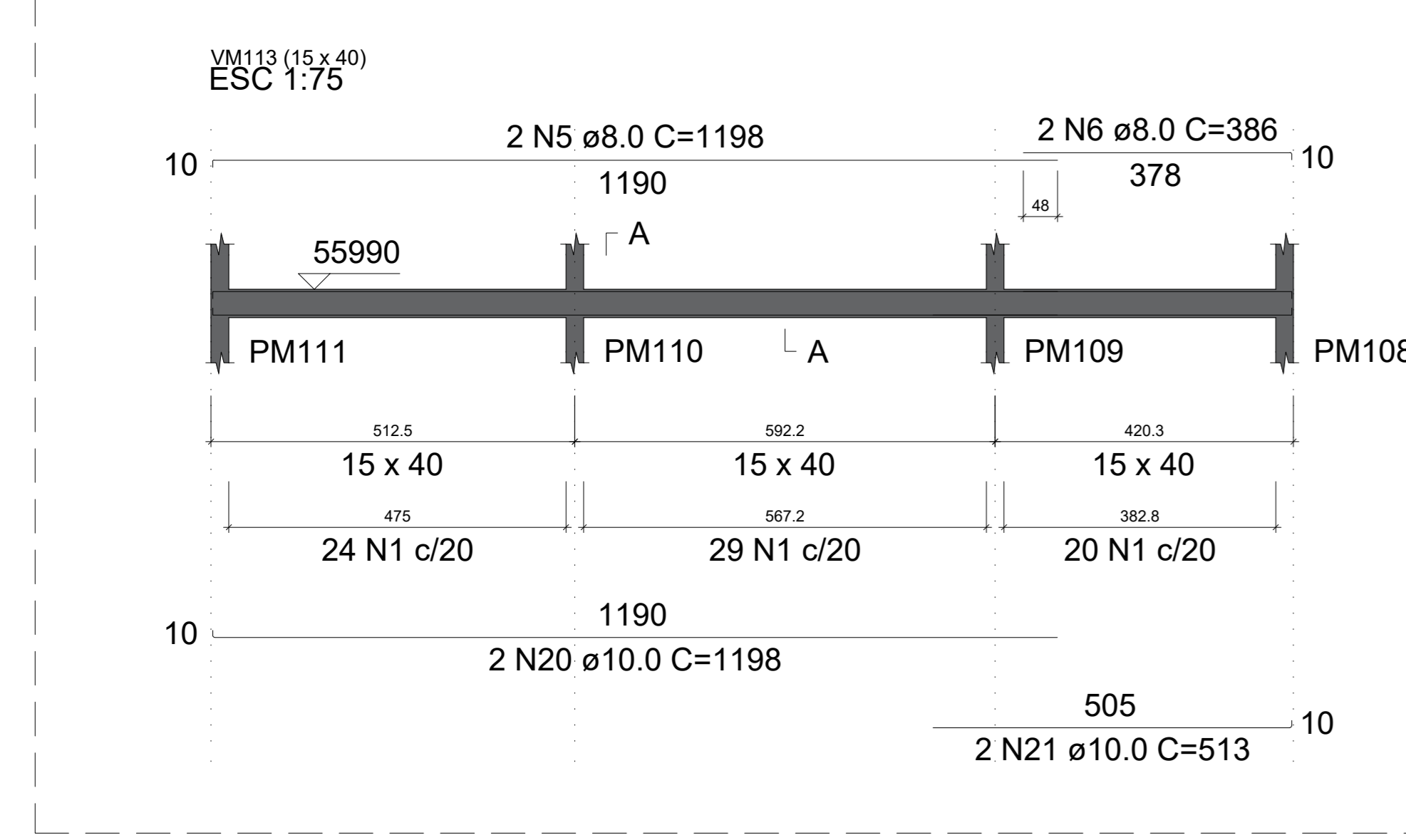
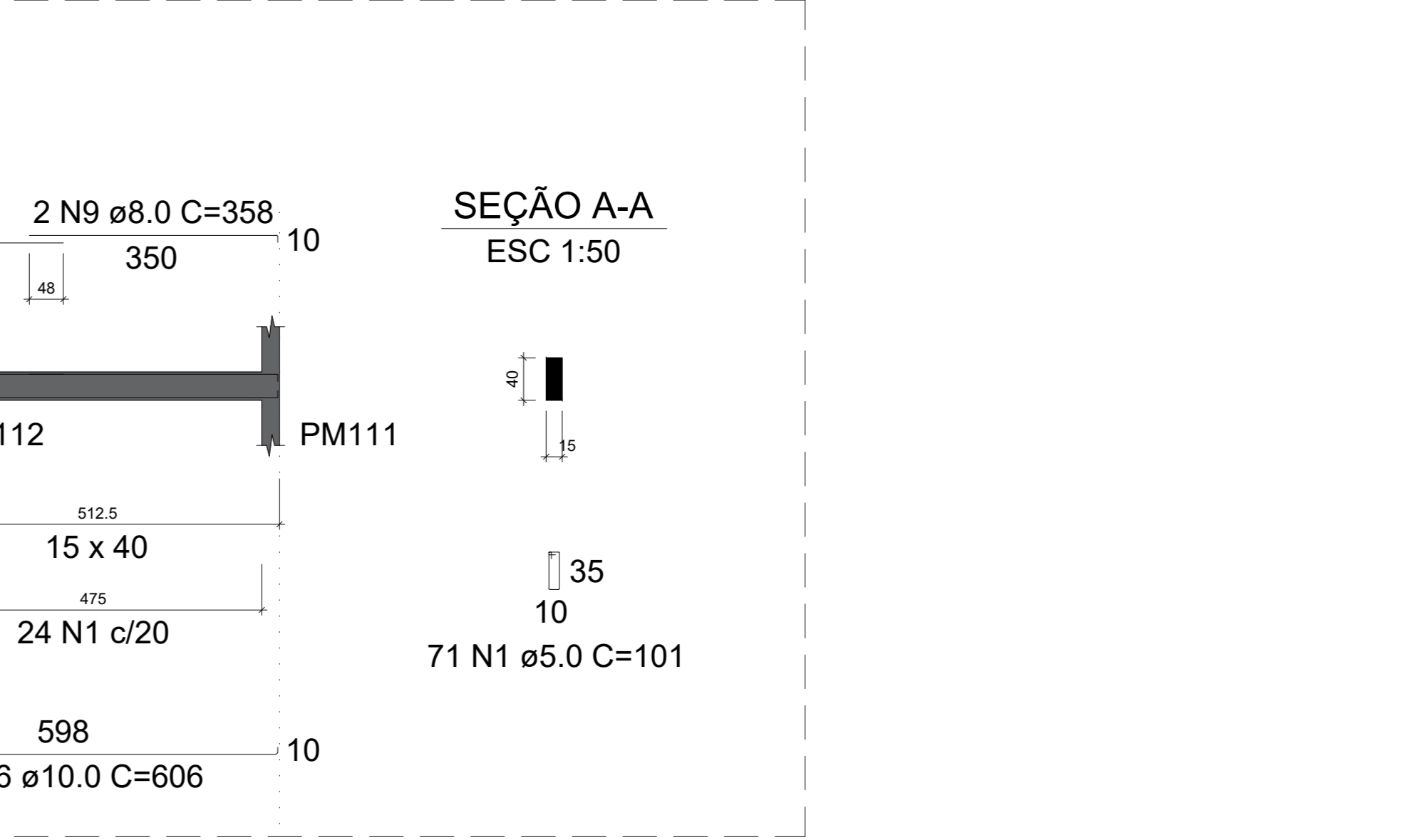
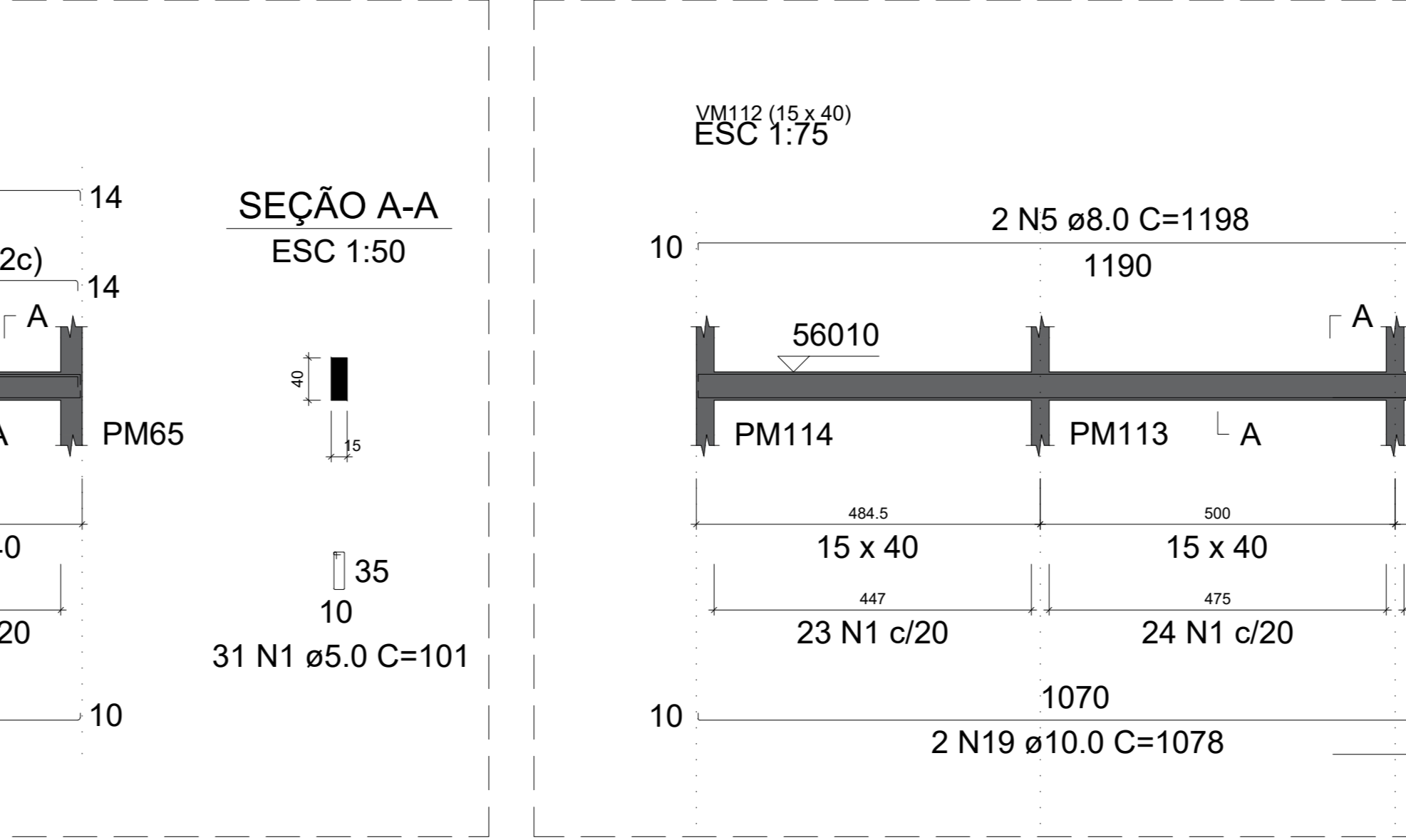
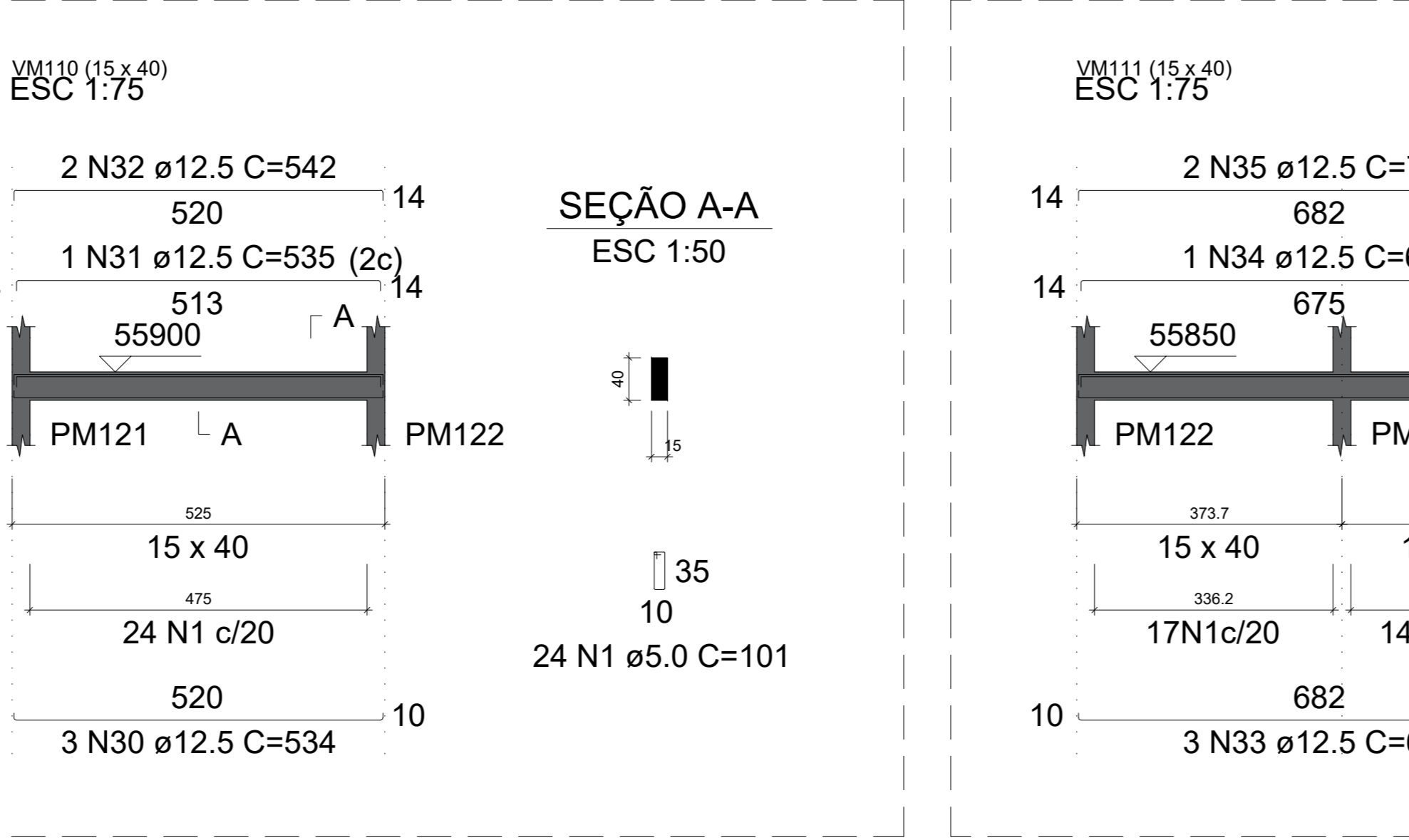
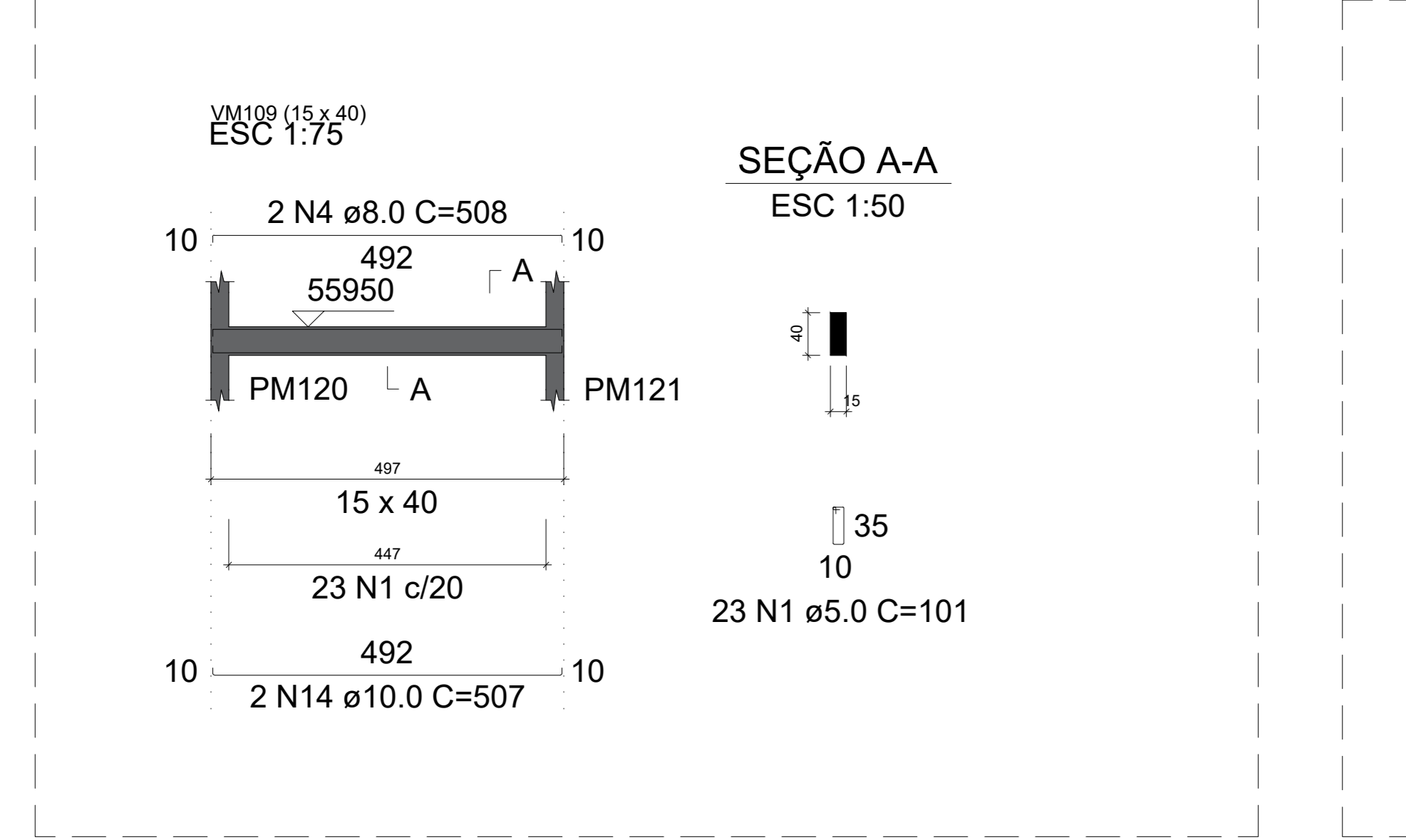
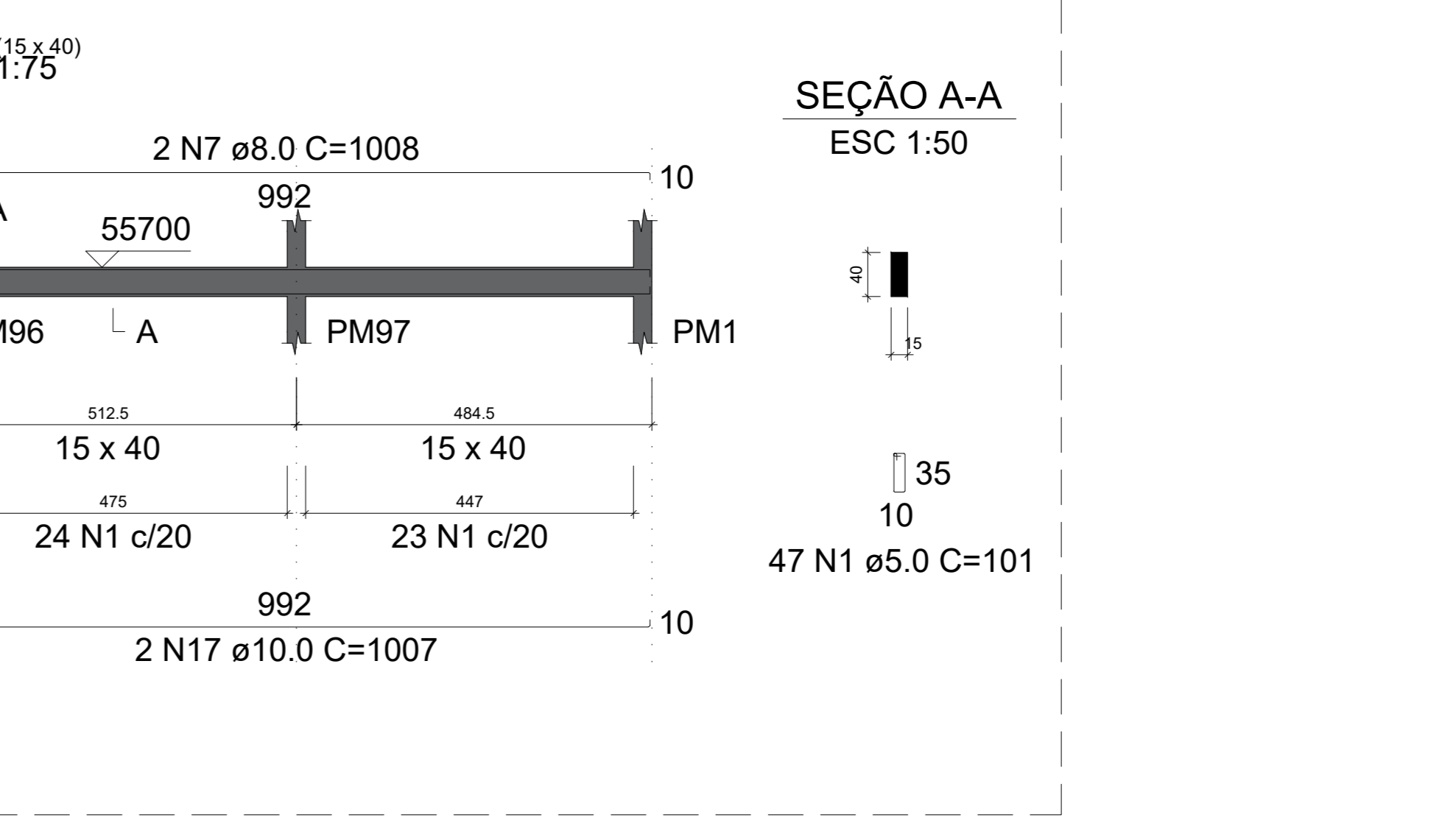
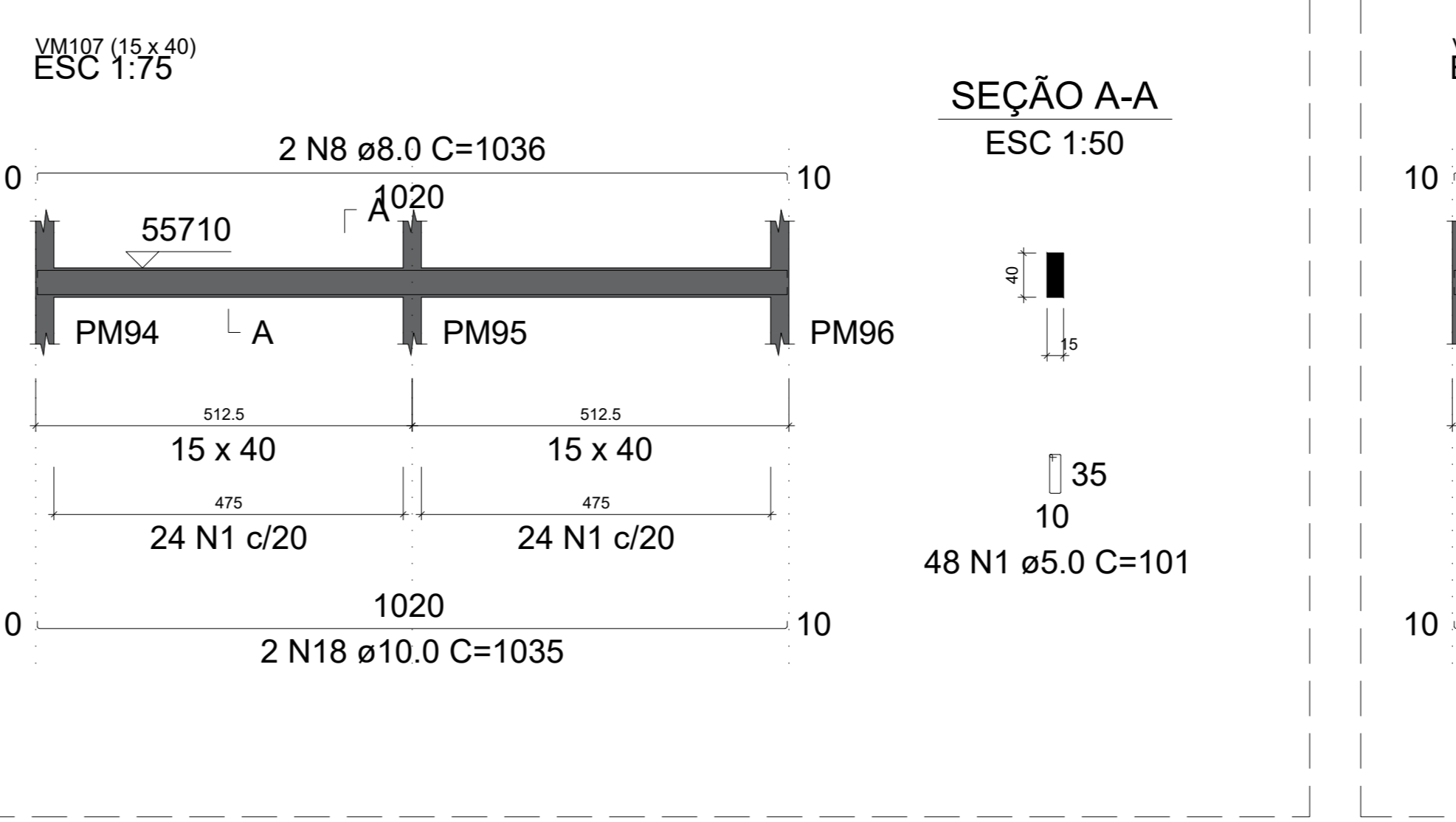
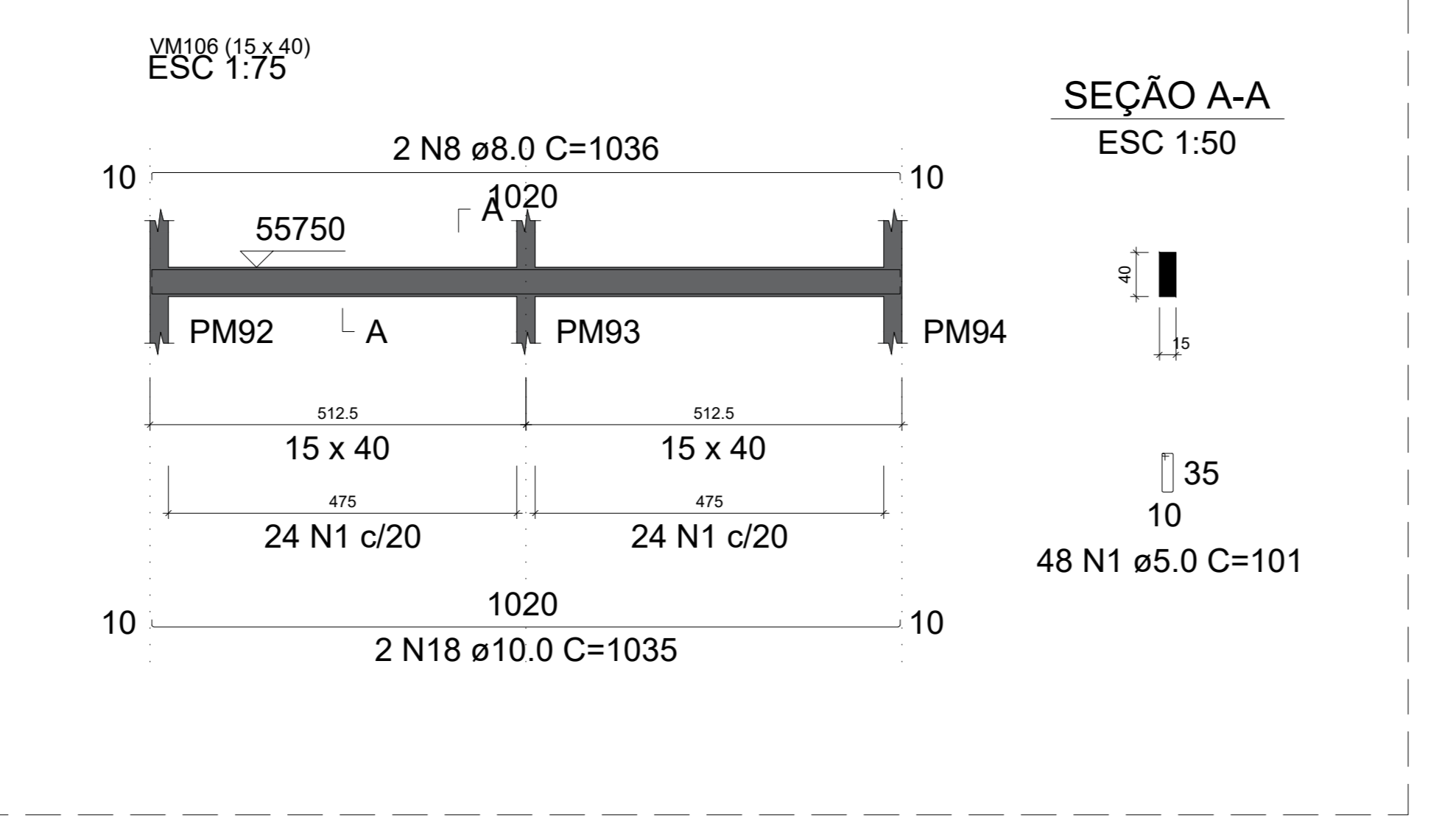
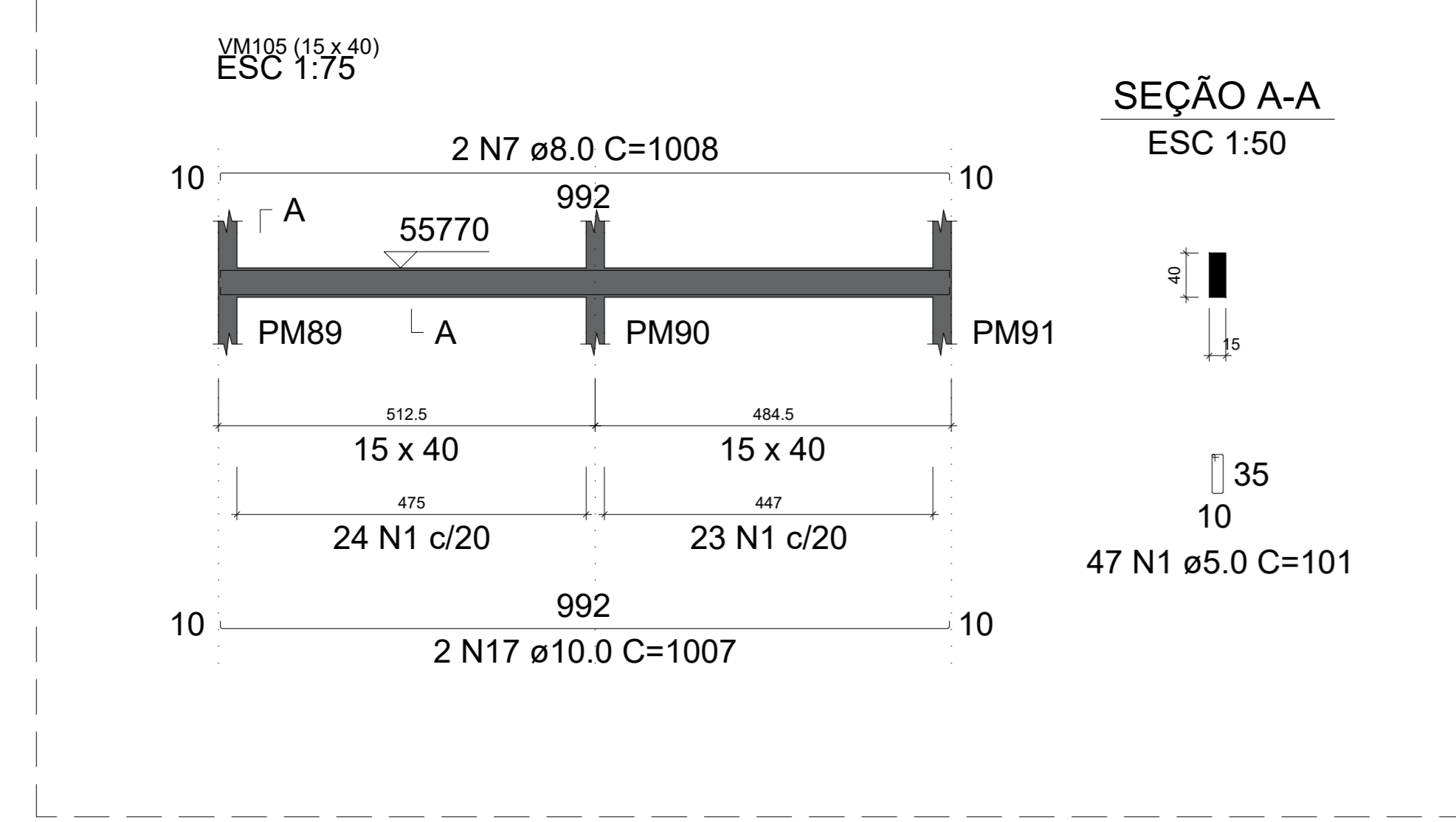
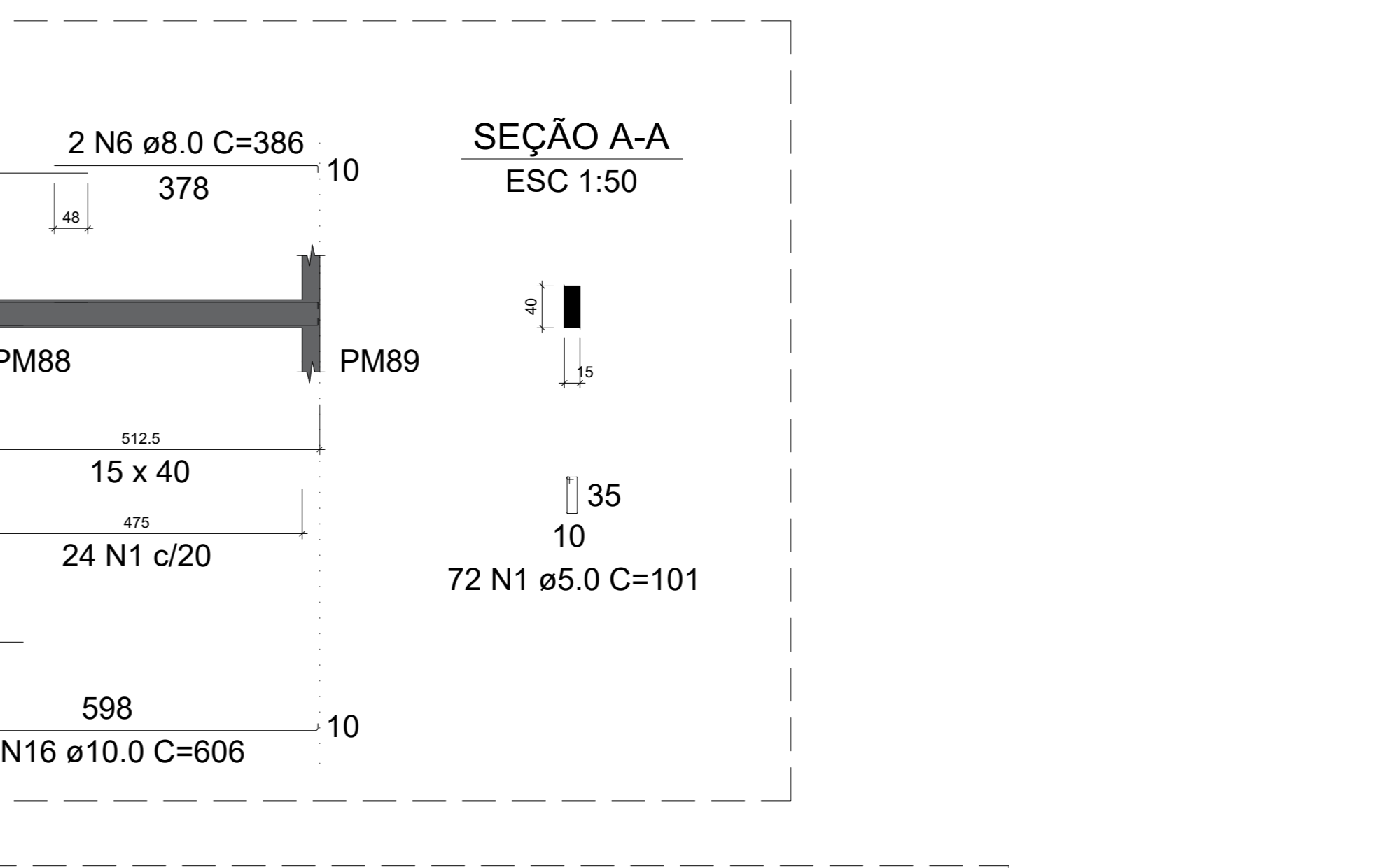
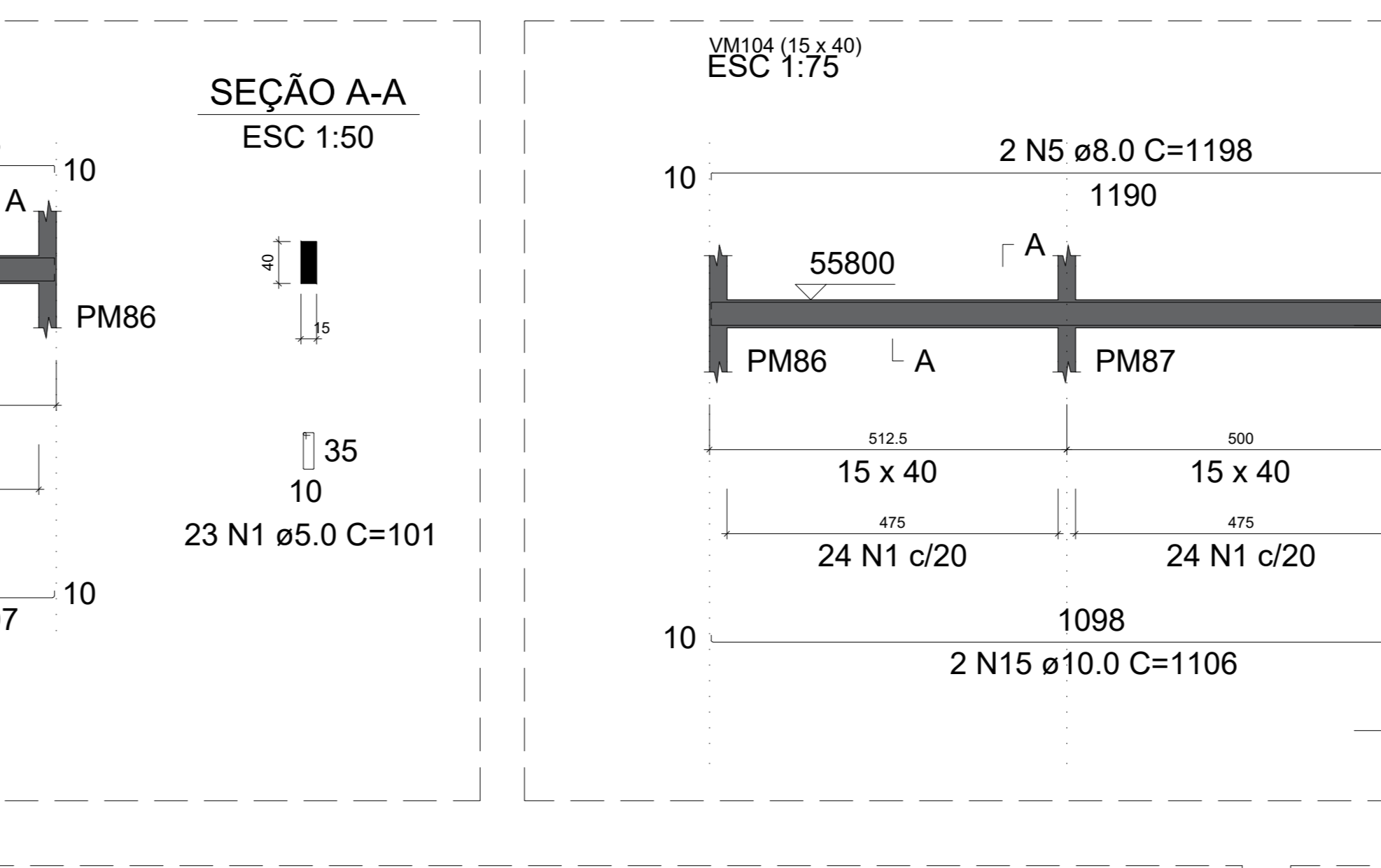
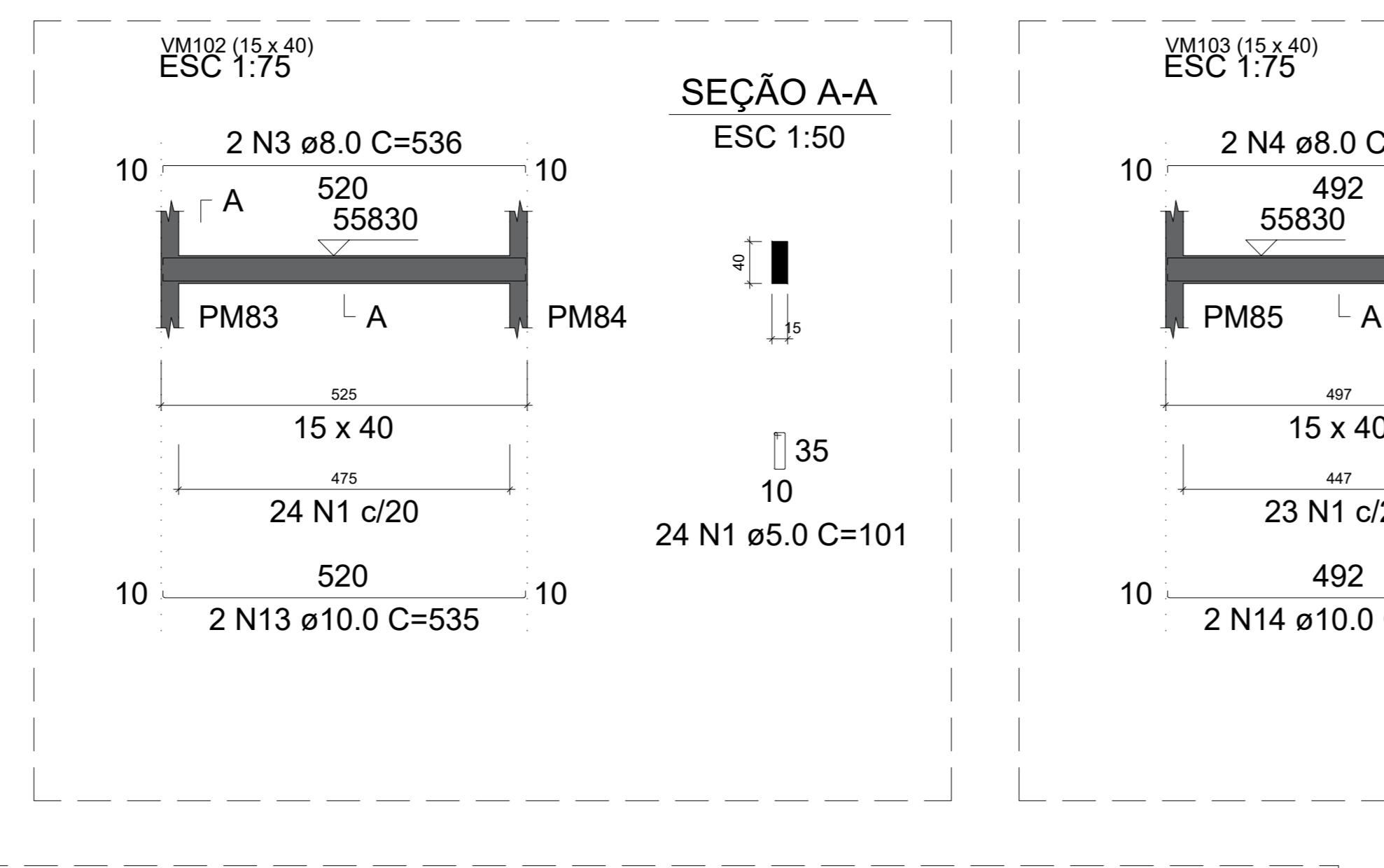
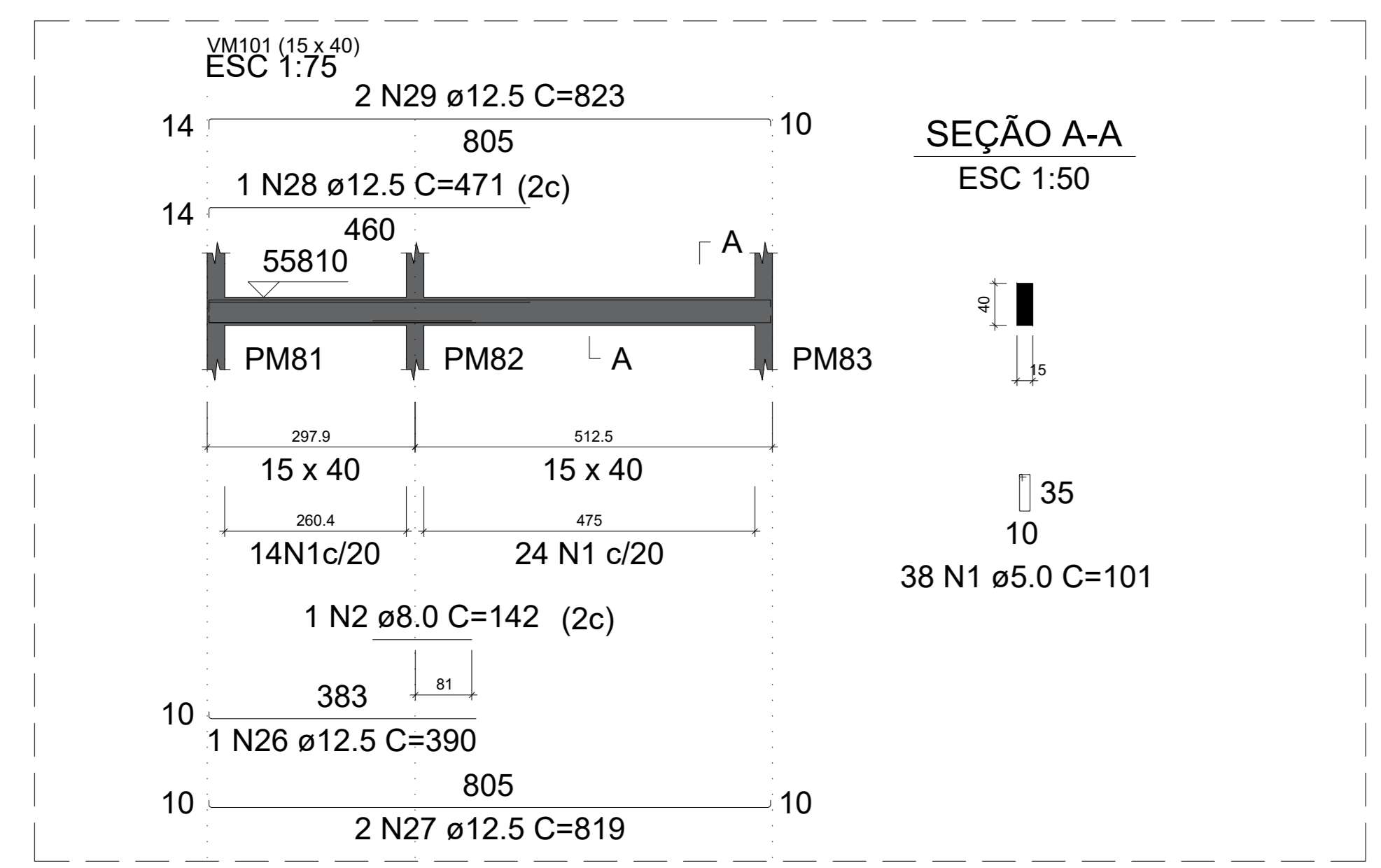
ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETARIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
SECRETARIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 196339/14-09
ART: 262051801916

