

AZOTEA
Despiece de vigas
Hormigón: 25 Mpas
Acero en barras: AH-500
Acero en estribos: AH-500
Escala pórtilos 1:50
Escala secciones 1:50
Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 2	1	Ø16	6	234	260	1560	24.6
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	6	460	460	2760	43.6
	4	Ø10	2	480	480	960	5.9
	5	Ø16	2	824	850	1700	26.8
	6	Ø16	2	850	850	1700	26.8
	7	Ø16	2	804	830	1660	26.2
	8	Ø12	2	600	600	1200	10.7
	9	Ø10	2	804	820	1640	10.1
	10	Ø10	2	810	810	1620	10.0
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	123	7	24	172	21156
Total+10%:							279.2

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	4	460	460	1840	29.0
	4	Ø10	2	480	480	960	5.9
	5	Ø12	3	820	840	2520	22.4
	6	Ø12	2	850	850	1700	15.1
	7	Ø12	3	800	820	2460	21.8
	8	Ø10	1	620	620	620	3.8
	9	Ø10	2	804	820	1640	10.1
	10	Ø10	2	810	810	1620	10.0
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	125	7	24	172	21500
Total+10%:							224.8

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 4	1	Ø16	8	234	260	2080	32.8
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	8	460	460	3680	58.1
	4	Ø10	2	480	480	960	5.9
	5	Ø16	3	824	850	2550	40.2
	6	Ø16	3	850	850	2550	40.2
	7	Ø16	3	804	830	2490	39.3
	8	Ø10	2	804	820	1640	10.1
	9	Ø10	2	810	810	1620	10.0
	10	Ø10	2	784	800	1600	9.9
	11	Ø6	123	7	24	172	21156
Total+10%:							336.3

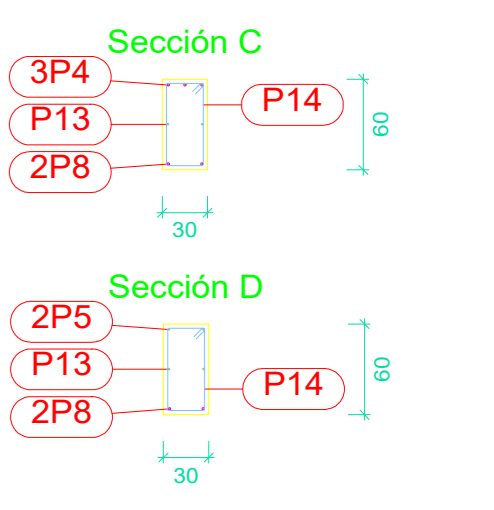
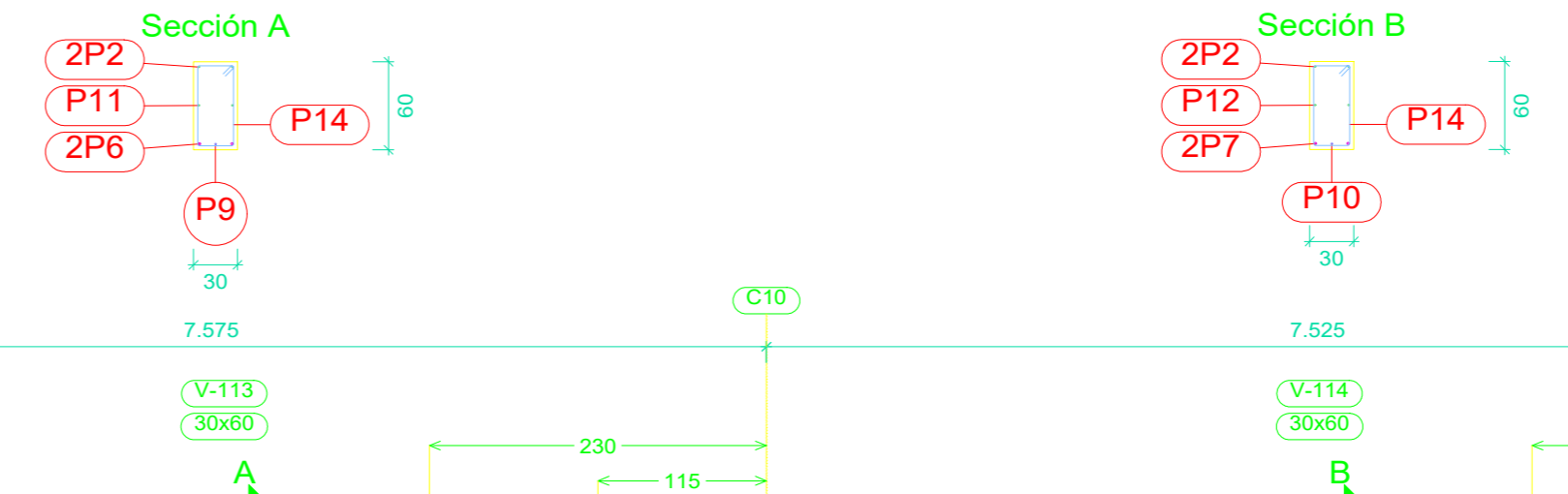
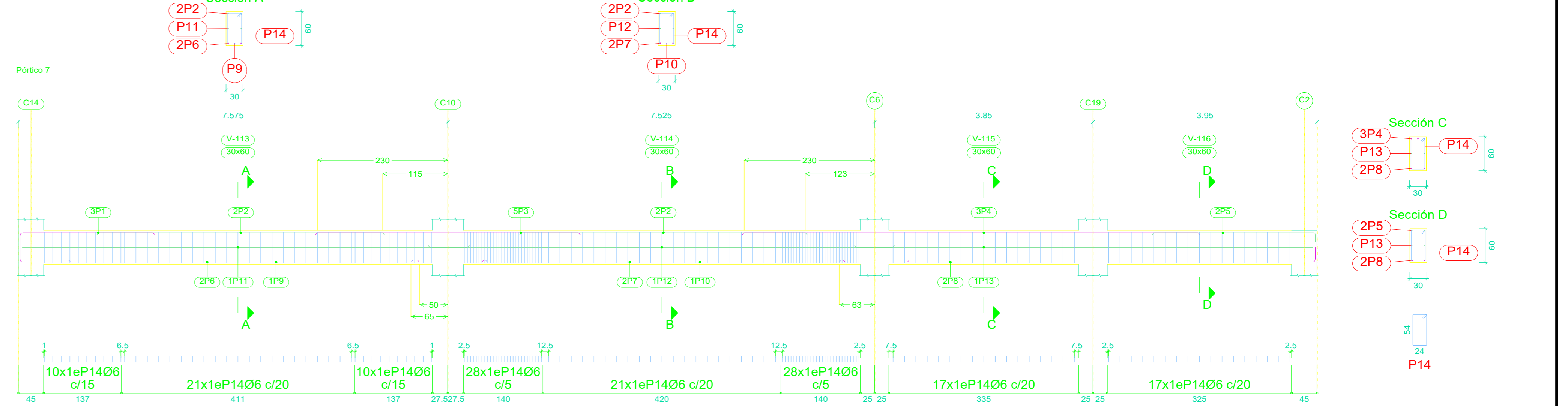
Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 3	1	Ø16	8	234	260	2080	32.8	
	2	Ø10	4	500	500	2000	12.3	
	3	Ø16	10	460	460	4600	72.6	
	4	Ø10	2	480	480	960	5.9	
	5	Ø16	3	824	850	2550	40.2	
	6	Ø16	3	850	850	2550	40.2	
	7	Ø16	3	804	830	2490	39.3	
	8	Ø10	2	804	820	1640	10.1	
	9	Ø10	2	810	810	1620	10.0	
	10	Ø10	2	784	800	1600	9.9	
	11	Ø6	20	10	24	176	3520	13.9
	12	Ø6	111	7	24	172	19092	42.4
Total+10%:							362.6	

