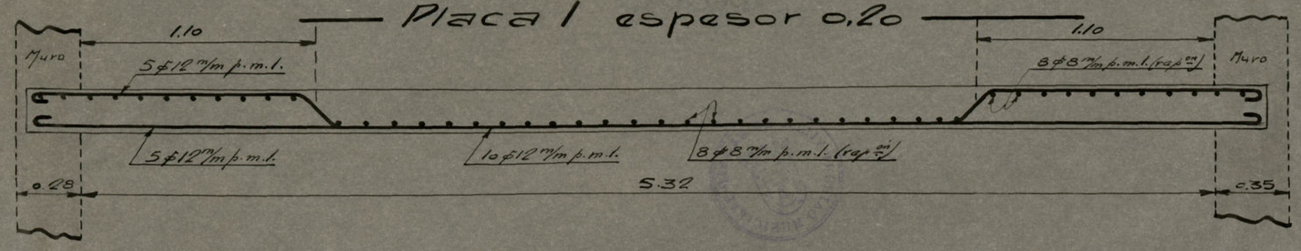
Plano nº 10

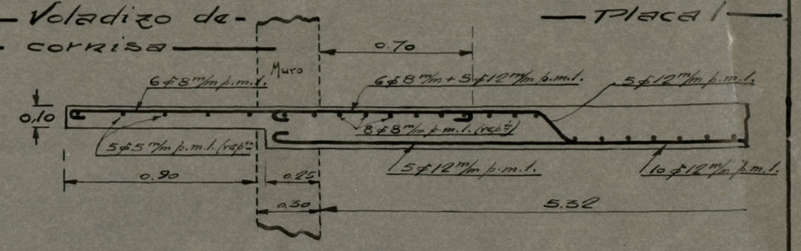
Cubiertas — (cota 3.20 y 5,30)

Detalle de Vigas y Placas

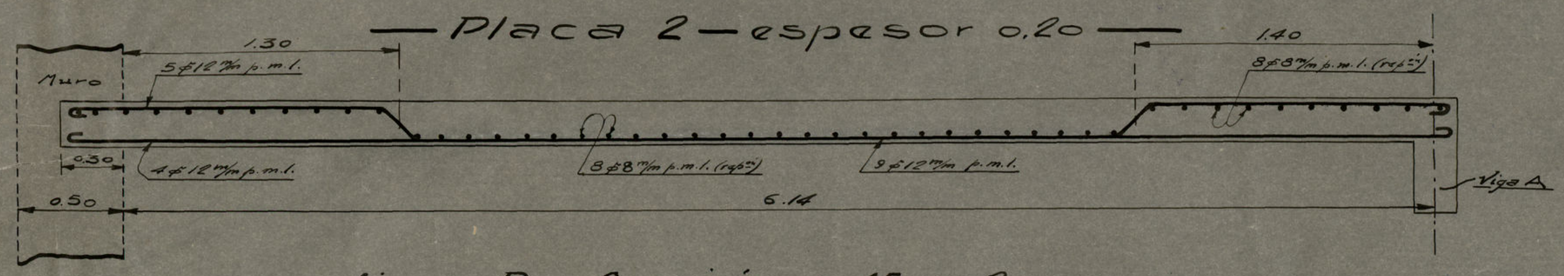
Placa 1 espesor 0,20



Voladizo de cornisa — Placa 1

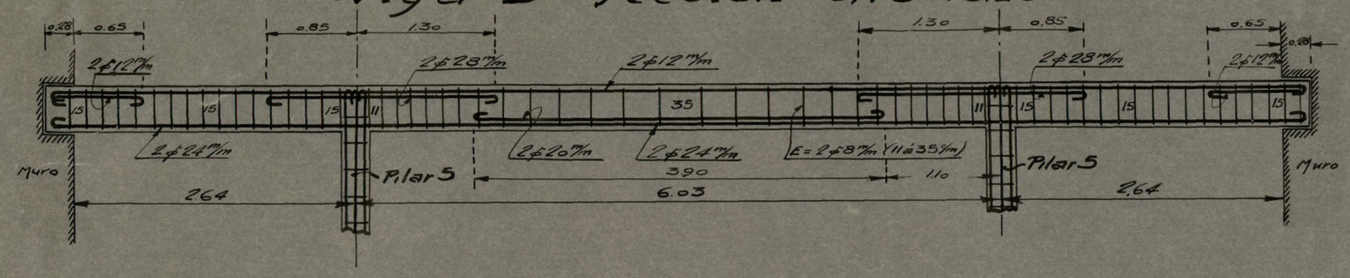


Placa 2 — espesor 0,20



Escalas — en { Vigas 1:40 ; Placas y voladizo 1:20 }

Viga D — Sección 0,45 x 0,20

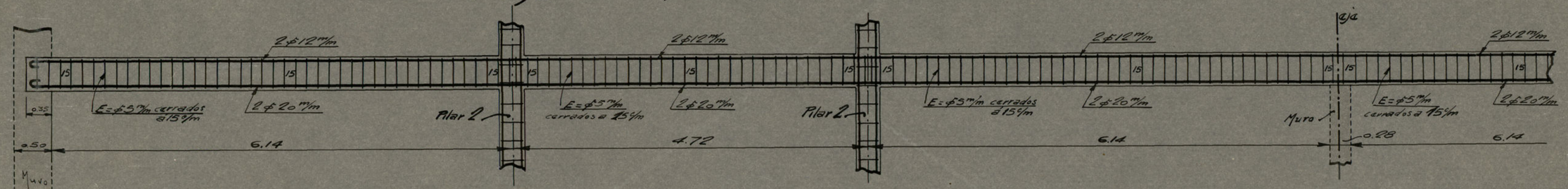


Viga D₁

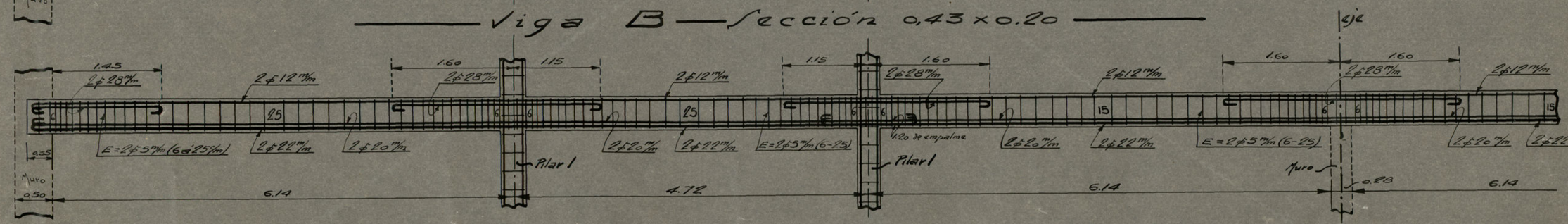
Sección 0,45 x 0,20

Armaduras de igual longitud que en la Viga D — { Secciones — { 2φ12 m/m ; 2φ28 m/m (rafφ) } ; " { 2φ22 m/m (rafφ) ; 2φ24 m/m } } E = 2φ8 m/m (8 a 25 m/m)