Emprego: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Cliente: MUNICIPIO DE CAÇAPAVA
Descrição: PROJETO ESTRUTURAL
Levantamento:

Numero de Processo: 5.6132004
ÁREA:
Ver na folha ARG 01/52
Folha: 30/60
Escala: Indecida
Data: NOV/2025
Revisão: RD1



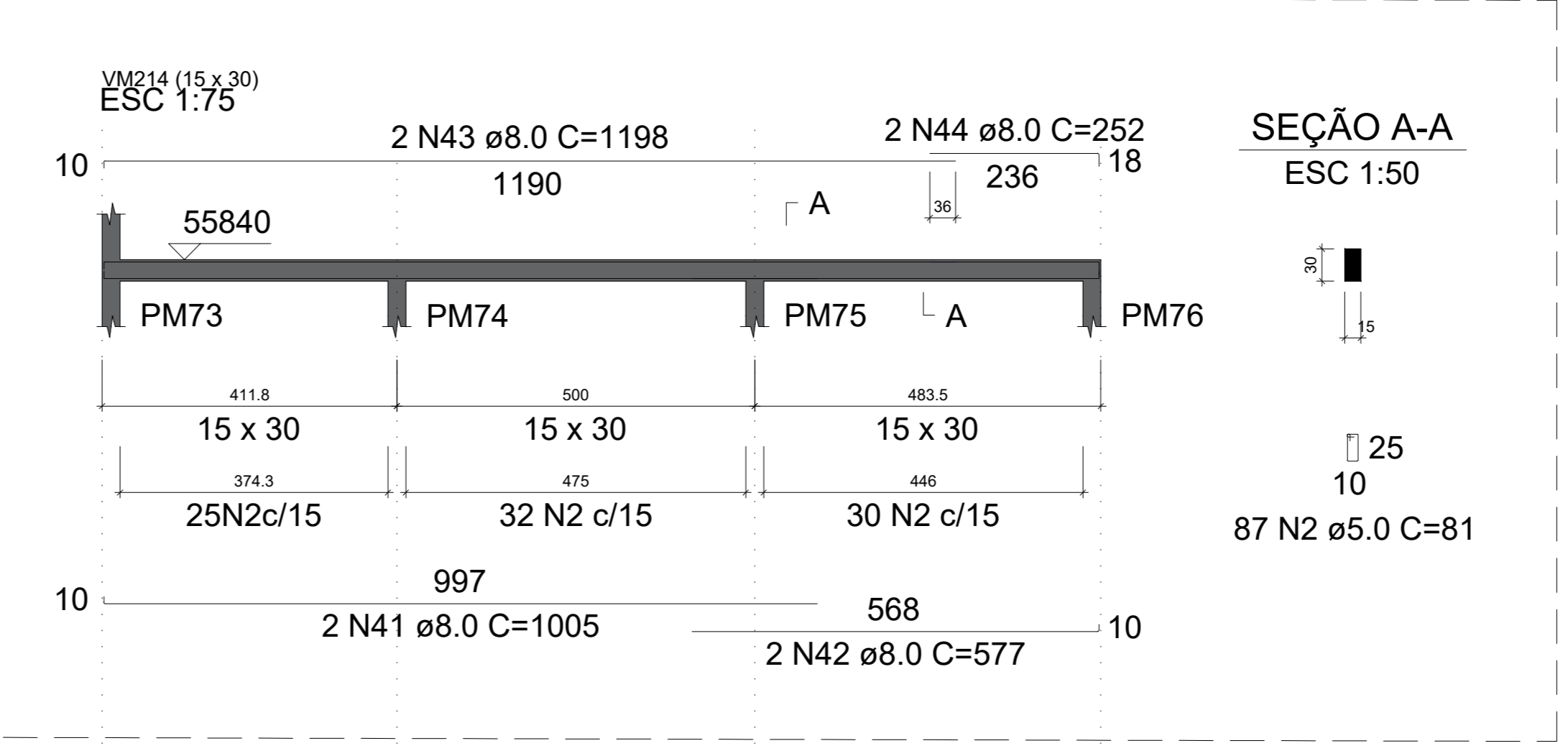
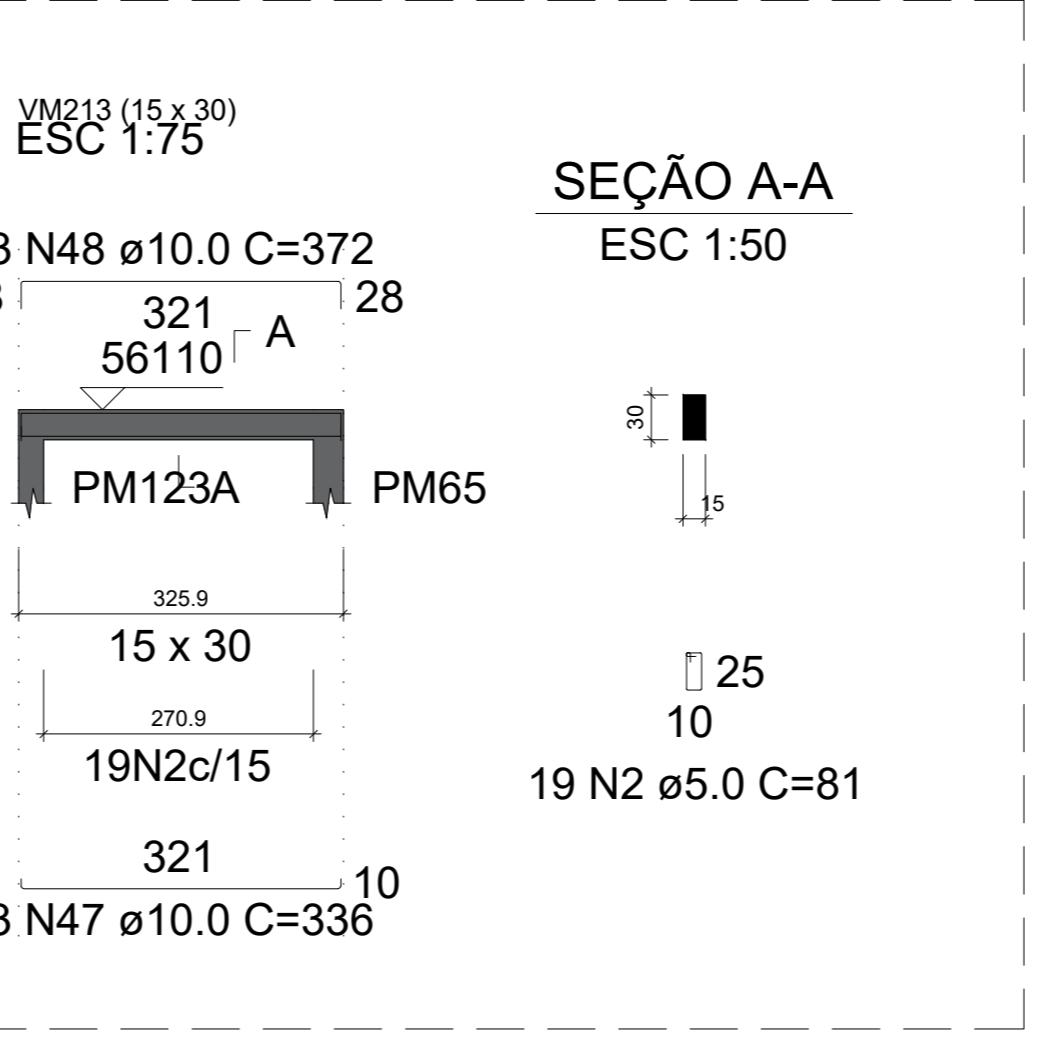
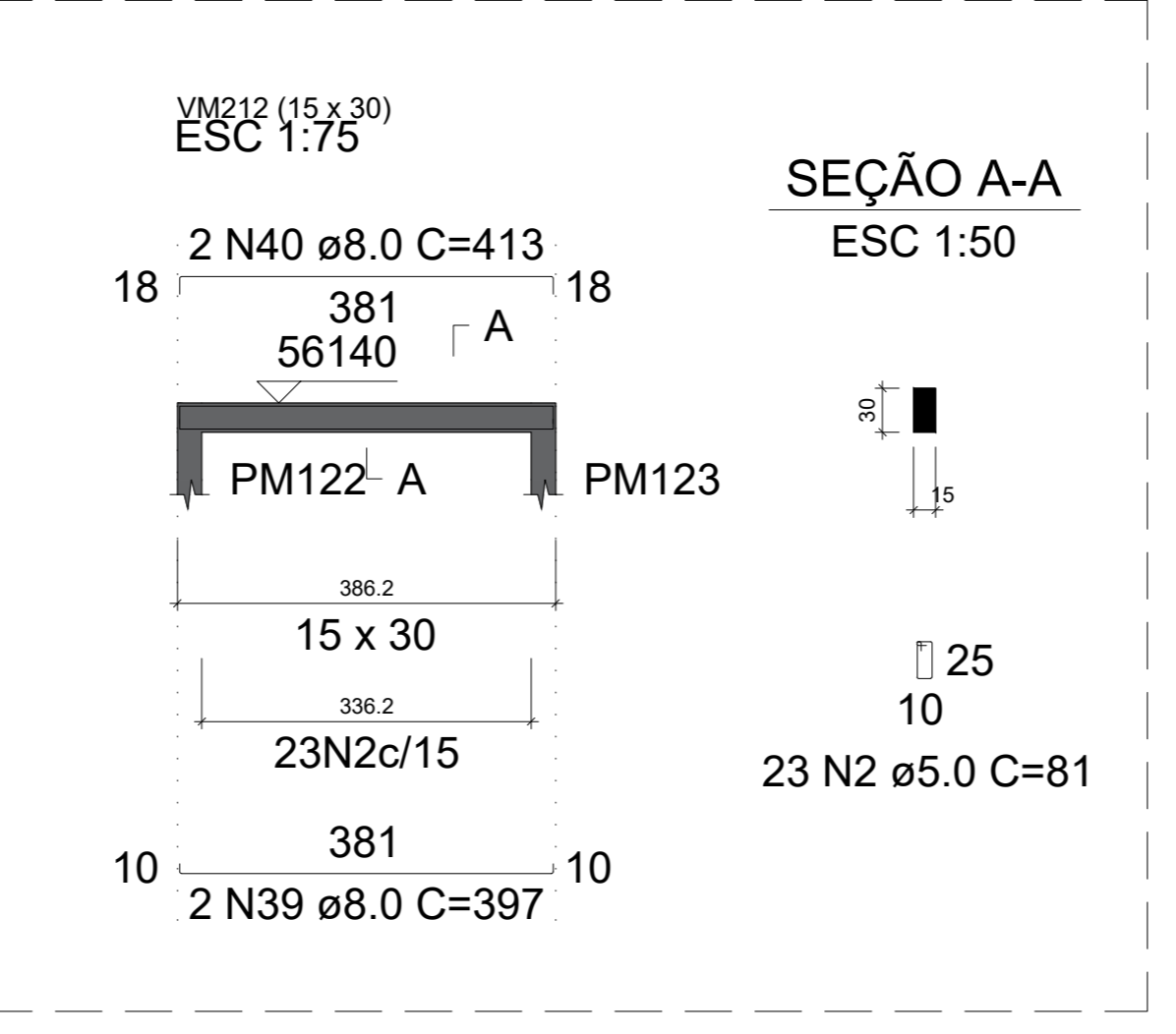
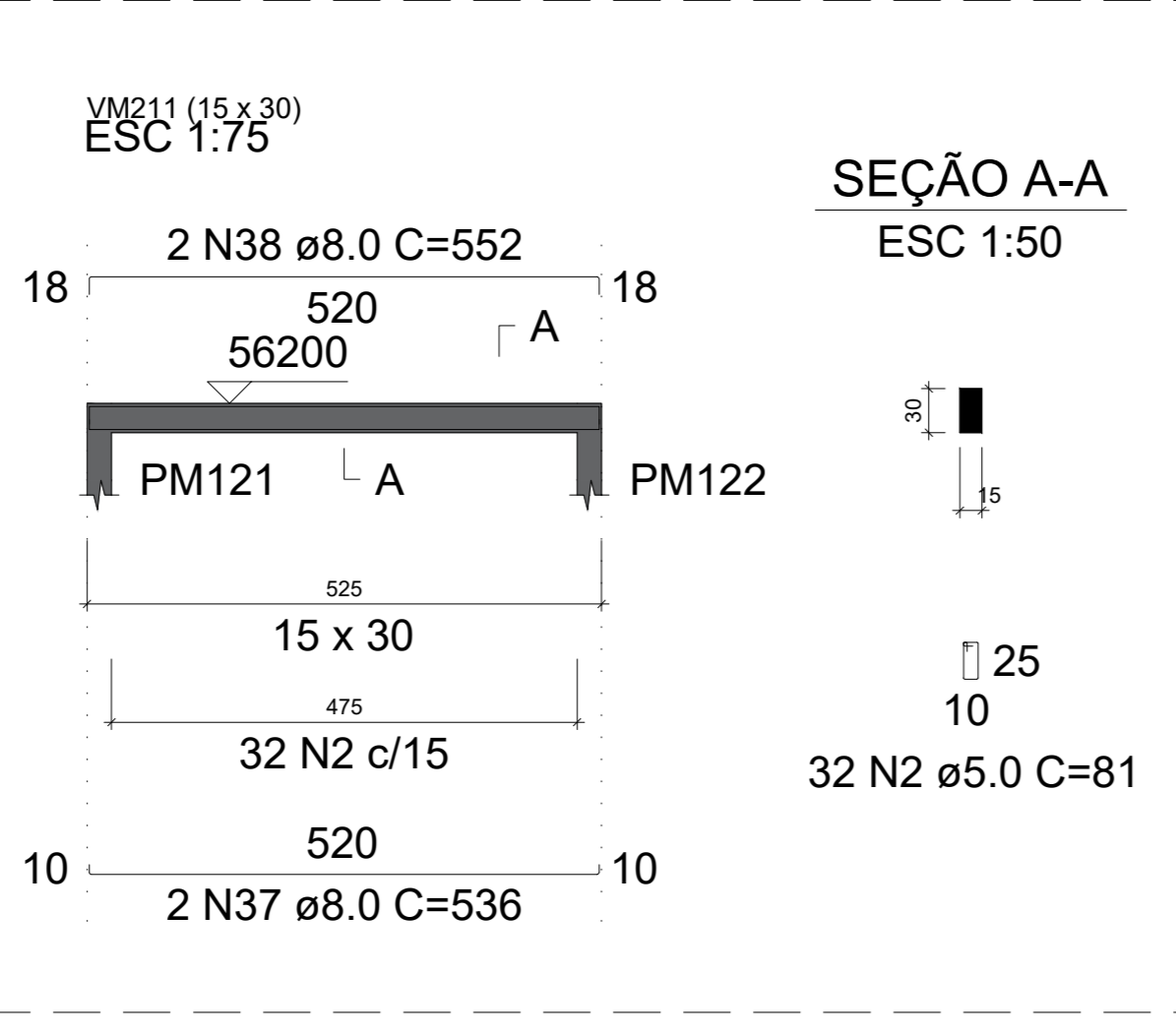
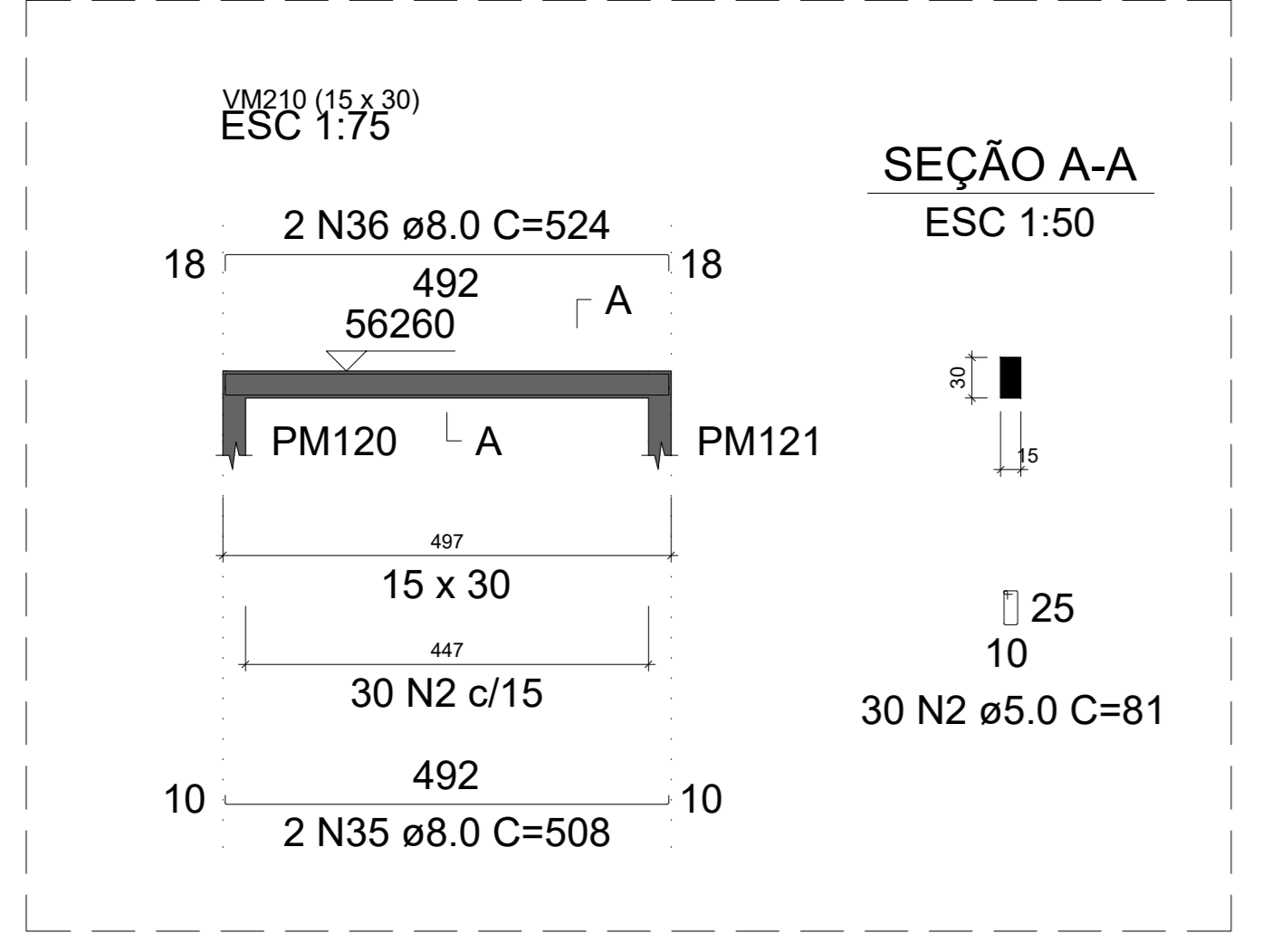
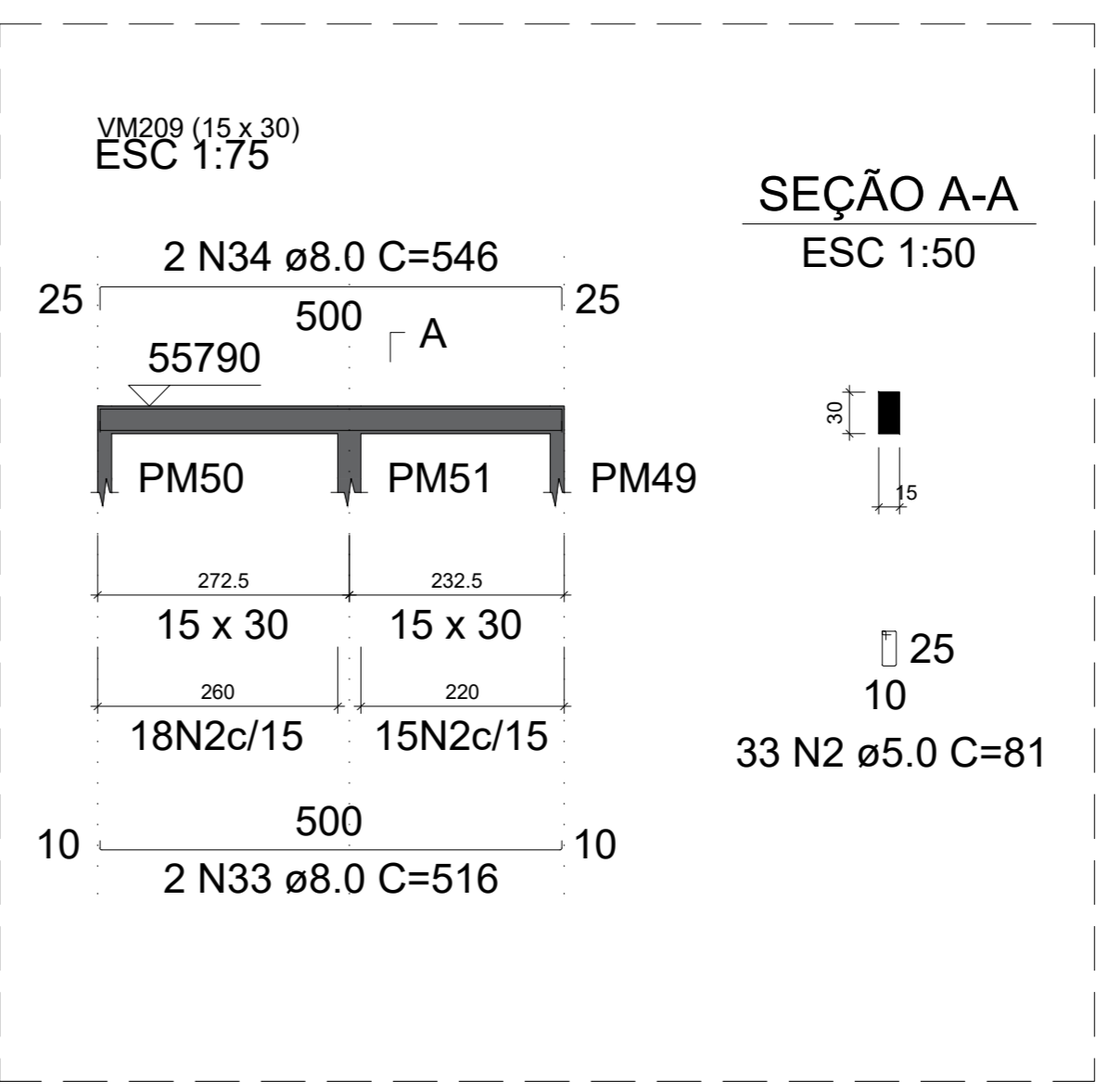
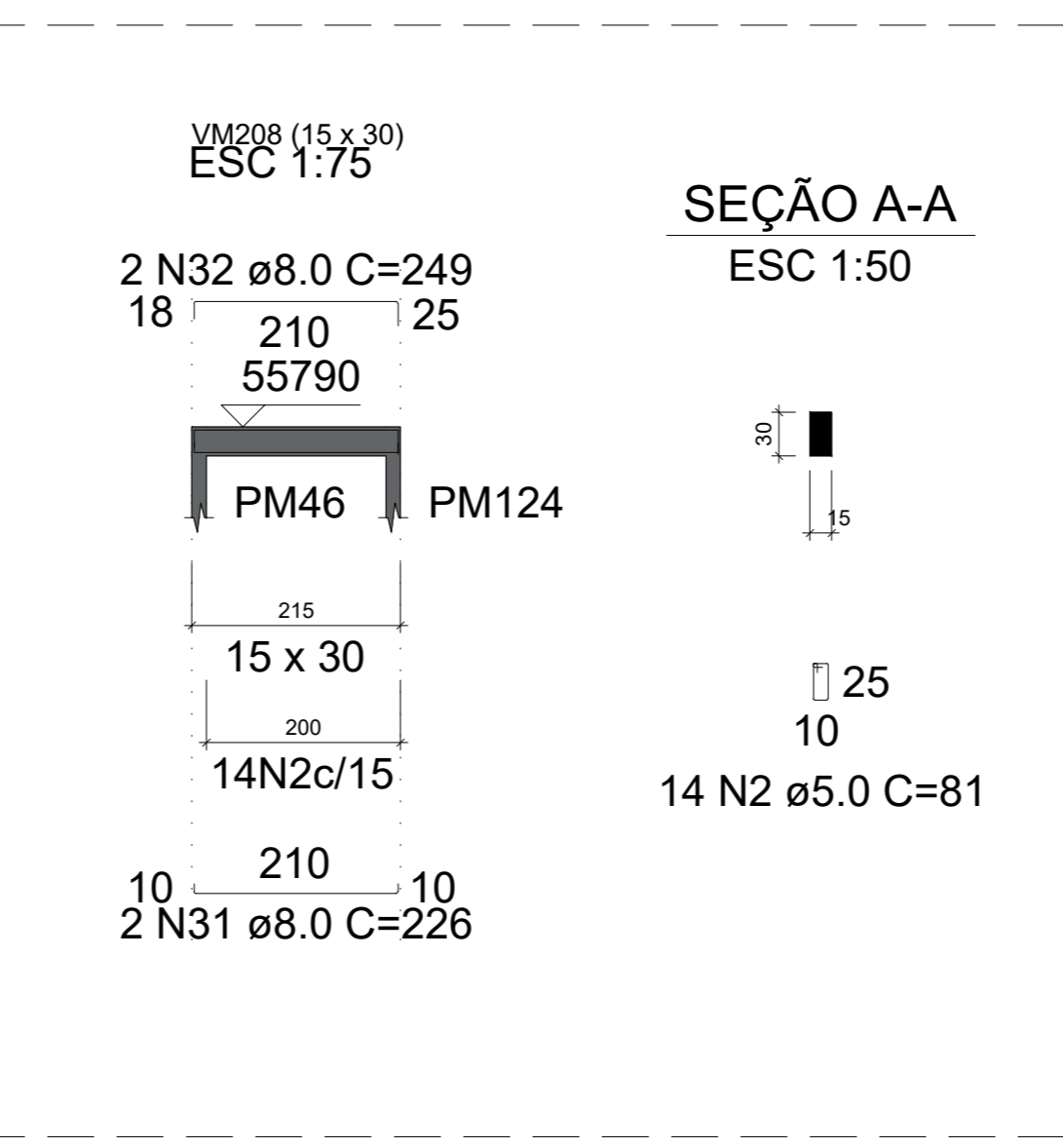