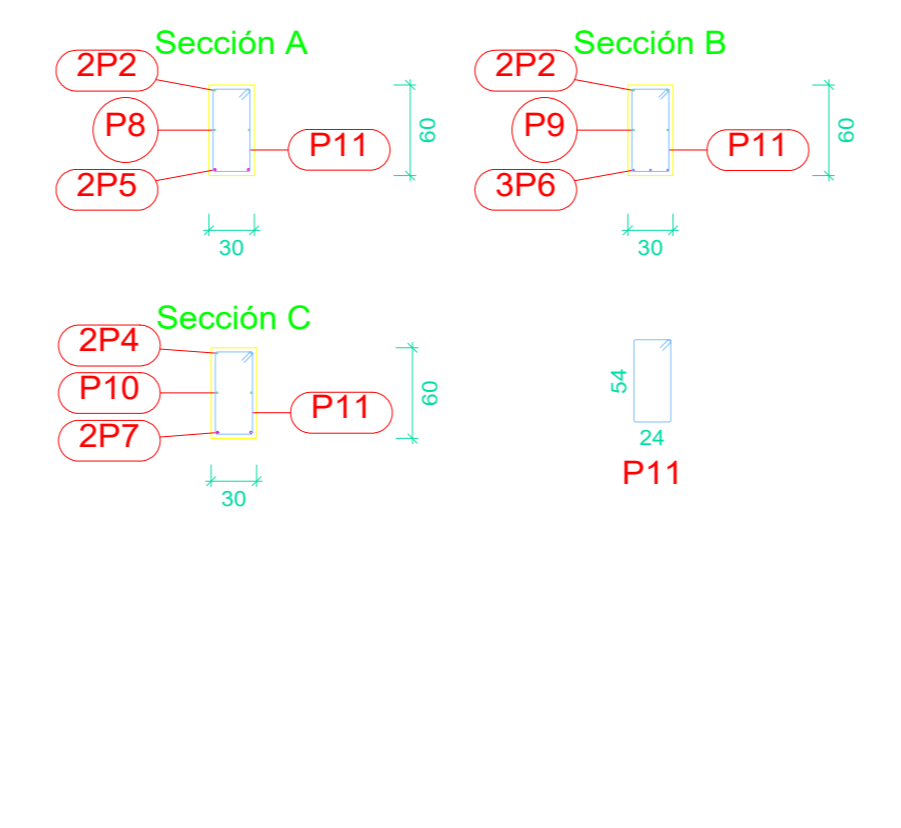
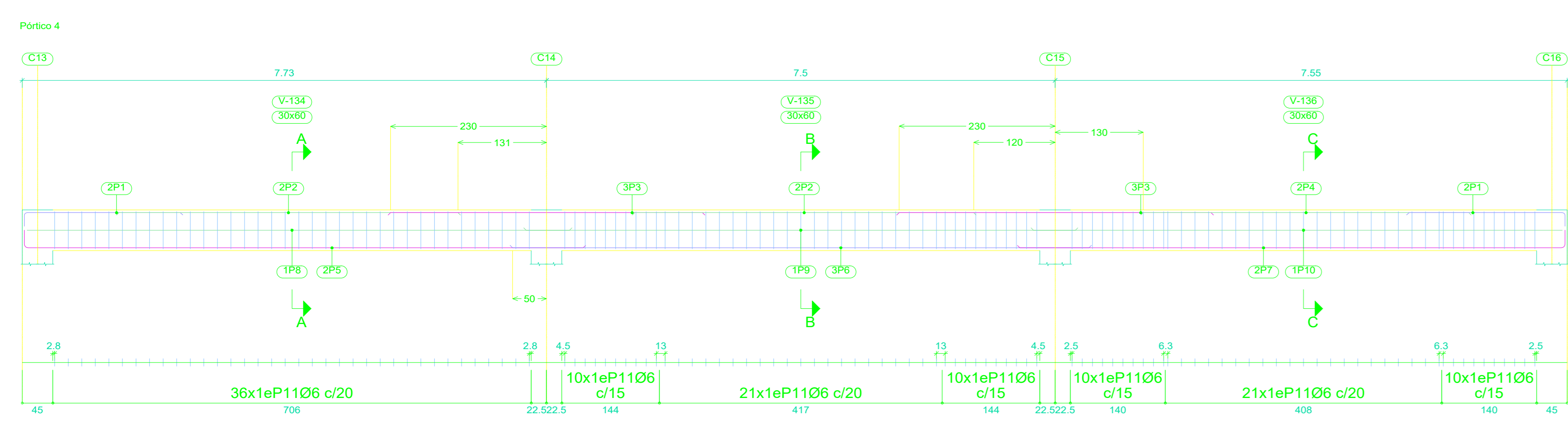
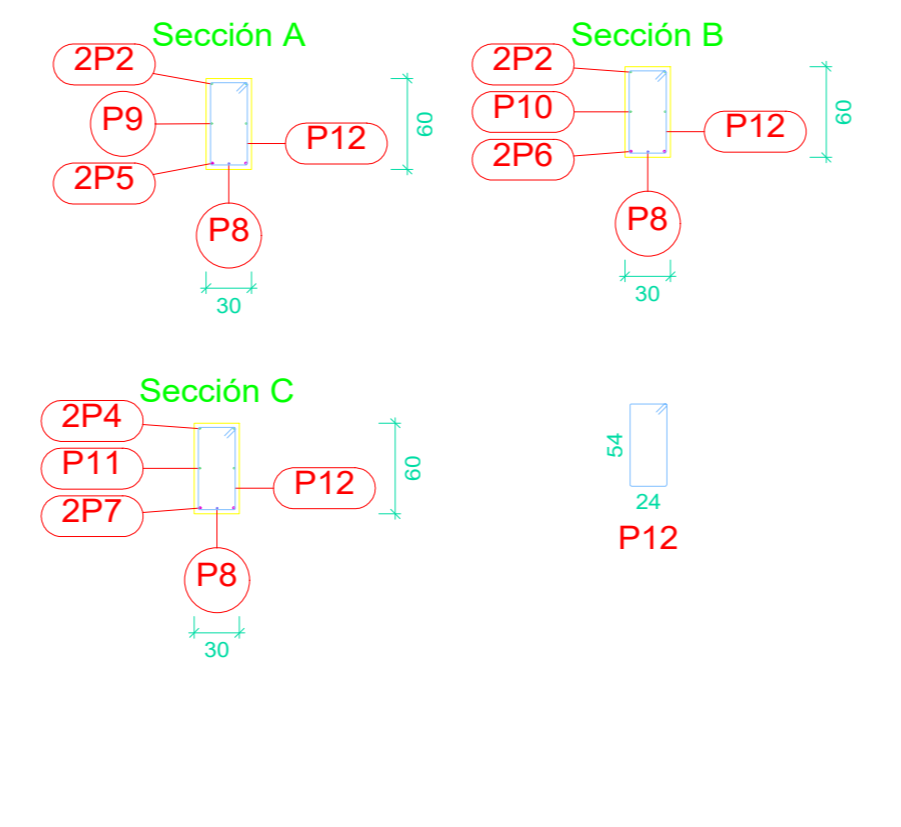
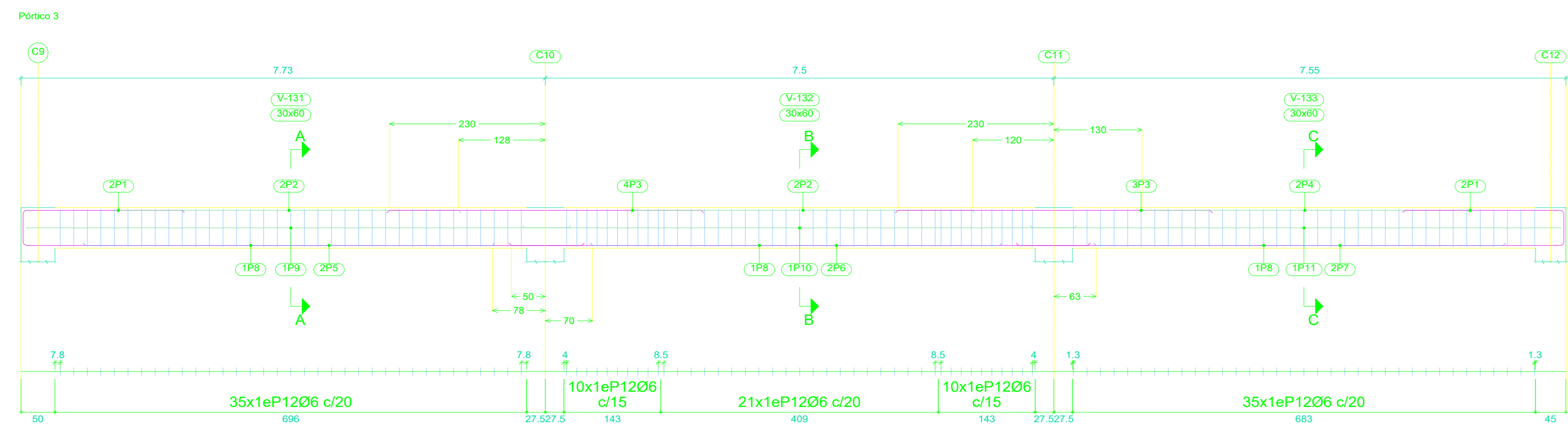
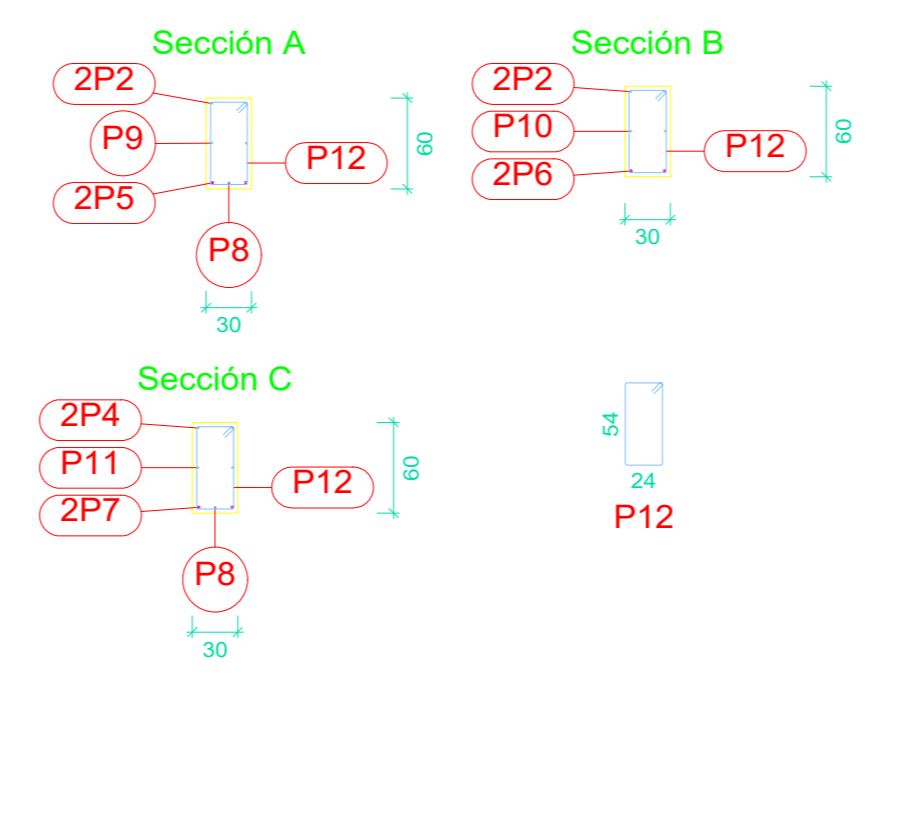
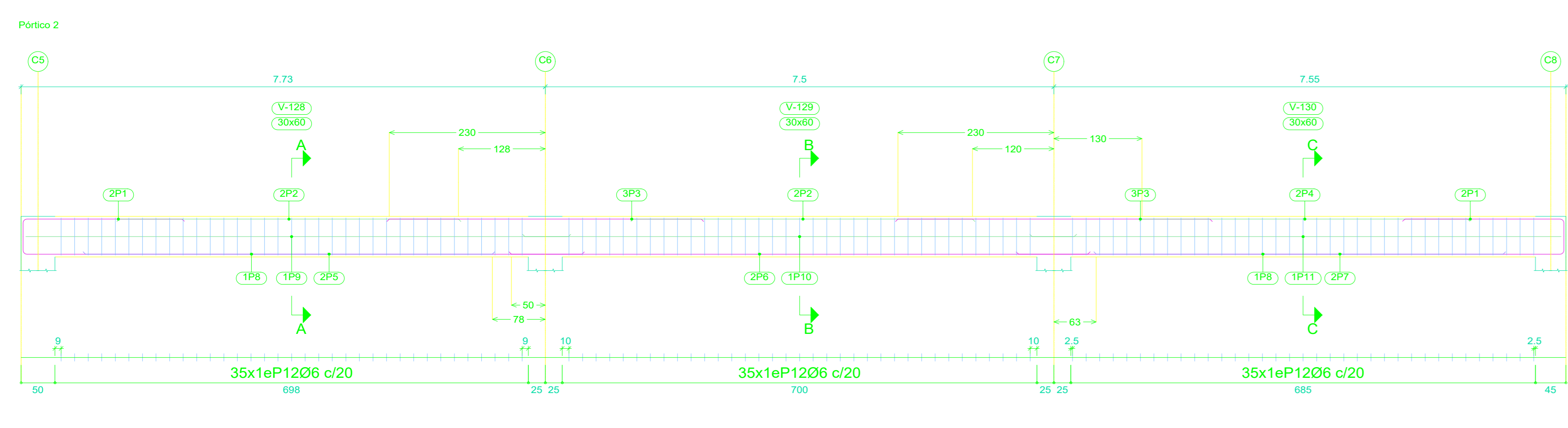
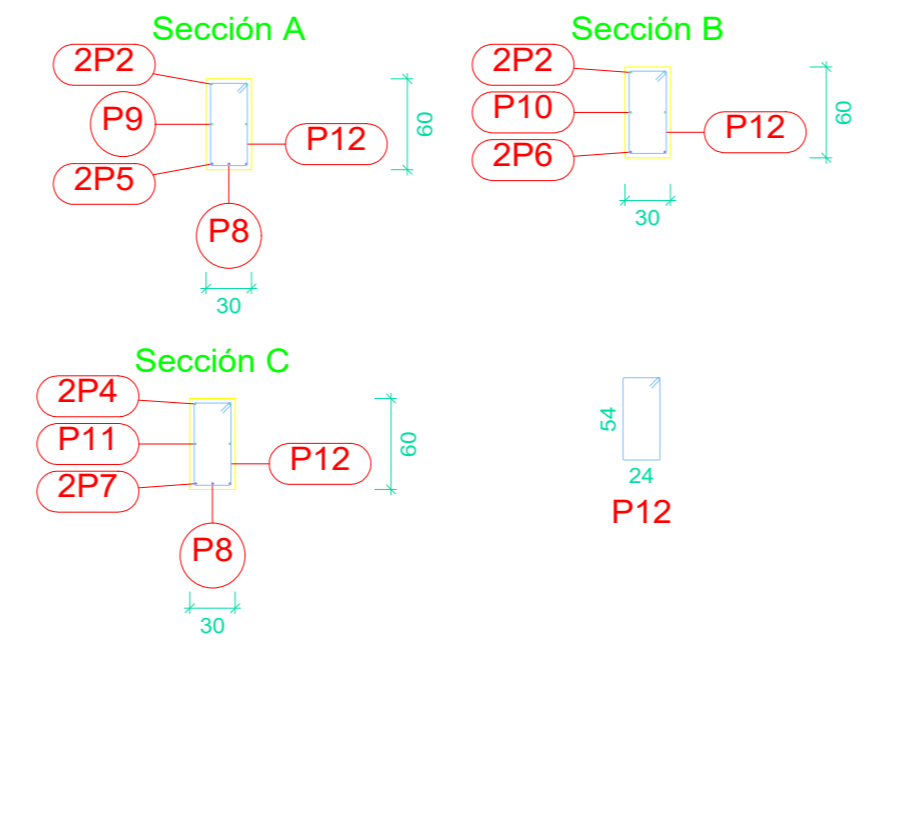
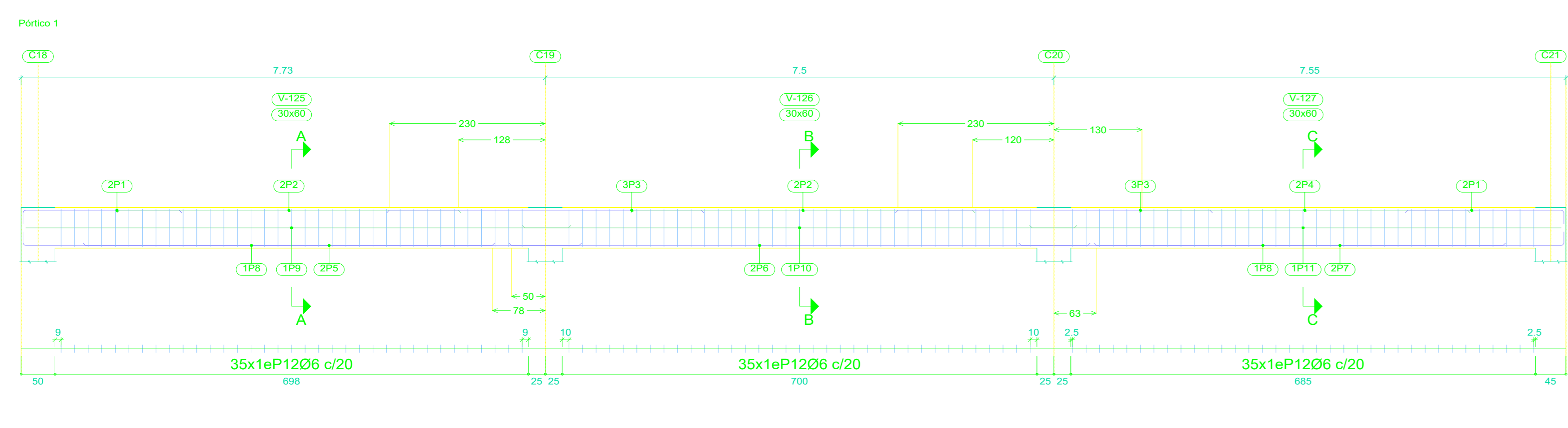
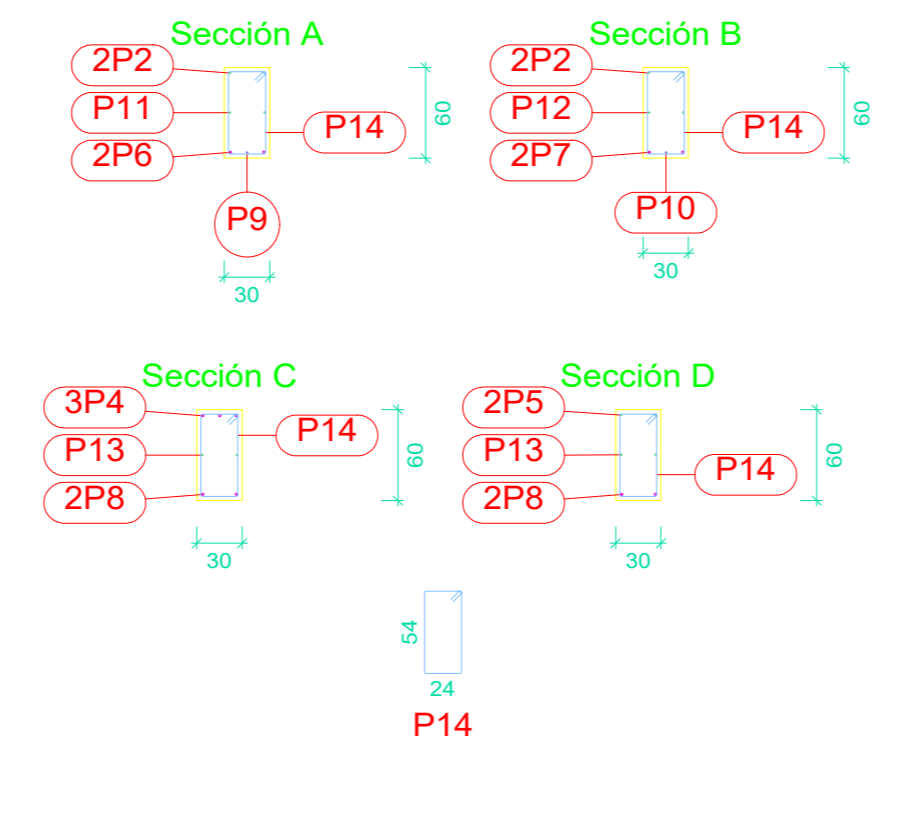
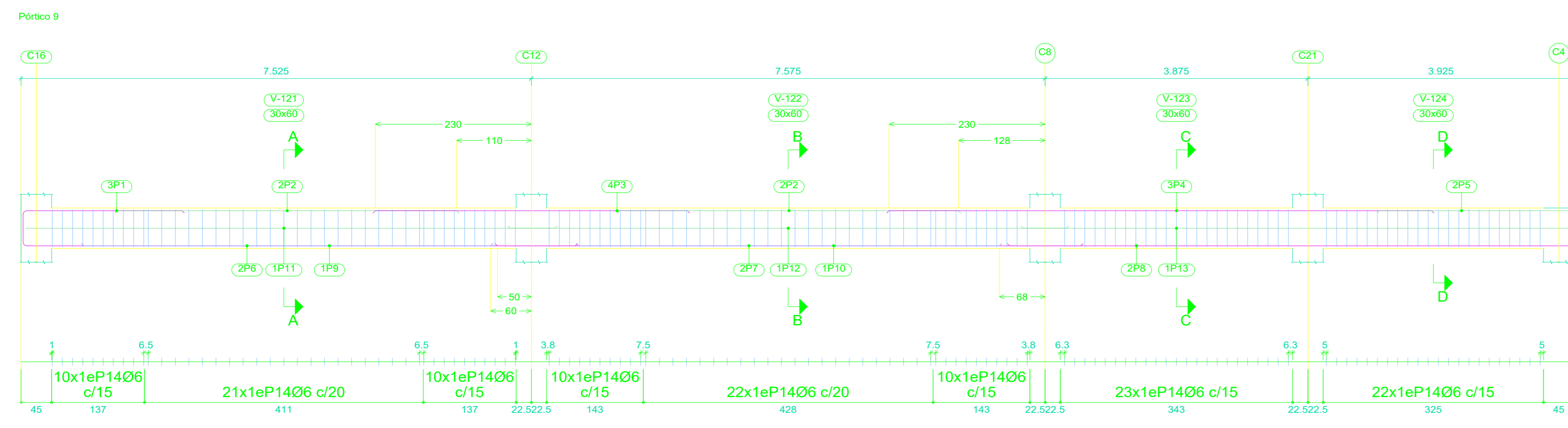
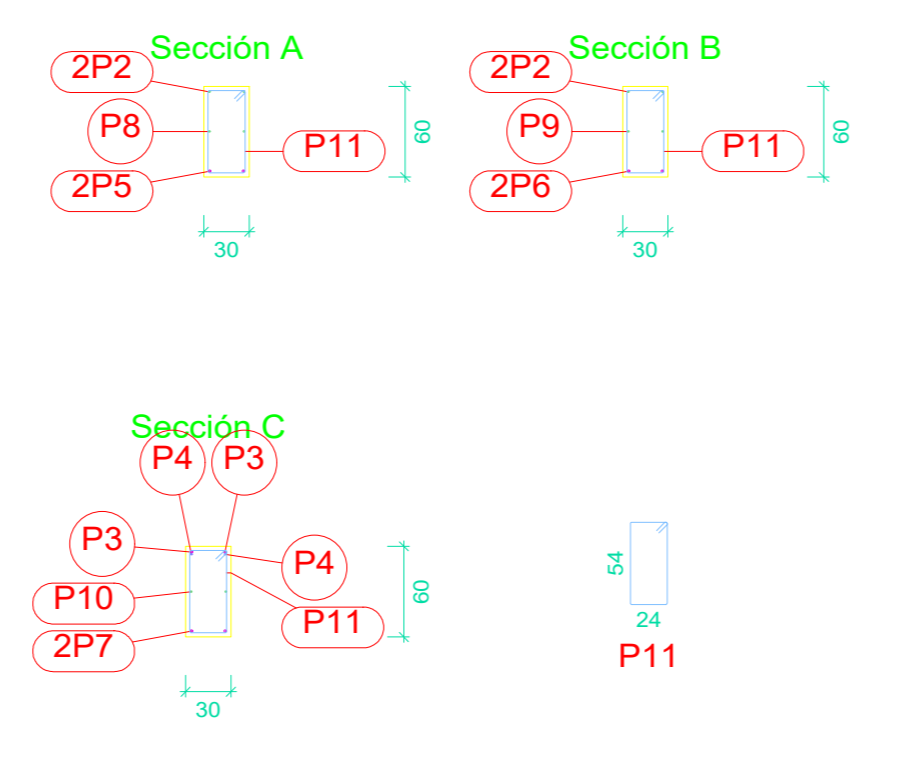
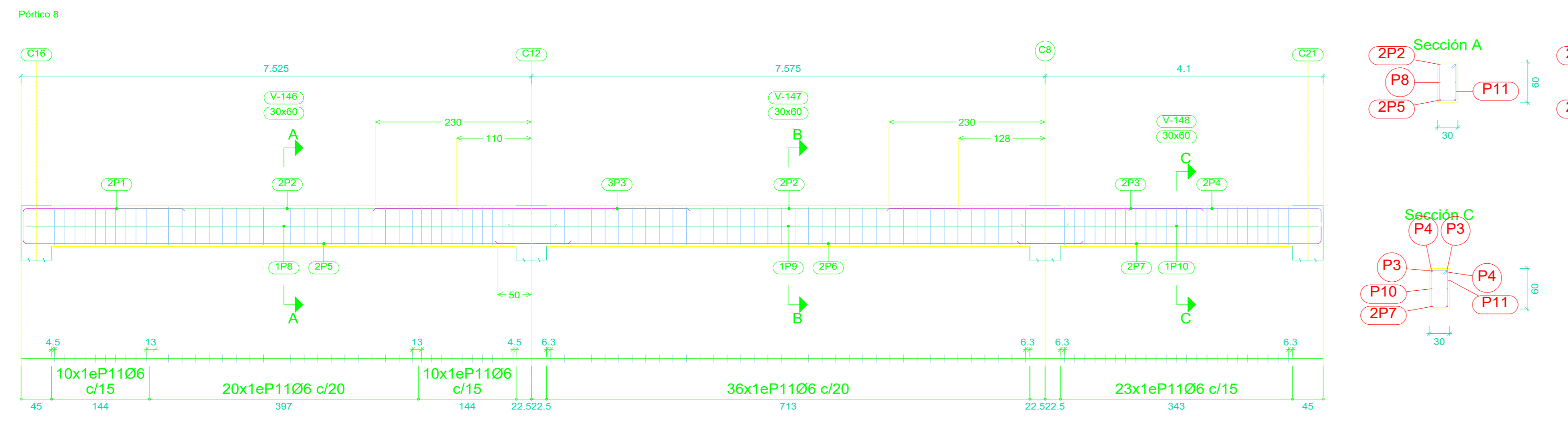
Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 6	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	3	800	800	2400	37.9
	5	Ø10	2	284	300	600	3.7
	6	Ø16	2	814	840	1680	26.5
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	829	855	1710	27.0
	9	Ø12	1	600	600	600	5.3
	10	Ø12	1	620	620	620	5.5
	11	Ø10	2	784	800	1600	9.9
	12	Ø10	2	815	815	1630	10.0
	13	Ø10	2	809	825	1650	10.2
	14	Ø6	128	7	24	172	22016
Total+10%:							292.2

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	
Pórtico 5	1	Ø16	6	234	260	1560	24.6	
	2	Ø10	4	500	500	2000	12.3	
	3	Ø16	6	460	460	2760	43.6	
	4	Ø16	2	480	480	960	5.9	
	5	Ø16	2	824	850	1700	26.8	
	6	Ø16	2	850	850	1700	26.8	
	7	Ø16	2	804	830	1660	26.2	
	8	Ø12	1	620	620	620	5.5	
	9	Ø10	2	804	820	1640	10.1	
	10	Ø10	2	810	810	1620	10.0	
	11	Ø10	2	784	800	1600	9.9	
	12	Ø6	125	7	24	172	21500	47.7
	Total+10%:							274.3

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 7	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	5	460	460	2300	36.3
	4	Ø16	3	800	800	2400	37.9
	5	Ø10	2	284	300	600	3.7
	6	Ø16	2	814	840	1680	26.5
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	829	855	1710	27.0
	9	Ø12	1	600	600	600	5.3
	10	Ø12	1	620	620	620	5.5
	11	Ø10	2	789	805	1610	9.9
	12	Ø10	2	815	815	1630	10.0
	13	Ø10	2	809	825	1650	10.2
	14	Ø6	152	7	24	172	26144
Total+10%:							310.2

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 7	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	5	460	460	2300	36.3
	4	Ø16	3	800	800	2400	37.9
	5	Ø10	2	284	300	600	3.7
	6	Ø16	2	814	840	1680	26.5
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	829	855	1710	27.0
	9	Ø12	1	600	600	600	5.3
	10	Ø12	1	620	620	620	5.5
	11	Ø10	2	789	805	1610	9.9
	12	Ø10	2	815	815	1630	10.0
	13	Ø10	2	809	825	1650	10.2
	14	Ø6	152	7	24	172	26144
Total+10%:							310.2





Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 8	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	5	460	460	2300	36.3
	4	Ø16	3	800	800	2400	37.9
	5	Ø10	2	284	300	600	3.7
	6	Ø16	2	814	840	1680	26.5
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	829	855	1710	27.0
	9	Ø12	1	600	600	600	5.3
	10	Ø12	1	620	620	620	5.5
	11	Ø10	2	789	805	1610	9.9
	12	Ø10	2	815	815	1630	10.0
	13	Ø10	2	809	825	1650	10.2
	14	Ø6	124	7	24	172	21328
Total+10%:							298.4

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 9	1	Ø16	3	234	260	780	12.3
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	4	460	460	1840	29.0
	4	Ø16	3	800	800	2400	37.9
	5	Ø10	2	284	300	600	3.7
	6	Ø16	2	814	840	1680	26.5
	7	Ø16	2	860	860	1720	27.1
	8	Ø16	2	829	855	1710	27.0
	9	Ø12	1	600	600	600	5.3
	10	Ø12	1	620	620	620	5.5
	11	Ø10	2	784	800	1600	9.9
	12	Ø10	2	820	820	1640	10.1
	13	Ø10	2	809	825	1650	10.2
	14	Ø6	128	7	24	172	22016
Total+10%:							292.3