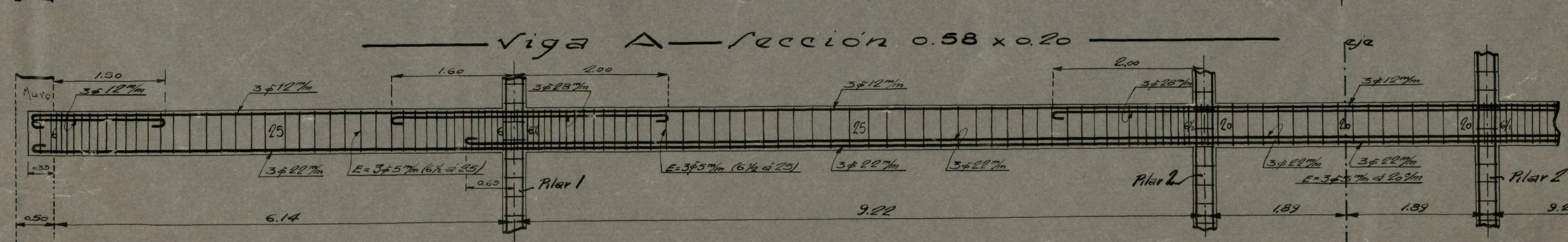
Viga C — Sección 0,43 x 0.20



Viga B — Sección 0,43 x 0.20



Viga A — Sección 0.58 x 0.20



Madrid Noviembre 1930

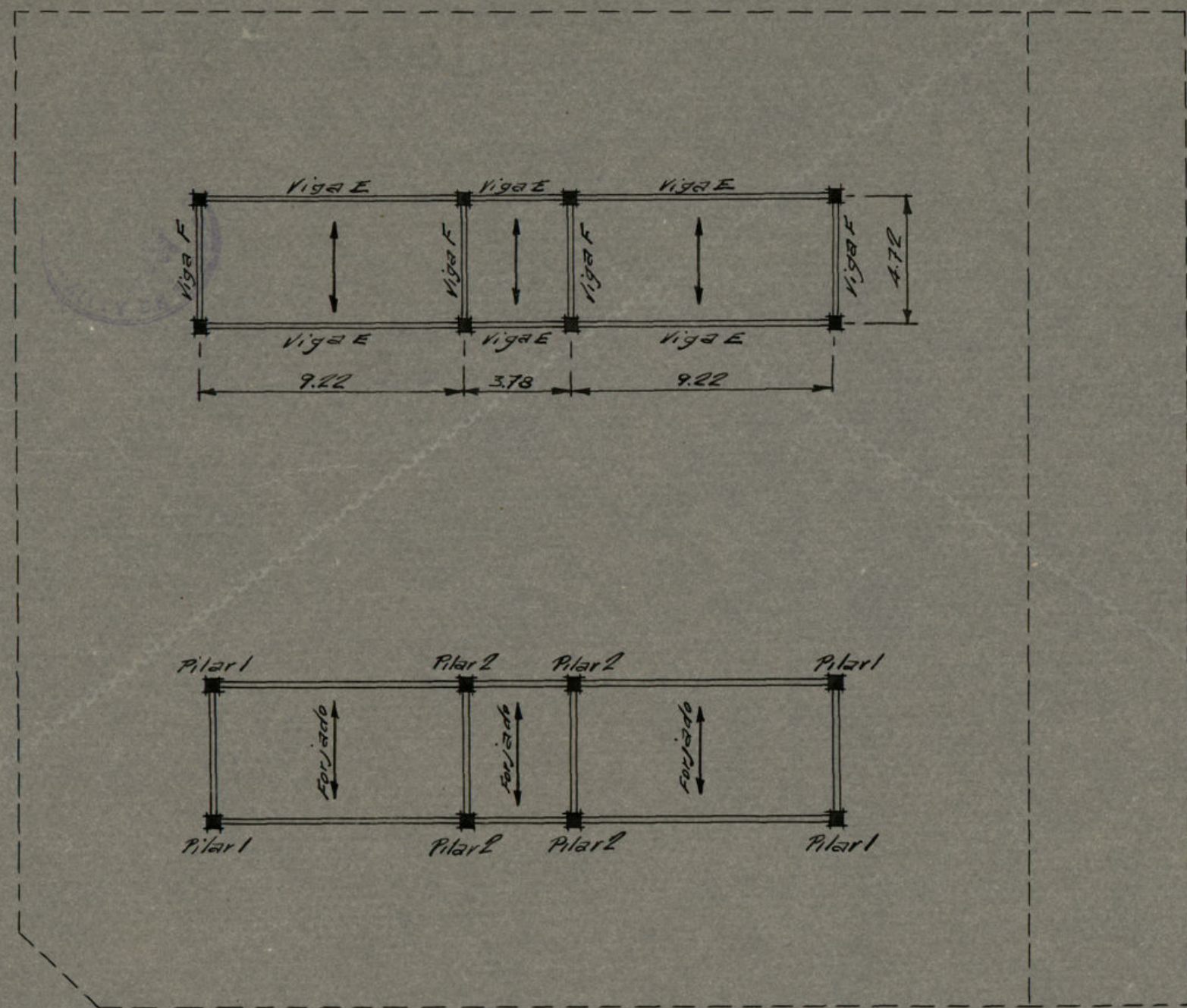
JOSE MARCHESI — INGENIERO — Paseo, 10 - MADRID

Ayuntamiento de Madrid

Plano nº 11

PLANTA DE CUBIERTAS (cota 8,00 m.)

E = 1:200



Madrid Noviembre 1930

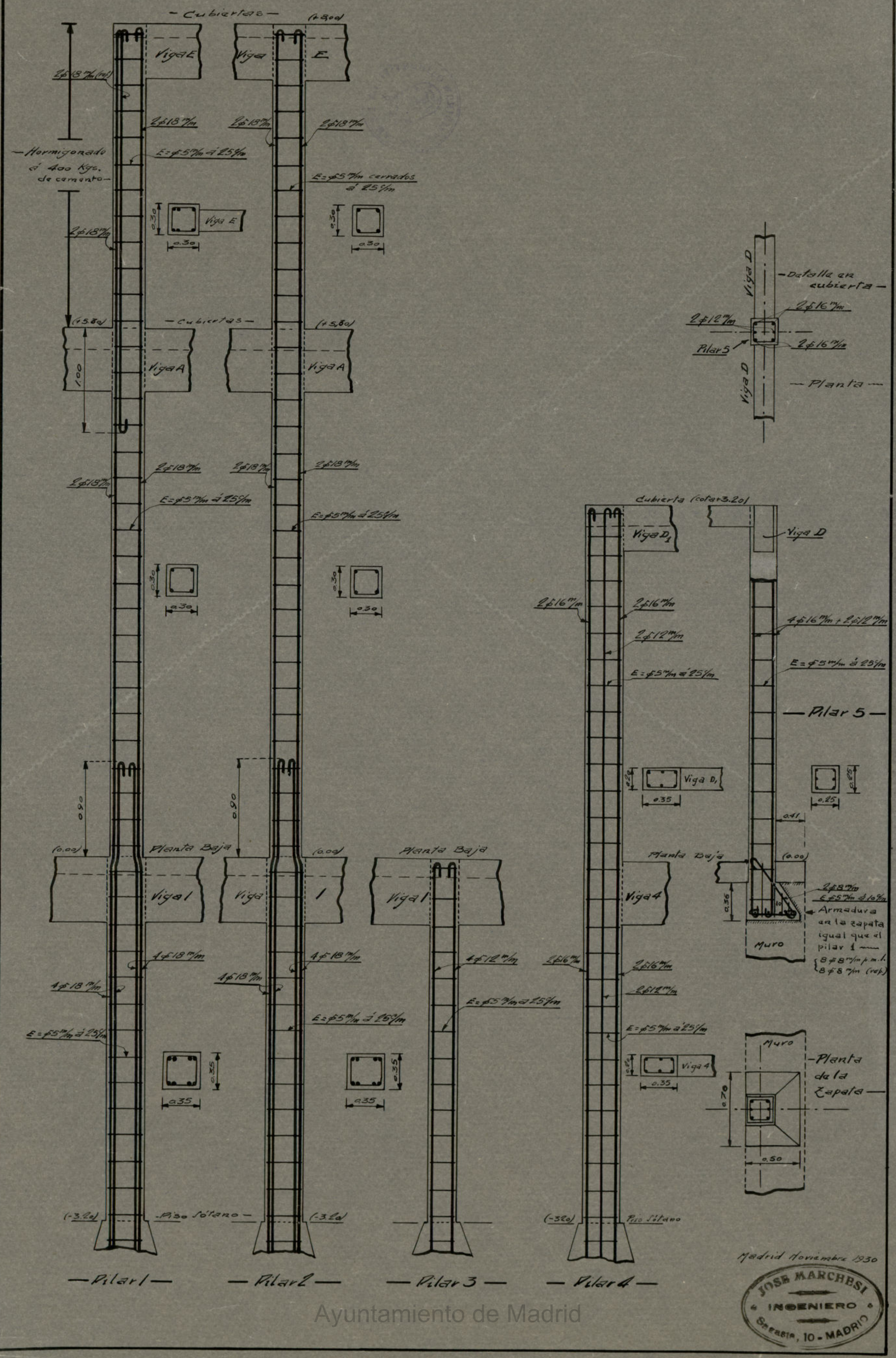
JOSE MARCHESI
INGENIERO
Serrano, 10 - MADRID