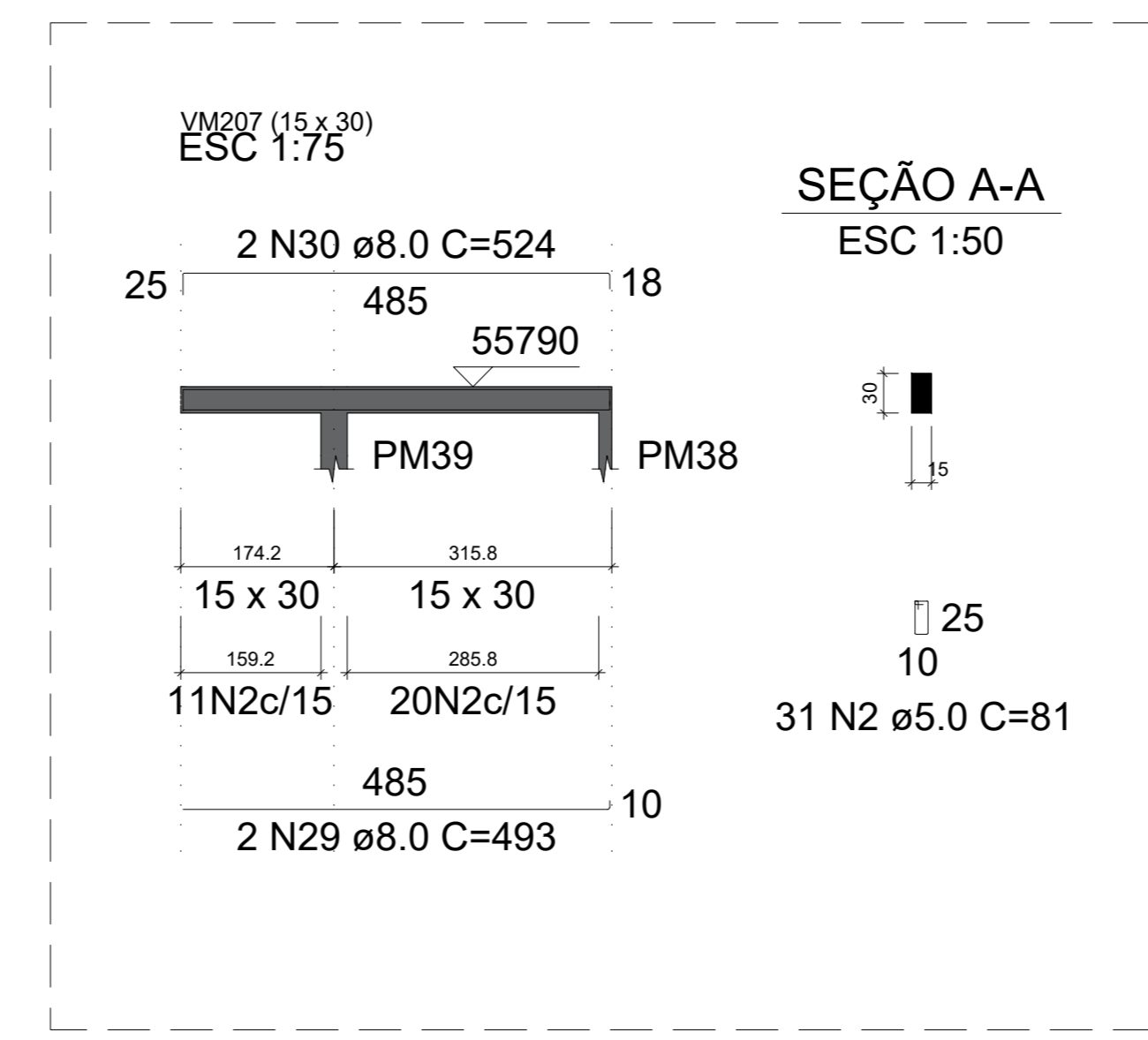
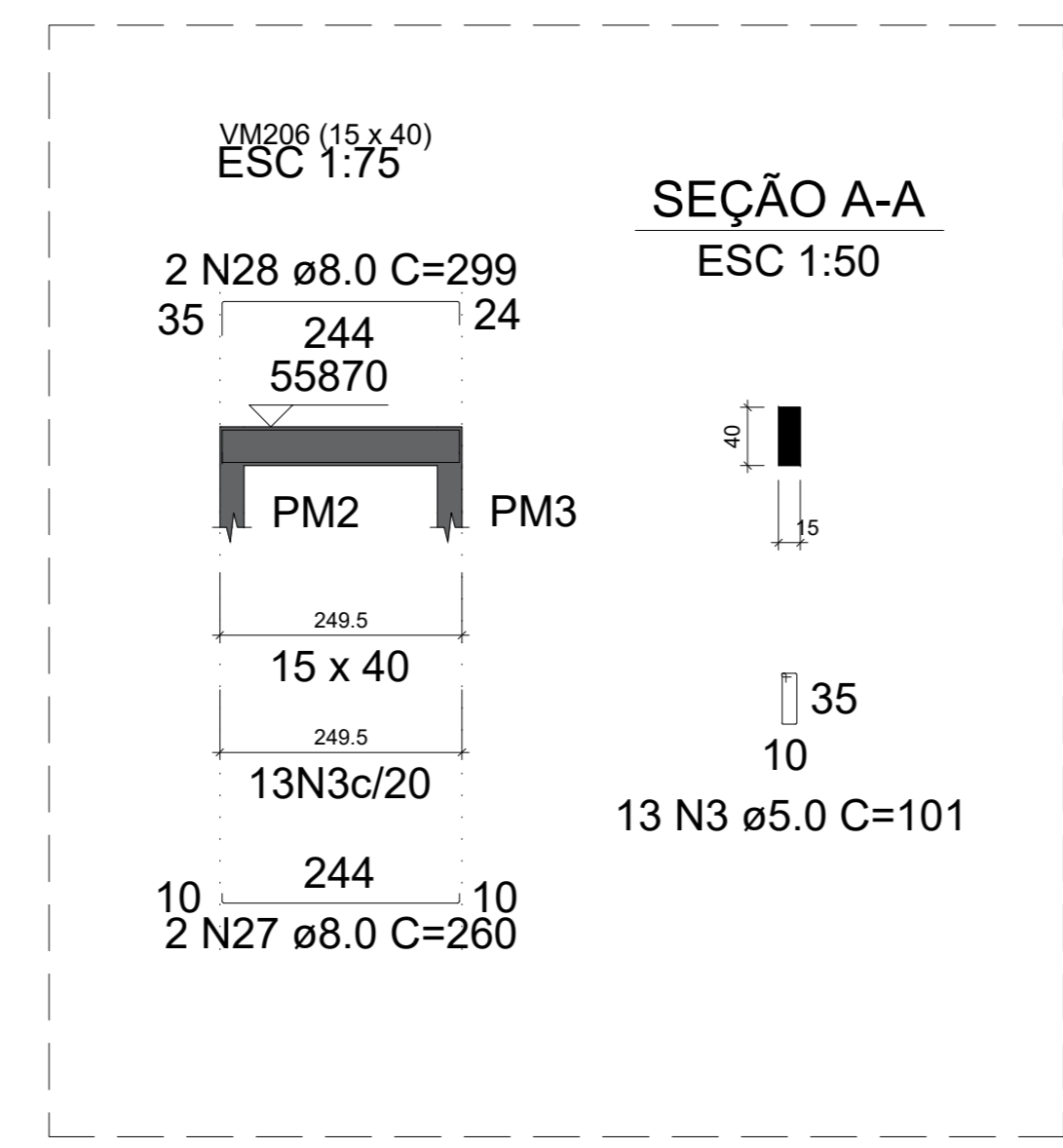
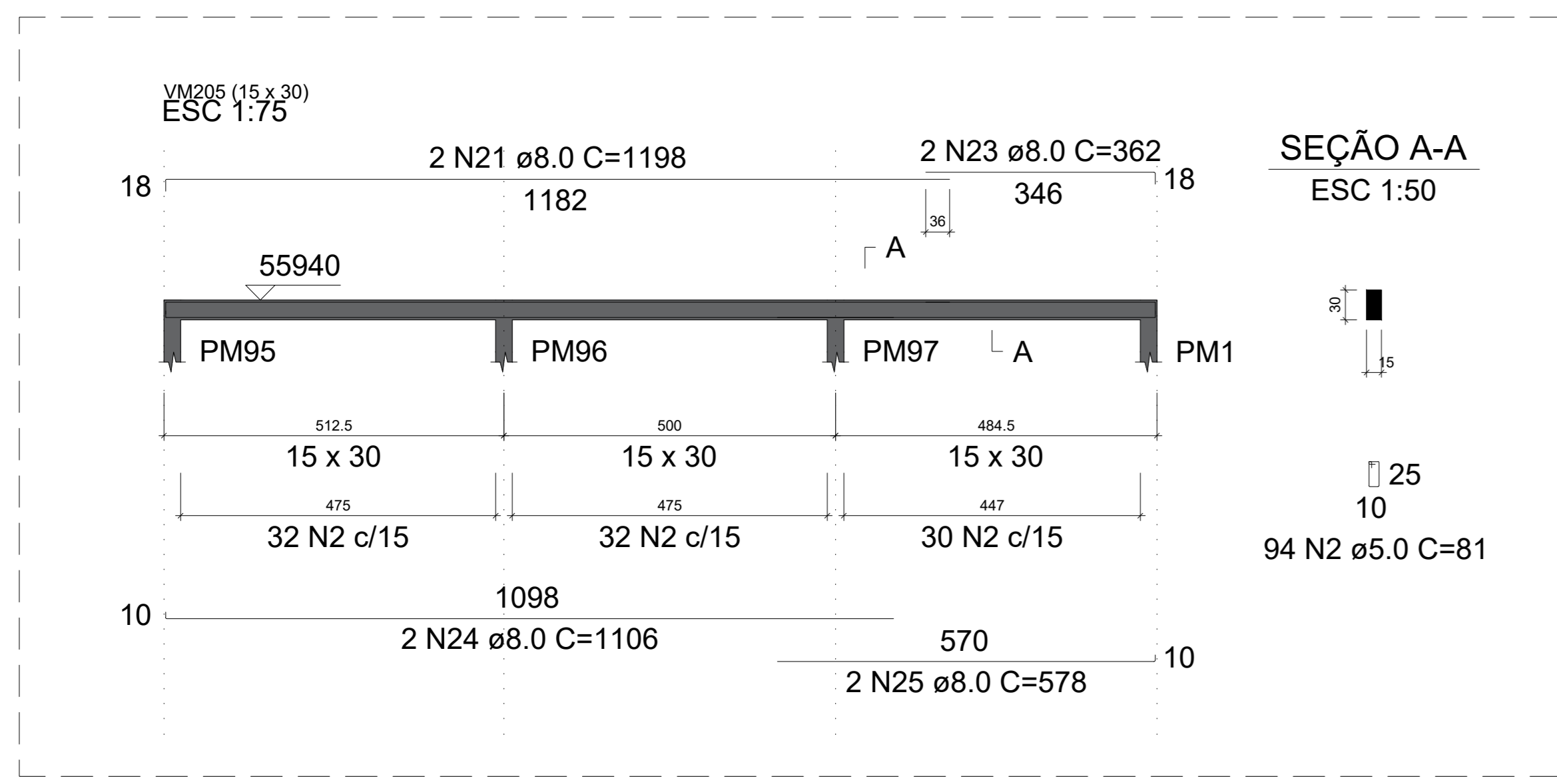
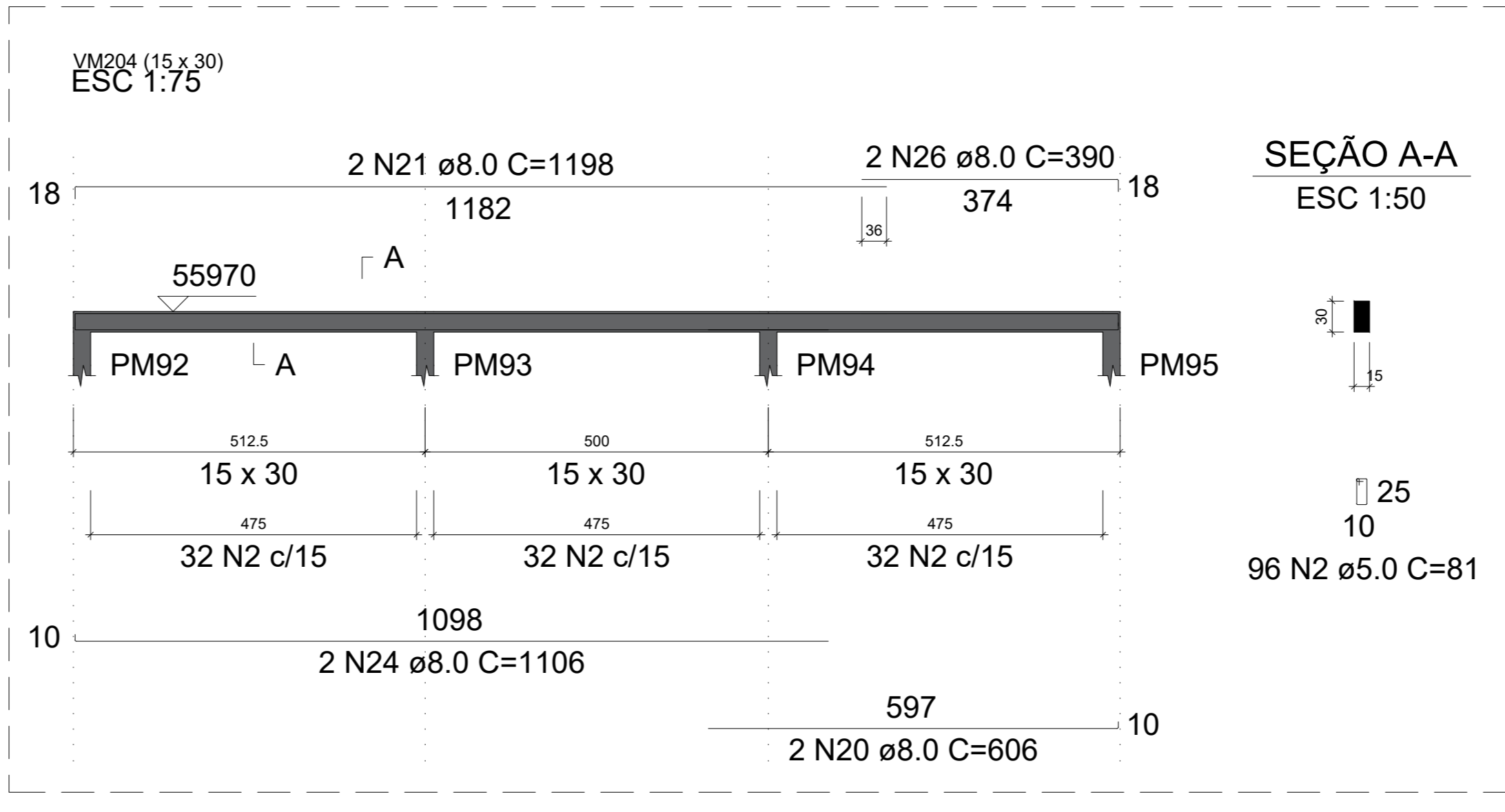
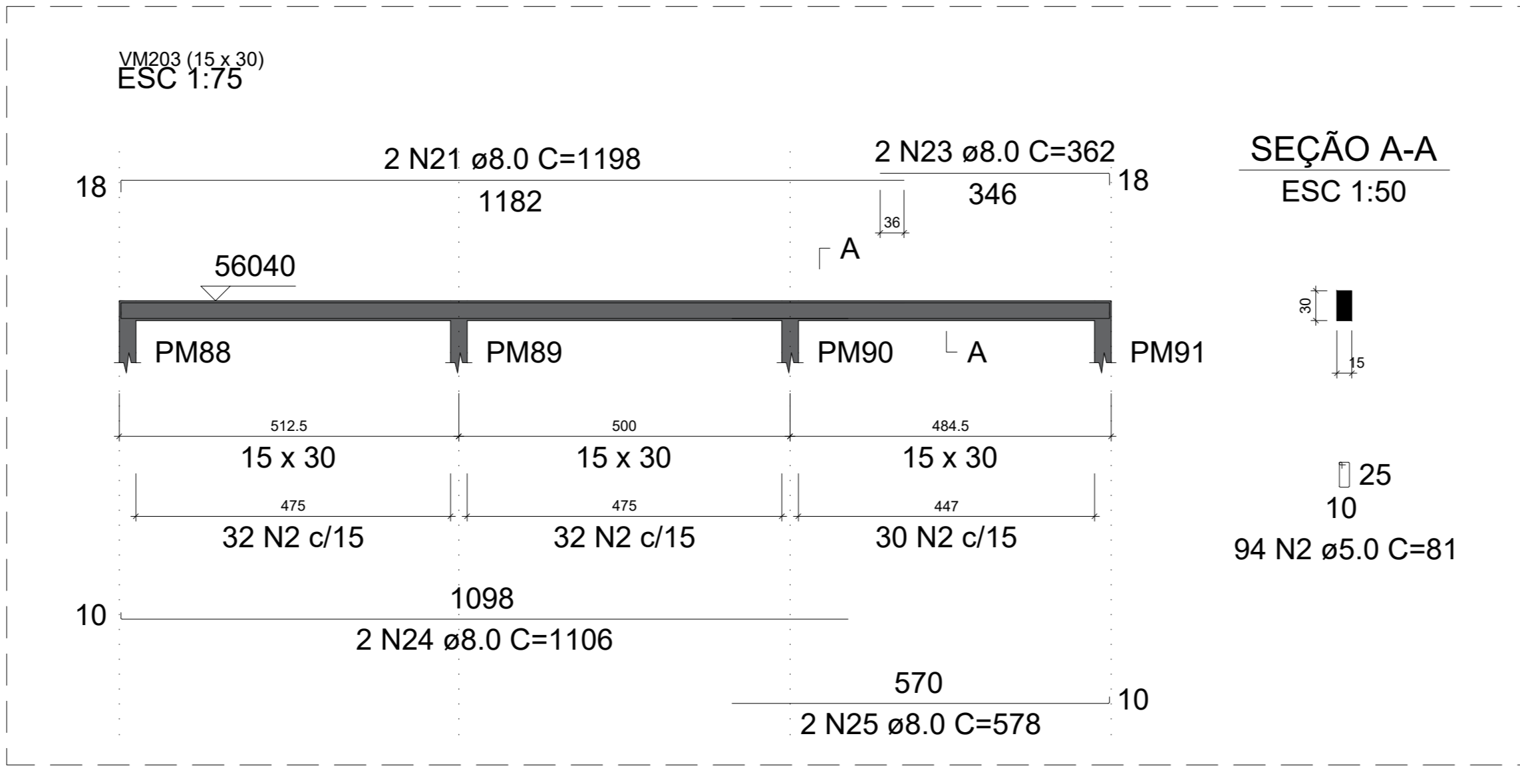
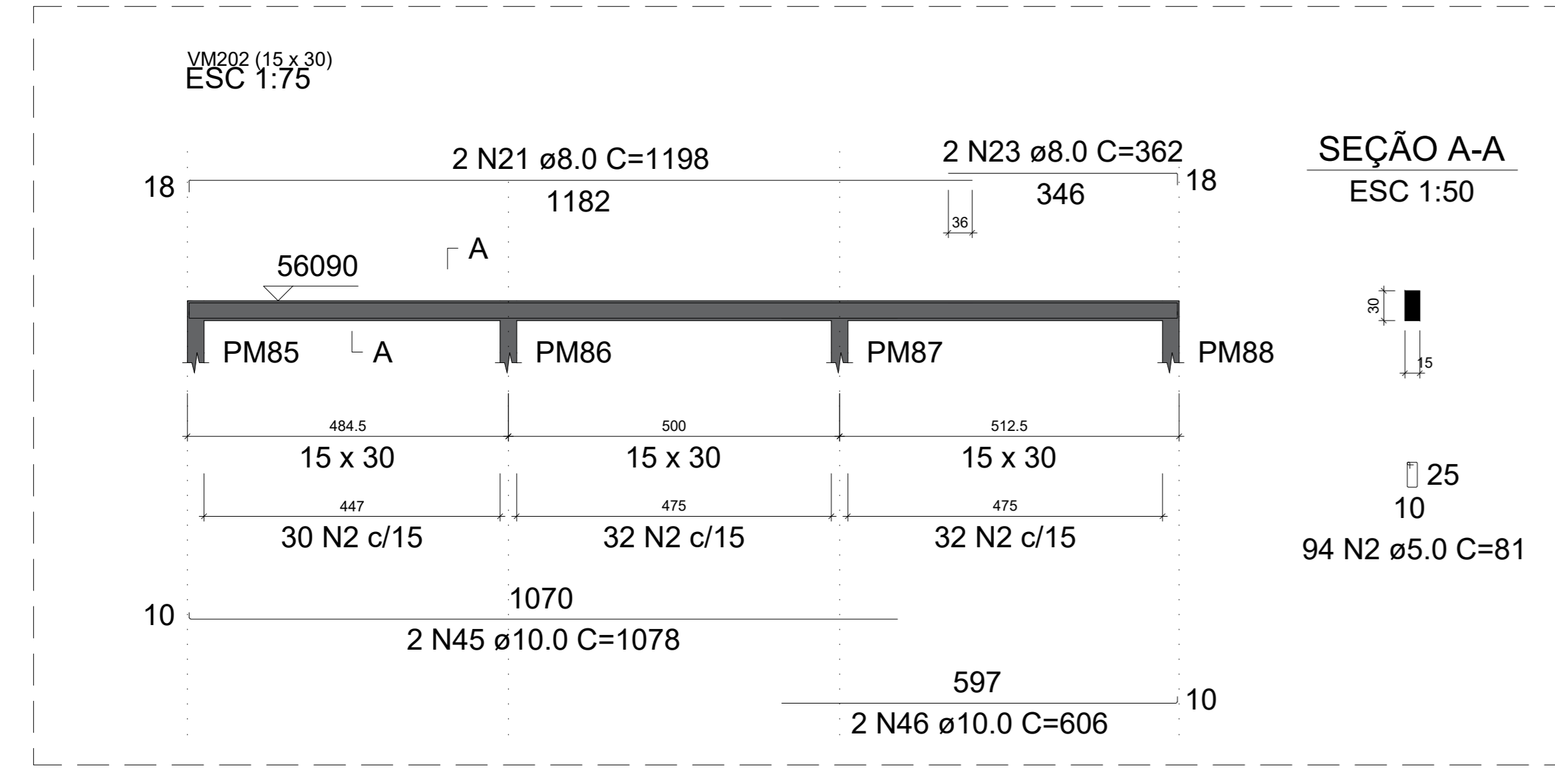
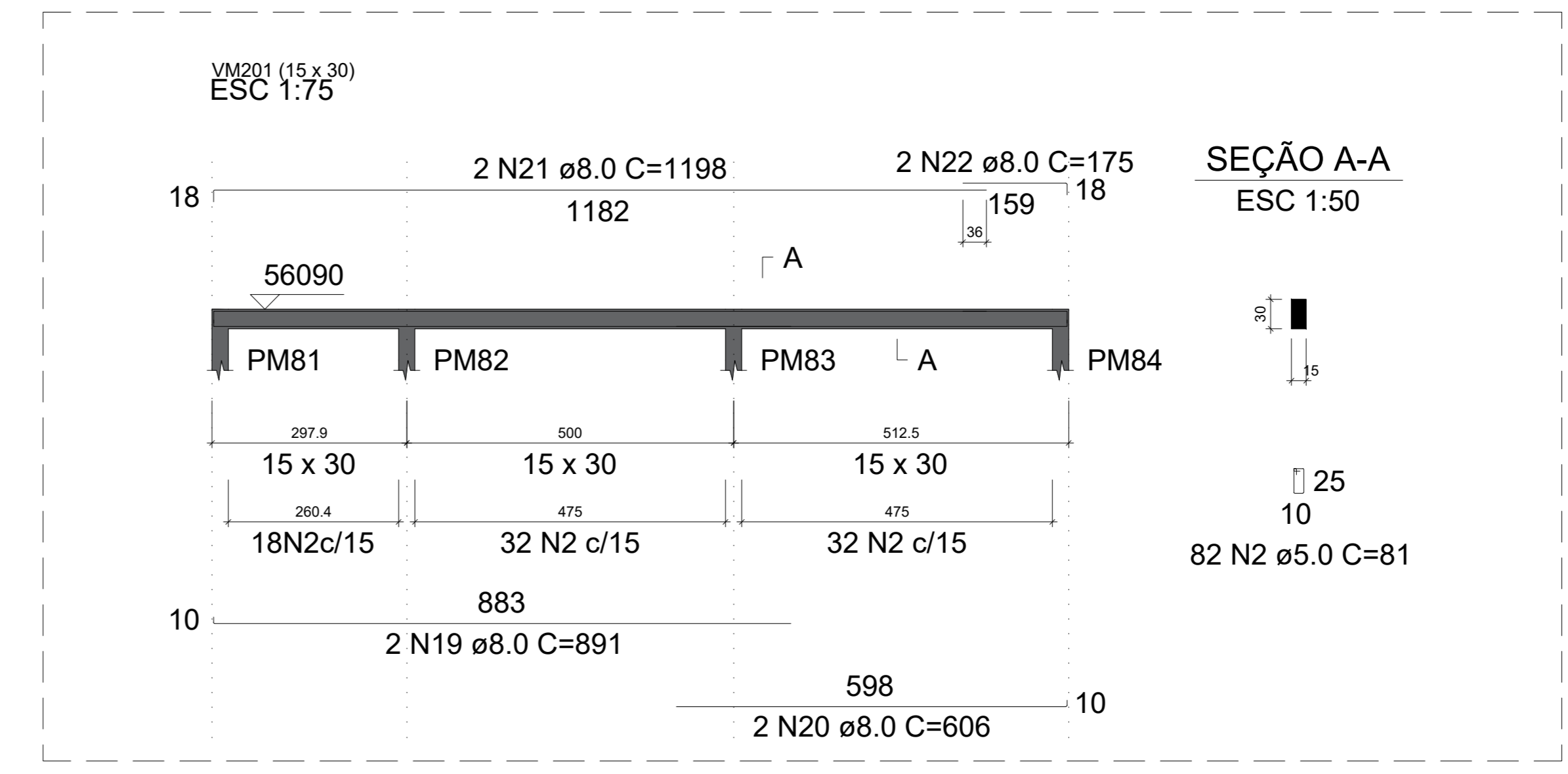
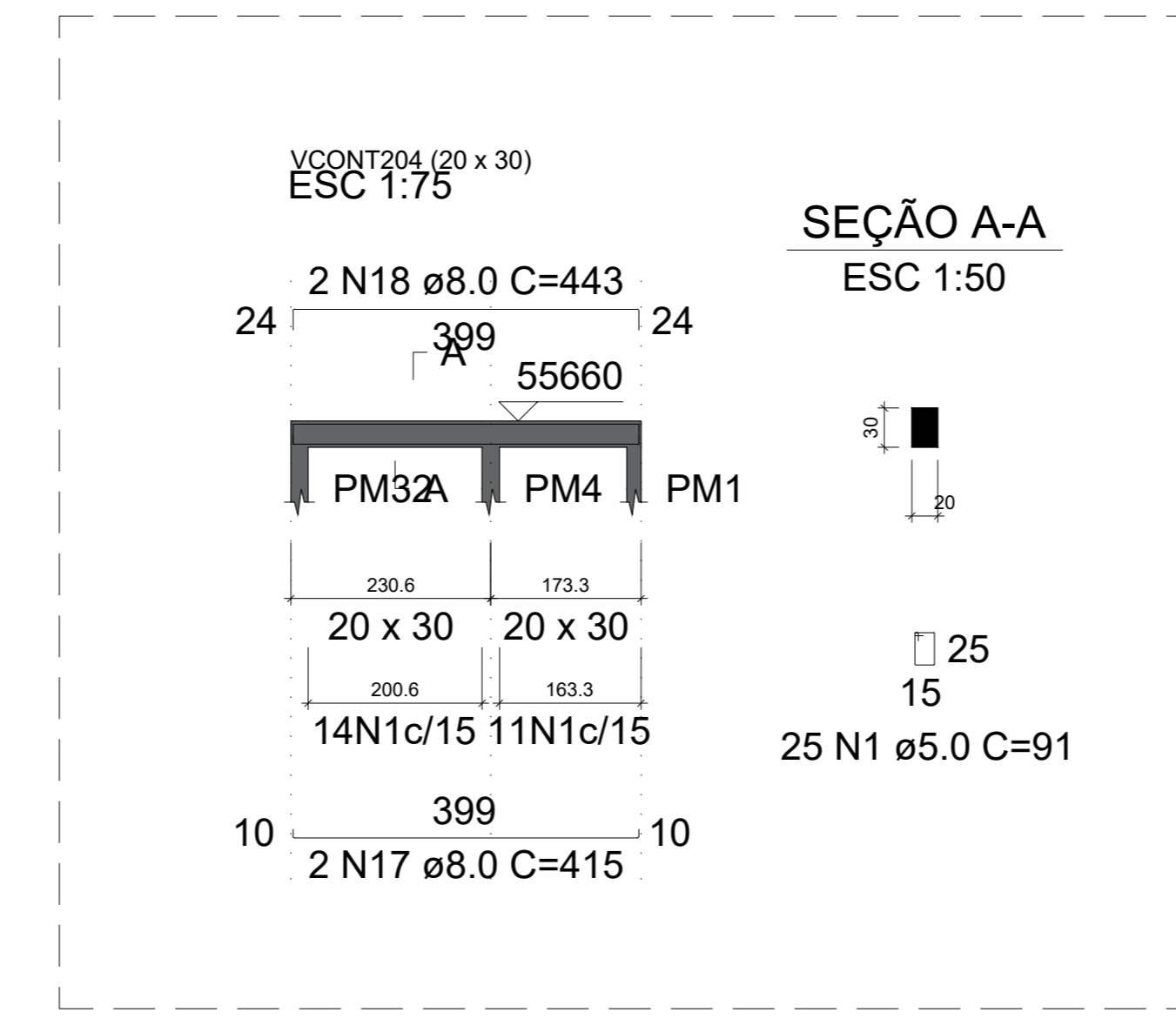
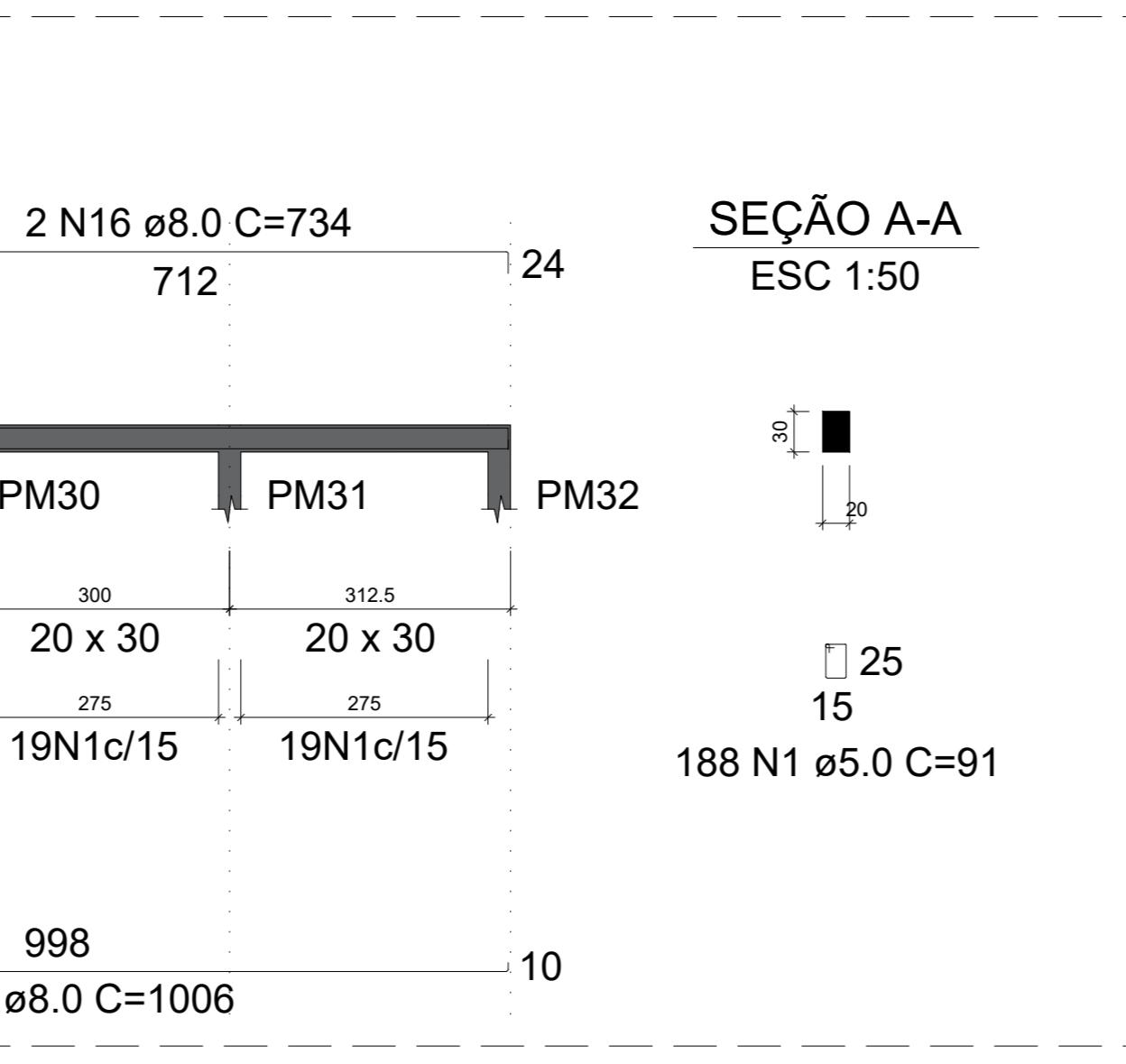
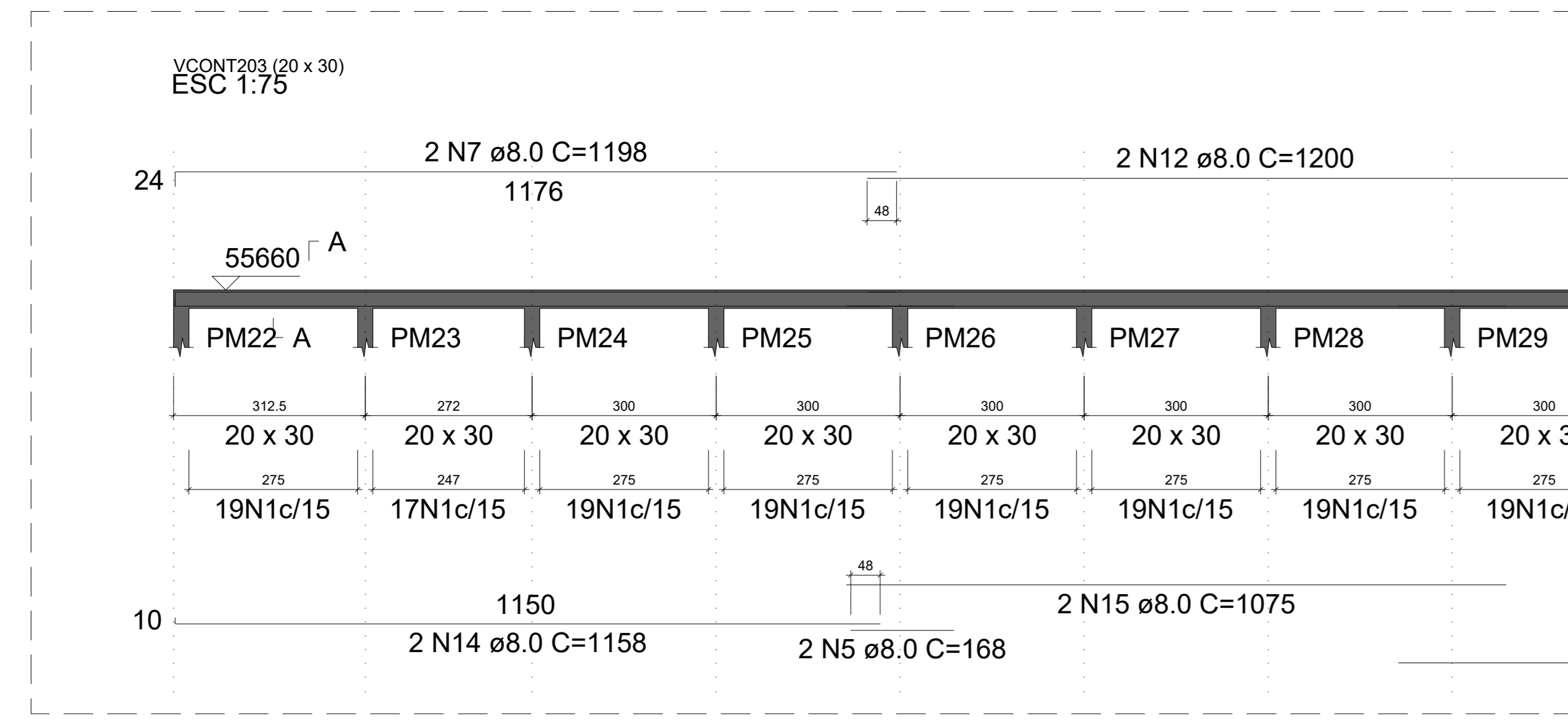
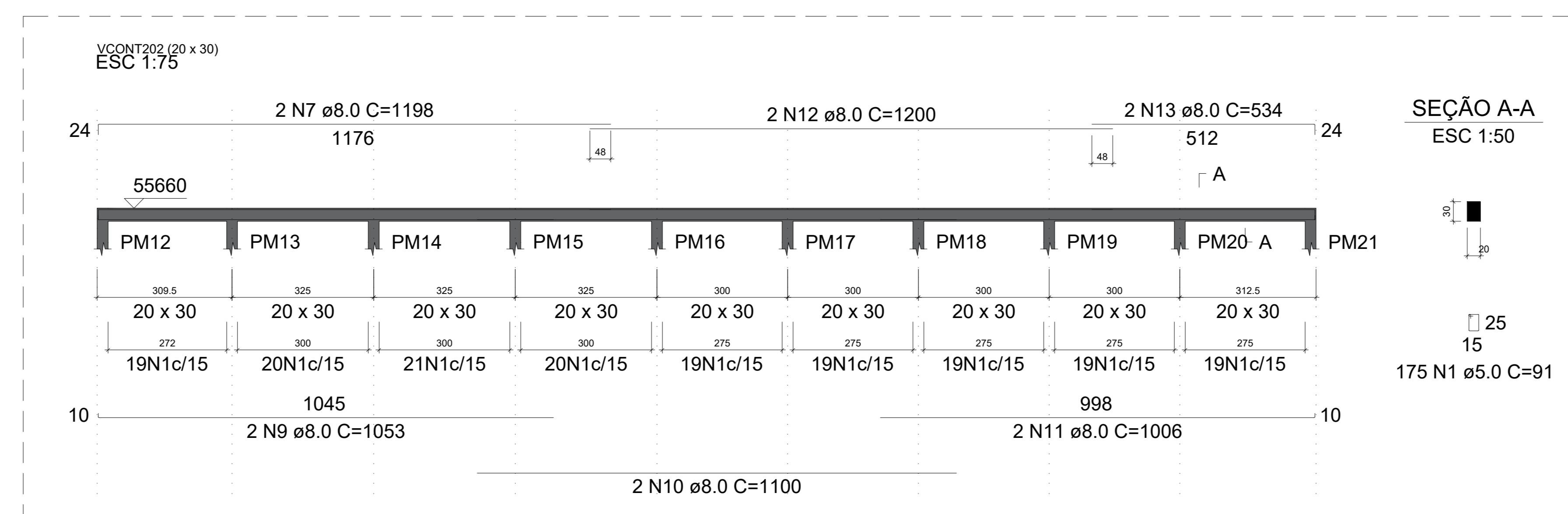
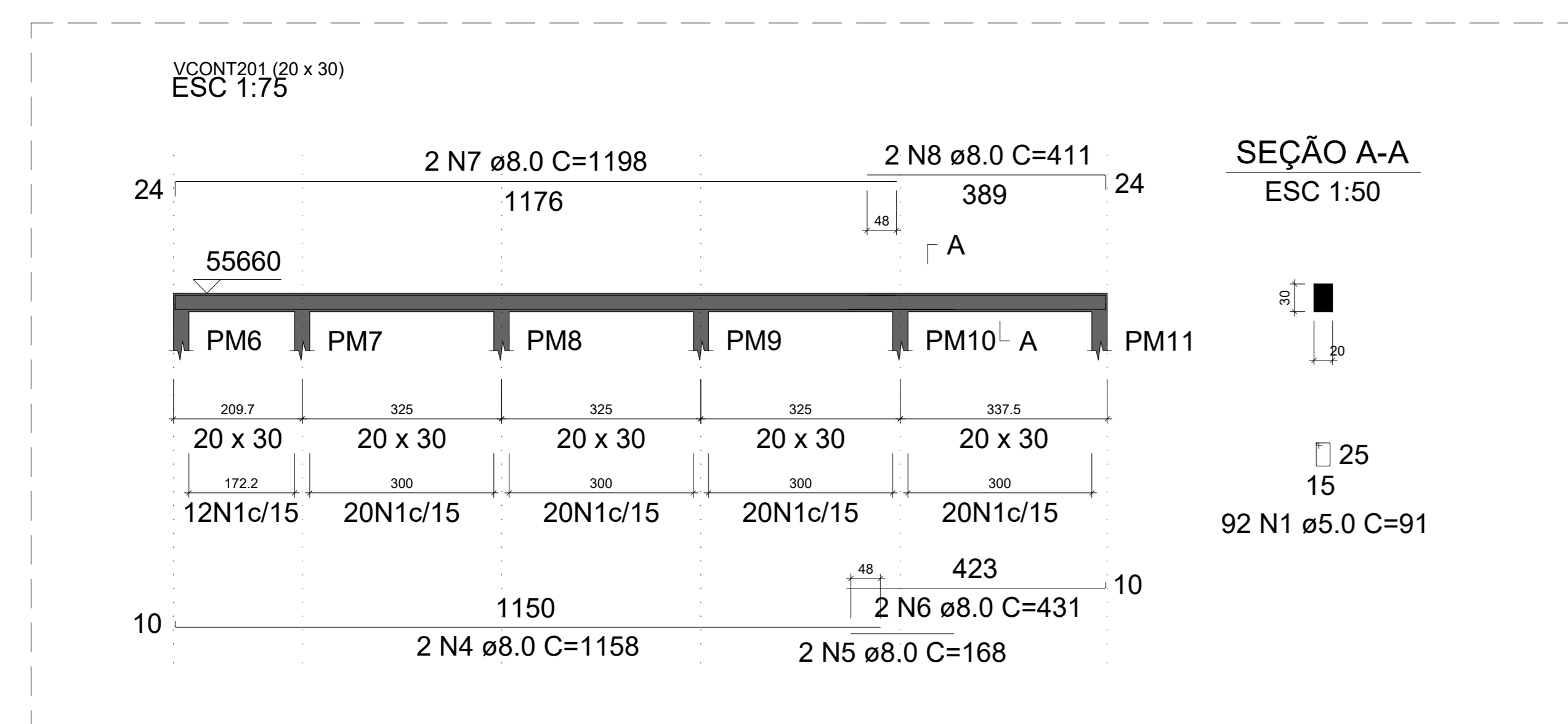
RELAÇÃO DO AÇO - VIGA SUPERIOR 01/03