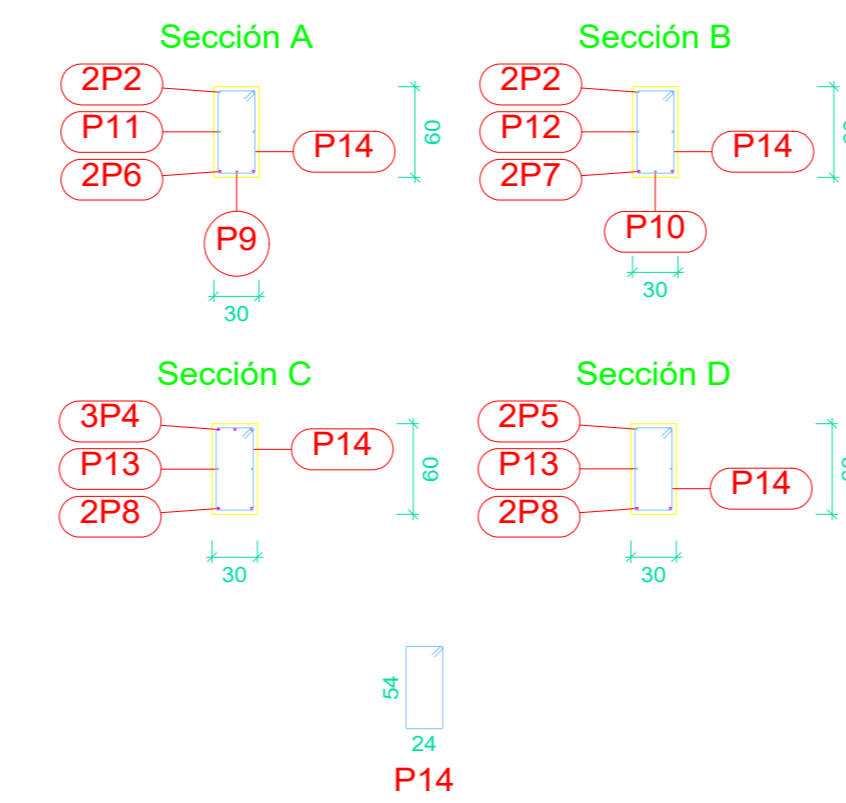
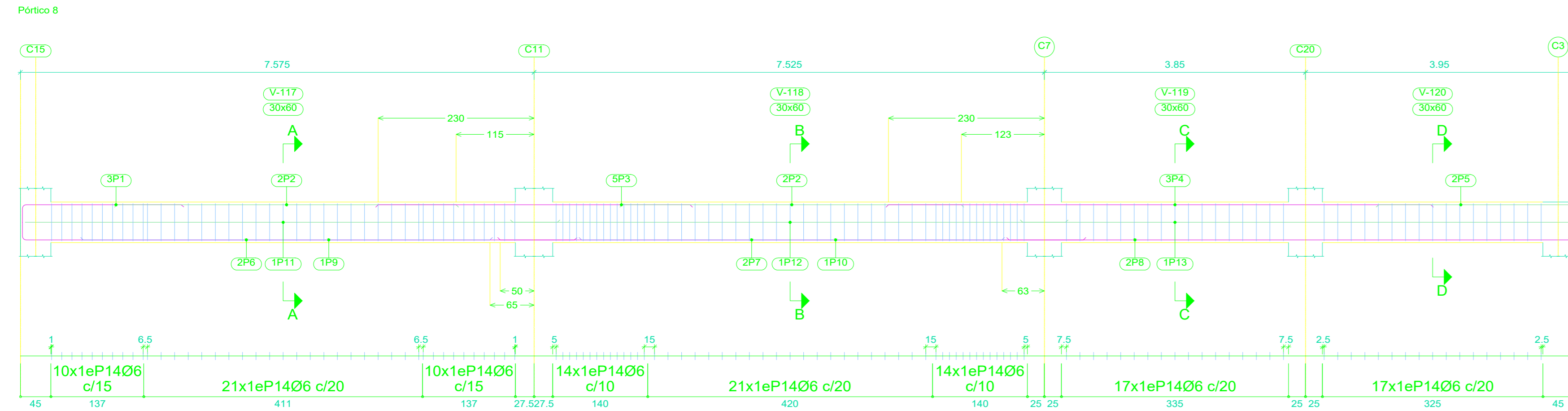
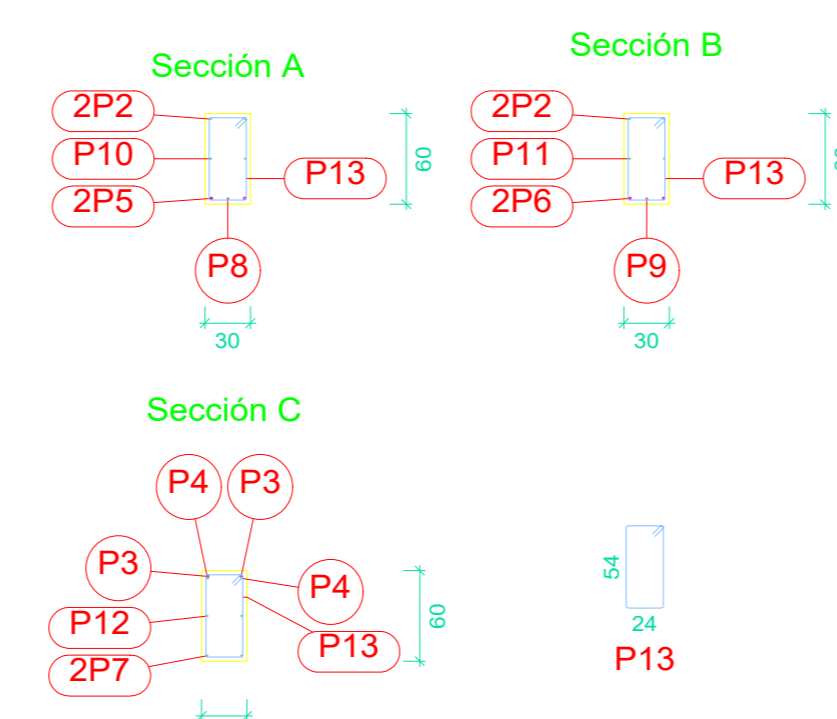
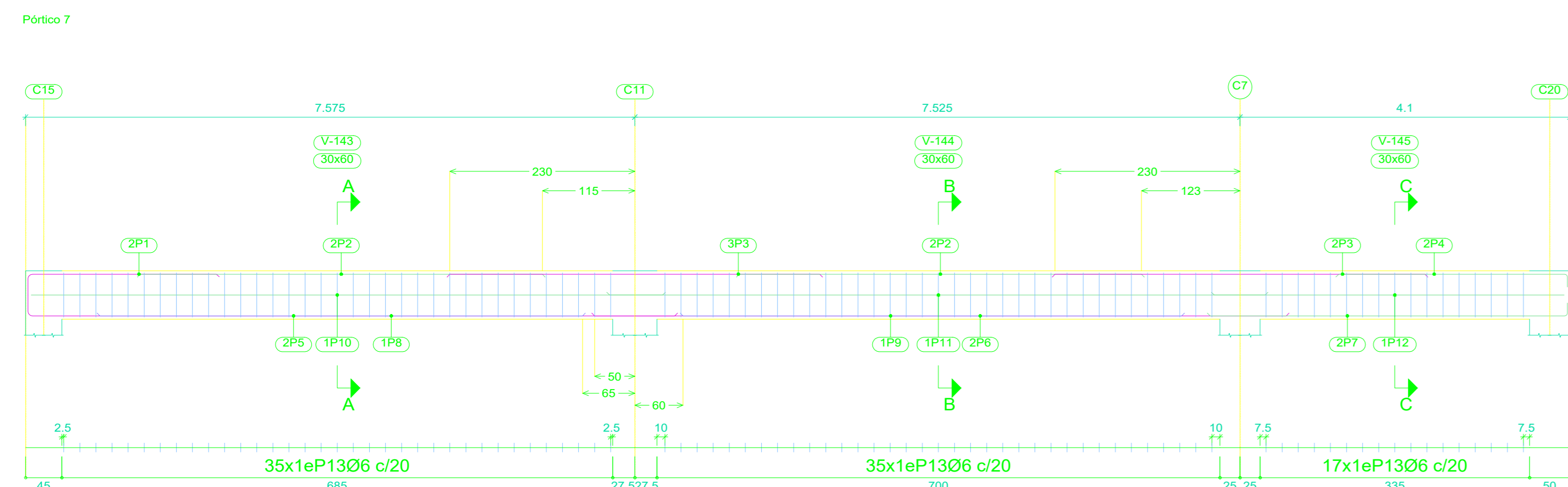
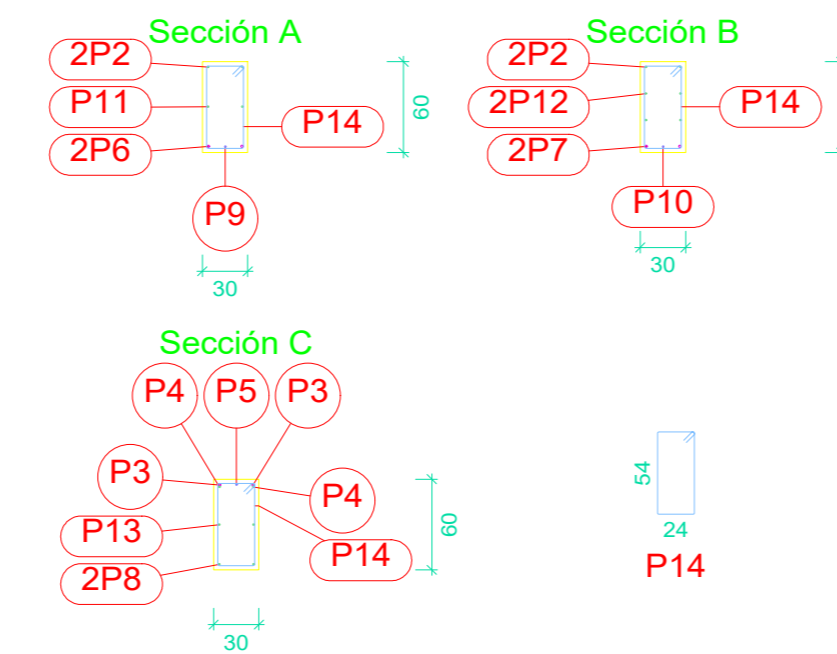
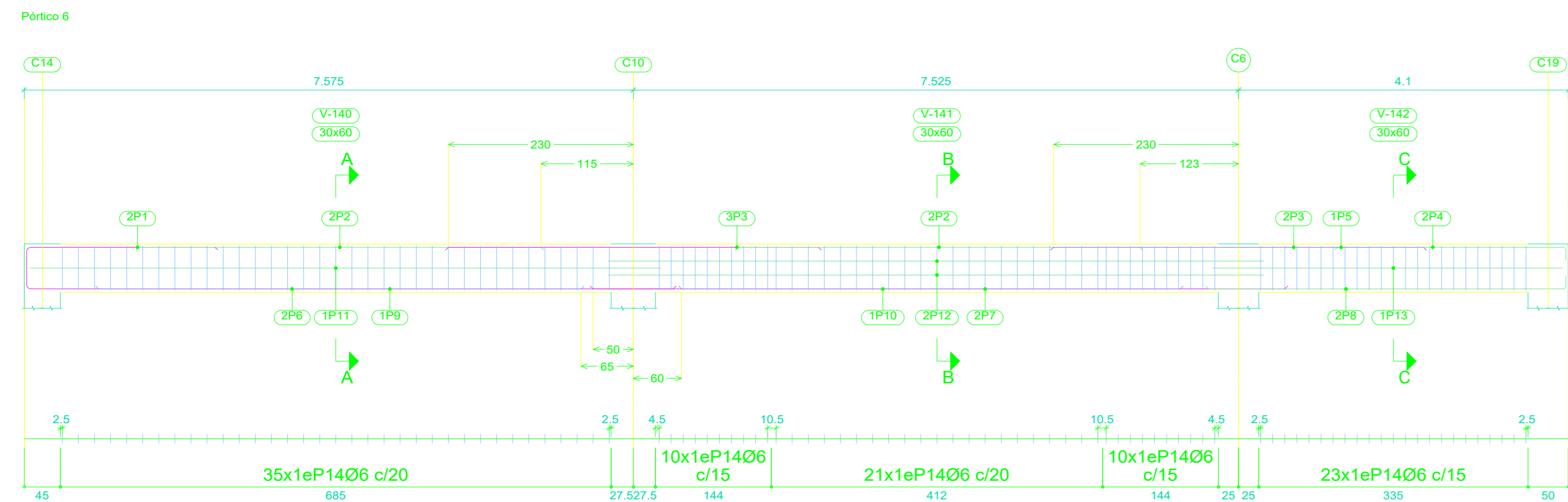
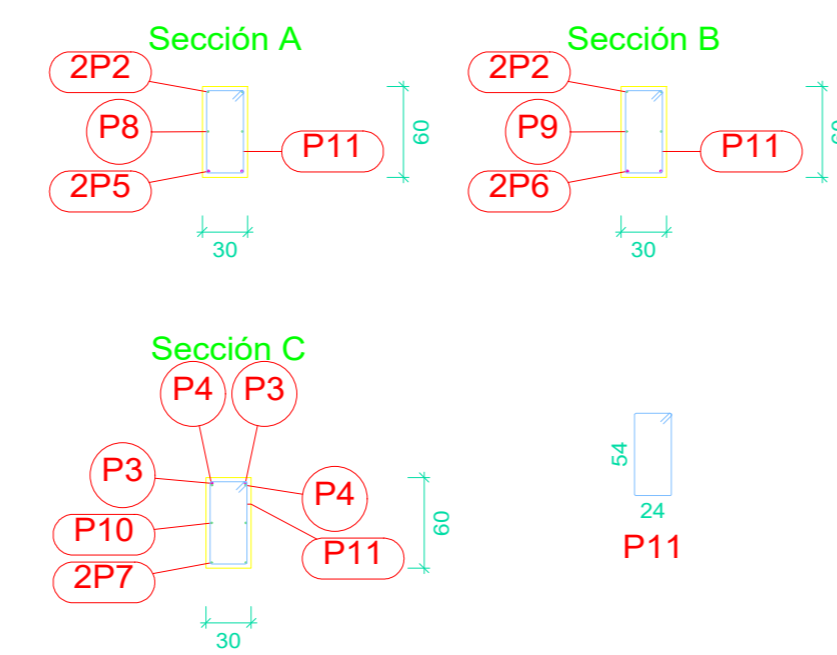
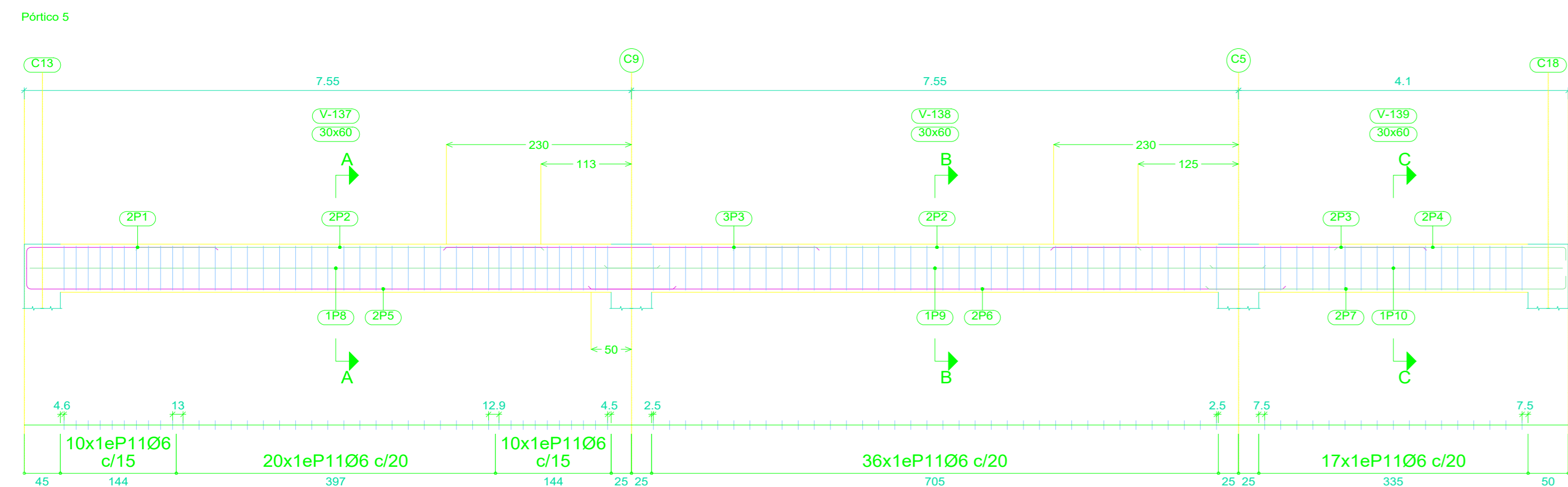
CUBIERTA
 Despiece de vigas
 Hormigón: 25 Mpas
 Acero en barras: AH-500
 Acero en estribos: AH-500
 Escala pórticos 1:50
 Escala secciones 1:50
 Escala huecos 1:50

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 2	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	6	460	460	2760	43.6
	4	Ø10	2	480	480	960	5.9
	5	Ø16	2	824	850	1700	26.8
	6	Ø16	2	850	850	1700	26.8
	7	Ø16	2	804	830	1660	26.2
	8	Ø12	2	600	600	1200	10.7
	9	Ø10	2	804	820	1640	10.1
	10	Ø10	2	810	810	1620	10.0
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	105	7	24	172	18060
Total+10%:							262.7

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 1	1	Ø12	4	230	250	1000	8.9
	2	Ø10	4	500	500	2000	12.3
	3	Ø12	6	460	460	2760	24.5
	4	Ø10	2	480	480	960	5.9
	5	Ø12	2	820	840	1680	14.9
	6	Ø12	2	850	850	1700	15.1
	7	Ø12	2	800	820	1640	14.6
	8	Ø12	2	600	600	1200	10.7
	9	Ø10	2	804	820	1640	10.1
	10	Ø10	2	810	810	1620	10.0
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	105	7	24	172	18060
Total+10%:							194.7

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 3	1	Ø16	4	234	260	1040	16.4
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	7	460	460	3220	50.8
	4	Ø10	2	480	480	960	5.9
	5	Ø16	2	824	850	1700	26.8
	6	Ø16	2	850	850	1700	26.8
	7	Ø16	2	804	830	1660	26.2
	8	Ø12	3	600	600	1800	16.0
	9	Ø10	2	804	820	1640	10.1
	10	Ø10	2	810	810	1620	10.0
	11	Ø10	2	784	800	1600	9.9
	12	Ø6	111	7	24	172	19092
Total+10%:							279.0

Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)
Pórtico 4	1	Ø12	4	230	250	1000	8.9
	2	Ø10	4	500	500	2000	12.3
	3	Ø16	6	460	460	2760	43.6
	4	Ø10	2	480	480	960	5.9
	5	Ø16	2	824	850	1700	26.8
	6	Ø12	3	850	850	2550	22.6
	7	Ø16	2	804	830	1660	26.2
	8	Ø10	2	804	820	1640	10.1
	9	Ø10	2	810	810	1620	10.0
	10	Ø10	2	784	800	1600	9.9
	11	Ø6	118	7	24	172	20296
Total+10%:							243.4



Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)		
Pórtico 5	1	Ø16	2	234	260	520	8.2	Pórtico 6	1	Ø16	2	234	260	520	8.2		
	2	Ø10	4	500	500	2000	12.3		2	Ø10	4	500	500	2000	12.3		
	3	Ø16	5	460	460	2300	36.3		3	Ø16	5	460	460	2300	36.3		
	4	Ø10	2	284	300	600	3.7		4	Ø10	2	284	300	600	3.7		
	5	Ø16	2	804	830	1660	26.2		5	Ø12	1	460	460	460	4.1		
	6	Ø16	2	860	860	1720	27.1		6	Ø16	2	804	830	1660	26.2		
	7	Ø10	2	444	460	920	5.7		7	Ø16	2	860	860	1720	27.1		
	8	Ø10	2	784	800	1600	9.9		8	Ø10	2	444	460	920	5.7		
	9	Ø10	2	815	815	1630	10.0		9	Ø12	1	620	600	600	5.3		
	10	Ø10	2	439	455	910	5.6		10	Ø12	1	620	620	620	5.5		
	11	Ø6	93	24	172	15996	35.5		11	Ø10	2	789	805	1610	9.9		
Total+10%:								198.6	Total+10%:								228.6
Pórtico 7	1	Ø16	2	234	260	520	8.2	Pórtico 8	1	Ø16	2	234	260	520	8.2		
	2	Ø10	4	500	500	2000	12.3		2	Ø10	4	500	500	2000	12.3		
	3	Ø16	5	460	460	2300	36.3		3	Ø16	5	460	460	2300	36.3		
	4	Ø10	2	284	300	600	3.7		4	Ø12	2	280	300	600	5.3		
	5	Ø16	2	804	830	1660	26.2		5	Ø16	2	804	830	1660	26.2		
	6	Ø16	2	860	860	1720	27.1		6	Ø16	2	860	860	1720	27.1		
	7	Ø10	2	444	460	920	5.7		7	Ø16	2	444	470	940	14.8		
	8	Ø12	1	600	600	600	5.3		8	Ø10	2	784	800	1600	9.9		
	9	Ø12	1	620	620	620	5.5		9	Ø10	2	820	820	1640	10.1		
	10	Ø10	2	789	805	1610	9.9		10	Ø10	2	820	820	1640	10.1		
	11	Ø10	2	815	815	1630	10.0		11	Ø10	2	439	455	910	5.6		
	12	Ø10	2	439	455	910	5.6		12	Ø6	99	24	172	17028	37.8		
	13	Ø6	87	24	172	14964	33.2		13	Ø6	99	24	172	17028	37.8		
Total+10%:								207.9	Total+10%:								213.0



UNIVERSIDAD:

JUAN MISAE SARACHO



UNIVERSITARIO:

MARCELO CRUZ CAIHUARA

PROYECTO:

HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:

DESPIECE DE VIGAS MÓDULO 4

FECHA:

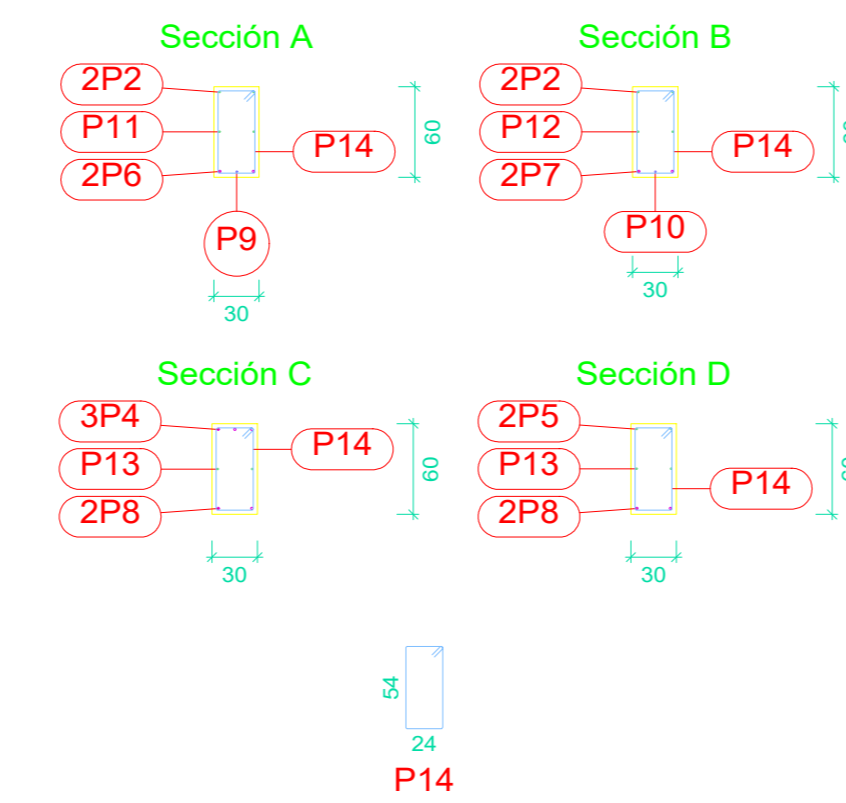
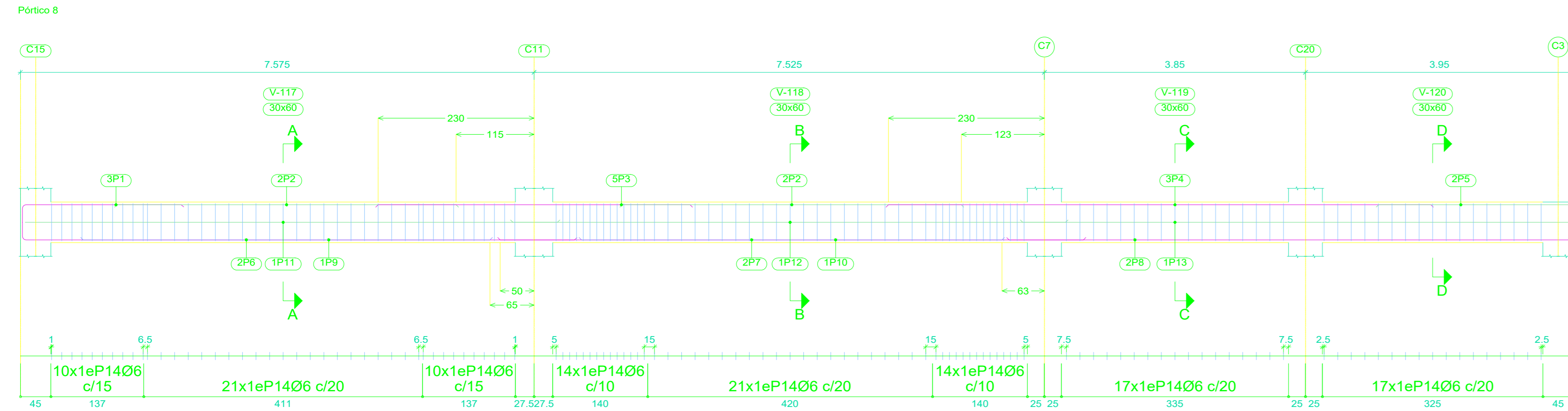
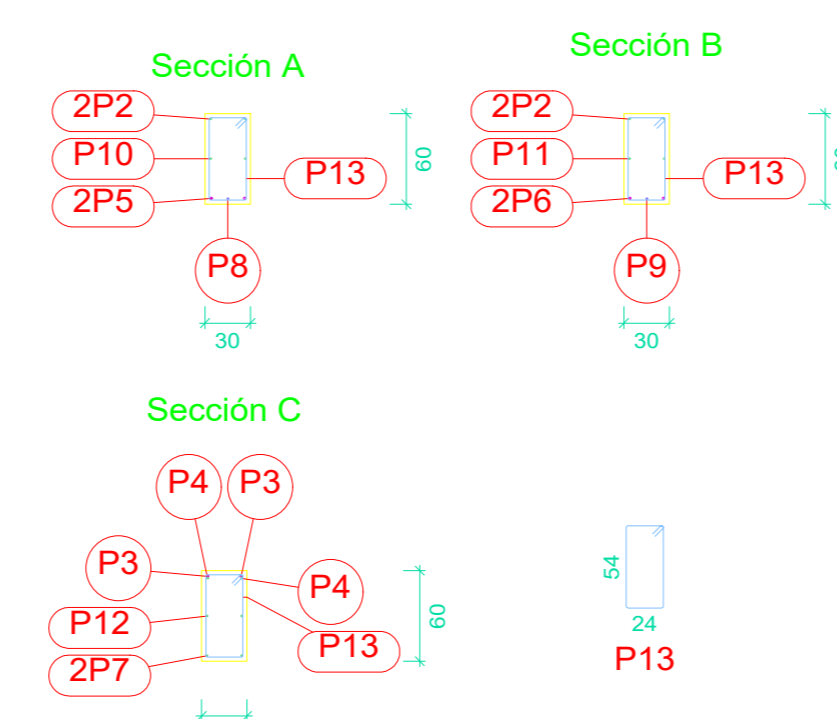
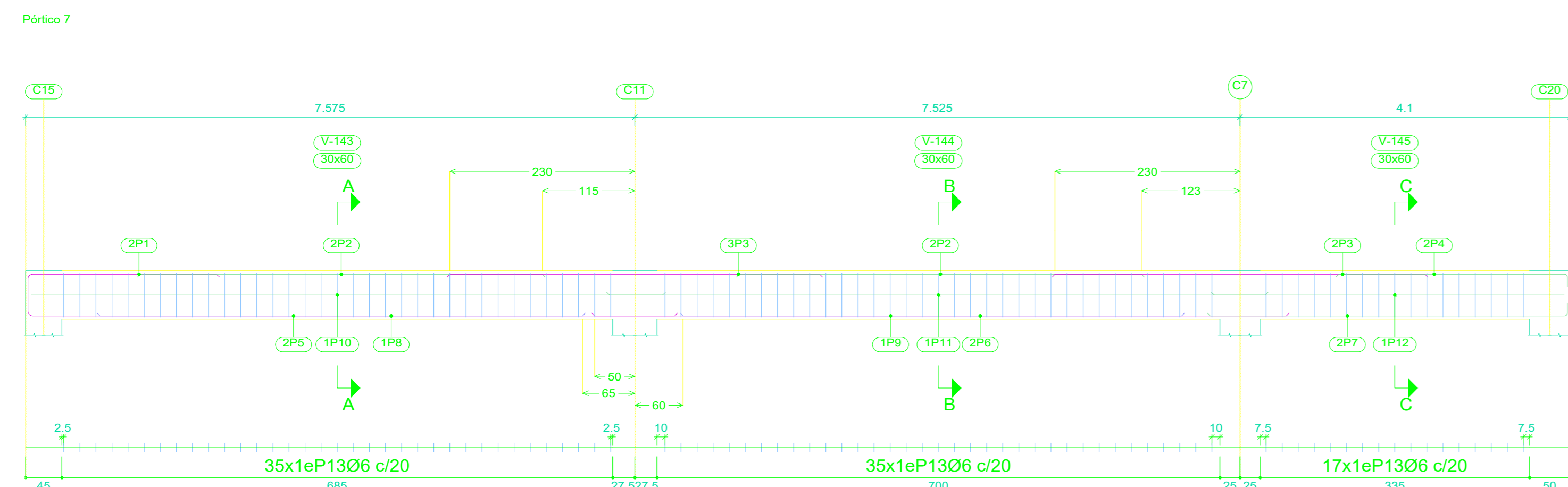
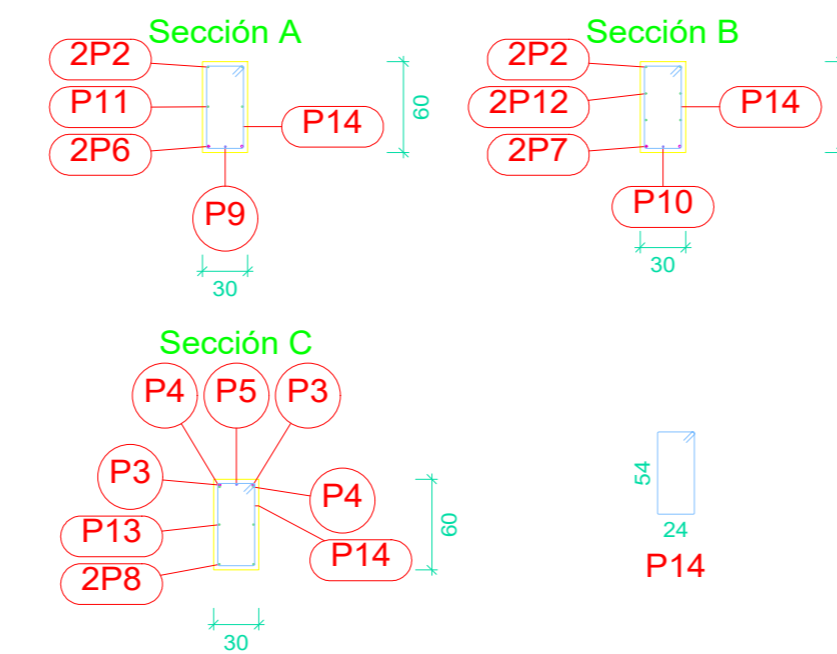
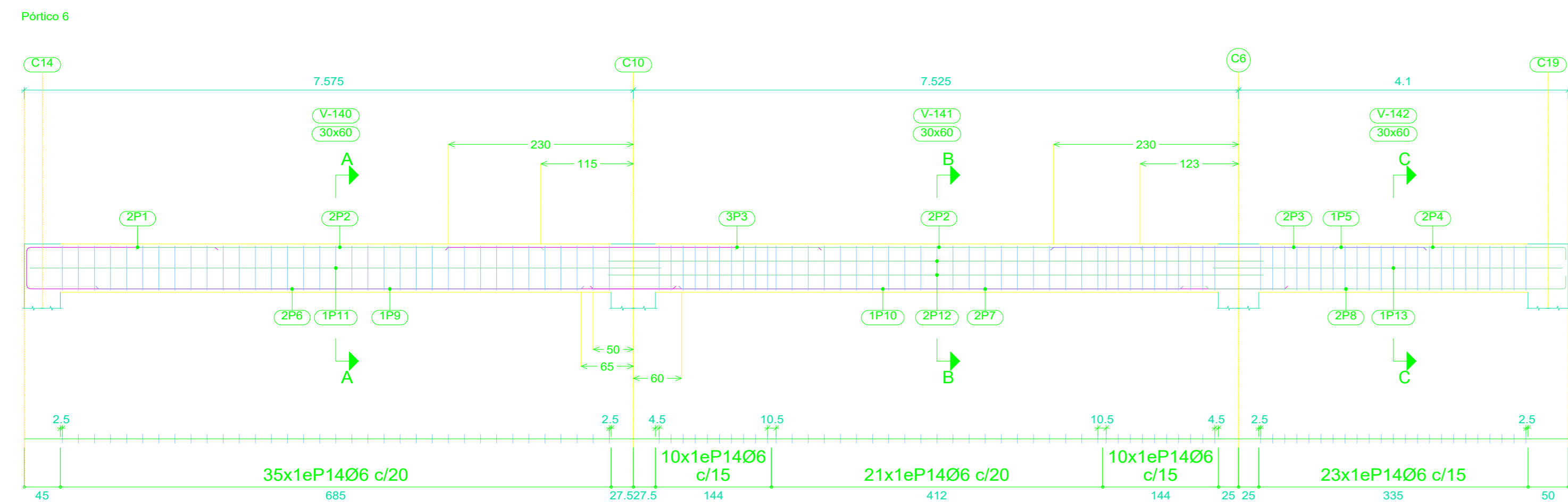
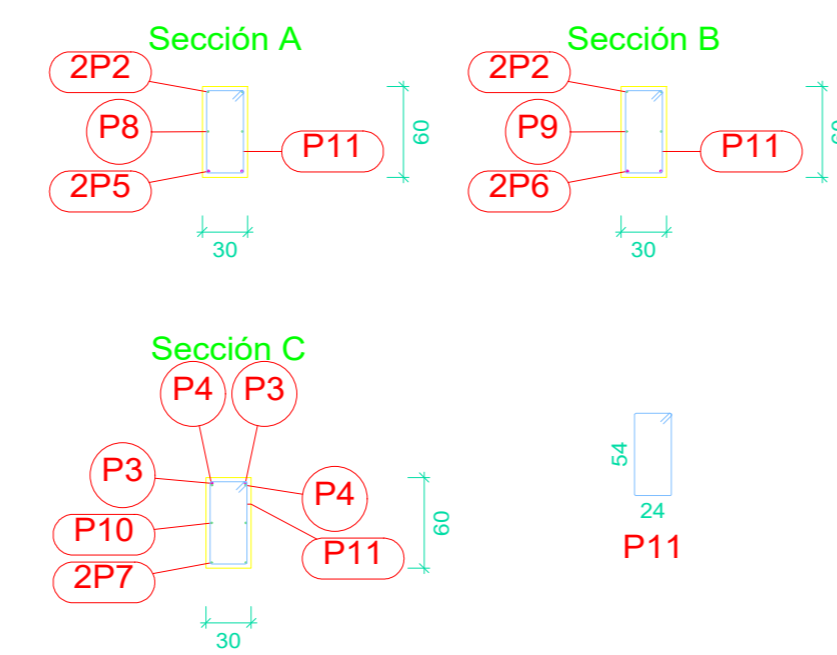
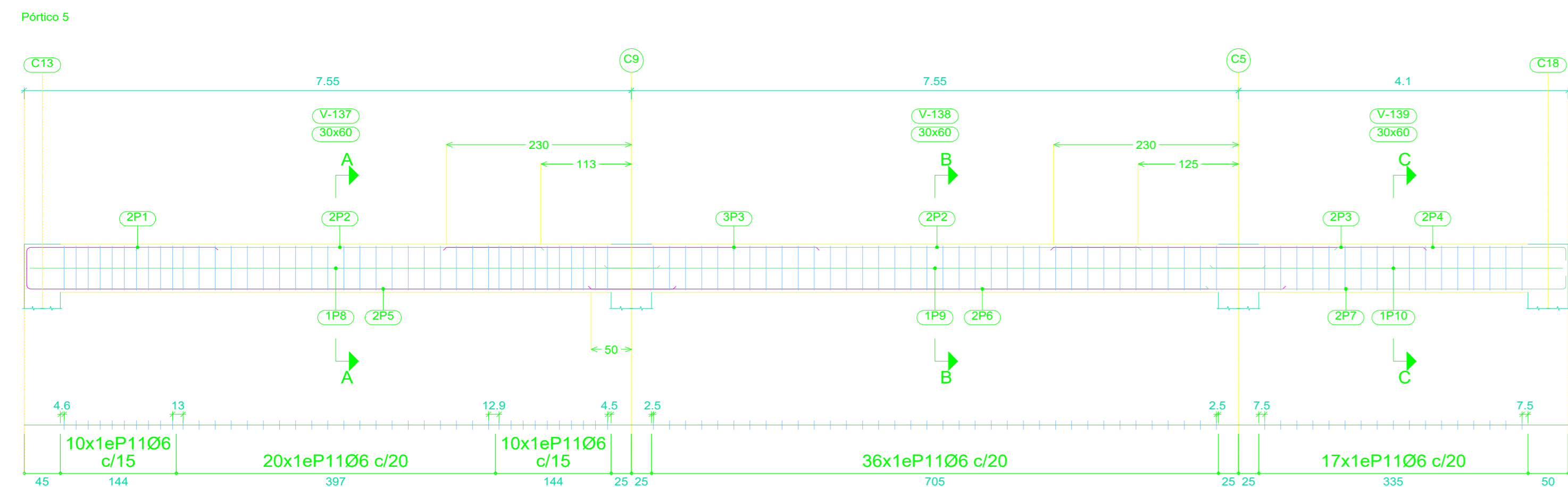
Marzo - 2023

ESCALA:

Indicada

LAMINA:

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Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)	Elemento	Pos.	Diám.	No.	Esquema (cm)	Long. (cm)	Total (cm)	AH-500 (kg)		
Pórtico 5	1	Ø16	2	234	260	520	8.2	Pórtico 6	1	Ø16	2	234	260	520	8.2		
	2	Ø10	4	500	500	2000	12.3		2	Ø10	4	500	500	2000	12.3		
	3	Ø16	5	460	460	2300	36.3		3	Ø16	5	460	460	2300	36.3		
	4	Ø10	2	284	300	600	3.7		4	Ø10	2	284	300	600	3.7		
	5	Ø16	2	804	830	1660	26.2		5	Ø12	1	460	460	460	4.1		
	6	Ø16	2	860	860	1720	27.1		6	Ø16	2	804	830	1660	26.2		
	7	Ø10	2	444	460	920	5.7		7	Ø16	2	860	860	1720	27.1		
	8	Ø10	2	784	800	1600	9.9		8	Ø10	2	444	460	920	5.7		
	9	Ø10	2	815	815	1630	10.0		9	Ø12	1	600	600	600	5.3		
	10	Ø10	2	439	455	910	5.6		10	Ø12	1	620	620	620	5.5		
	11	Ø6	93	24	172	15996	35.5		11	Ø10	2	789	805	1610	9.9		
Total+10%:								198.6	Total+10%:								228.6
Pórtico 7	1	Ø16	2	234	260	520	8.2	Pórtico 8	1	Ø16	2	234	260	520	8.2		
	2	Ø10	4	500	500	2000	12.3		2	Ø10	4	500	500	2000	12.3		
	3	Ø16	5	460	460	2300	36.3		3	Ø16	5	460	460	2300	36.3		
	4	Ø10	2	284	300	600	3.7		4	Ø12	2	280	300	600	5.3		
	5	Ø16	2	804	830	1660	26.2		5	Ø16	2	804	830	1660	26.2		
	6	Ø16	2	860	860	1720	27.1		6	Ø16	2	860	860	1720	27.1		
	7	Ø10	2	444	460	920	5.7		7	Ø16	2	444	470	940	14.8		
	8	Ø12	1	600	600	600	5.3		8	Ø10	2	784	800	1600	9.9		
	9	Ø12	1	620	620	620	5.5		9	Ø10	2	820	820	1640	10.1		
	10	Ø10	2	789	805	1610	9.9		10	Ø10	2	820	820	1640	10.1		
	11	Ø10	2	815	815	1630	10.0		11	Ø10	2	439	455	910	5.6		
	12	Ø10	2	439	455	910	5.6		12	Ø6	99	24	172	17028	37.8		
	13	Ø6	87	24	172	14964	33.2		13	Ø6	99	24	172	17028	37.8		
Total+10%:								207.9	Total+10%:								213.0



UNIVERSIDAD:

JUAN MISAE SARACHO



UNIVERSITARIO:

MARCELO CRUZ CAIHUARA

PROYECTO:

HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:

DESPIECE DE VIGAS MÓDULO 4

FECHA:

Marzo - 2023

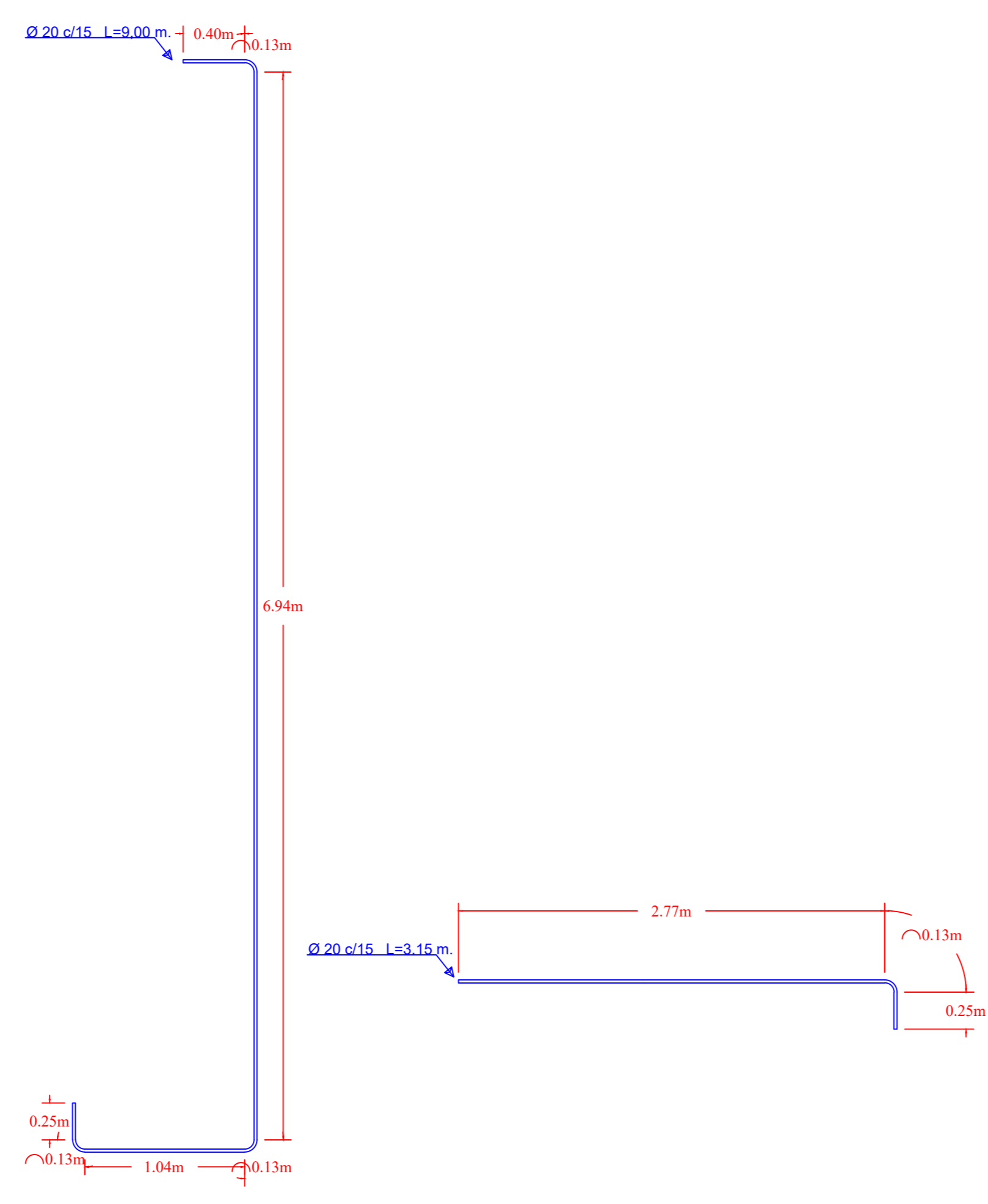
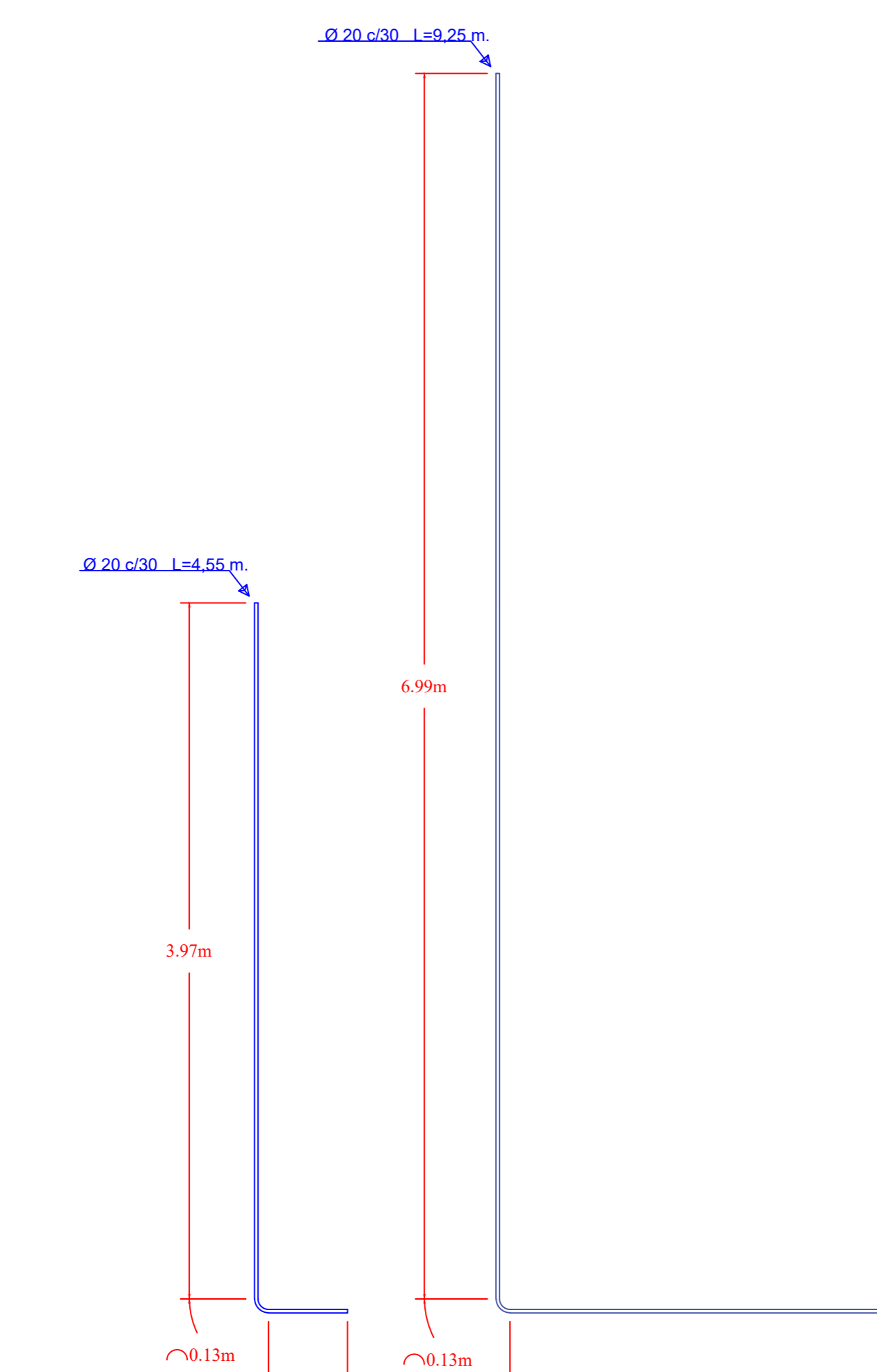
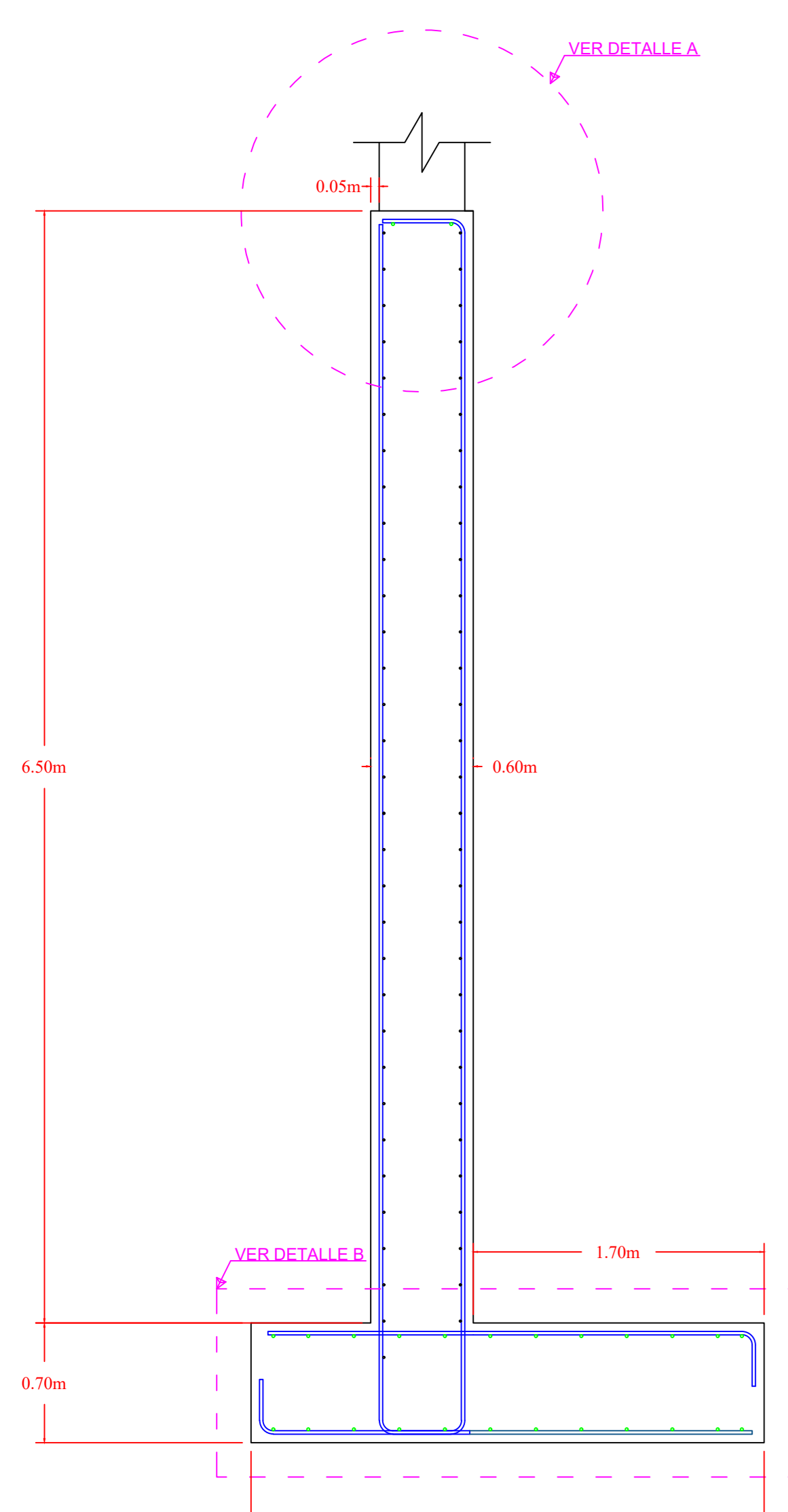
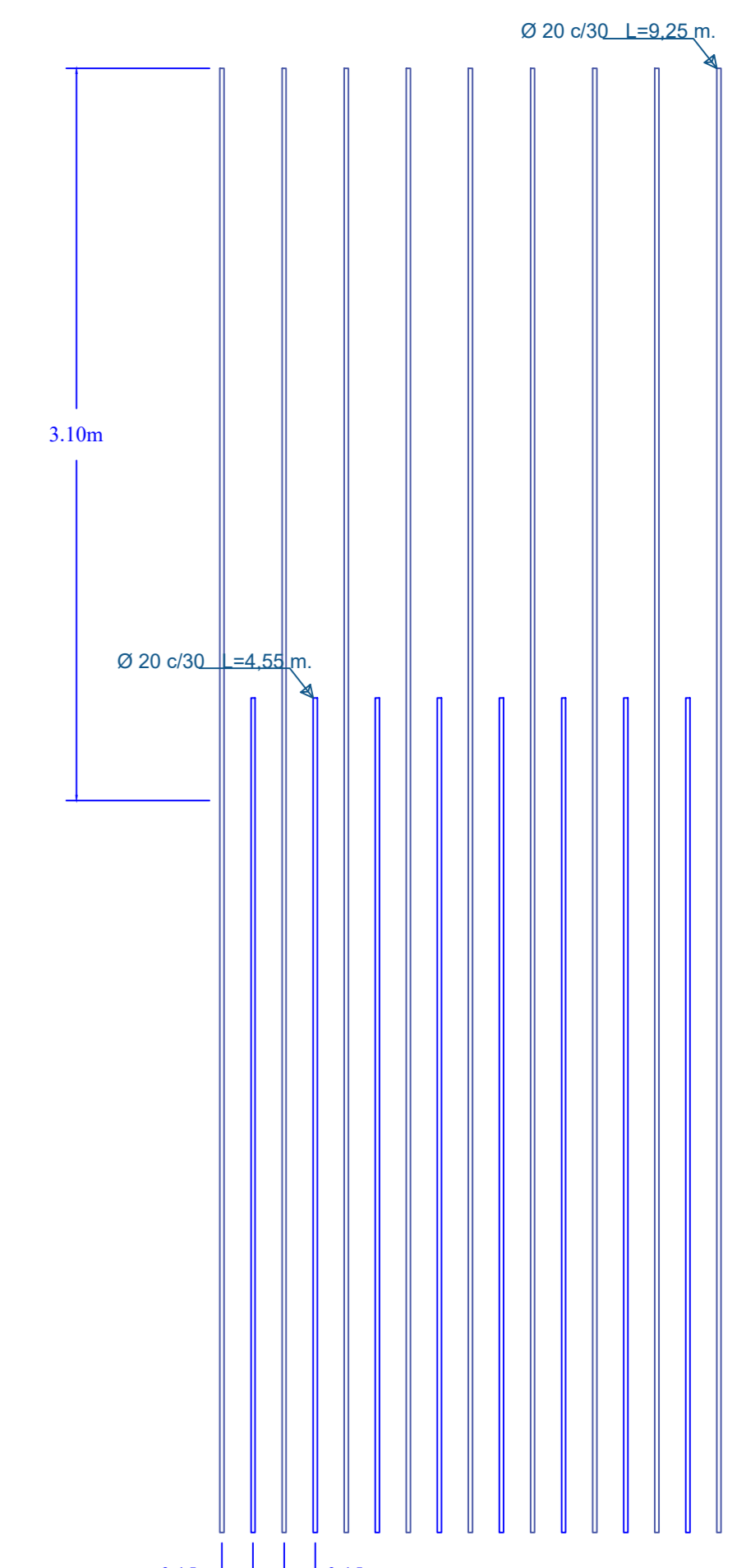
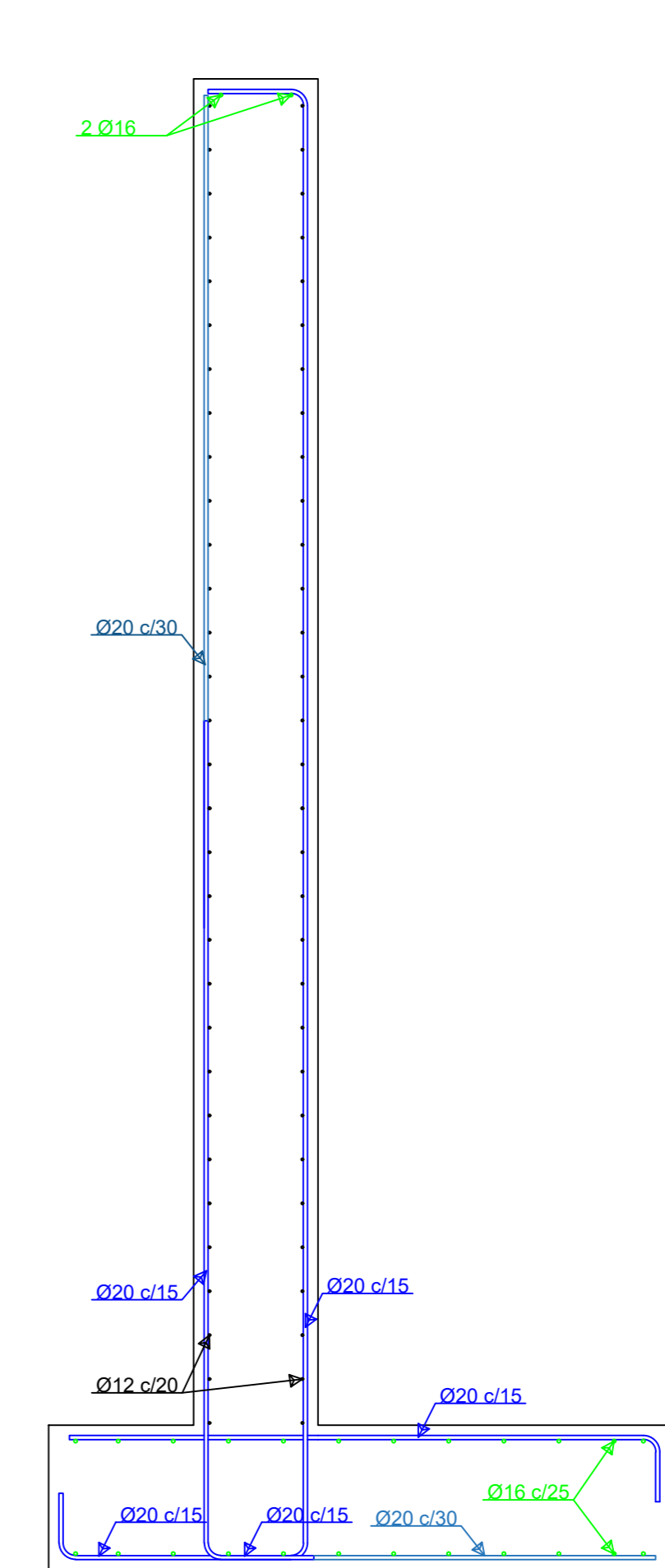
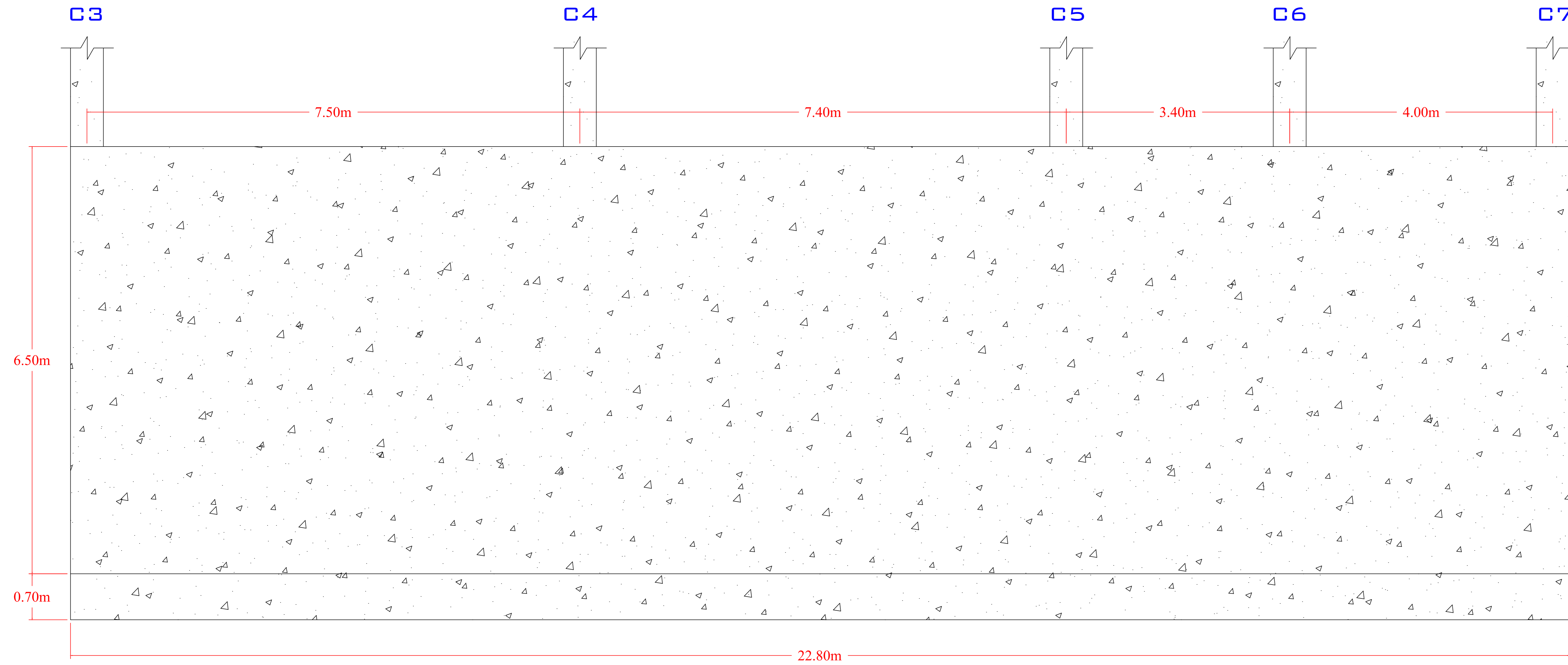
ESCALA:

Indicada

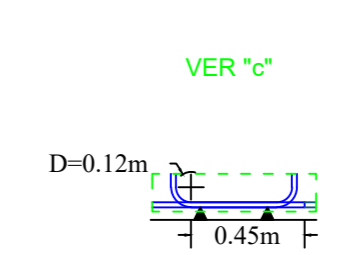
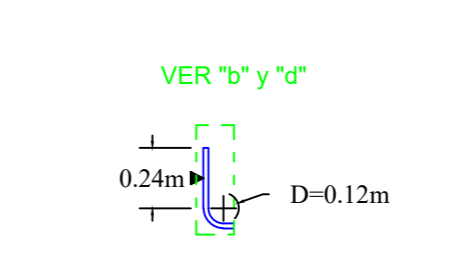
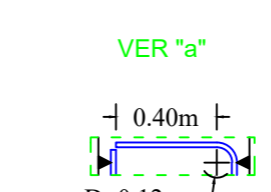
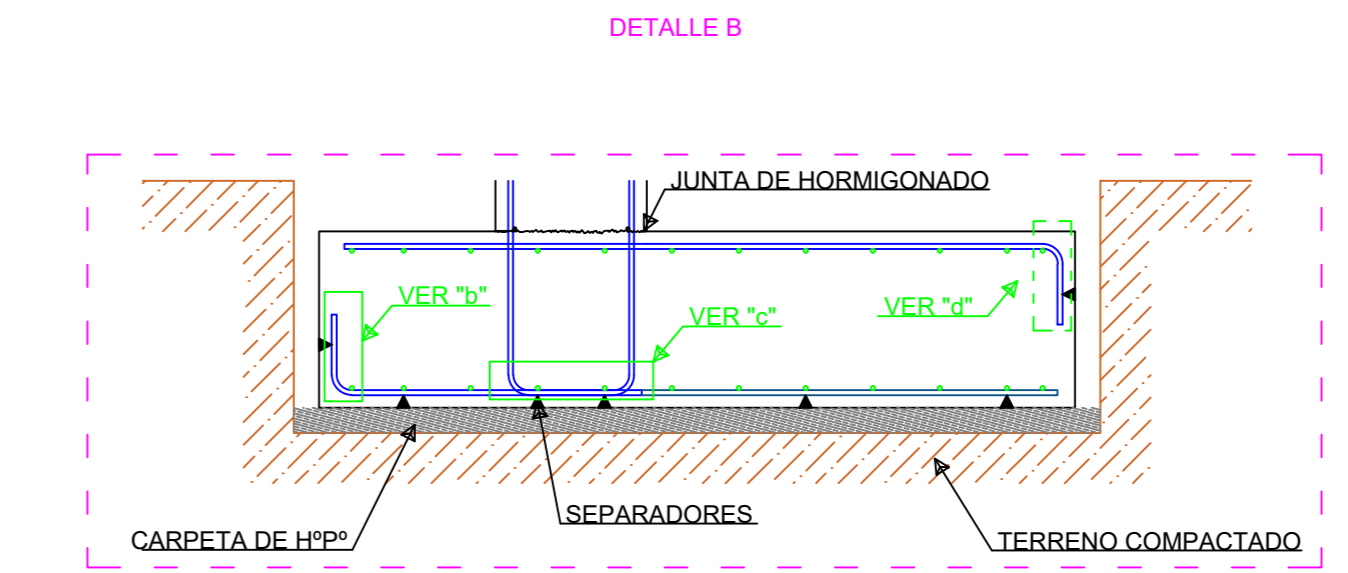
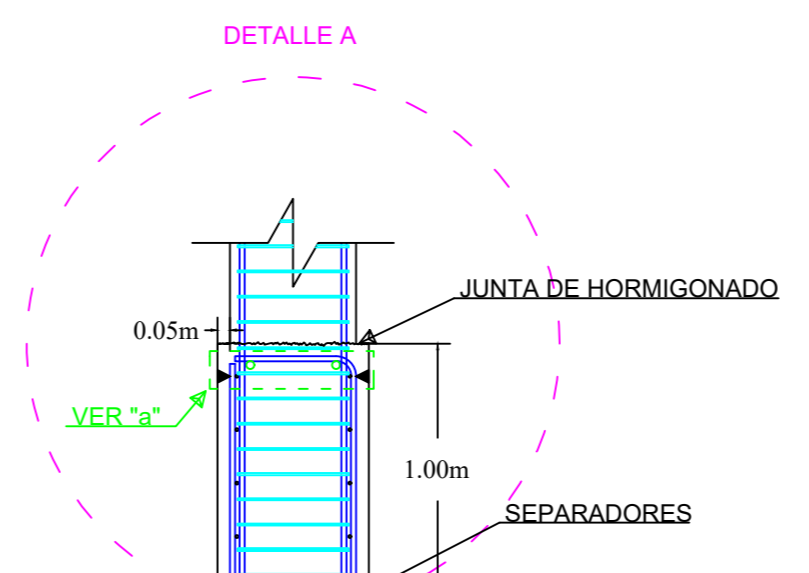
LAMINA:

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ESC 1:30



NOTA:
EL NUMERO DE BARRAS LONGITUDINALES DE LA COLUMNA ES INDEPENDIENTE DE CADA COLUMNA, ASI TAMBIEN LA DISPOSICION DE ESTRIBOS.