Ayuntamiento de Madrid

— Plano nº 8 —

— DETALLE DE PILARES —

E = 1:30



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
SAGASTA, 10 - MADRID

Ayuntamiento de Madrid

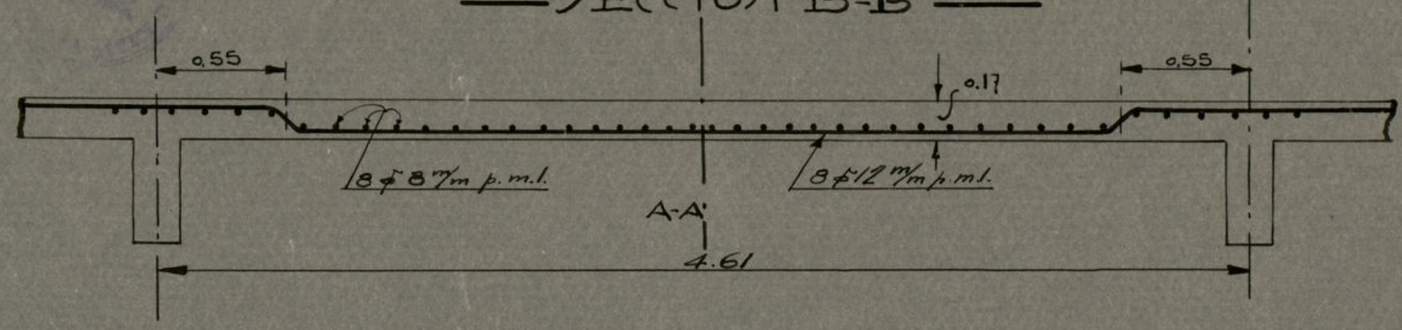
Plano nº 4

PLANTA BAJA

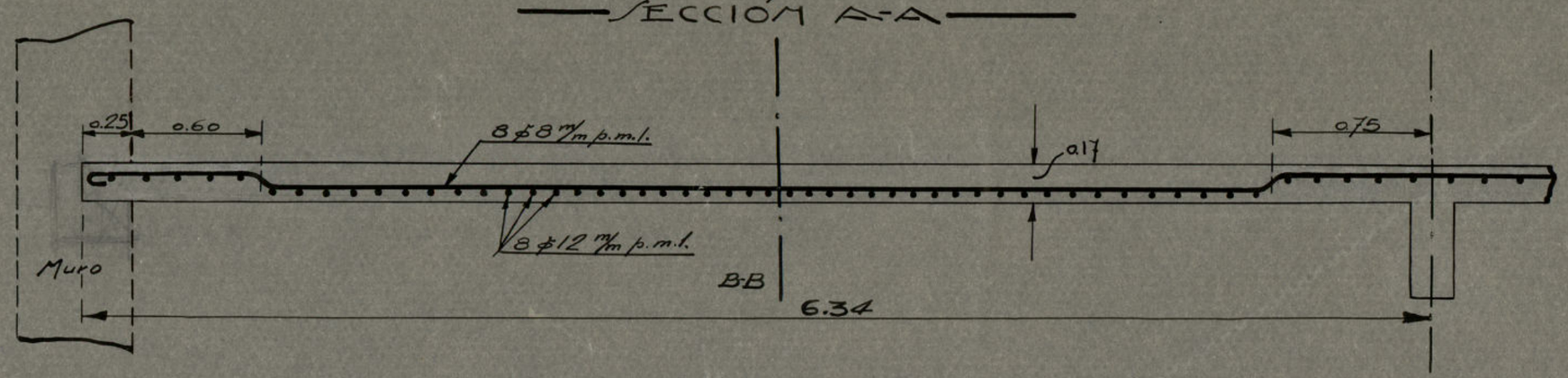
Placa=a= de 6,34x4,61

E=1:25

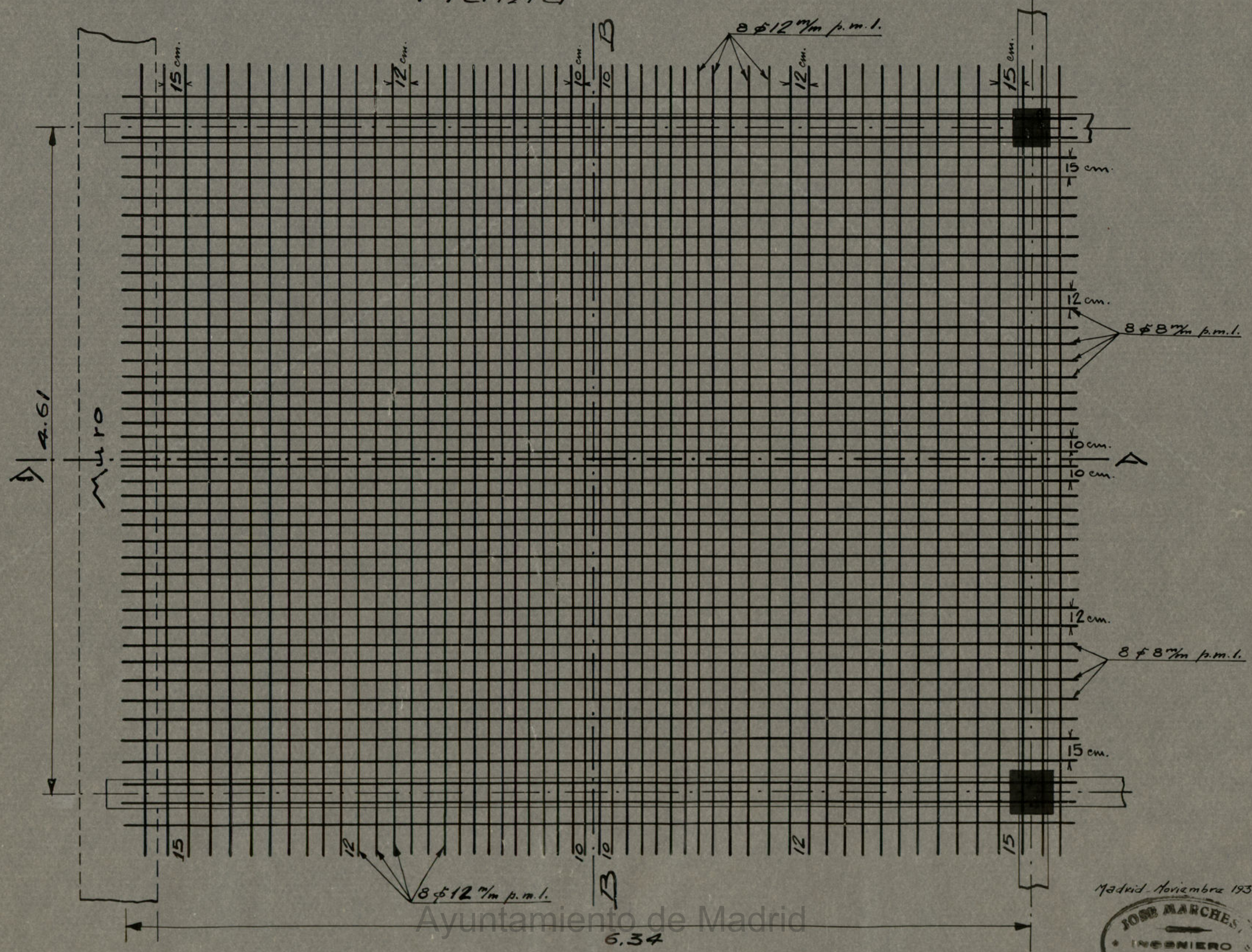
SECCIÓN B-B



SECCIÓN A-A



Planta



Madrid. Noviembre 1930

JOSE MARCHES
INGENIERO
Príncipe, 10 - MADRID

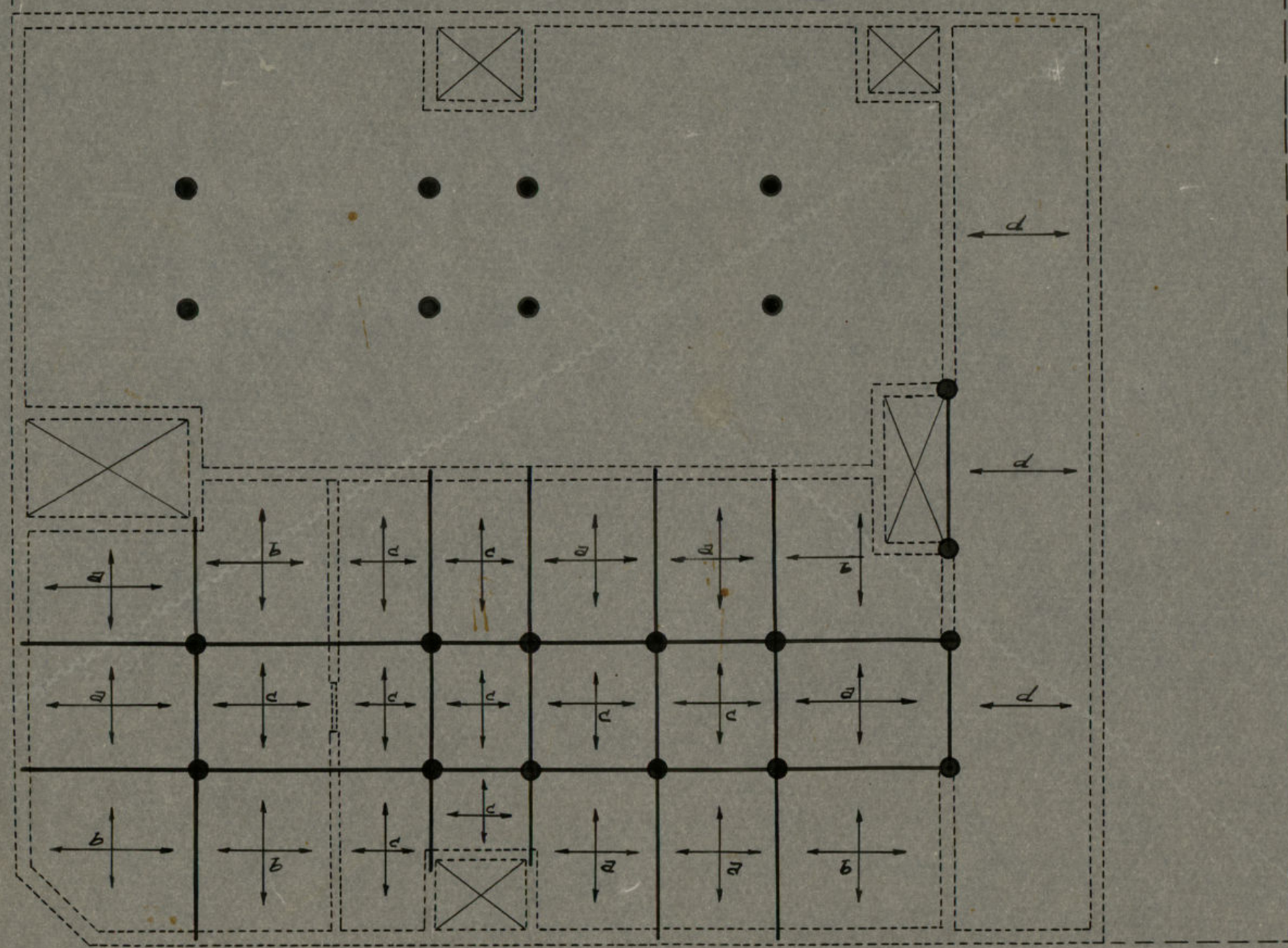