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	480	91	43680
CA60	2	5.0	729	81	59049
CA60	3	5.0	13	101	1313
CA60	4	8.0	2	1158	2316
CA60	5	8.0	4	168	672
CA60	6	8.0	2	431	862
CA60	7	8.0	6	1198	7188
CA60	8	8.0	2	411	822
CA60	9	8.0	2	1053	2106
CA60	10	8.0	2	1100	2200
CA60	11	8.0	4	1006	4024
CA60	12	8.0	4	1200	4800
CA60	13	8.0	2	534	1068
CA60	14	8.0	2	1158	2316
CA60	15	8.0	2	1075	2150
CA60	16	8.0	2	734	1468
CA60	17	8.0	2	415	830
CA60	18	8.0	2	443	886
CA60	19	8.0	2	891	1782
CA60	20	8.0	4	606	2424
CA60	21	8.0	10	1198	11980
CA60	22	8.0	2	175	350
CA60	23	8.0	6	362	2172
CA60	24	8.0	6	1106	6636
CA60	25	8.0	4	578	2312
CA60	26	8.0	2	390	780
CA60	27	8.0	2	260	520
CA60	28	8.0	2	299	598
CA60	29	8.0	2	493	986
CA60	30	8.0	2	524	1048
CA60	31	8.0	2	226	452
CA60	32	8.0	2	249	498
CA60	33	8.0	2	516	1032
CA60	34	8.0	2	546	1092
CA60	35	8.0	2	508	1016
CA60	36	8.0	2	524	1048
CA60	37	8.0	2	536	1072
CA60	38	8.0	2	552	1104
CA60	39	8.0	2	397	794
CA60	40	8.0	2	413	826
CA60	41	8.0	2	1005	2010
CA60	42	8.0	2	577	1154
CA60	43	8.0	2	1198	2396
CA60	44	8.0	2	252	504
CA60	45	10.0	2	1078	2156
CA60	46	10.0	2	606	1212
CA60	47	10.0	3	336	1008
CA60	48	10.0	3	372	1116