UNIVERSIDAD:
JUAN MISAEL SARACHO



UNIVERSITARIO:
MARCELO CRUZ CAIHUARA

PROYECTO:
HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:
DESPIECE DE MURO DE SÓTANO

FECHA:
Marzo - 2023

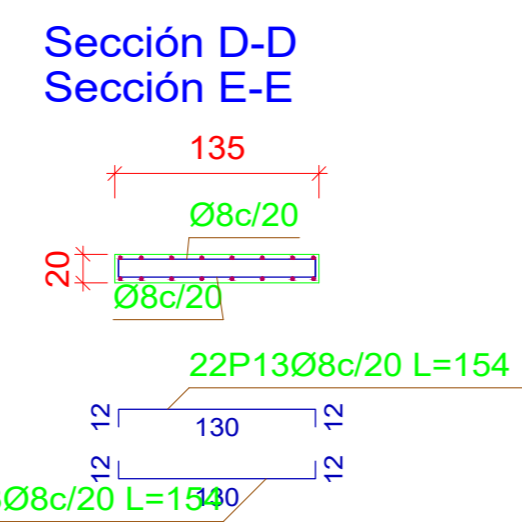
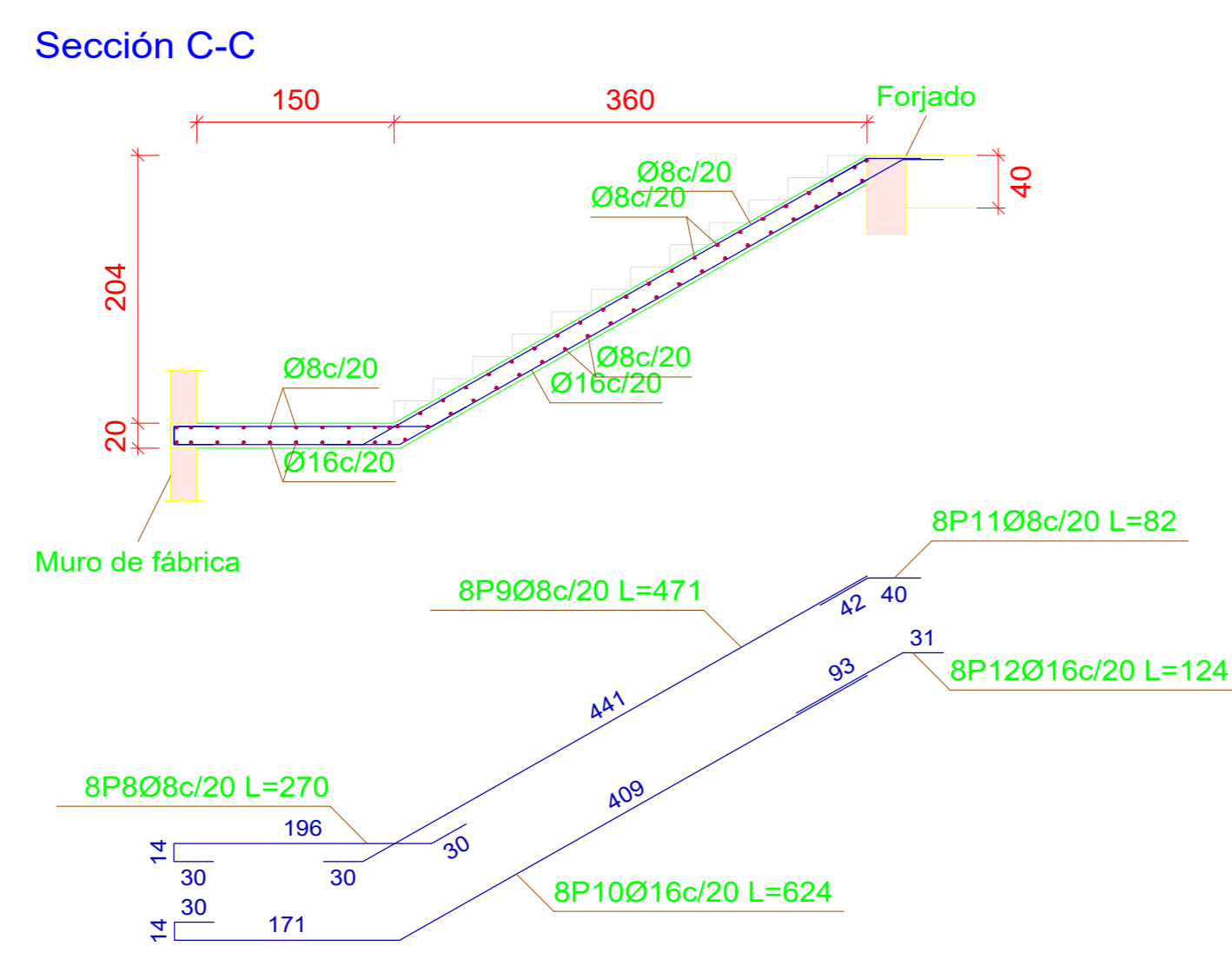
ESCALA:
Indicada

LAMINA:
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ESC 1:50

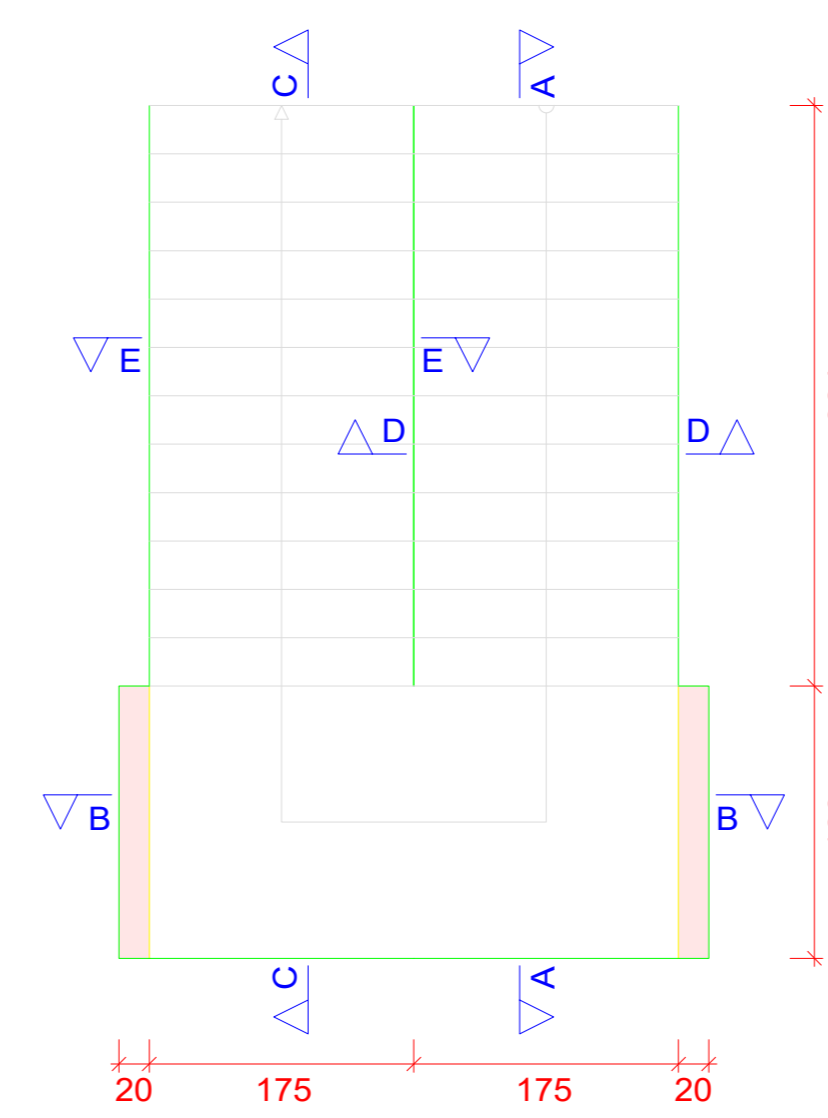
ESCALERA TIPO 1; MÓDULO 2

Tramo 1	
Geometría	
Ámbito	1.350 m
Espesor	0.20 m
Huella	0.300 m
Contrahuella	0.170 m
Desnivel que salva	4.08 m
Nº de escalones	24
Planta final	PRIMERA PLANTA
Planta inicial	PLANTA BAJA
Peso propio	4.47 kN/m ²
Cargas	
Peldañado (Hormigonado con la losa)	1.74 kN/m ²
Solado	1.20 kN/m ²
Barandillas	1.00 kN/m
Sobrecarga de uso	5.00 kN/m ²
Materiales	
Hormigón	25 Mpas
Acero	AH-500
Rec. geométrico	2.0 cm



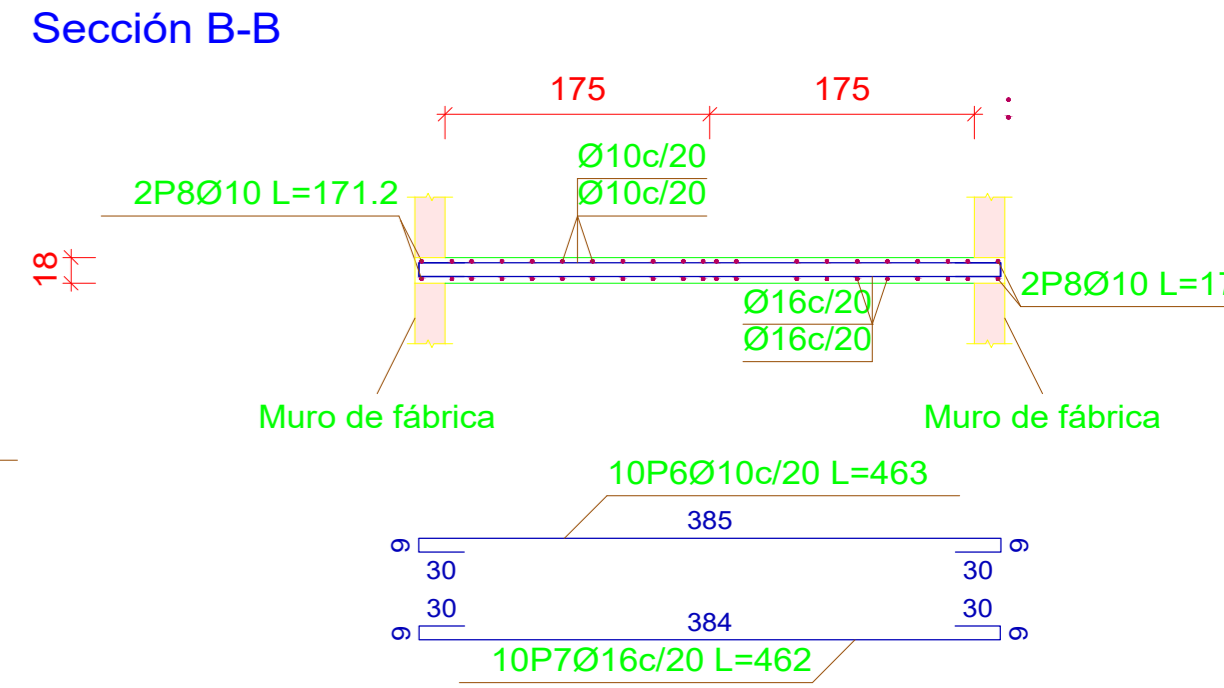
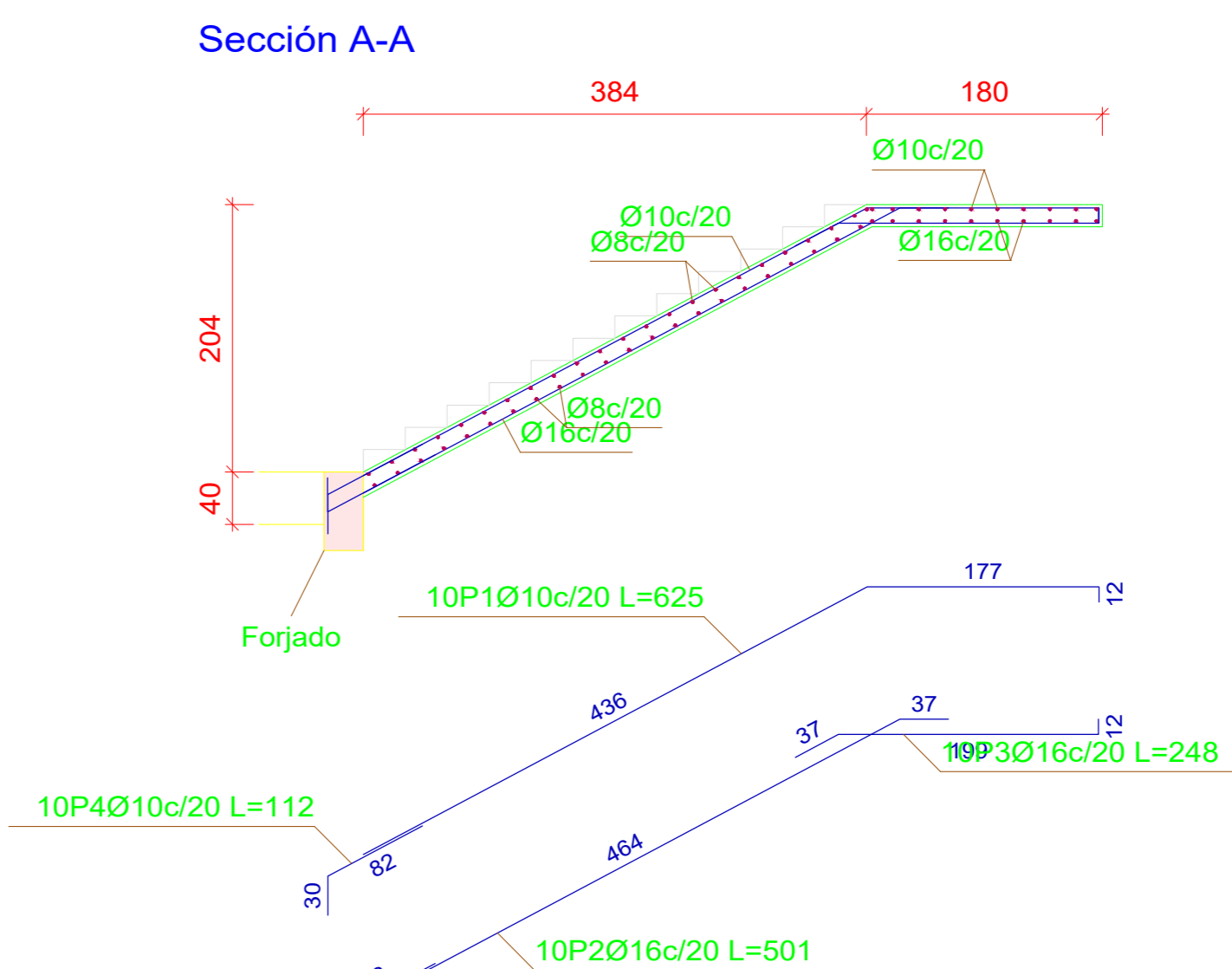
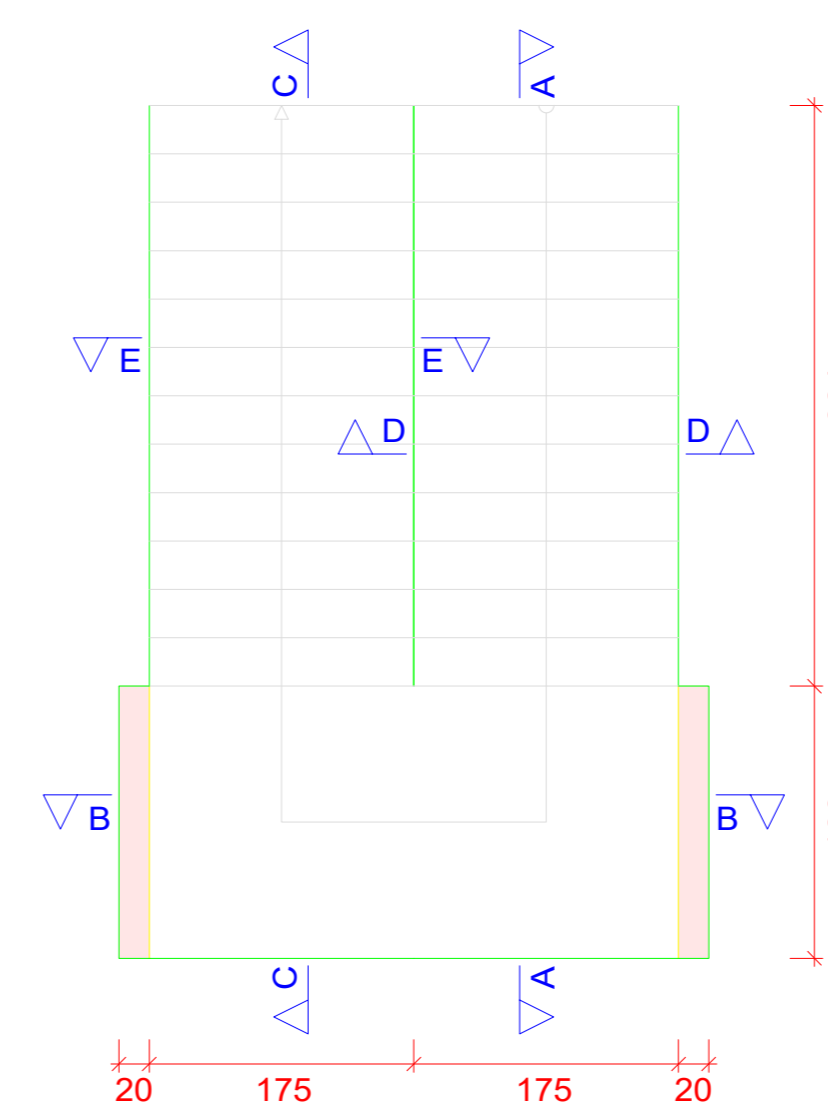
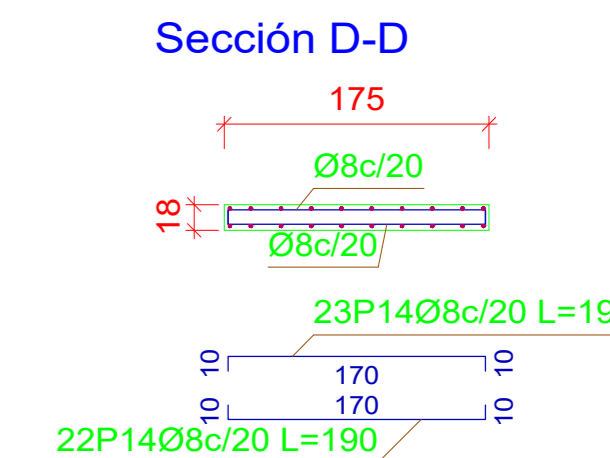
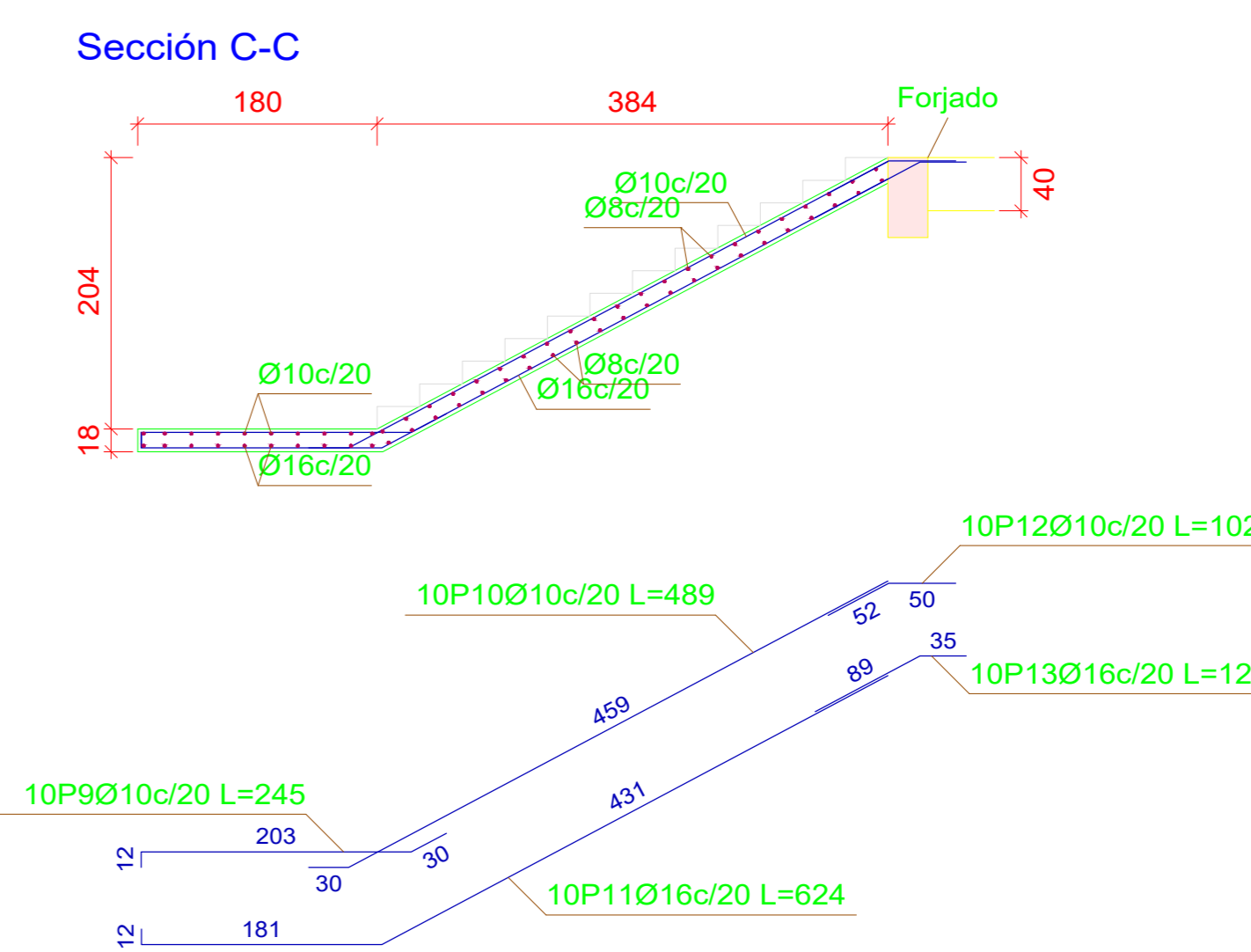
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-500 (kg)
ESCALERA TIPO 4 MÓDULO 3	1	Ø10	10	625	6250	36.5
	2	Ø16	10	501	5010	79.1
	3	Ø16	10	248	2480	39.1
	4	Ø10	10	112	1120	6.9
	5	Ø16	10	119	1190	18.8
	6	Ø10	10	463	4630	28.5
	7	Ø16	10	462	4620	72.9
	8	Ø10	4	171	684	4.2
	9	Ø10	10	245	2450	15.1
	10	Ø10	10	489	4890	30.1
	11	Ø16	10	624	6240	98.5
	12	Ø10	10	102	1020	6.3
	13	Ø16	10	124	1240	19.8
	14	Ø8	89	190	16010	66.7
Total+10%:						576.7
						Ø8: 73.3
						Ø10: 142.6
						Ø16: 360.8
						Total: 576.7

Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-500 (kg)
ESCALERA TIPO 1 MÓDULO 2	1	Ø8	8	626	5008	19.8
	2	Ø16	8	481	3848	60.7
	3	Ø16	8	269	2152	34.0
	4	Ø8	8	102	816	3.2
	5	Ø16	8	123	984	15.5
	6	Ø8	10	287	2870	11.3
	7	Ø16	10	286	2860	45.1
	8	Ø8	8	270	2160	8.5
	9	Ø8	8	471	3768	14.9
	10	Ø16	8	624	4992	78.8
	11	Ø8	8	82	656	2.6
	12	Ø16	8	124	992	15.7
	13	Ø8	86	154	13244	52.3
Total+10%:						398.6
						Ø8: 123.9
						Ø16: 274.7
						Total: 398.6



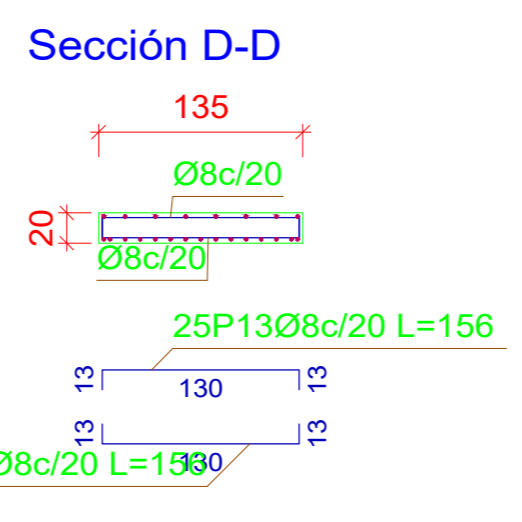
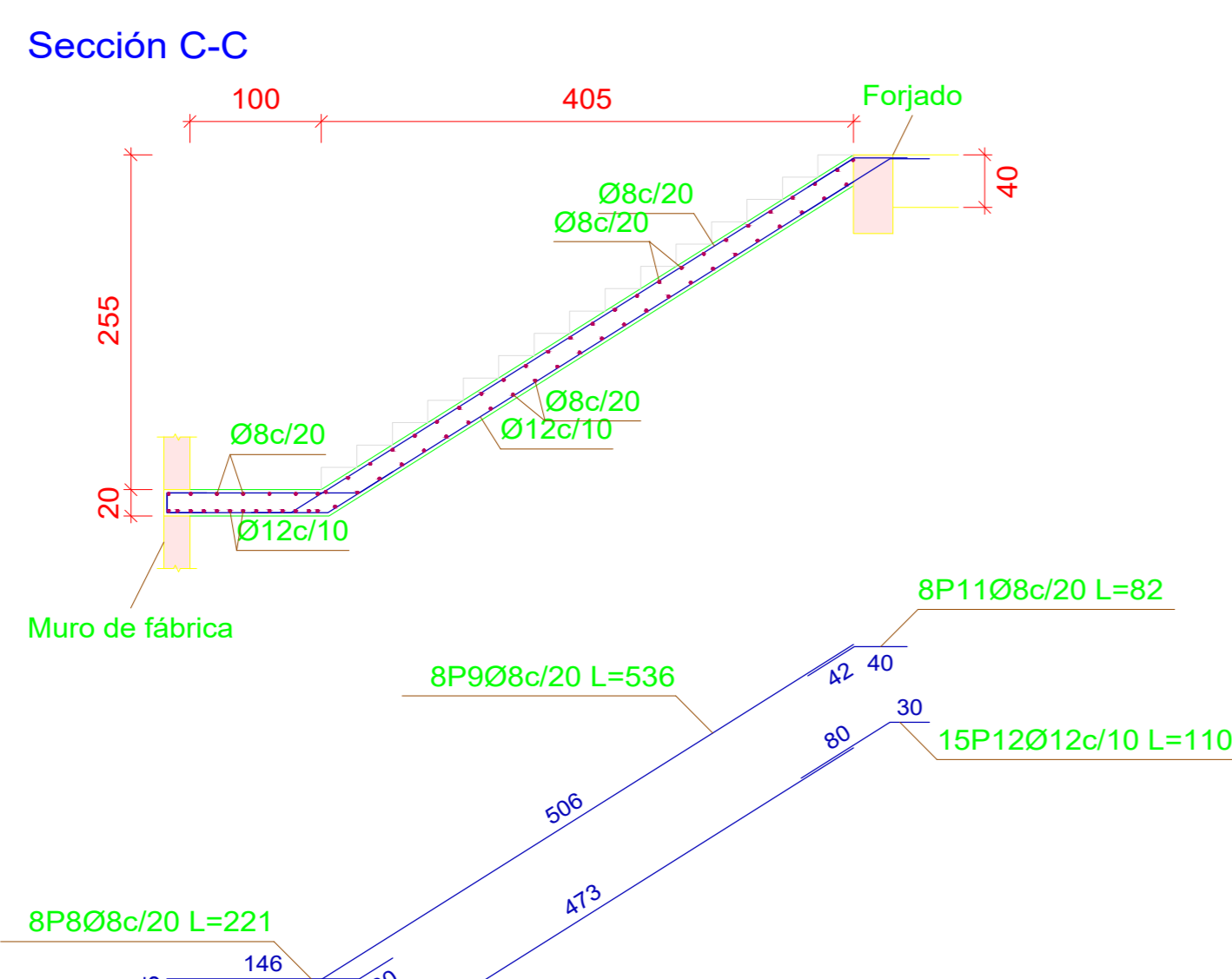
ESCALERA TIPO 4; MÓDULO 3

Tramo 1	
Geometría	
Ámbito	1.750 m
Espesor	0.18 m
Huella	0.320 m
Contrahuella	0.170 m
Desnivel que salva	4.08 m
Nº de escalones	24
Planta final	PRIMERA PLANTA
Planta inicial	PLANTA BAJA
Peso propio	4.00 kN/m ²
Cargas	
Peldañado (Hormigonado con la losa)	1.76 kN/m ²
Solado	1.20 kN/m ²
Barandillas	1.00 kN/m
Sobrecarga de uso	5.00 kN/m ²
Materiales	
Hormigón	25 Mpas
Acero	AH-500
Rec. geométrico	2.0 cm



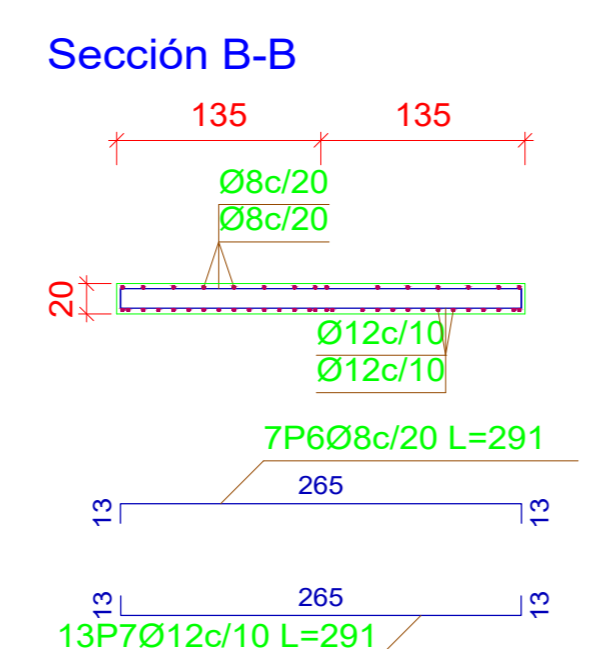
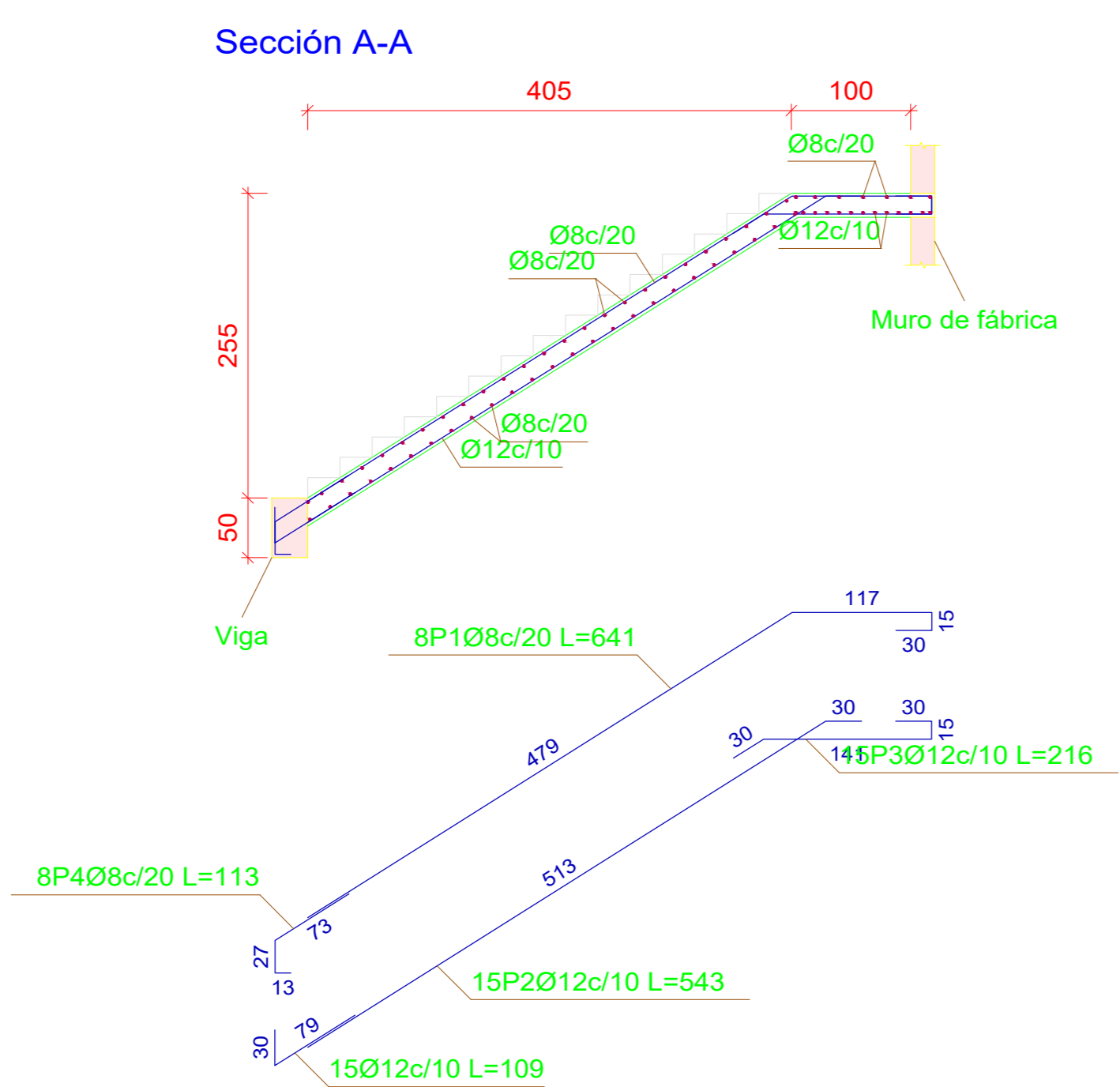
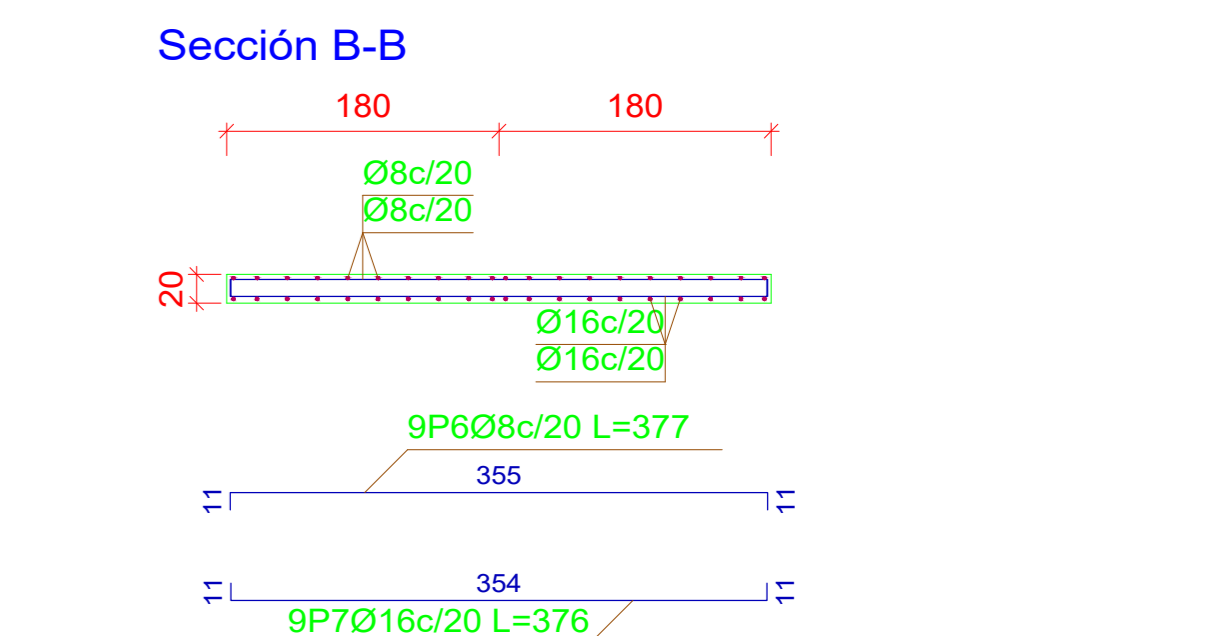
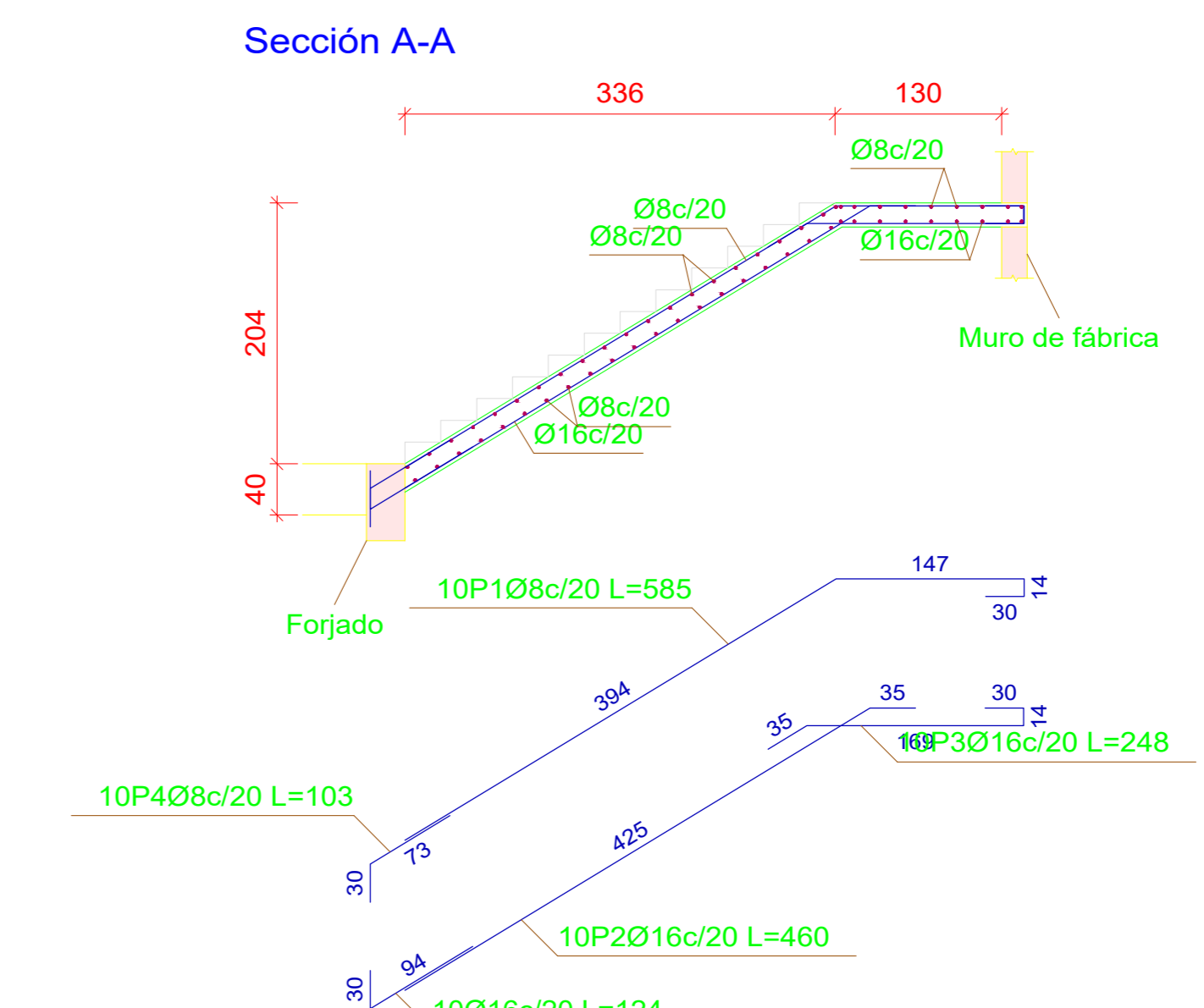
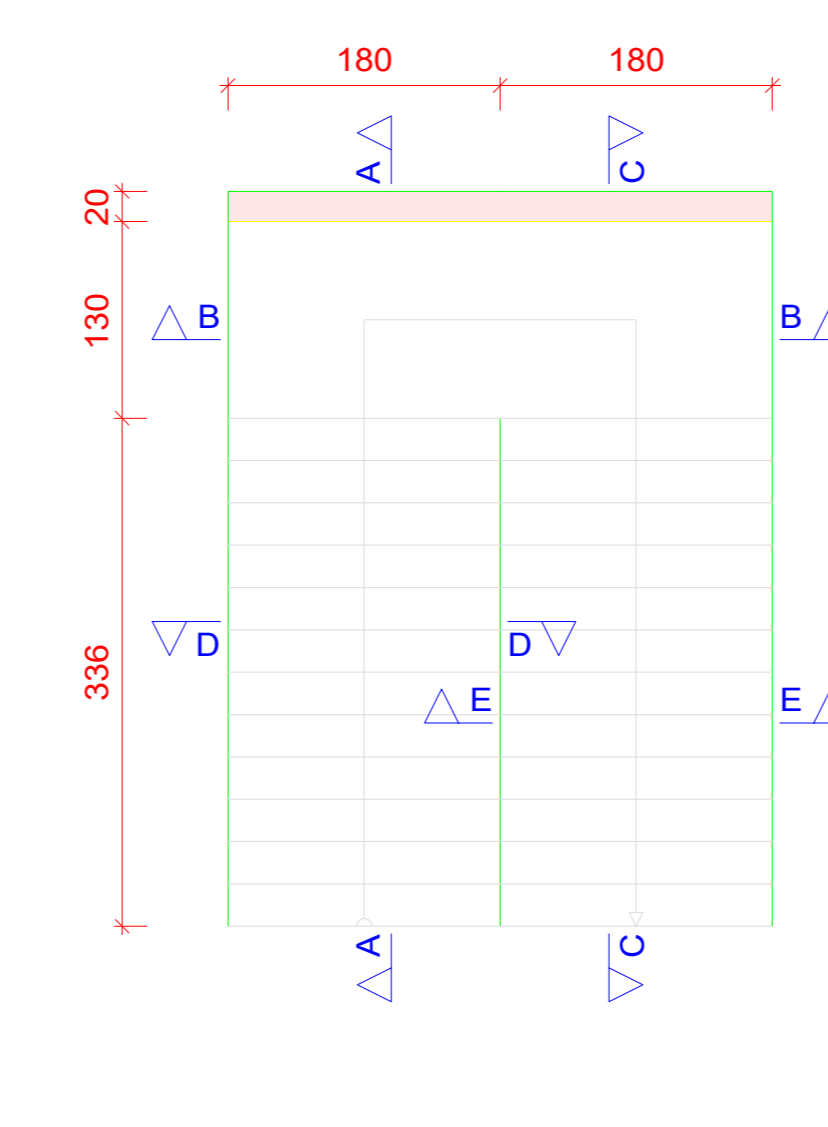
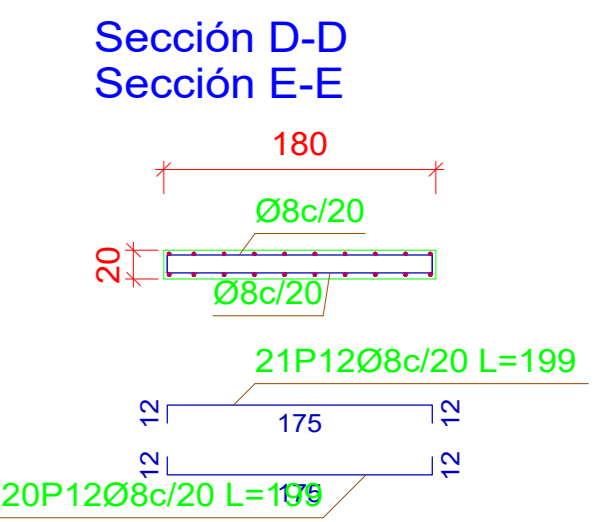
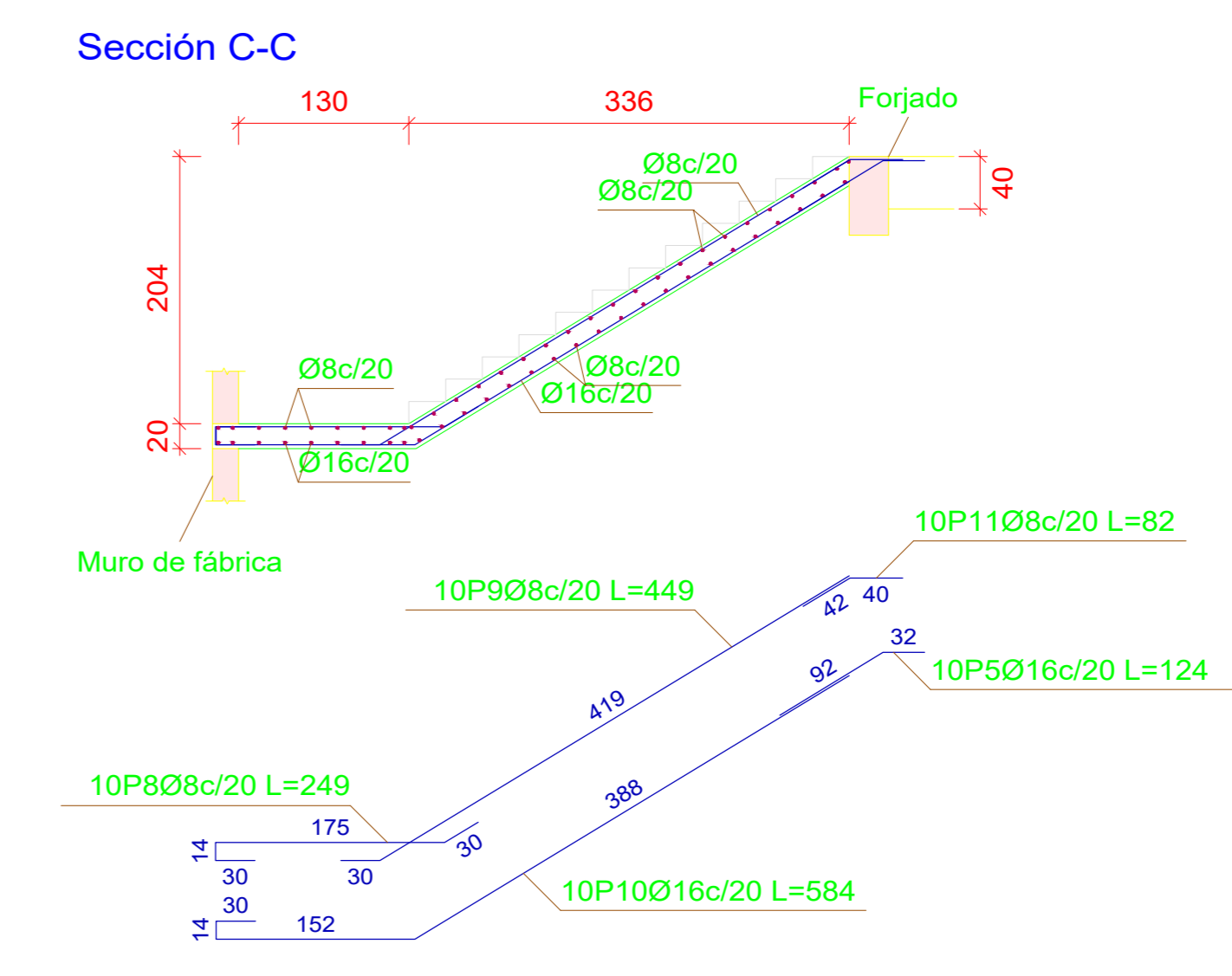
ESCALERA TIPO 2; MÓDULO 2