Ayuntamiento de Madrid

— Plano nº 3 —

— PLANTA BAJA — Distribución de las placas —

E = 1:200

— Placa a) 6,34 x 4,61
" b) 6.34 x 6,28
" c) 4.72 x 4.61
" d) 5.51 —



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
Carrera, 10 - MADRID

Ayuntamiento de Madrid

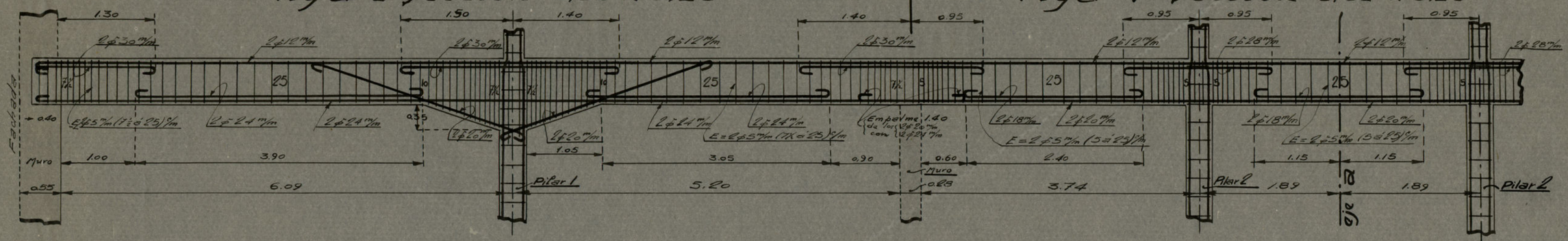
Planta Baja

Detalle de Vigas

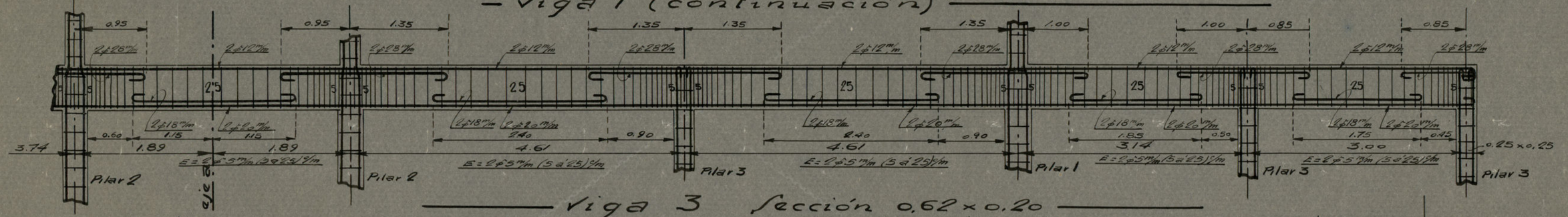
Escala 1:40

Plano nº 7

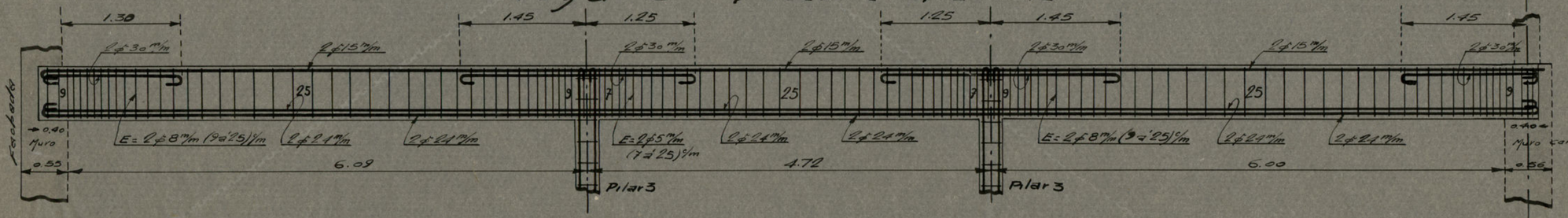
Viga 2 Sección 0.62 x 0.20 — Viga 1 Sección 0.62 x 0.20