RESUMO DO AÇO

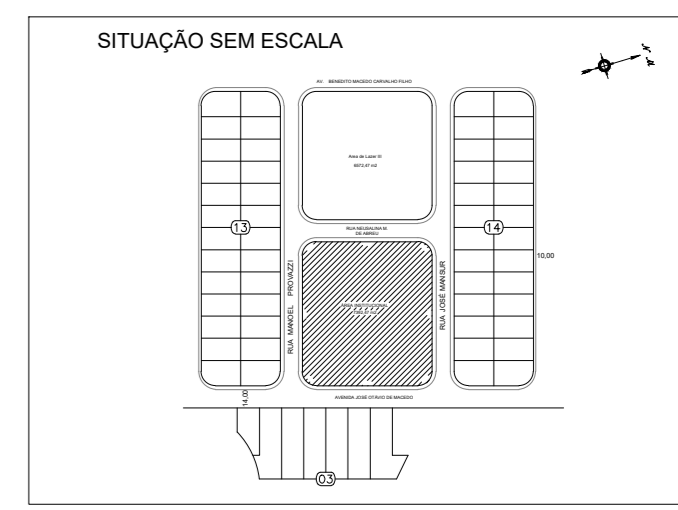
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	802.9	348.5
CA50	10.0	54.9	37.2
CA60	5.0	1040.4	176.4
PESO TOTAL (kg)			
CA50			385.8
CA60			176.4

Volume de concreto (C-30) = 9.16 m³
Área de forma = 138.55 m²



ALFREDO PADUA MANZANO
270159018
38

Assinado de forma digital por ALFREDO PADUA MANZANO; MANZANO:27015901838
Dados: 2026.01.09 11:58:47 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. VAN LOPES ALMEIDA
PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANTIA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 190239814-08
ART: 262051981916

Endereço: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA
Cidade: MUNICIPIO DE CAÇAPAVA
Projeto: PROJETO ESTRUTURAL
Levantamento:

ÁREA: Ver na folha ARQ 01/02
Pavão: 3760
Escala: Indicada
Data: NOV/2025
Revisão: R01

RELAÇÃO DO AÇO - VIGA SUPERIOR 02/03

VM215	VM216	VM217	VM218	VM219	VM220	VM221	VM222	VM223	VM224	VM225	VM226
CA60	1	5.0	951	81	77031	CA50	2	5.0	14	91	1274
	3	5.0	201	101	20301		4	8.0	2	444	888
	5	8.0	2	460	920		6	8.0	2	1078	2156
	7	8.0	8	606	4848		8	8.0	12	1198	14376
	9	8.0	2	362	724		10	8.0	2	1198	2396
	11	8.0	2	513	1026		12	8.0	6	390	2340
	13	8.0	10	1106	11060		14	8.0	2	251	522
	15	8.0	2	289	578		16	8.0	2	959	1918
	17	8.0	2	744	1488		18	8.0	2	1175	2350
	19	8.0	2	978	1956		20	8.0	2	495	990
	21	8.0	4	1200	4800		22	8.0	2	918	1836
	23	8.0	2	499	998		24	8.0	2	971	1942
	25	8.0	2	1006	2012		26	8.0	2	1198	2396
	27	8.0	2	423	846		28	8.0	2	881	1762
	29	8.0	2	603	1206		30	8.0	2	1190	2380
	31	8.0	2	172	344		32	8.0	2	948	1896
	33	8.0	2	964	1928		34	8.0	2	486	972
	35	8.0	2	502	1004		36	8.0	2	1065	2130
	37	8.0	2	168	336		38	8.0	2	389	778
	39	8.0	2	1086	2172		40	8.0	2	190	380

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	850.9	369.3
CA60	5.0	966.1	167.2
PESO TOTAL (kg)			
CA50			369.3
CA60			167.2

Volume de concreto (C-30) = 8.81 m³
Área de forma = 144.49 m²

RELAÇÃO DO AÇO - VIGA SUPERIOR 03/03

VM301	VM302	VM303	VM304	VM305	VM306	VM307	VM308	VM309	VM310		
CA60	1	5.0	107	81	8667	CA50	2	8.0	2	908	1816
	3	8.0	2	924	1848		4	8.0	2	857	1714
	5	8.0	2	873	1746						

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	71.2	30.9
CA60	5.0	86.7	14.7
PESO TOTAL (kg)			
CA50			30.9
CA60			14.7

Volume de concreto (C-30) = 0.69 m³
Área de forma = 11.57 m²

ALFREDO PADUA MANZANO
Assinado de forma digital por ALFREDO PADUA MANZANO: 270159018901838
Dados: 2026.01.09 11:59:26 -03'00'