Tramo 1	
Geometría	
Ámbito	1.350 m
Espesor	0.20 m
Huella	0.270 m
Contrahuella	0.170 m
Desnivel que salva	5.10 m
Nº de escalones	30
Planta final	PLANTA BAJA
Planta inicial	SÓTANO
Peso propio	4.70 kN/m ²
Cargas	
Peldañado (Hormigonado con la losa)	1.69 kN/m ²
Solado	1.20 kN/m ²
Barandillas	1.00 kN/m
Sobrecarga de uso	5.00 kN/m ²
Materiales	
Hormigón	25 Mpas
Acero	AH-500
Rec. geométrico	2.0 cm



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-500 (kg)
ESCALERA TIPO 3 MÓDULO 2	1	Ø8	10	585	5850	23.1
	2	Ø16	10	460	4600	72.6
	3	Ø16	10	248	2480	39.1
	4	Ø8	10	103	1030	4.1
	5	Ø16	20	124	2480	39.1
	6	Ø8	9	377	3393	13.4
	7	Ø16	9	376	3384	53.4
	8	Ø8	10	249	2490	9.8
	9	Ø8	10	449	4490	17.7
	10	Ø16	10	584	5840	92.2
	11	Ø8	10	82	656	3.2
	12	Ø8	82	199	16318	64.4
Total+10%:						475.3
						Ø8: 149.3
						Ø16: 326.0
						Total: 475.3

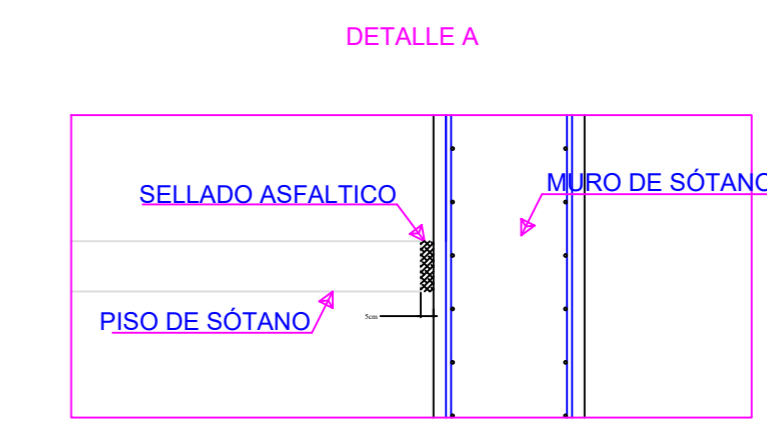
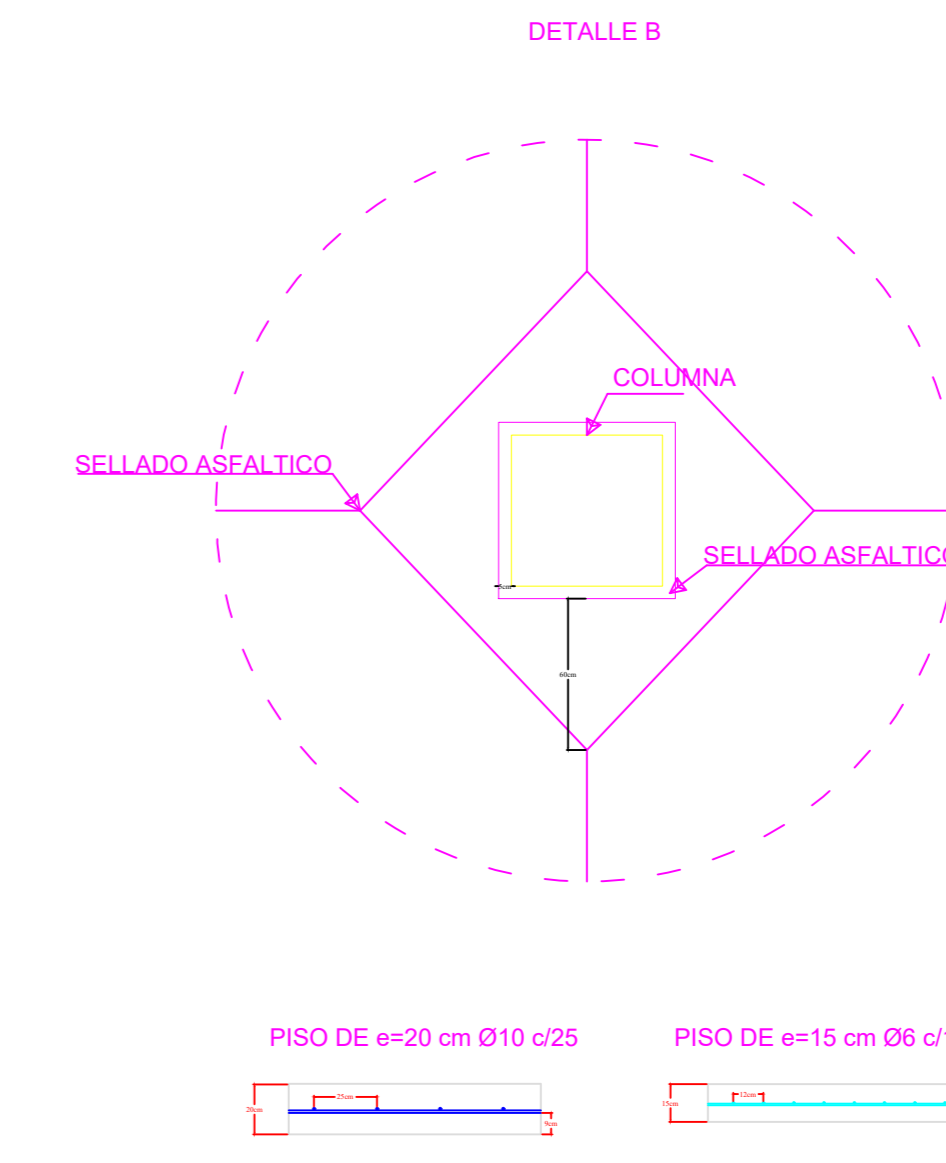
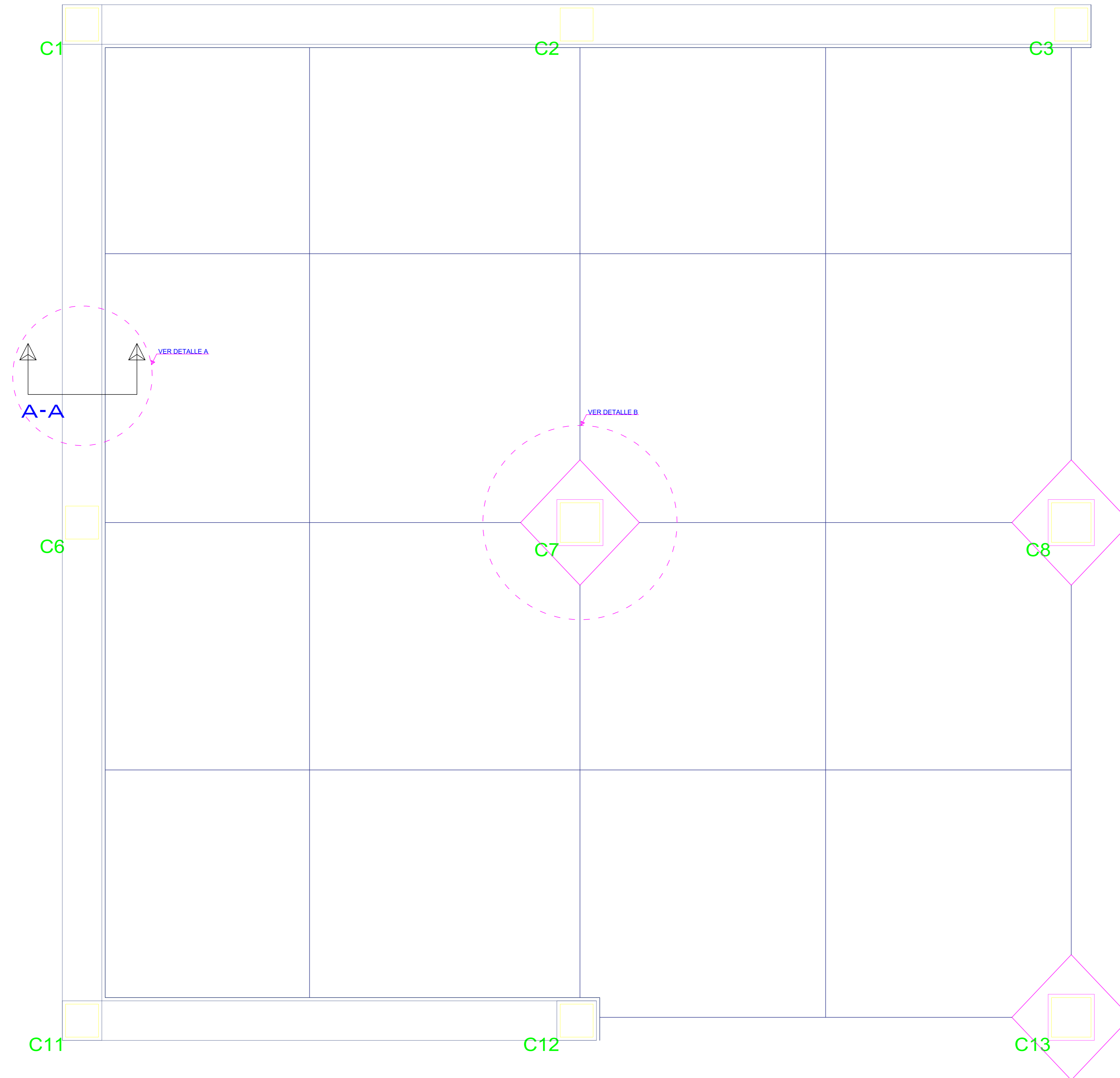
Tramo 1	
Geometría	
Ámbito	1.800 m
Espesor	0.20 m
Huella	0.280 m
Contrahuella	0.170 m
Desnivel que salva	4.08 m
Nº de escalones	24
Planta final	PRIMERA PLANTA
Planta inicial	PLANTA BAJA
Peso propio	4.47 kN/m ²
Cargas	
Peldañado (Realizado con ladrillo)	1.14 kN/m ²
Solado	1.20 kN/m ²
Barandillas	1.00 kN/m
Sobrecarga de uso	5.00 kN/m ²
Materiales	
Hormigón	25 Mpas
Acero	AH-500
Rec. geométrico	2.0 cm



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-500 (kg)
ESCALERA TIPO 2 MÓDULO 2	1	Ø8	8	641	5128	20.2
	2	Ø12	15	543	8145	72.3
	3	Ø12	15	216	3240	28.8
	4	Ø8	8	113	904	3.6
	5	Ø12	15	109	1635	14.5
	6	Ø8	7	291	2037	8.0
	7	Ø12	13	291	3783	33.6
	8	Ø8	8	221	1768	7.0
	9	Ø8	8	536	4288	16.9
	10	Ø12	15	640	9600	85.2
	11	Ø8	8	82	656	2.6
	12	Ø12	15	110	1650	14.6
	13	Ø8	99	156	15444	60.9
Total+10%:						405.0

ESC 1:30

DETALLES DE PISO DE SÓTANO



UNIVERSIDAD:

JUAN MISAEL SARACHO



UNIVERSITARIO:

MARCELO CRUZ CAIHUARA

PROYECTO:

HOSPITAL DE SEGUNDO NIVEL YACUIBA

CARACTER:

DESPIECE DE PISO INDUSTRIAL Y BARANDADO

FECHA:

Marzo - 2023

ESCALA:

Indicada

LAMINA:

65/65