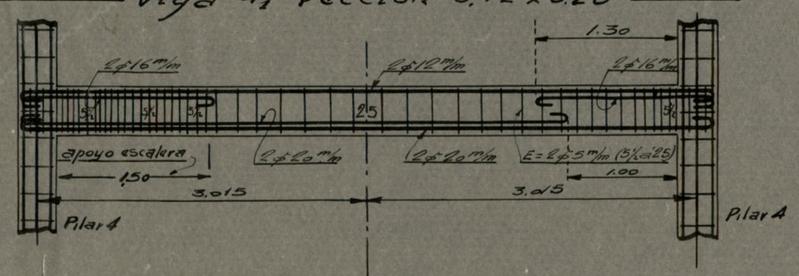
Viga 1 (continuación)



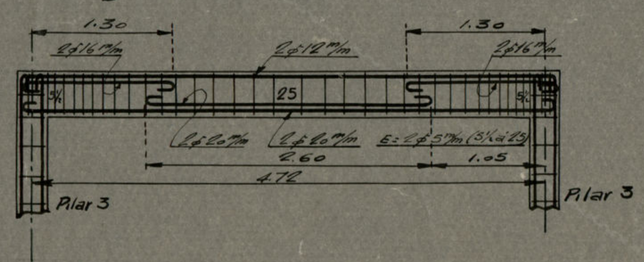
Viga 3 Sección 0.62 x 0.20



Viga 4, Sección 0.42 x 0.20



Viga 4 Sección 0.42 x 0.20



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
Sagasta, 10 - MADRID

Ayuntamiento de Madrid

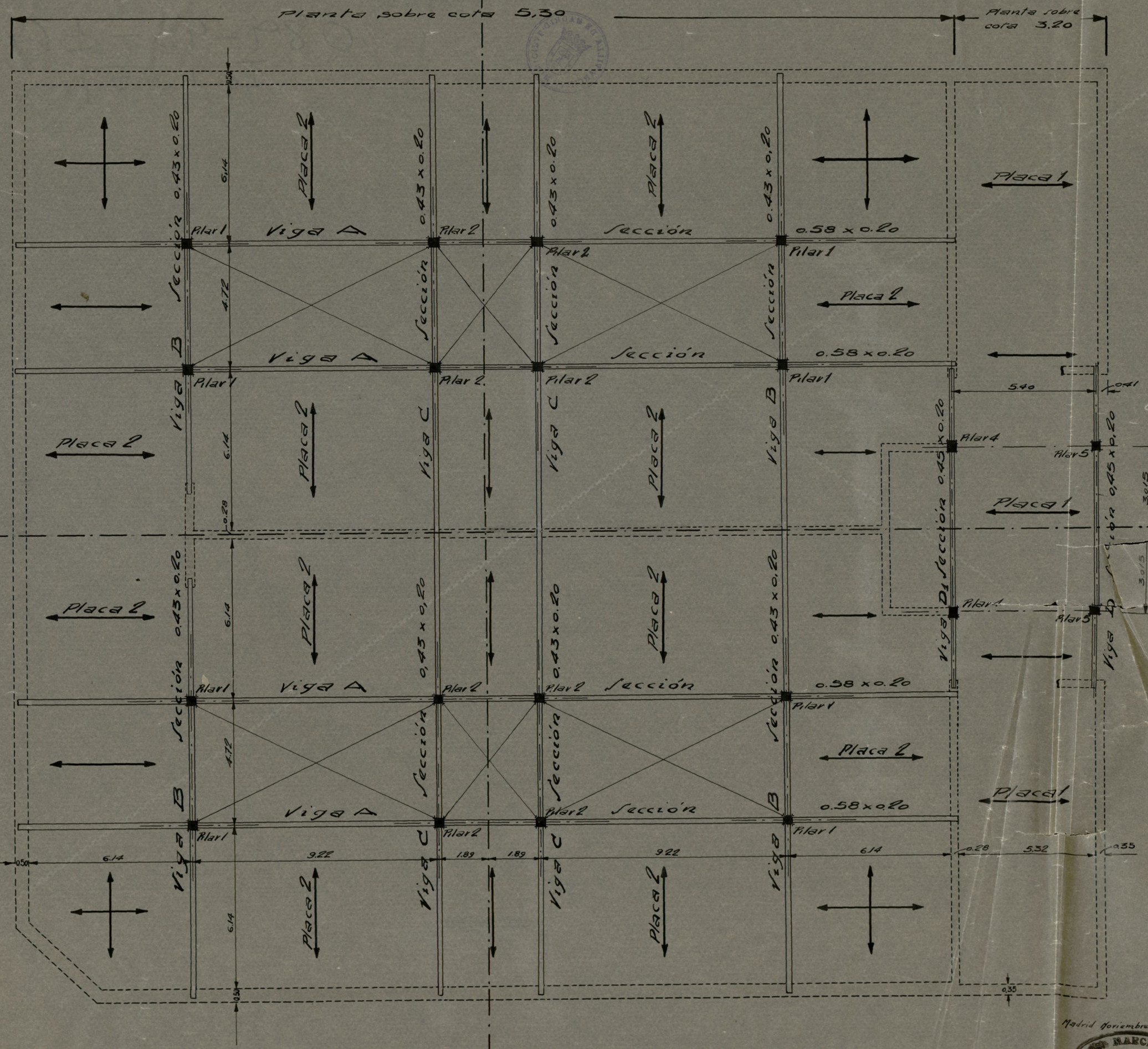
Plano nº 9

PLANTA DE CUBIERTAS

Distribución de vigas

E=1:100

—En la sección de las vigas está incluido el espesor de la placa



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
Serrano, 10 - MADRID

Ayuntamiento de Madrid

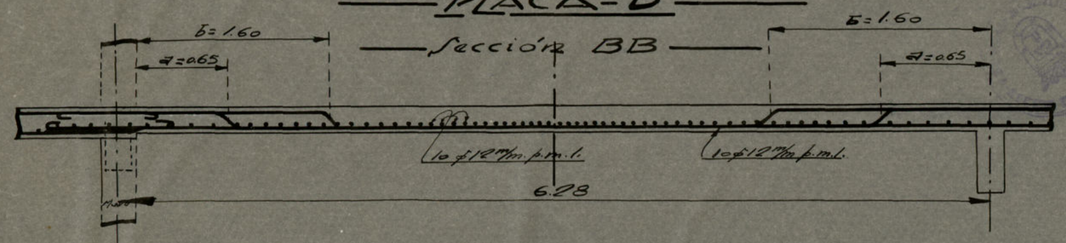
Planta Baja = Detalle de Placas

Plano nº 5