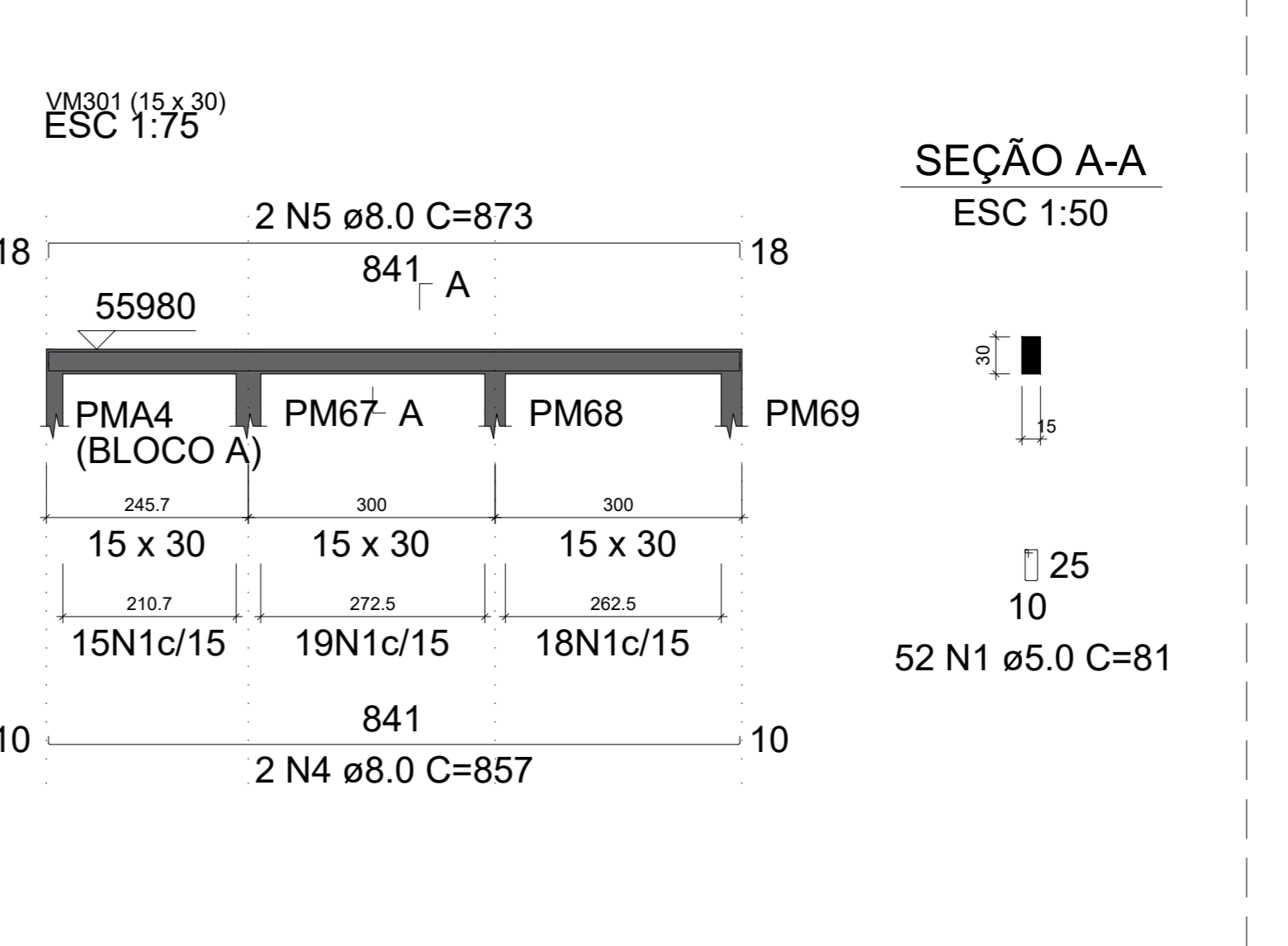
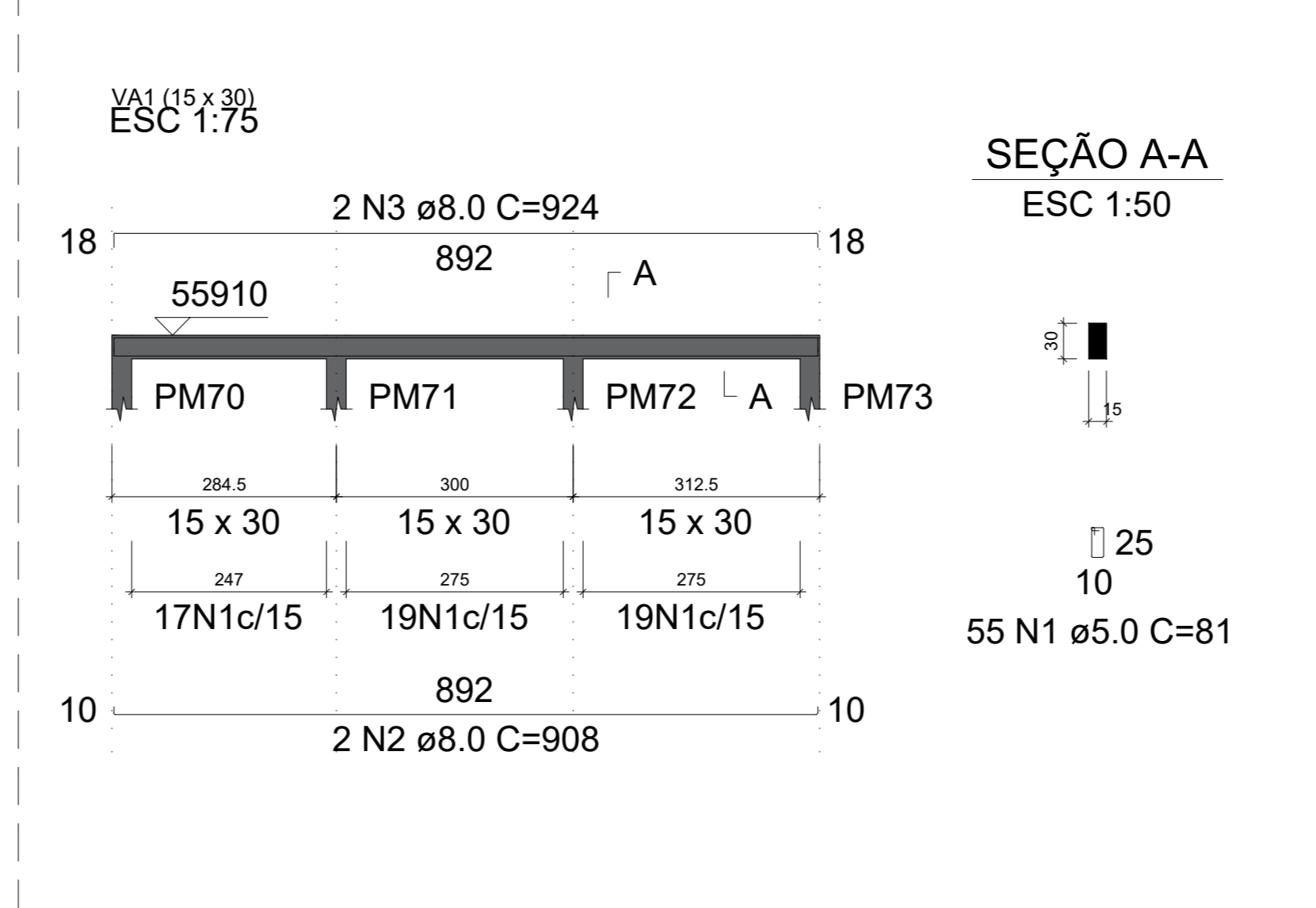
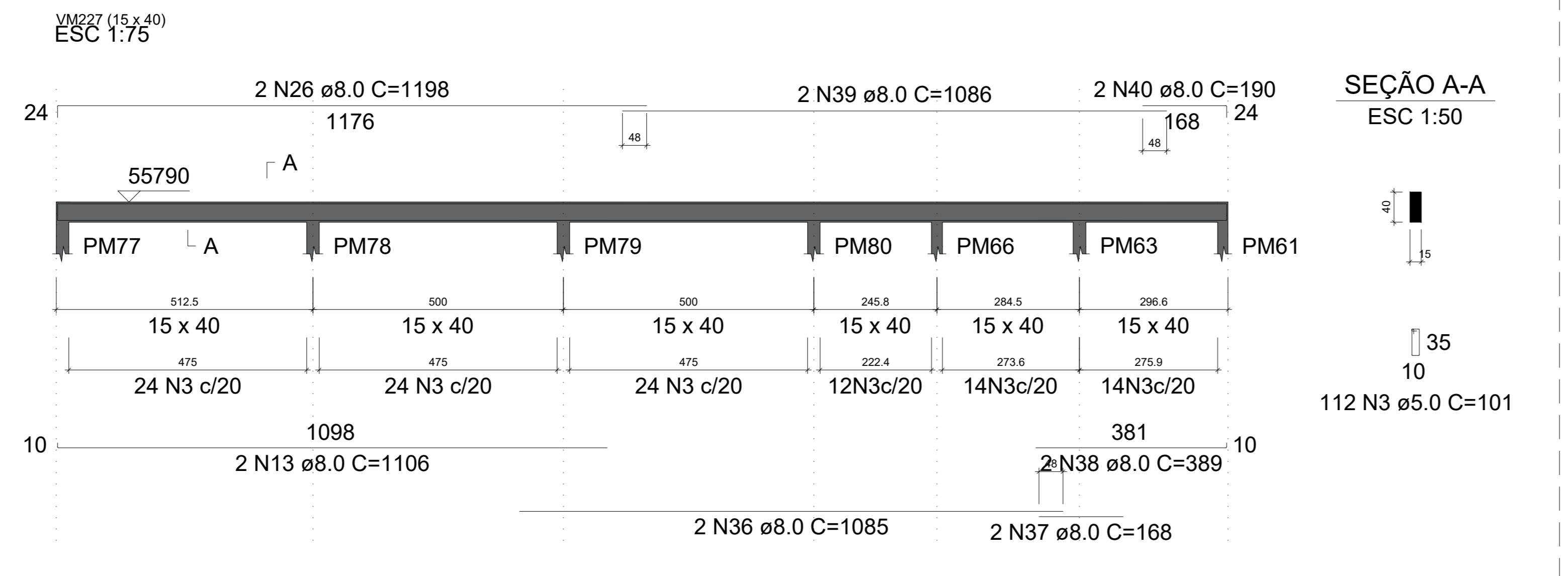
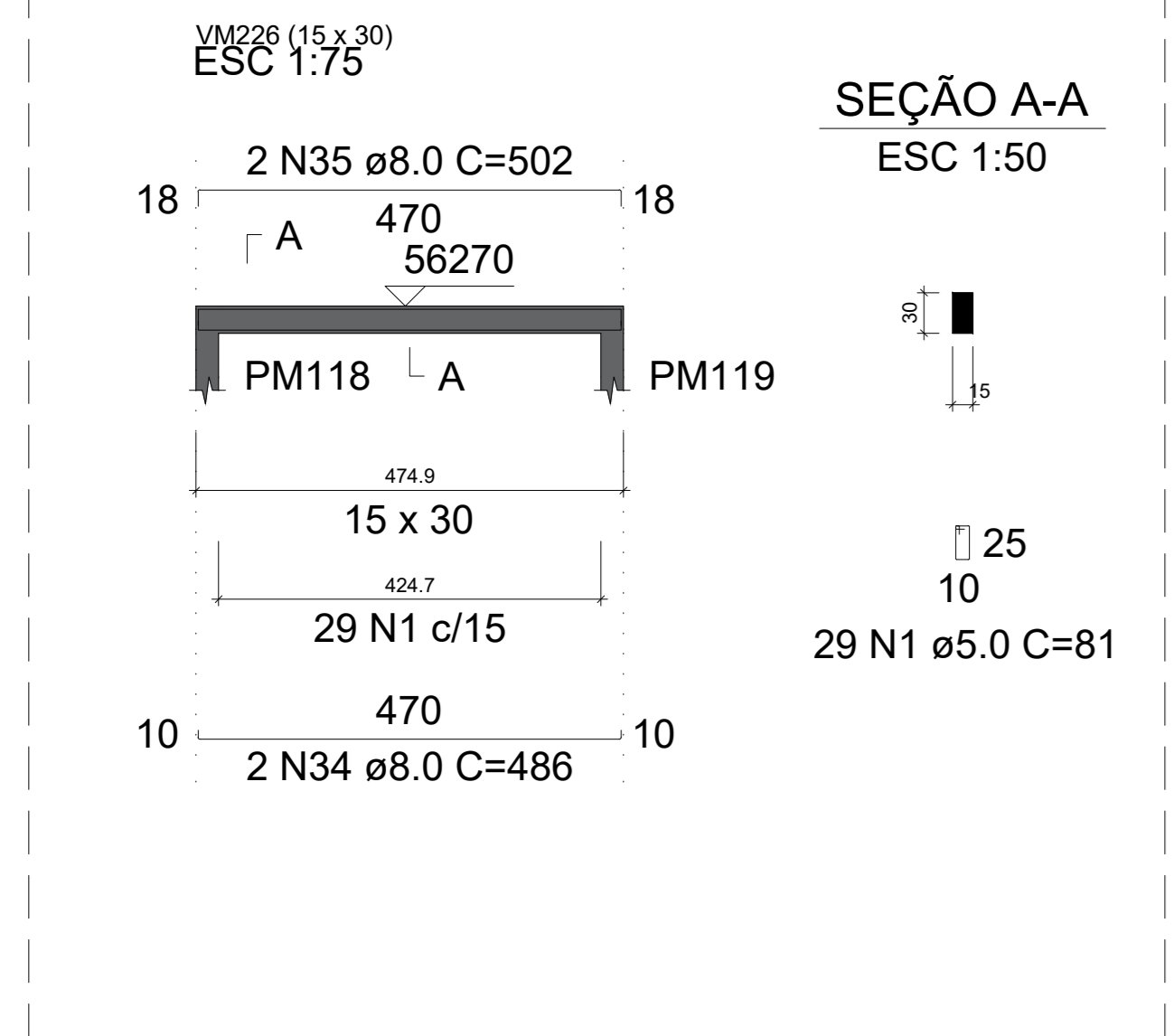
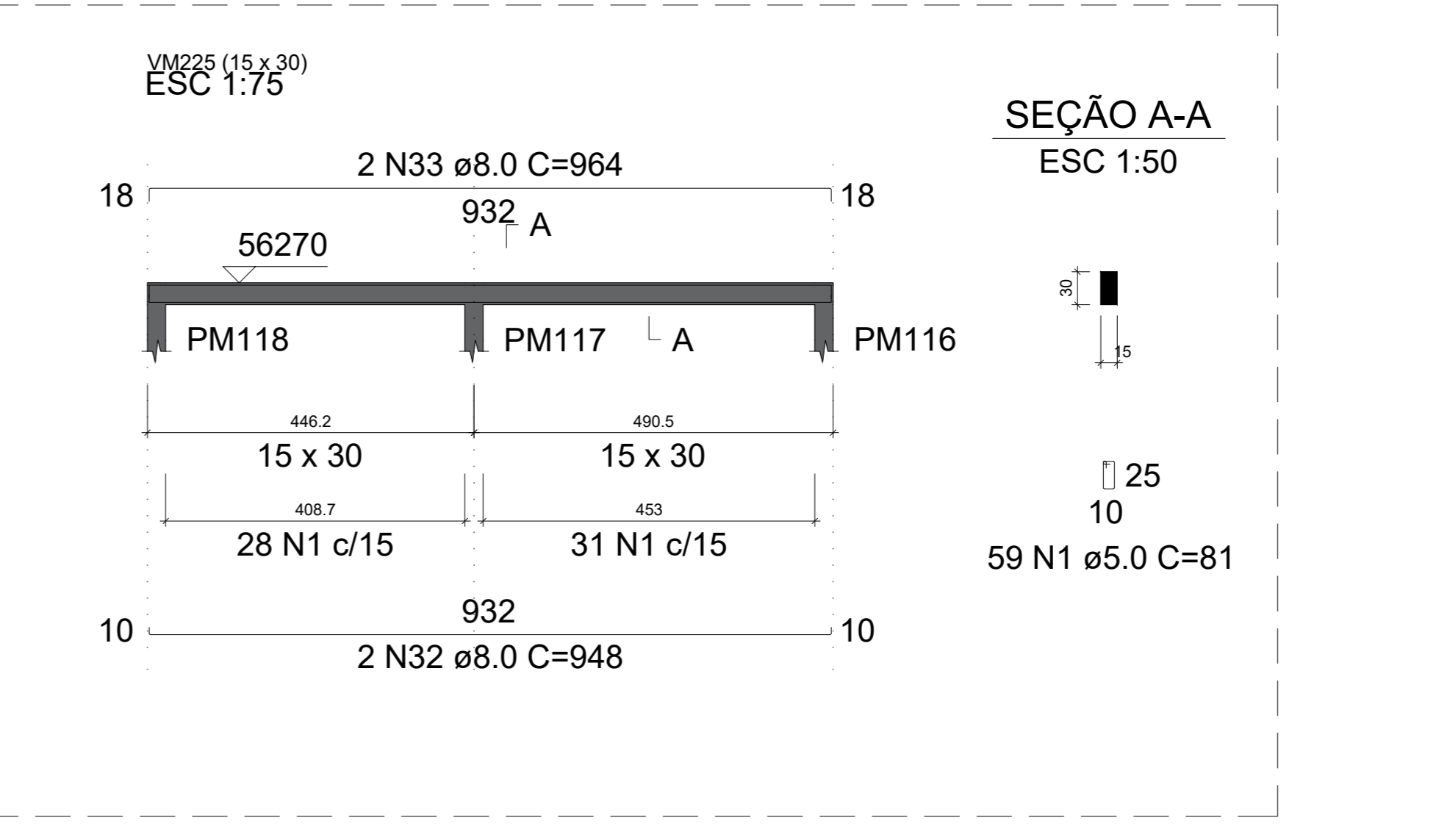
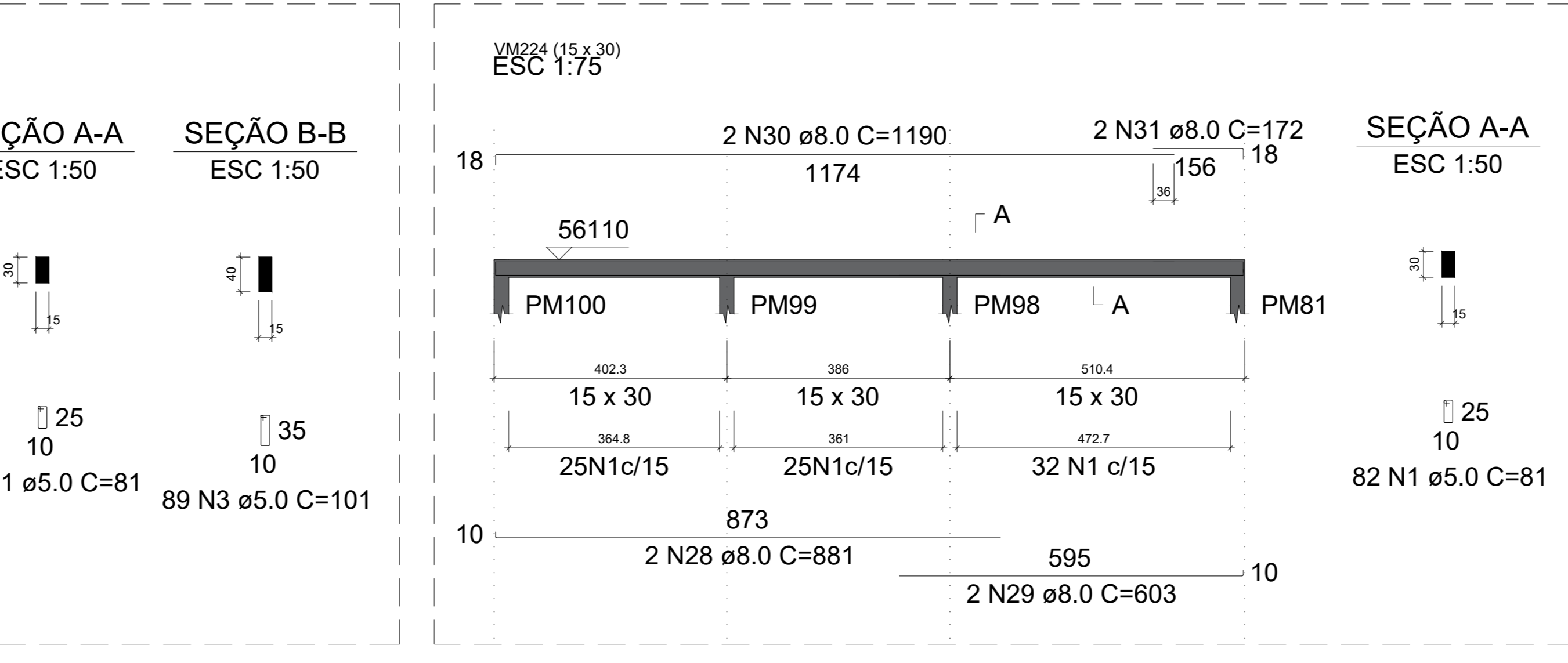
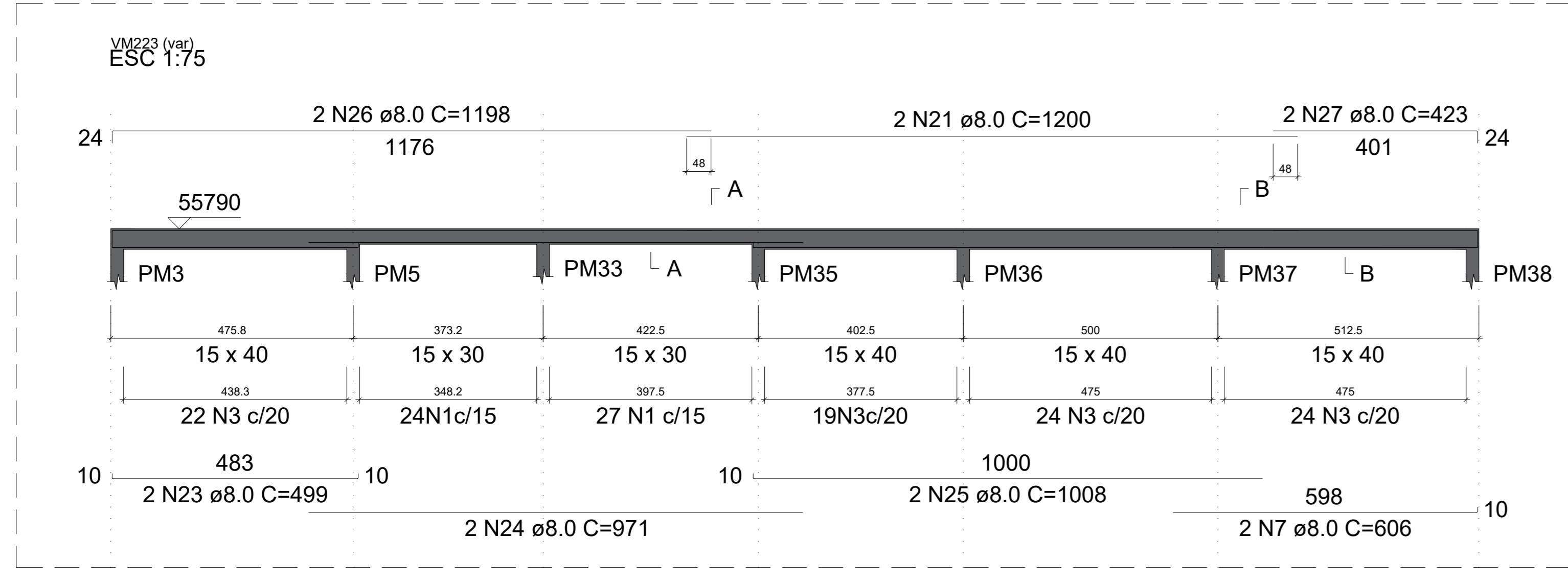
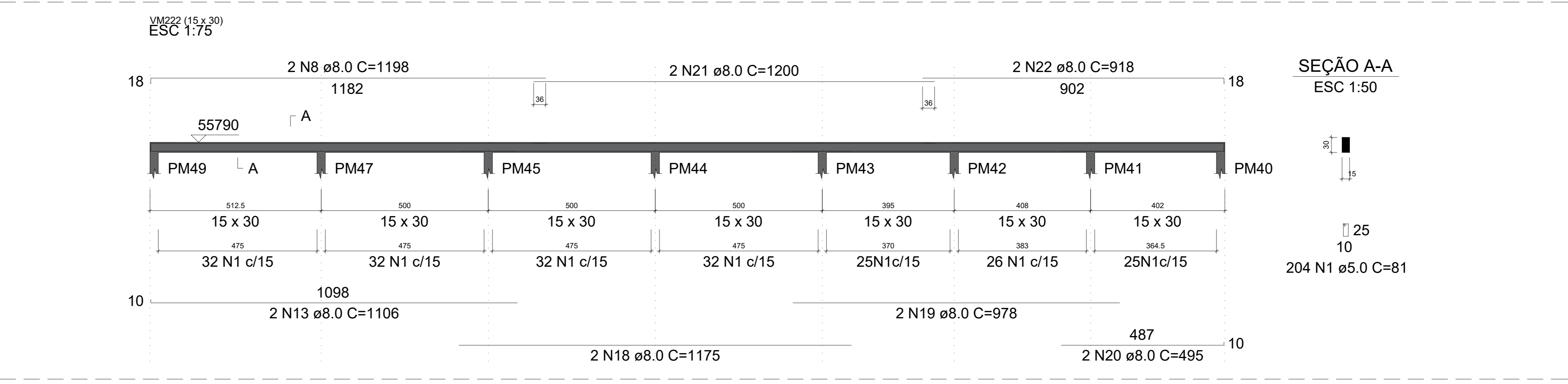
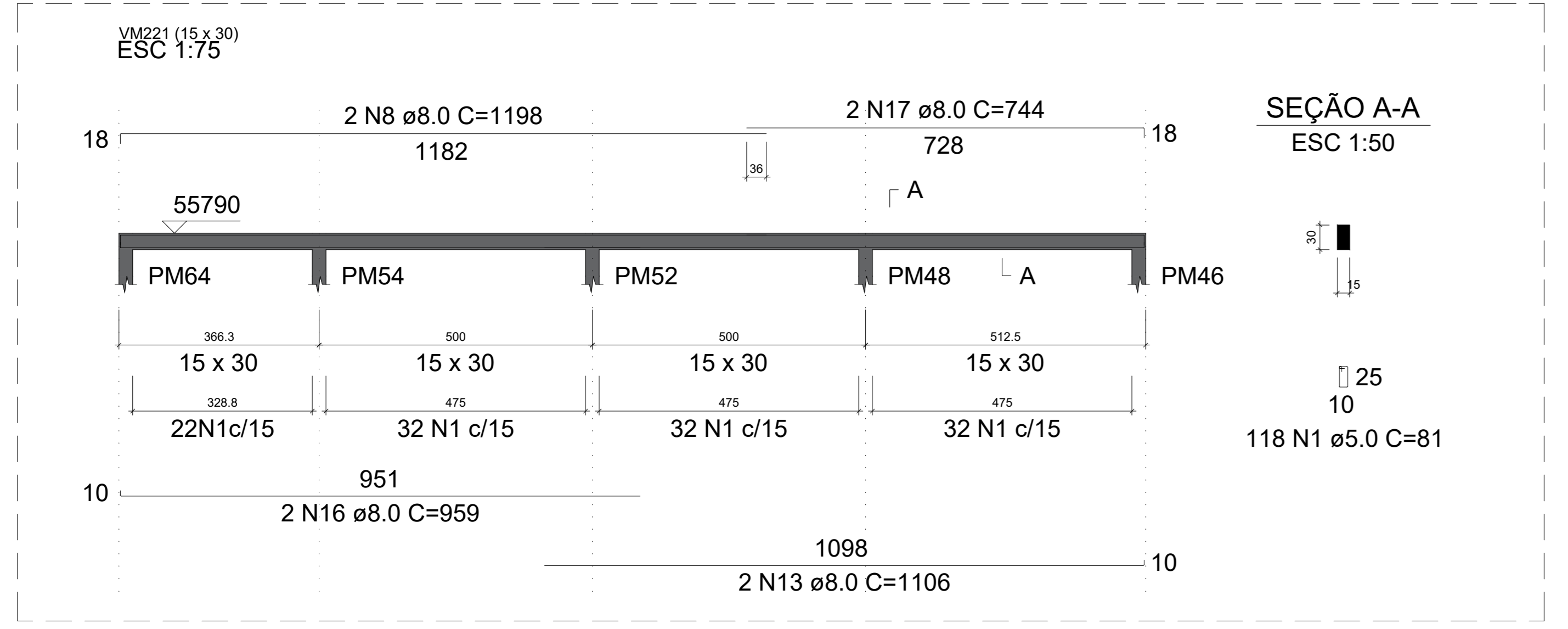
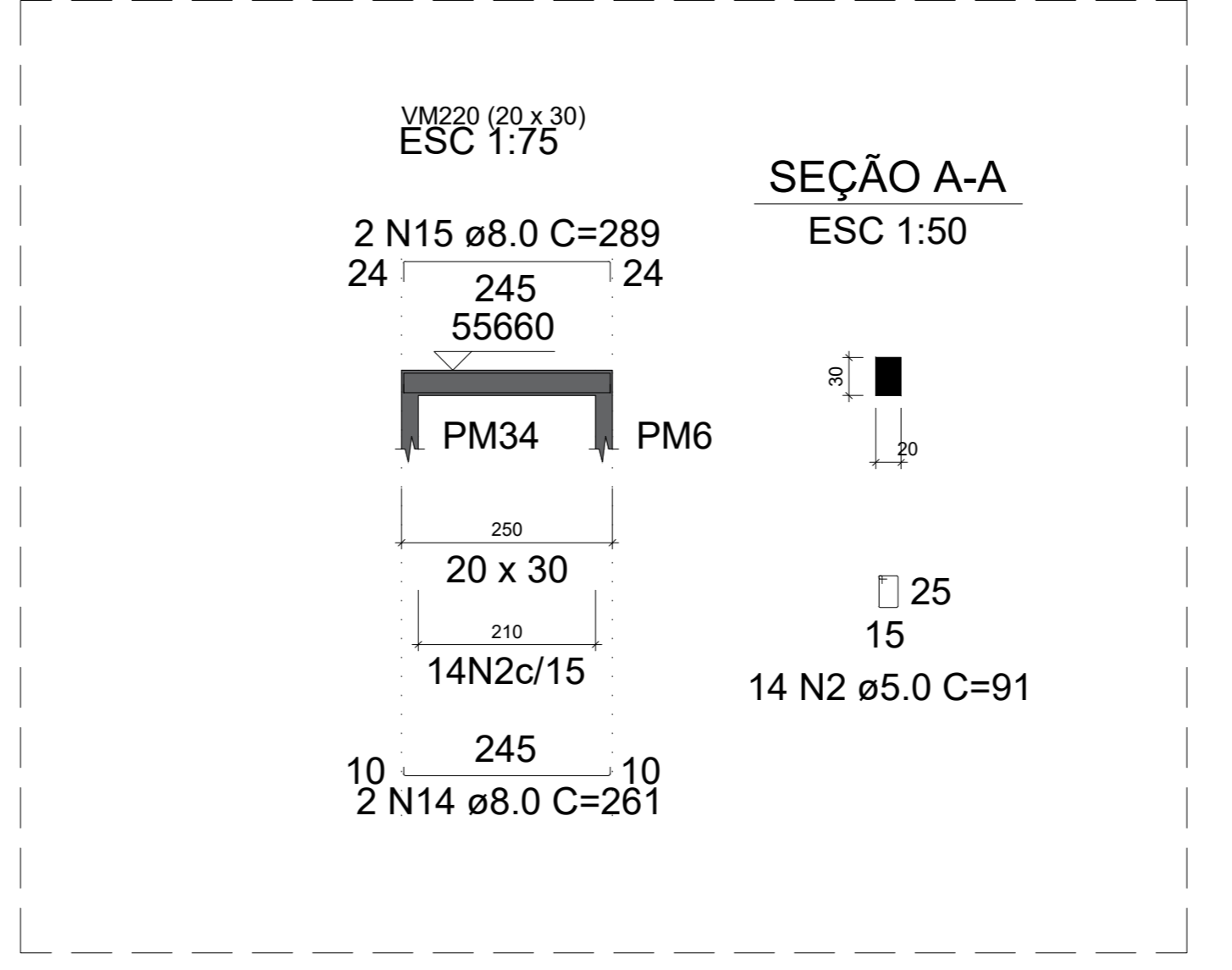
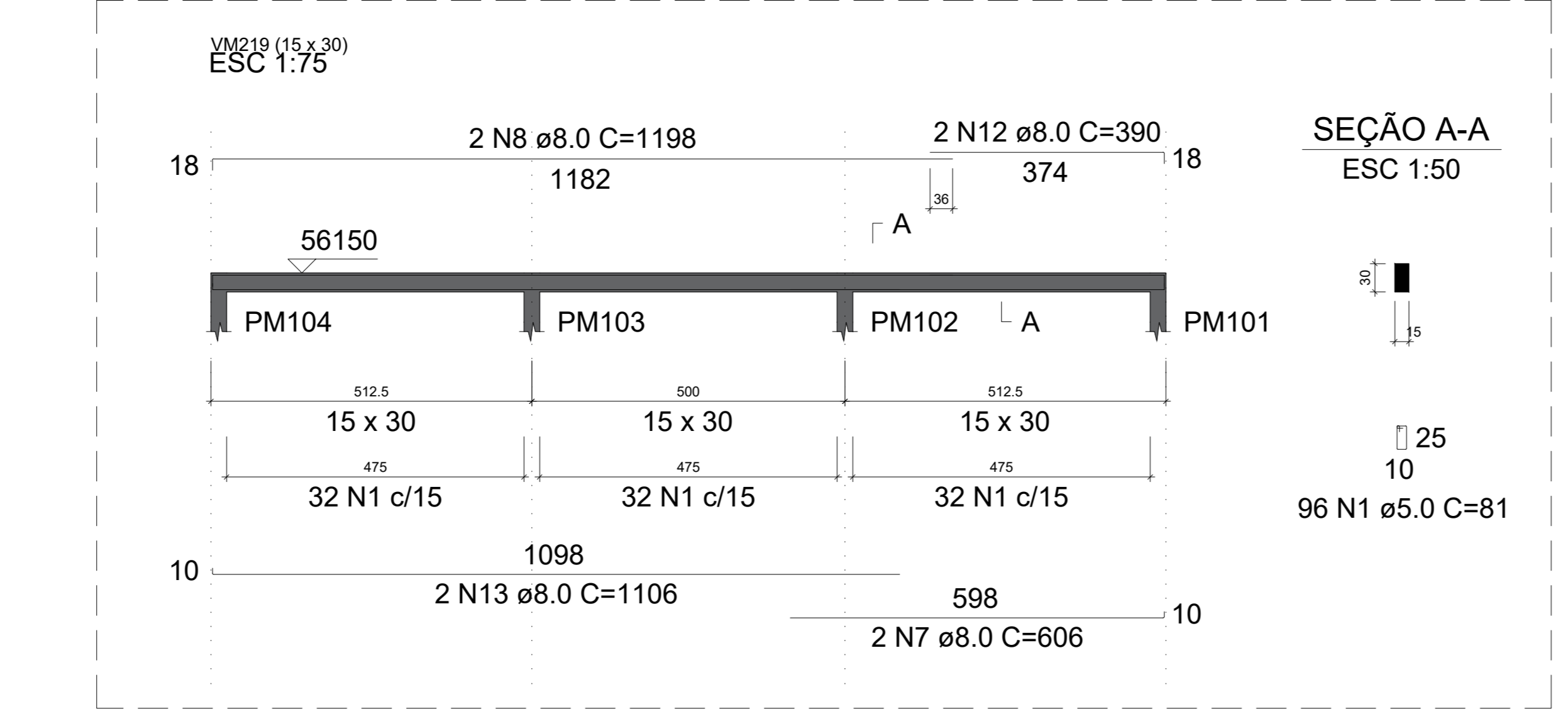
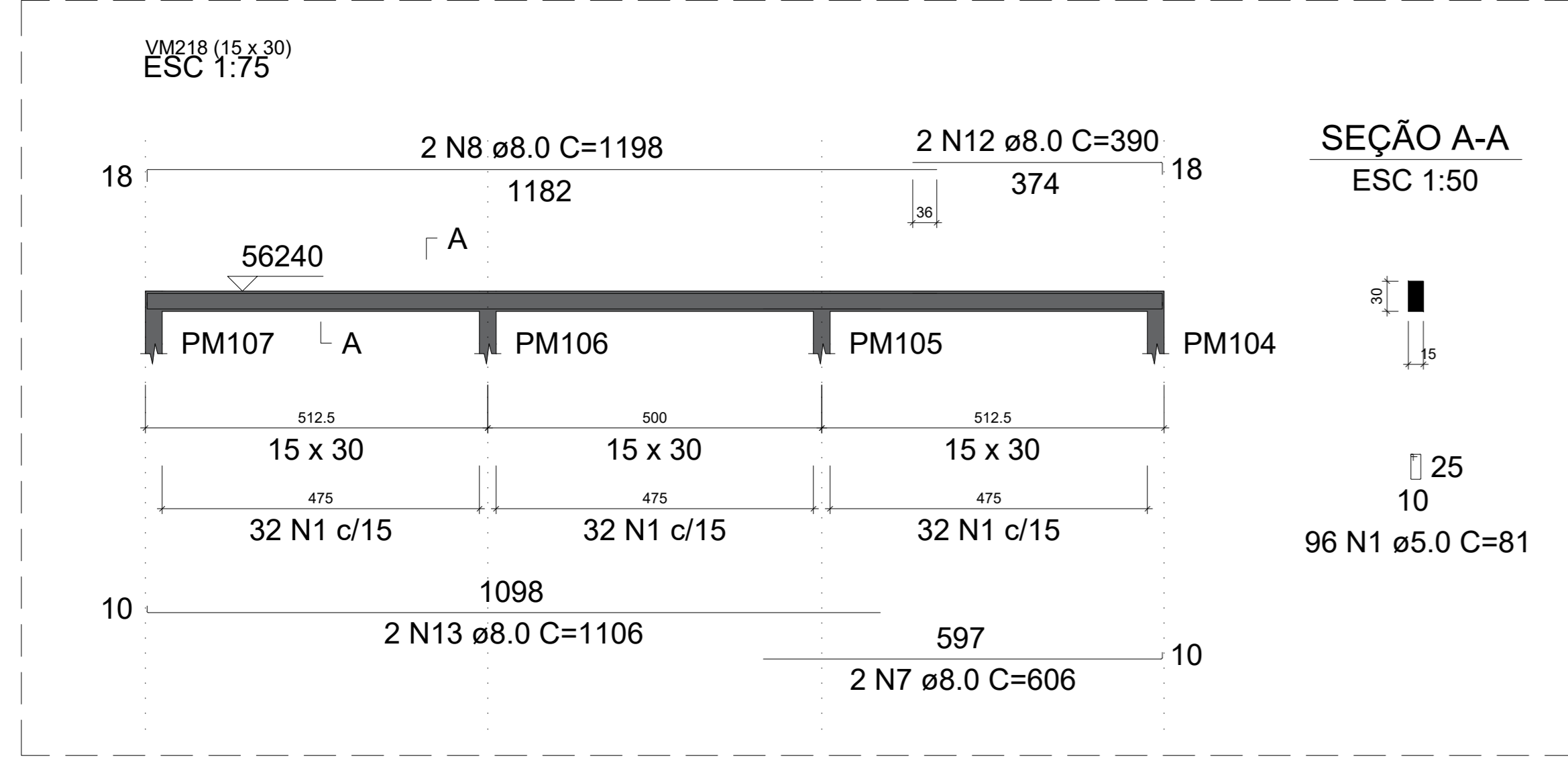
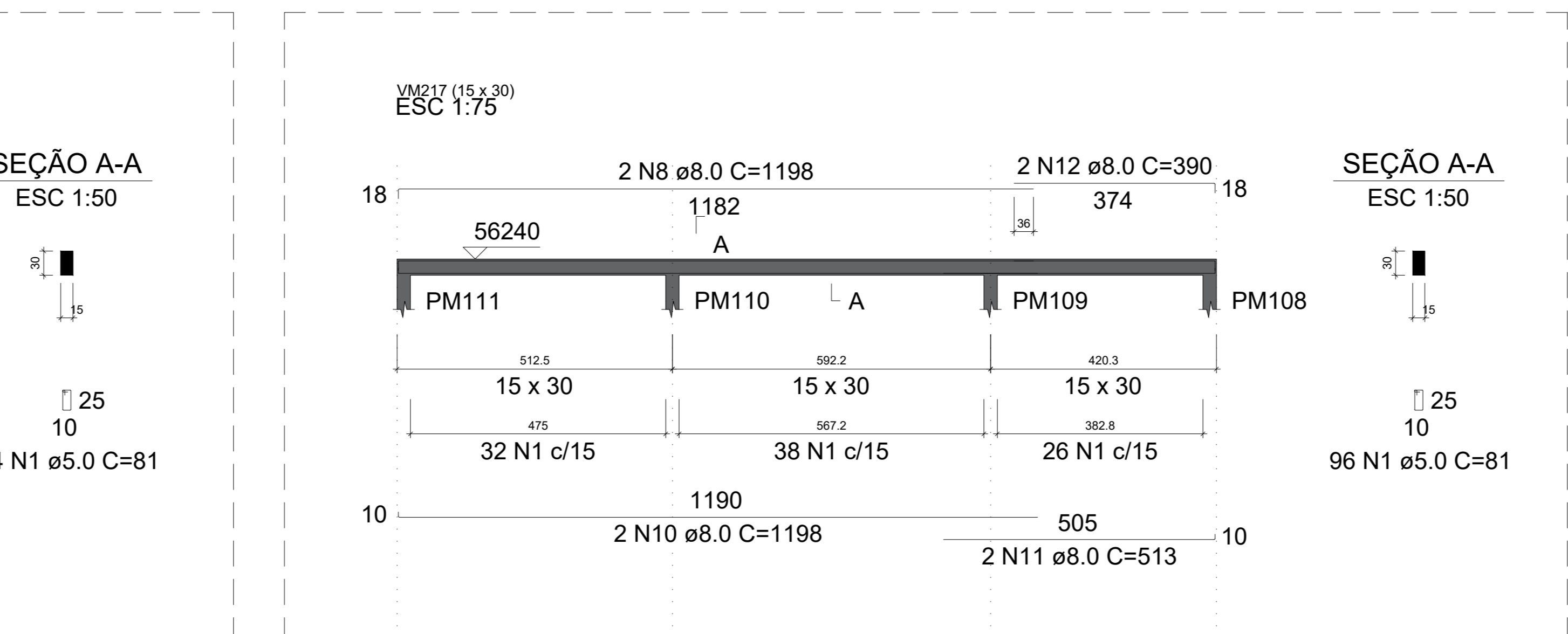
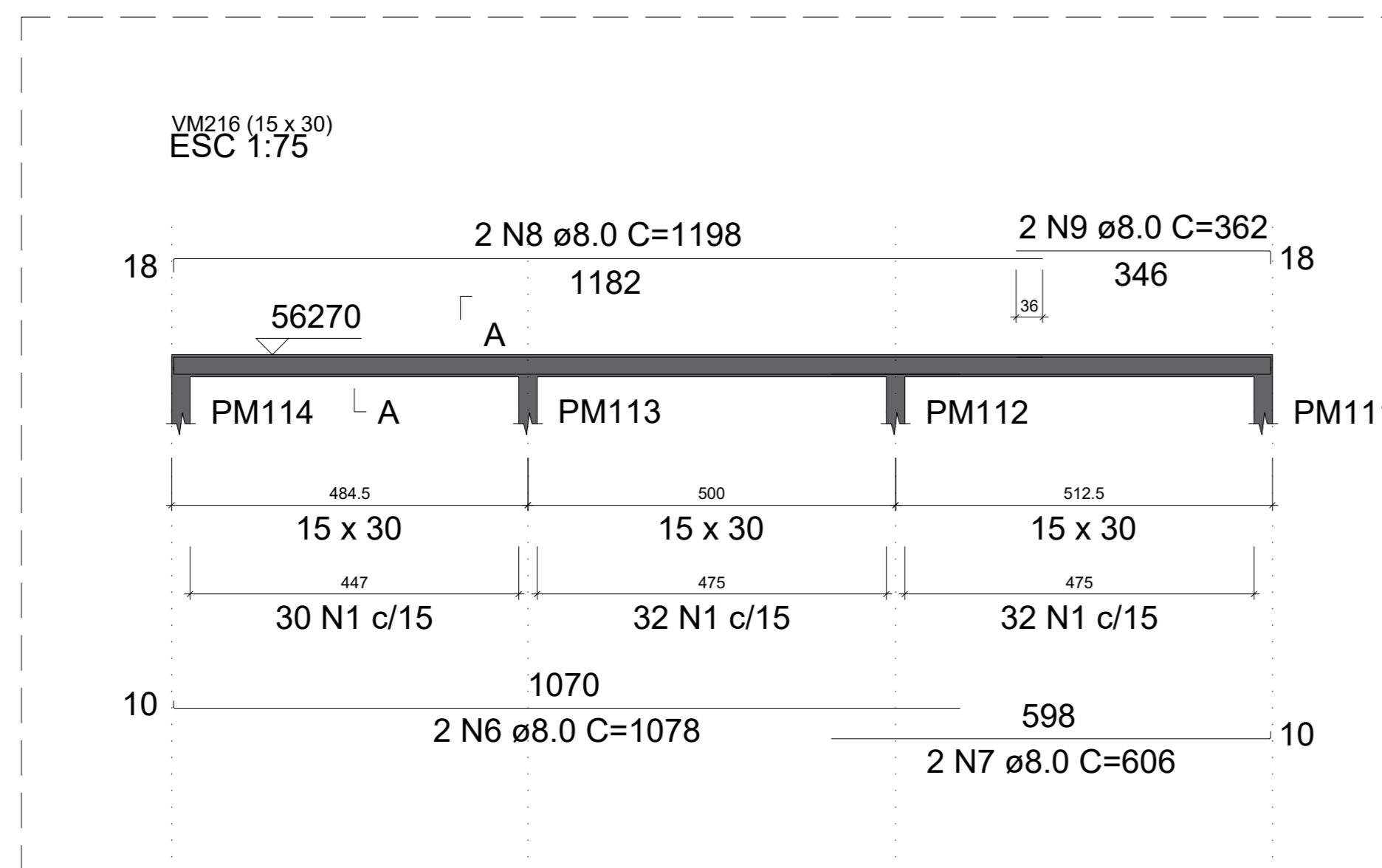
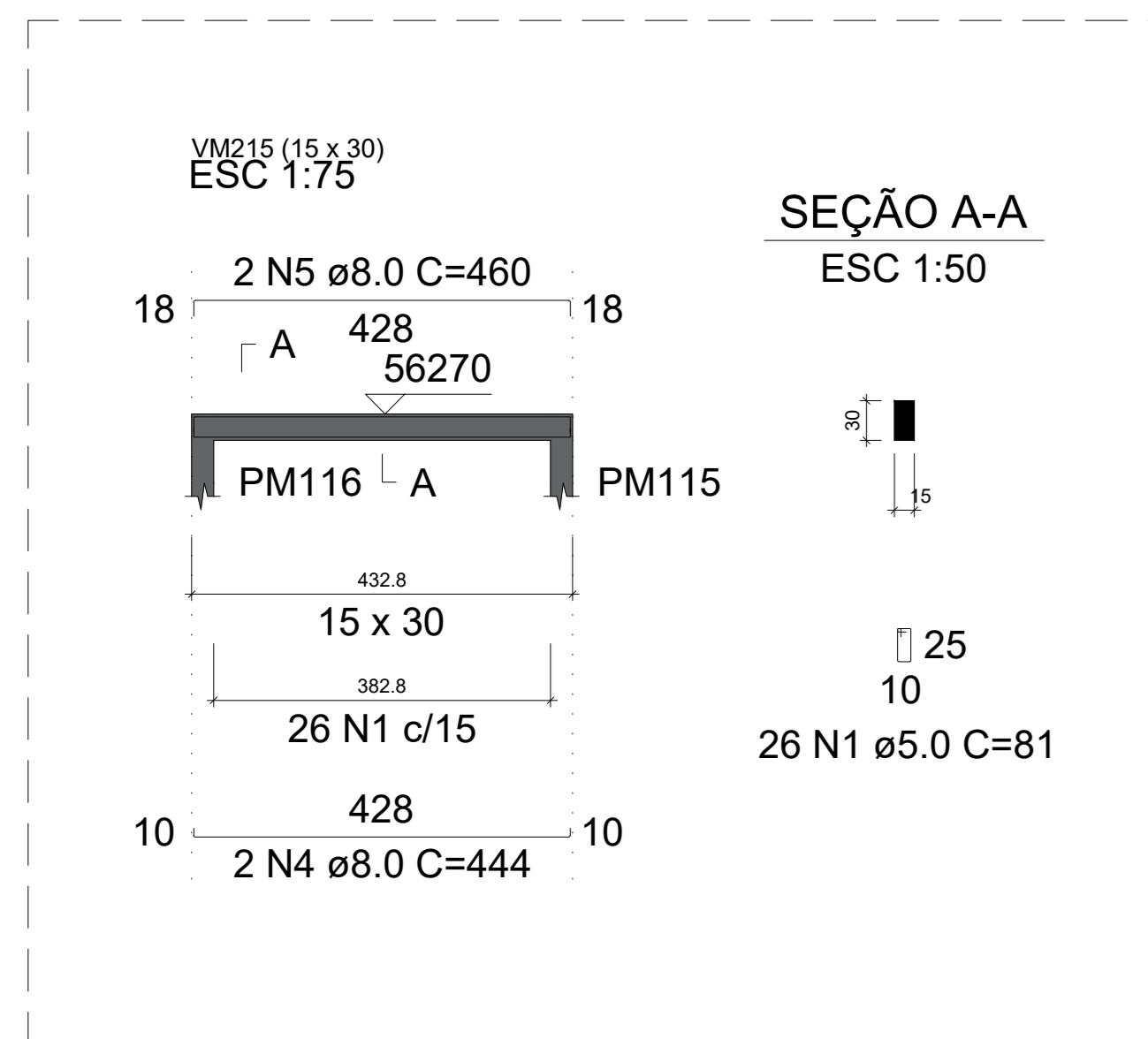


PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

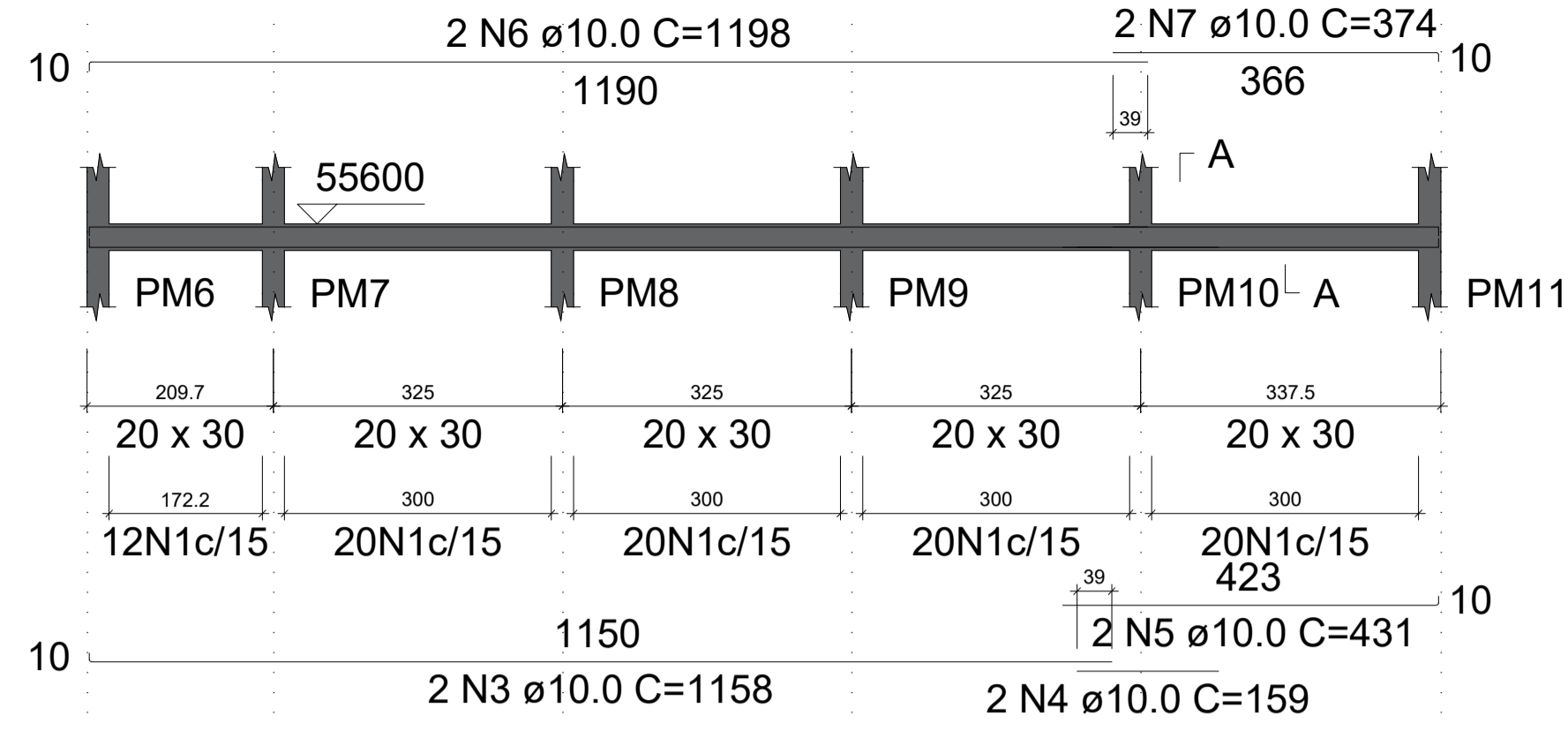
PROJETO: Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 sales

DR. VAN LOPES ALMEIDA - PREFEITO MUNICIPAL
ANTONIO POTIGUARA CHAGAS FERREIRA - SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE
SIDNEY SANTIA - SECRETÁRIO MUNICIPAL DE EDUCAÇÃO
ENG. ALFREDO PADUA MANZANO - CREA: 060339614-08 - ART: 262051801916

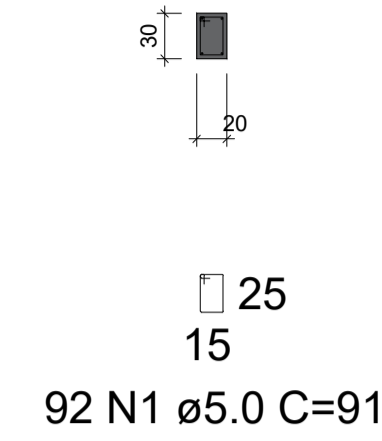
Endereço: AVENIDA JOSE OTAVIO DE MACEDO, Nº 841 - JARDIM PANORAMA	Número de Processo: 5.6132004
Cidade: MUNICIPIO DE CAÇAPAVA	ÁREA: Ver na folha ARQ 01/52
Descrição: PROJETO ESTRUTURAL	Descrição: BLOCO MURO- LOCAÇÃO
Levantamento:	Escala: Indecida
Data: NOV/2025	Revisão: RD1



VCONT101 (20 x 30)
ESC 1:75



SEÇÃO A-A
ESC 1:50



RELAÇÃO DO AÇO - VIGAS DE CONTENÇÃO

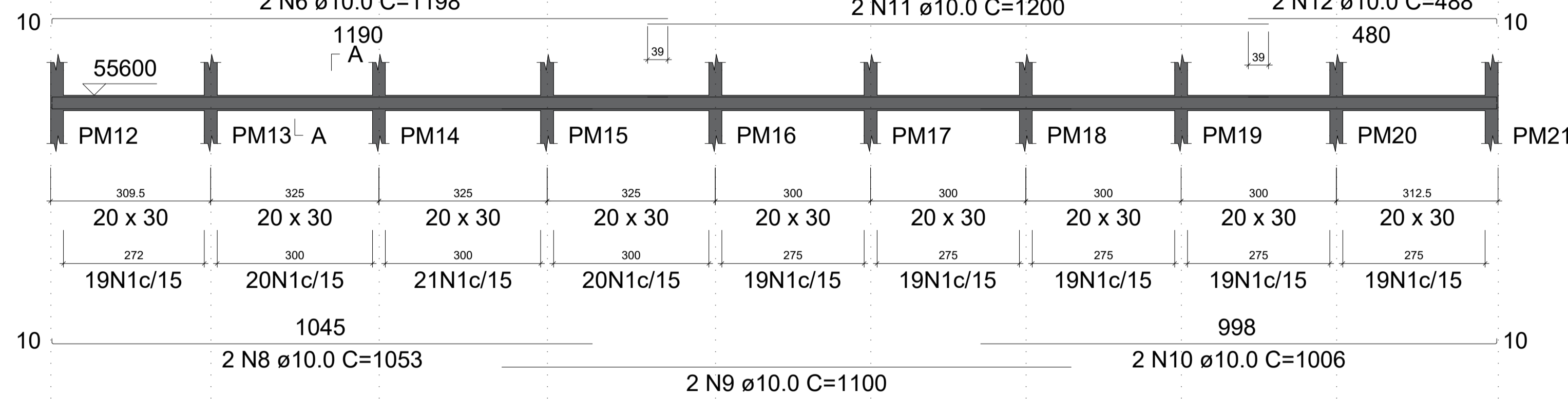
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	494	91	44954
CA50	2	5.0	87	81	7047
	3	10.0	2	1158	2316
	4	10.0	4	159	636
	5	10.0	2	431	862
	6	10.0	8	1198	9584
	7	10.0	2	374	748
	8	10.0	2	1053	2106
	9	10.0	2	1100	2200
	10	10.0	4	1006	4024
	11	10.0	4	1200	4800
	12	10.0	2	488	976
	13	10.0	2	1158	2316
	14	10.0	2	1075	2150
	15	10.0	2	688	1376
	16	10.0	2	1005	2010
	17	10.0	2	577	1154
	18	10.0	2	237	474
	19	10.0	2	260	520
	20	10.0	2	264	528
	21	10.0	2	414	828
	22	10.0	2	418	836

RESUMO DO AÇO

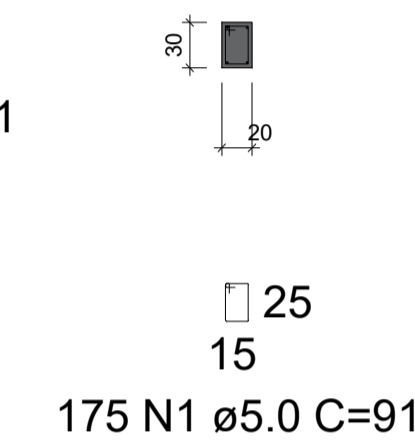
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	404.4	274.3
CA60	5.0	520	88.2
PESO TOTAL (kg)			
CA50			274.3
CA60			88.2

Volume de concreto (C-30) = 4.92 m³
Área de forma = 67.56 m²

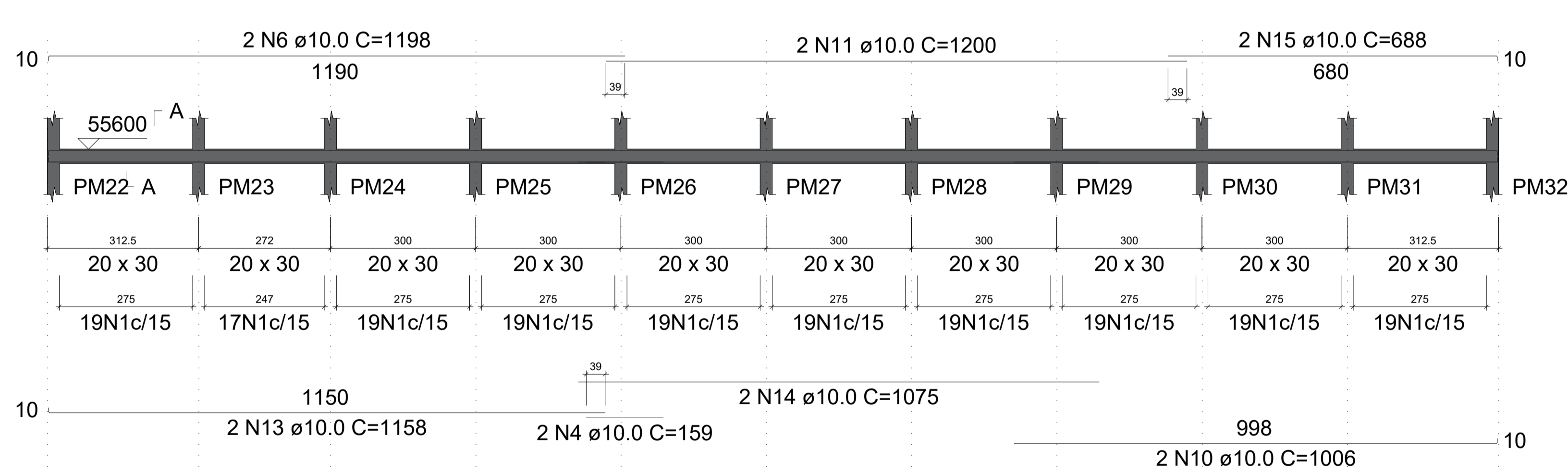
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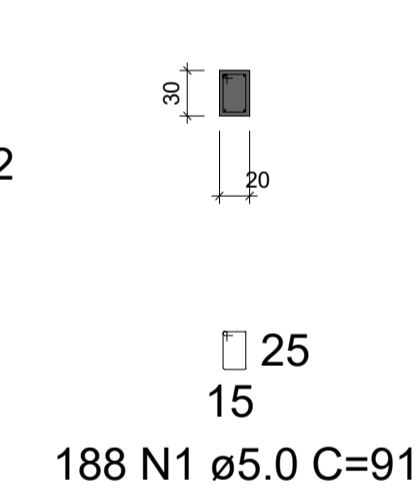
SEÇÃO A-A
ESC 1:50



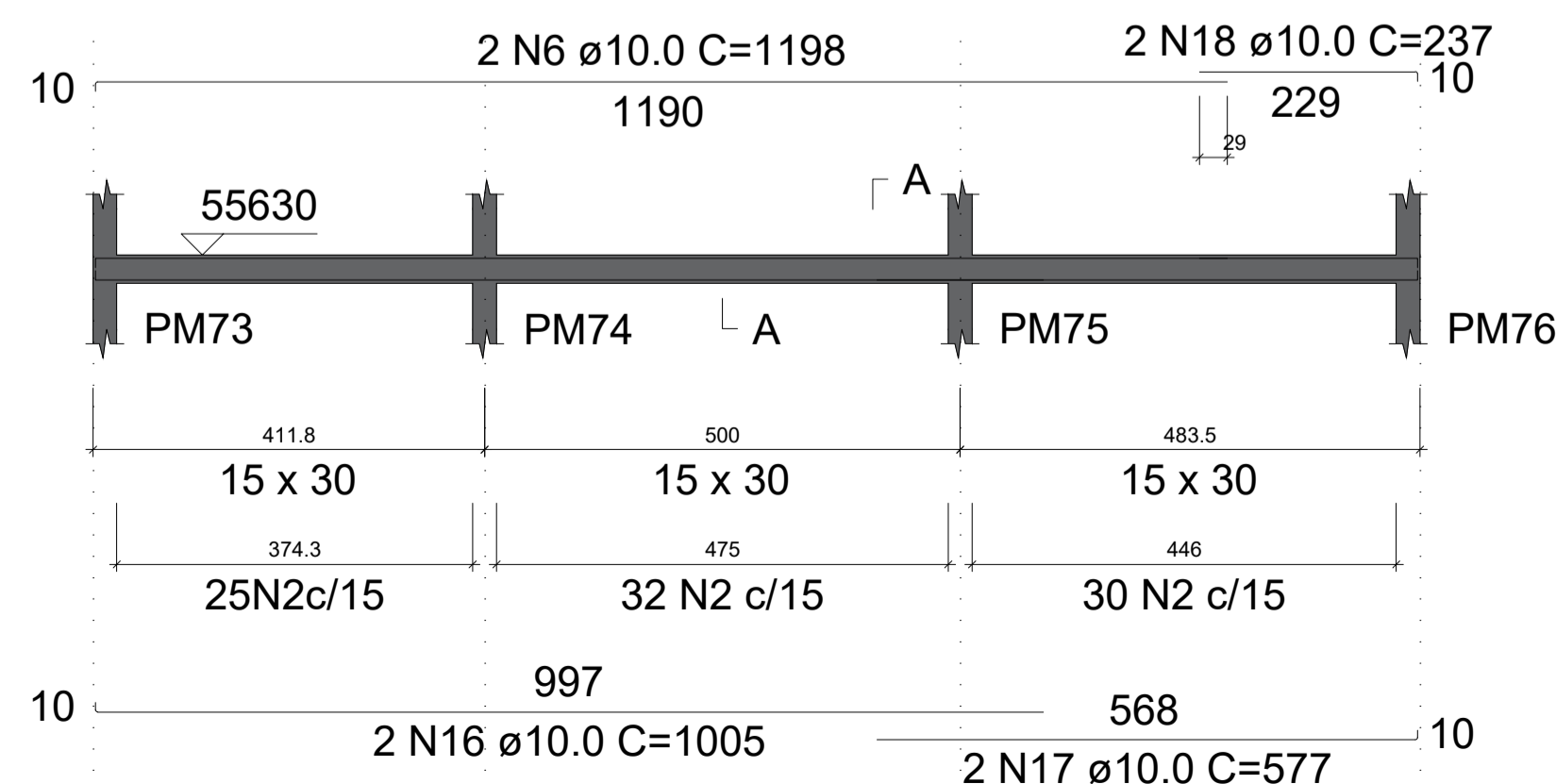
VCONT103 (20 x 30)
ESC 1:75



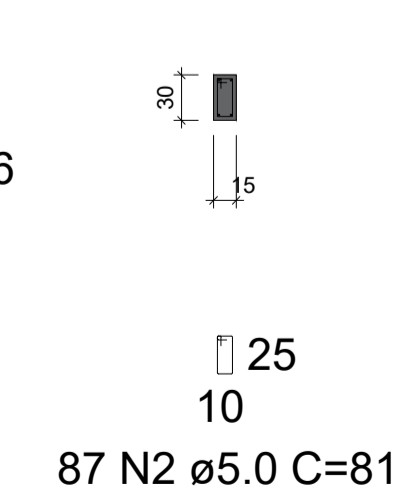
SEÇÃO A-A
ESC 1:50



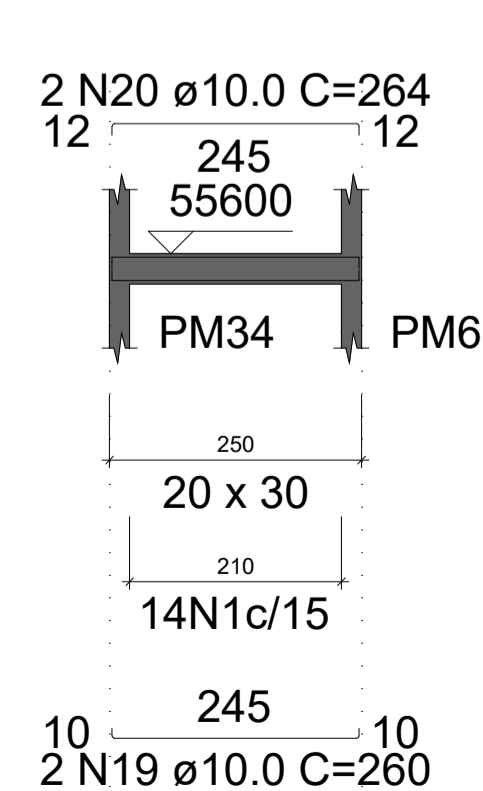
VCONT104 (15 x 30)
ESC 1:75



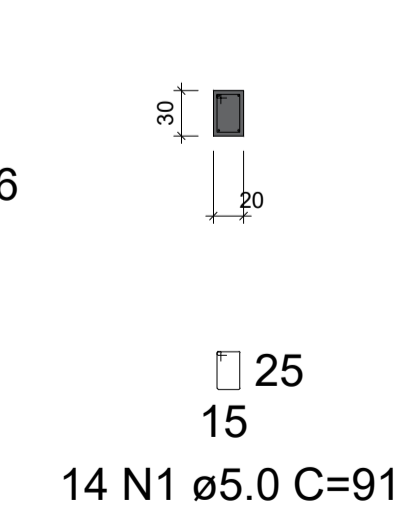
SEÇÃO A-A
ESC 1:50



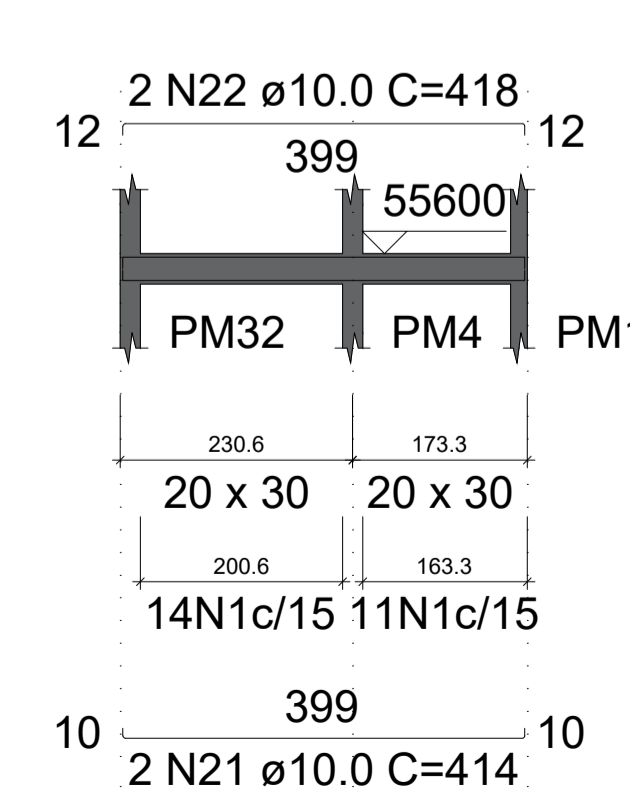
VCONT105 (20 x 30)
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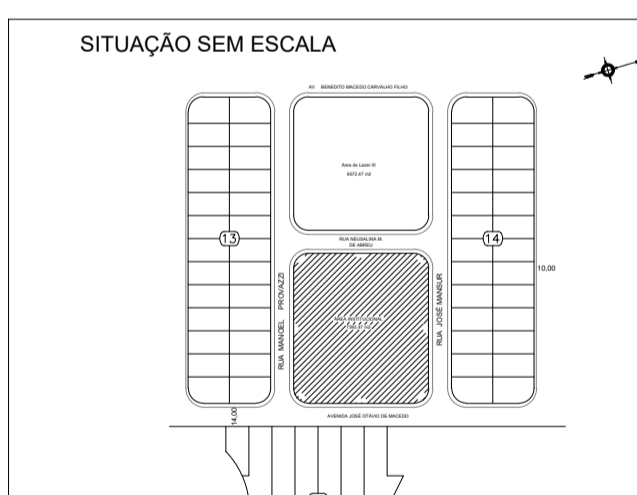
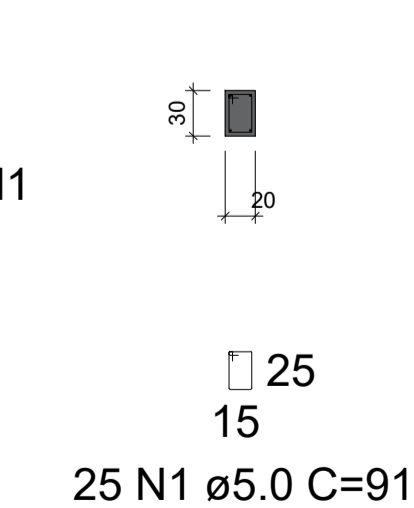
SEÇÃO A-A
ESC 1:50



VCONT106 (20 x 30)
ESC 1:75



SEÇÃO A-A
ESC 1:50



Assinado de forma digital por
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Dados: 2026.01.09 12:01:41 -03'00'

PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO:
Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas

DR. YAN LOPES ALMEIDA
PREFEITO MUNICIPAL



ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANITA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 5062359814-SP
ART: 2620251651916

Endereço: AVENIDA JOSÉ OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA

Número do Processo: 5.612/2024

Cliente: MUNICIPIO DE CAÇAPAVA

ÁREAS: Ver na folha ARQ 01/52

Desenho: PROJETO ESTRUTURAL

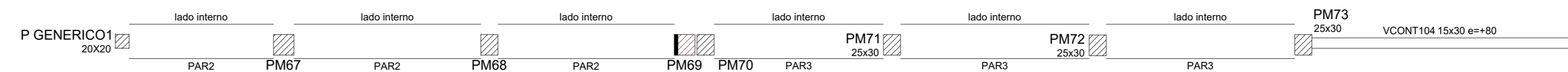
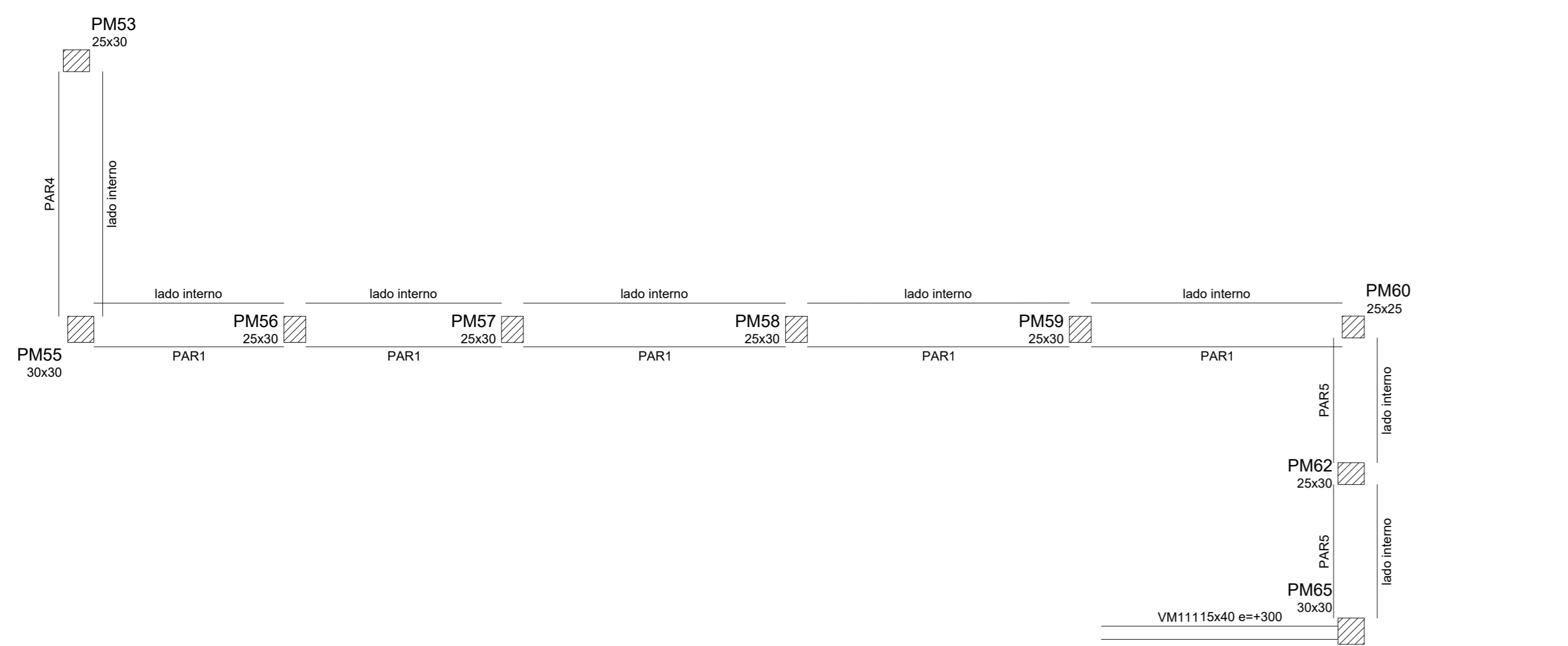
Descrição: BLOCO MURO- LOCAÇÃO