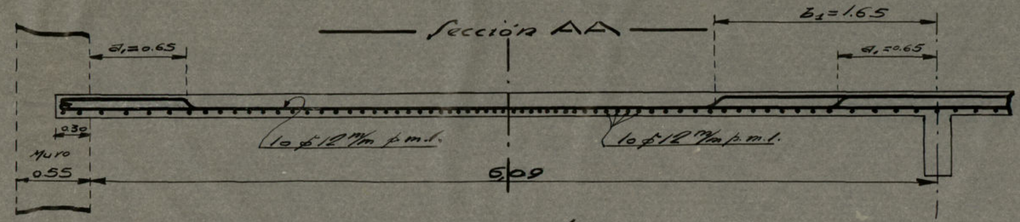
Escala 1:30

PLACA-b

Sección BB

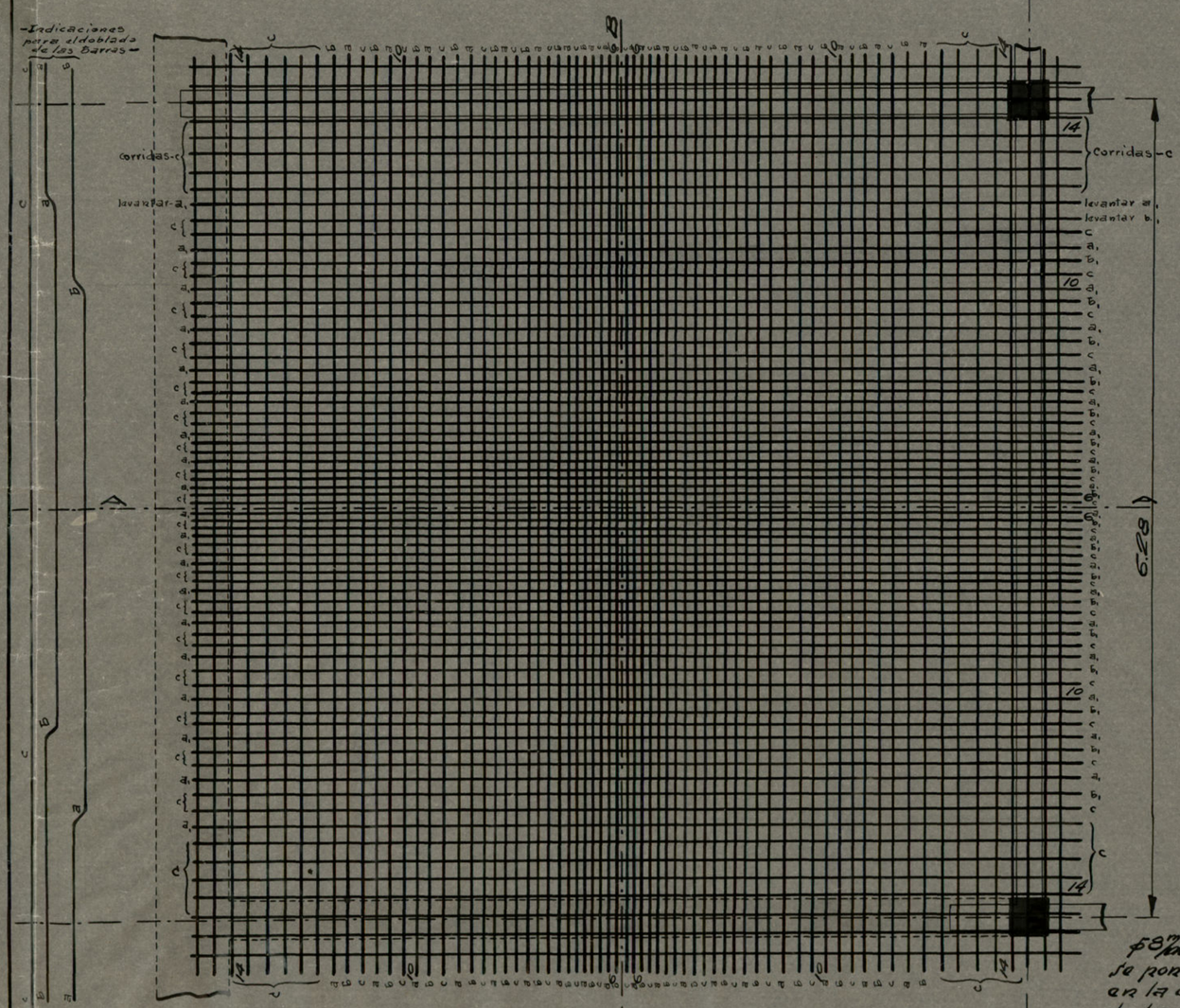


Sección AA



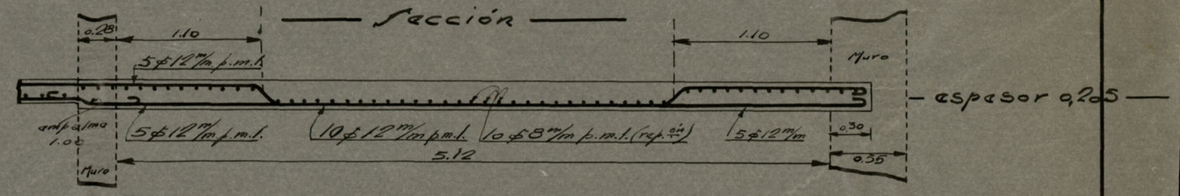
Espesor 0.17

Planta



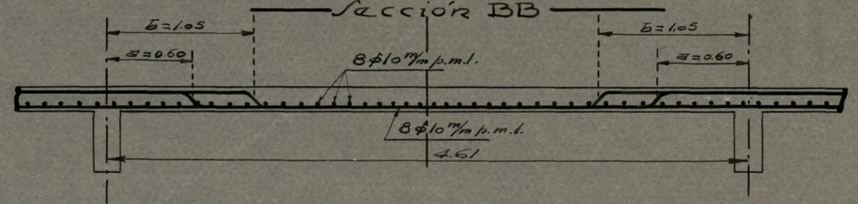
PLACA-d

Sección



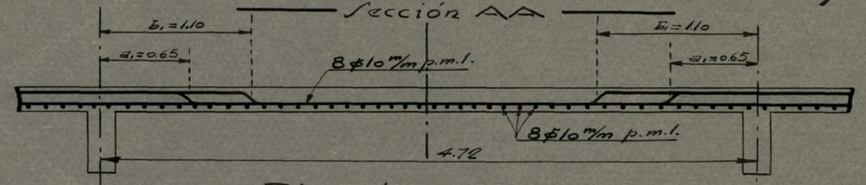
PLACA-C

Sección BB

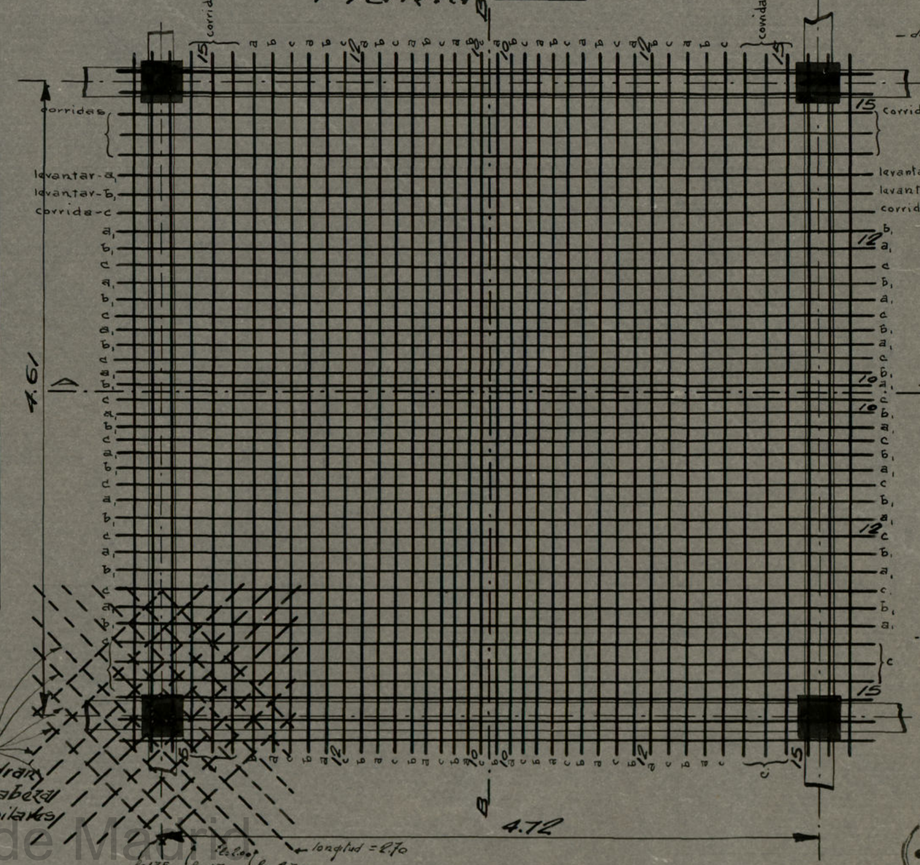


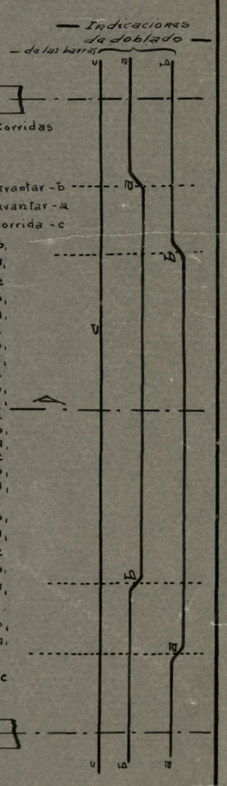
Espesor 0.17

Sección AA



Planta





Madrid Noviembre 1950

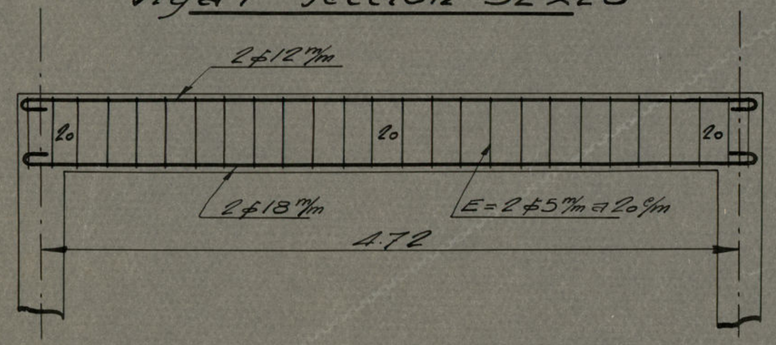
JOSE MARCHES, INGENIERO, Atocha, 10 - MADRID

Ayuntamiento de Madrid

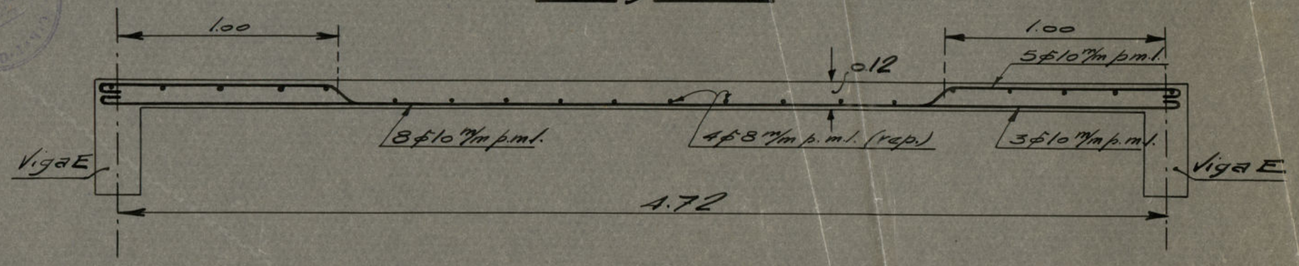
Vigas y Forjado de cubierta (cota 8,00 m)

Plano nº 12

Viga F Sección 52 x 20

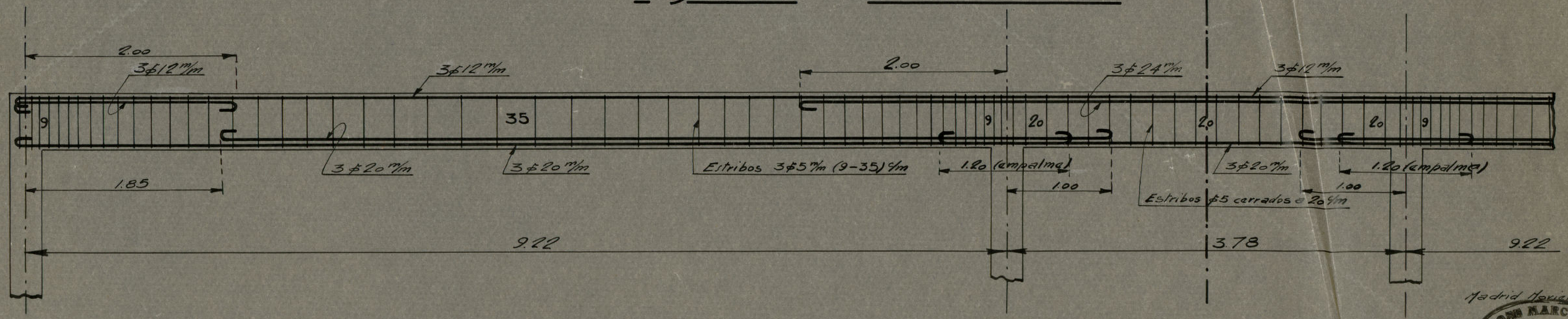


Forjado — E=1:20 —



— E=1:30 —

Viga E Sección 52 x 20



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
Sagasta, 10 - MADRID

Ayuntamiento de Madrid

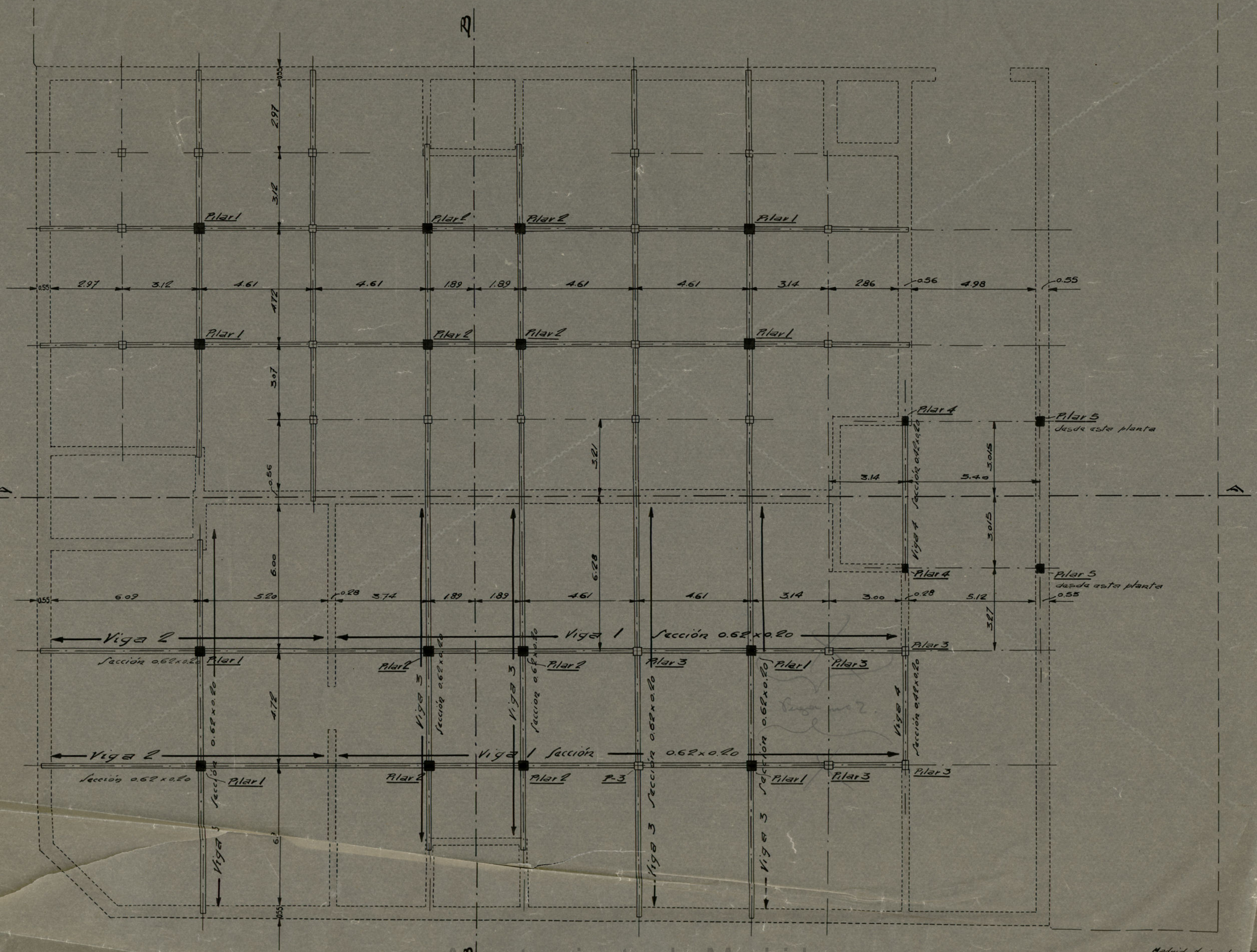
Plano nº 6

PLANTA BAJA

E = 1:100

DISTRIBUCIÓN DE VIGAS Y PILARES

En la sección de las vigas esta incluido el espesor de la placa



Madrid Noviembre 1930

JOSE MARCHESI
INGENIERO
Serrano, 10 - MADRID

Ayuntamiento de Madrid

Obras del nuevo Mercado de pescado

Movimiento de tierras para el sótano zona comprendida entre la Ronda Toledo (32,85 mts) Mundo Nuevo (54,47 mts) y Arganzuela 29,97

Perfiles		Superficie	Entre Perfiles
1	$\left(\frac{2,918+1,842}{2}\right)\times 39,50$	= 72,59	= 72,59+167,33 : 2 = 119,96 × 1,00 — 2 — = 119,960
2	$\left(\frac{5,410+5,877}{2}\right)\times 29,65$	= 167,33	= 167,33 + 156,50 : 2 = 161,91 × 0,80 — 2 y 3 — = 129,528
3	$(5,425\times 3,40)+\left(\frac{5,425+5,198}{2}\right)\times 14,75+\left(\frac{5,198+6,015}{2}\right)\times 19,65$	= 156,50	= 156,50 + 148,02 : 2 = 152,28 × 2,25 — 3 y 4 — = 342,585
4	$(5,425\times 3,40)+\left(\frac{5,425+5,239}{2}\times 14,75\right)+\left(\frac{5,239+6,435}{2}\times 9,70\right)$	= 148,02	= 148,02 + 149,73 : 2 = 148,87 × 1,75 — 4 y 5 — = 260,322
5	$(5,425\times 1,40)+\left(\frac{5,425+6,672}{2}\times 23,50\right)$	= 149,73	= 149,73 + 160,40 : 2 = 155,06 × 2,13 — 5 y 6 — = 330,277
6	$\left(\frac{6,703+6,958}{2}\times 2,85\right)+\left(\frac{6,958+6,903}{2}\times 11,90\right)+\left(\frac{6,903+7,276}{2}\times 8,25\right)$	= 160,40	= 160,40 + 153,30 : 2 = 156,85 × 2,85 — 6 y 7 — = 447,022
7	$\left(\frac{7,552+7,625}{2}\times 5,80\right)+\left(\frac{7,625+7,593}{2}\times 2,85\right)+\left(\frac{7,593+7,428}{2}\times 3,70\right)+\left(\frac{7,428+7,764}{2}\times 7,90\right)$	= 153,30	= 153,30 + 115,26 : 2 = 134,28 × 5,96 — 7 y 8 — = 800,308
8	$\left(\frac{7,829+7,902}{2}\times 2,85\right)+\left(\frac{7,902+7,843}{2}\times 6,00\right)+\left(\frac{7,843+7,891}{2}\times 5,80\right)$	= 115,26	= 115,26 + 106,16 : 2 = 110,71 × 1,20 — 8 y 9 — = 132,852
9	$\left(\frac{7,915+7,813}{2}\times 13,50\right)$	= 106,16	= 106,16 + 100,96 : 2 = 103,56 × 1,50 — 9 y 10 — = 155,340
10	$\left(\frac{8,397+8,429}{2}\times 12,00\right)$	= 100,96	= 100,96 + 57,72 : 2 = 79,34 × 5,75 — 10 y 11 — = 456,205
11	$\left(\frac{8,786+8,973}{2}\times 6,50\right)$	= 57,72	= — — $\left(\frac{6,50\times 6,00}{2}\right)\times\left(\frac{8,786+8,973+9,324}{3}\right)$ — = 171,510