Prancha: 39/40

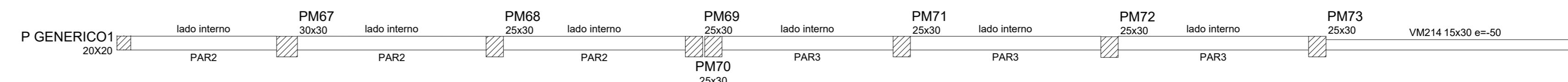
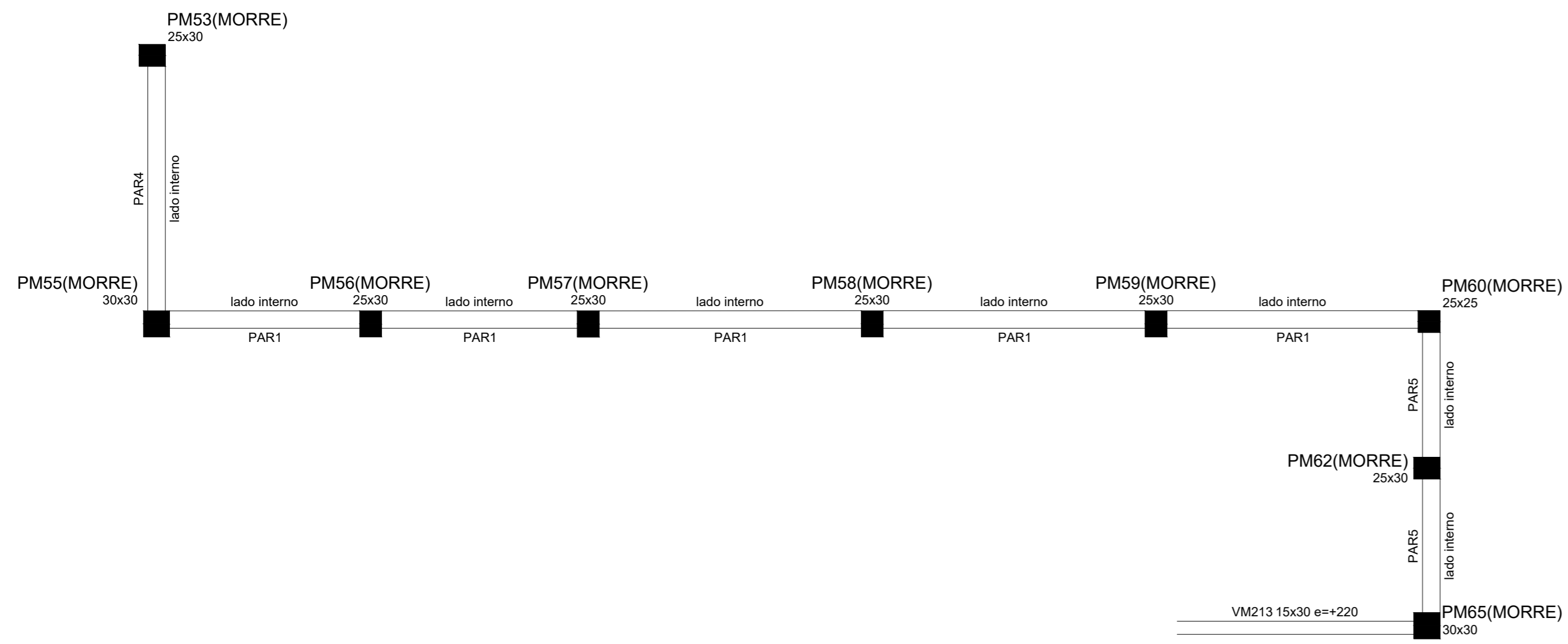
Levantamento:

Escala: Indicada

Revisão: R01



Contenções do pavimento TÉRREO
escala 1:50



Contenções do pavimento 1º PAVIMENTO
escala 1:50

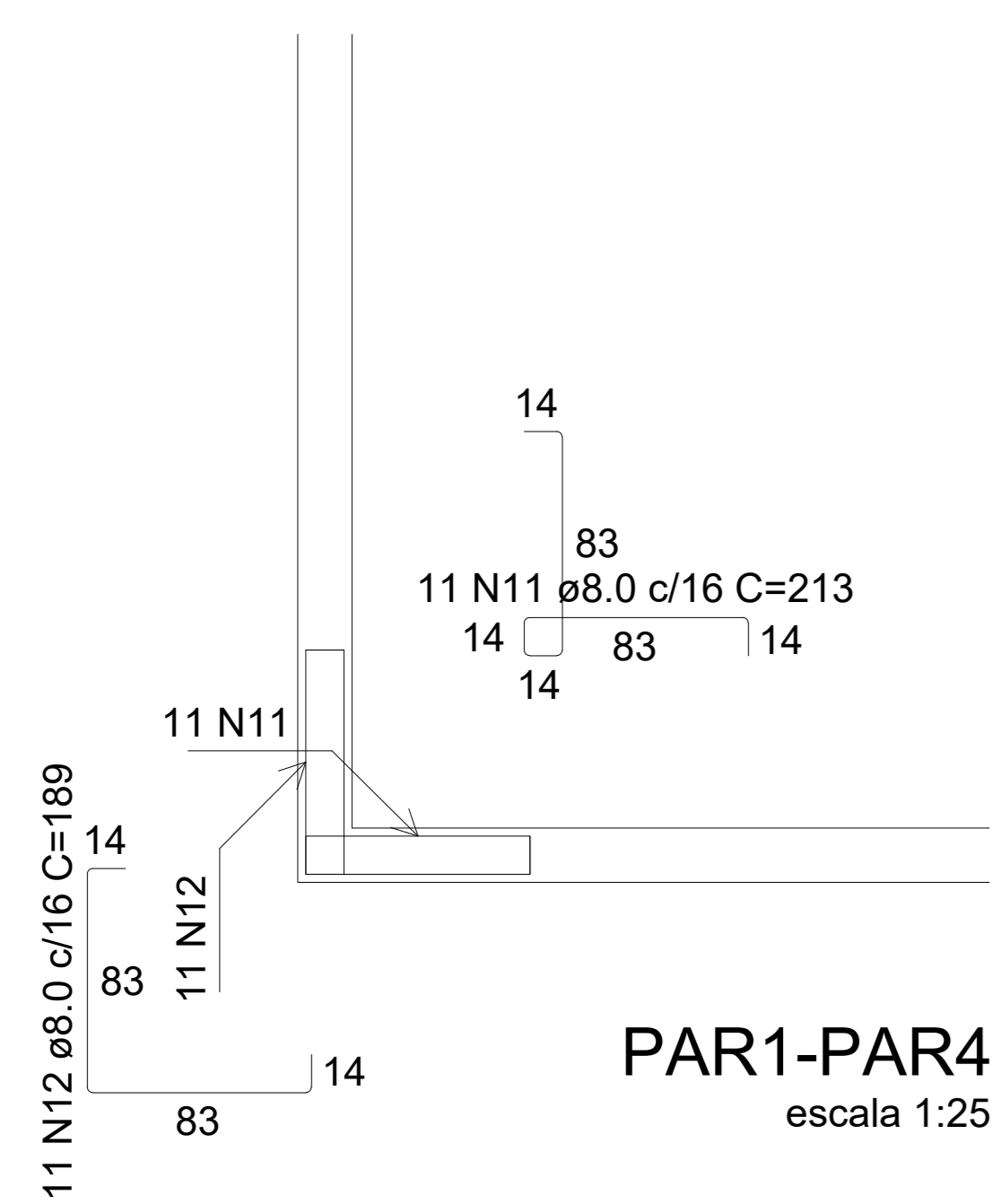
RELAÇÃO DO AÇO - MURO DE CONTENÇÃO

PAR1 PAR4	PAR2 PAR5	PAR3 PAR1-PAR4	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
			CA60	1	5.0	202	167	33734
			CA50	2	8.0	210	224	47040
				3	8.0	22	corr	32098
				4	8.0	104	264	27456
				5	8.0	26	corr	21398
				6	8.0	88	244	21472
				7	8.0	24	corr	20928
				8	8.0	22	corr	6666
				9	8.0	36	324	11664
				10	8.0	34	corr	11934
				11	8.0	11	213	2343
				12	8.0	11	189	2079
				13	10.0	4	corr	5836
				14	10.0	12	corr	9876
				15	10.0	8	corr	6976
				16	10.0	4	corr	1212
				17	10.0	4	corr	1404
				18	16.0	4	corr	5836
				19	16.0	2	corr	1744
				20	16.0	4	corr	1212
				21	16.0	4	corr	1404

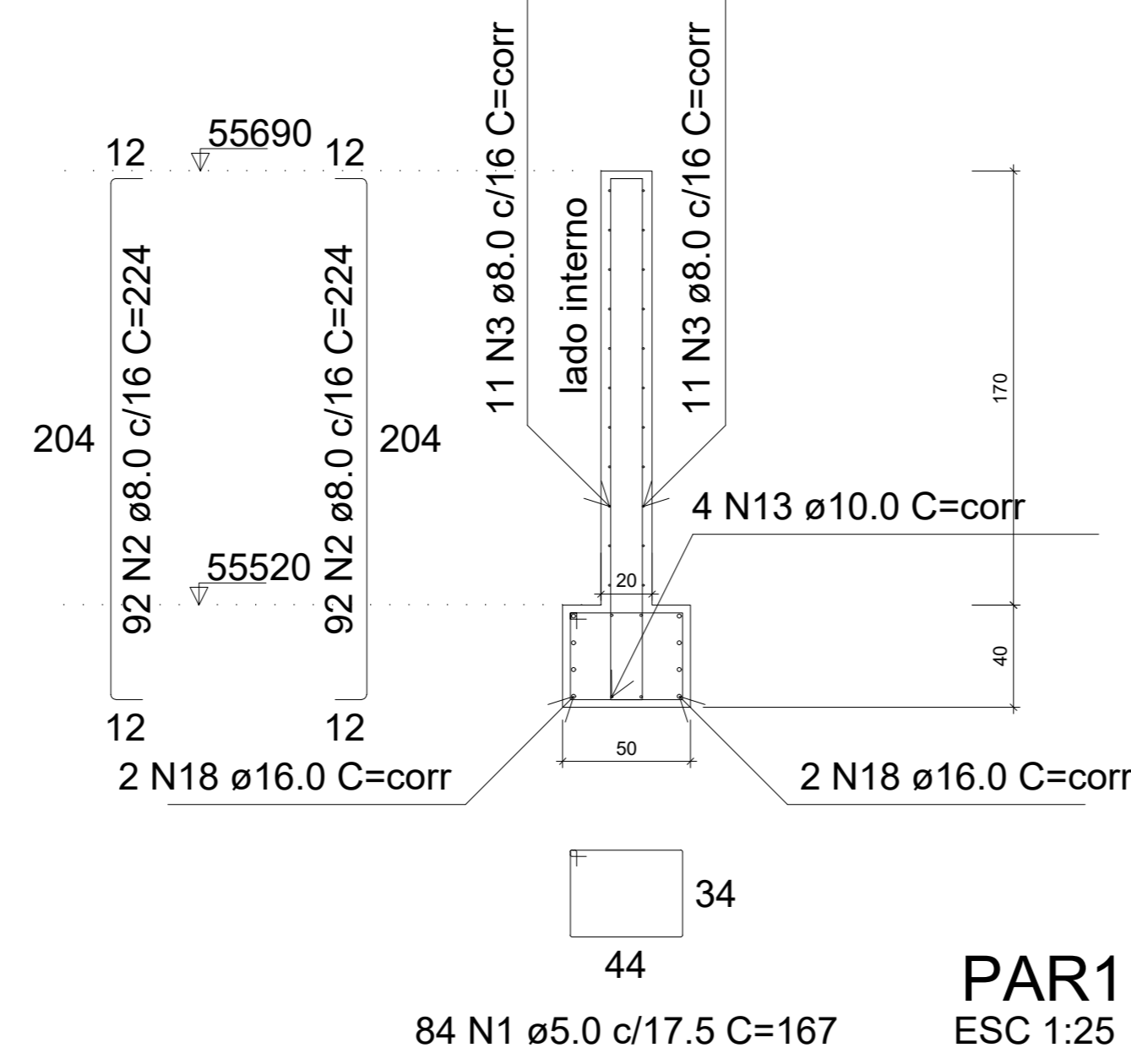
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	2050.8	890.1
	10.0	253	171.6
CA60	16.0	102	177
	5.0	337.3	57.2
PESO TOTAL (kg)			
CA50		1238.8	
CA60		57.2	

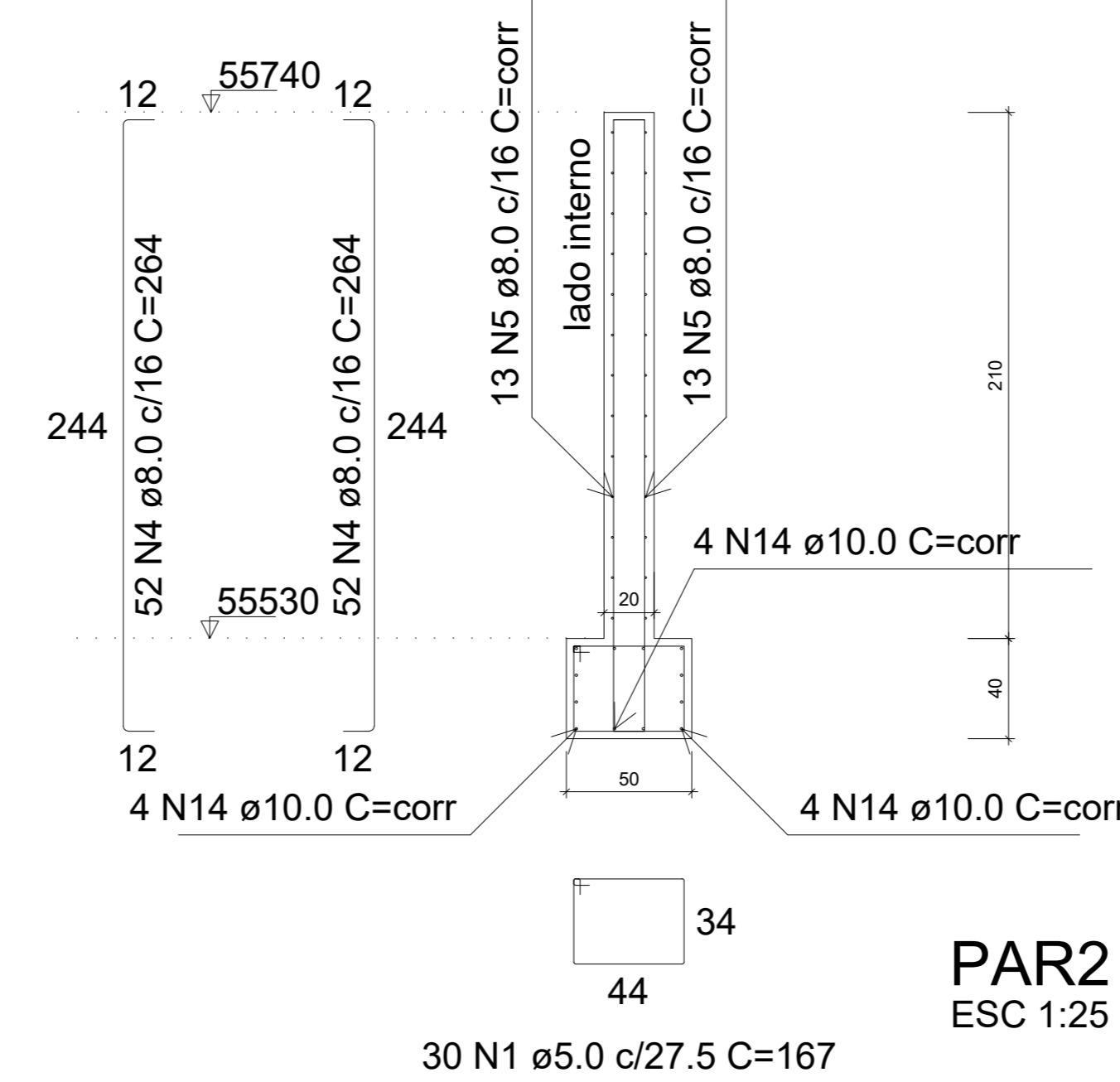
Volume de concreto (C-25) = 22.27 m³
Área de forma = 196.04 m²



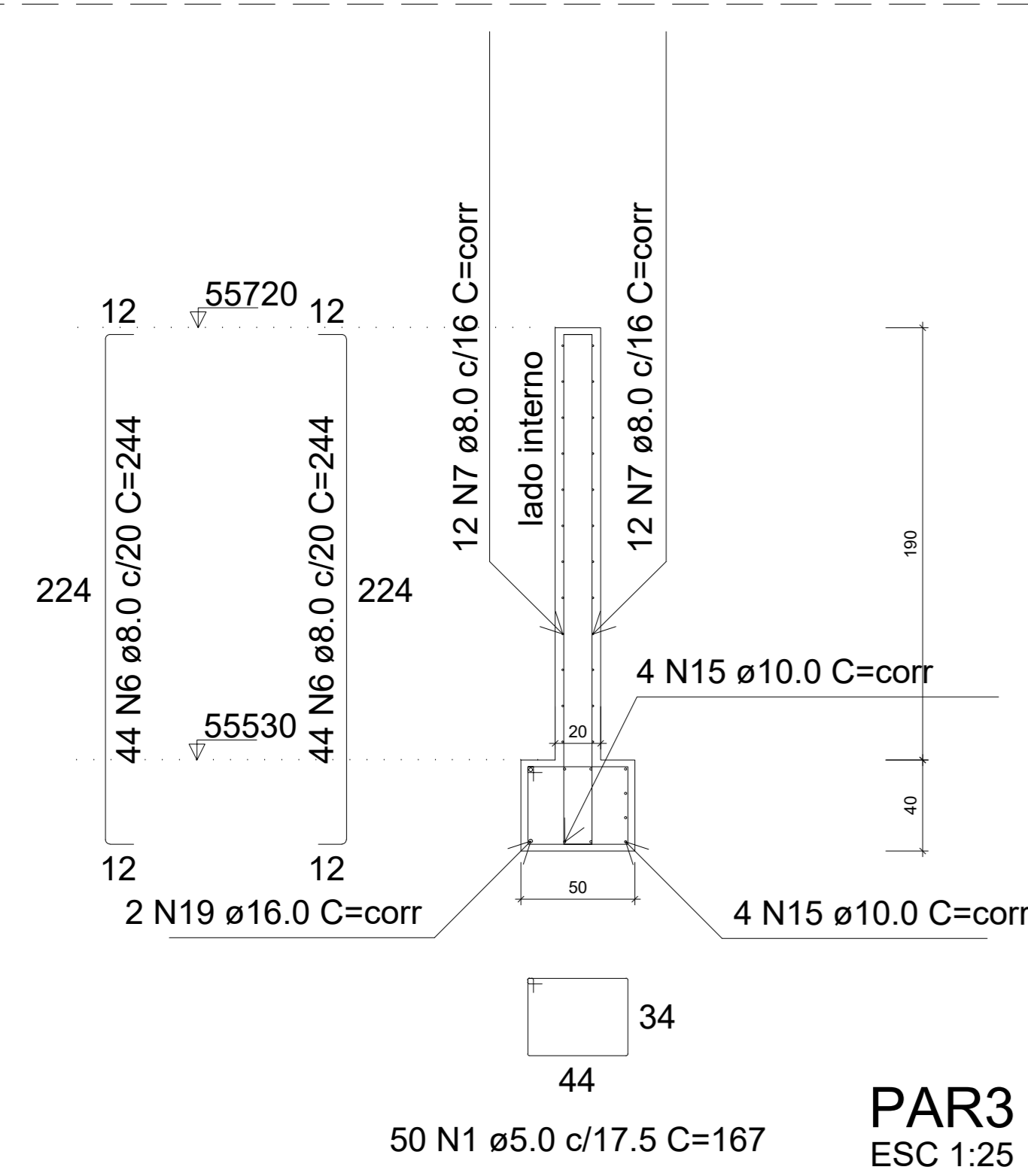
PAR1-PAR4
escala 1:25



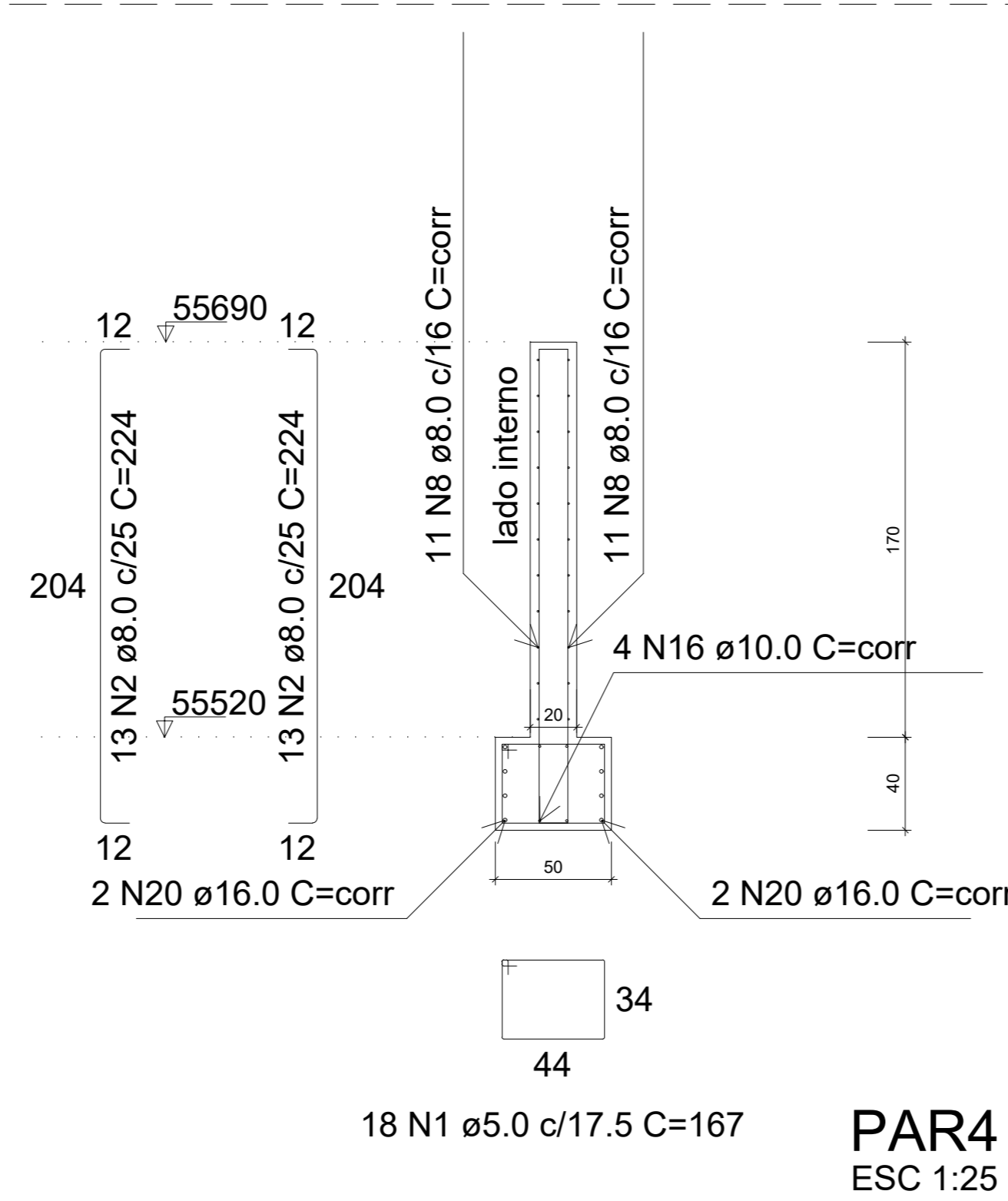
PAR2
ESC 1:25



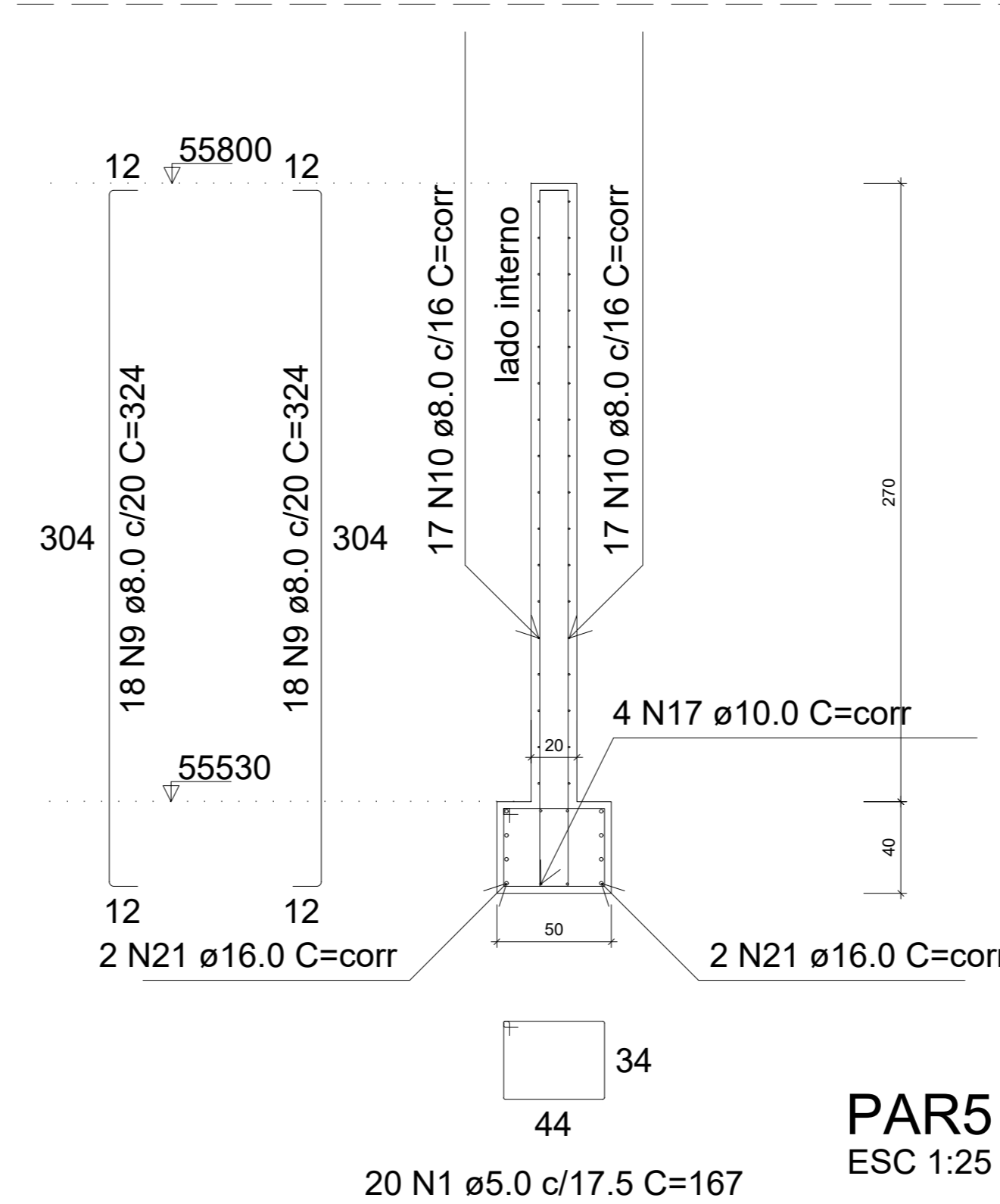
PAR3
ESC 1:25



PAR4
ESC 1:25

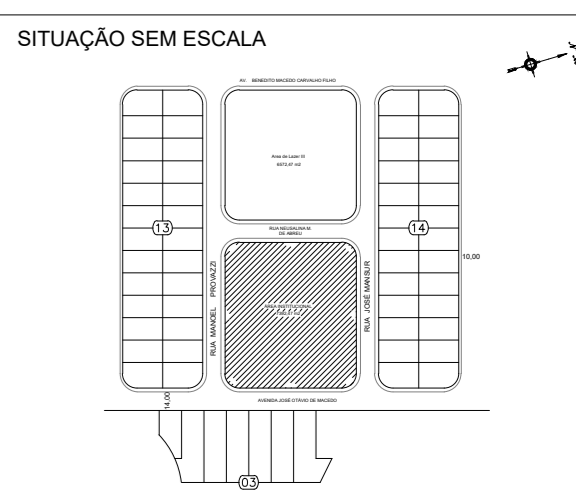


PAR5
ESC 1:25



PAR6
ESC 1:25

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Dados: 2026.01.09 12:01:15 -03'00'



PREFEITURA MUNICIPAL DE CAÇAPAVA
SECRETARIA DE PLANEJAMENTO URBANO E MEIO AMBIENTE

PROJETO: **Construção de Escola em Tempo Integral no Bairro Panorama – FNDE - Escola 13 salas**

DR. YAN LOPES ALMEIDA
PREFEITO MUNICIPAL

ANTONIO POTIGUARA CHAGAS FERREIRA
SECRETÁRIO DE PLANEJAMENTO URBANO E MEIO AMBIENTE

SIDNEY SANTA
SECRETÁRIO MUNICIPAL DE EDUCAÇÃO

ENG. ALFREDO PADUA MANZANO
CREA: 080209814-SP
ART: 362025165/1916

Endereço: AVENIDA JOSÉ OTÁVIO DE MACEDO, Nº 841 - JARDIM PANORAMA

Nome do Processo: 2412/2024

Cliente: MUNICÍPIO DE CAÇAPAVA

ÁREAS: Ver na folha ARQ 0152

Desenho: PROJETO ESTRUTURAL

Descrição: BLOCO MURO-LOCAÇÃO

Plancha: 40/40

Levantamento: Escala: Indicada

Data: NOV/2025

Revisão: R01