12	9,324 Vertice		
13	$\left(\frac{1,068+1,283}{2}\times 21,14\right)+\left(\frac{1,283+1,403}{2}\times 28,60\right)$	= 63,33	= 63,33 + 122,16 : 2 = 92,74 × 1,00 — 13 y 14 — = 92,740
14	$\left(\frac{1,528+3,075}{2}\times 23,50\right)+\left(\frac{3,075+1,495}{2}\times 29,80\right)$	= 122,16	= 122,16 + 167,71 : 2 = 144,93 × 1,20 — 14 y 15 — = 173,916
15	$\left(\frac{1,842+4,209}{2}\times 25,45\right)+\left(\frac{4,209+1,615}{2}\times 31,15\right)$	= 167,71	= 167,71 + 239,93 : 2 = 199,32 × 2,25 — 15 y 16 — = 348,470
16	$\left(\frac{5,342+5,048}{2}\times 22,85\right)+\left(\frac{5,048+1,739}{2}\times 33,15\right)$	= 239,93	= 239,93 + 285,77 : 2 = 258,35 × 1,50 — 16 y 17 y 17ª — = 387,525
17 y 17ª	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)+\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 285,77	=
17	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)$	= 199,08	= 199,08 + 175,97 : 2 = 187,52 × 5,25 — 17 y 18 — = 984,480
18	$\left(\frac{6,364+6,842}{2}\times 13,55\right)+\left(\frac{6,842+6,843}{2}\times 13,38\right)$	= 175,97	= 175,97 + 155,40 : 2 = 165,73 × 2,15 — 18 y 19 — = 356,319
19	$\left(\frac{6,842+6,349}{2}\times 10,80\right)+\left(\frac{6,349+6,643}{2}\times 12,87\right)$	= 155,40	= 155,40 + 138,11 : 2 = 146,80 × 2,40 — 19 y 20 — = 352,320
20	$\left(\frac{6,975+6,529}{2}\times 8,70\right)+\left(\frac{6,529+6,867}{2}\times 11,85\right)$	= 138,11	= 138,11 + 110,56 : 2 = 124,33 × 4,75 — 20 y 21 — = 590,560
21	$\left(\frac{7,860+7,643}{2}\times 3,00\right)+\left(\frac{7,643+7,741}{2}\times 11,35\right)$	= 110,56	= 110,56 + 95,24 : 2 = 102,90 × 1,95 — 21 y 22 — = 200,655
22	$\left(\frac{8,103+7,972}{2}\times 11,85\right)$	= 95,24	= 95,24 + 24,89 : 2 = 60,06 × 7,05 — 22 y 23 — = 423,423
23	$\left(\frac{9,324+9,823}{2}\times 2,60\right)$	= 24,89	
24	$(9,823\times 22,00)$	= 216,11	= 216,11 + 216,11 : 2 = 216,11 × 24,00 — 24 y 25 — = 5186,640
25	$(9,823\times 22,00)$	= 216,11	
26	$(9,823\times 2,25)$	= 22,10	= 22,10 + 11,30 : 2 = 16,70 × 2,10 — 26 y 27 — = 35,070
27	$(9,823\times 1,15)$	= 11,30	= 11,30 + 42,24 : 2 = 26,77 × 1,68 — 27 y 28 — = 44,974
28	$(9,823\times 4,30)$	= 42,24	= 42,24 + 54,03 : 2 = 48,13 × 14,32 — 28 y 29 — = 689,221
29	$(9,823\times 5,50)$	= 54,03	
Pº V	$\left(\frac{5,50\times 3,90}{2}\times 9,823\right)$		= 105,352
17ª	$\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 86,69	= 86,69 + 55,13 : 2 = 70,91 × 5,25 — 17ª y 30 — = 372,277
30	$\left(\frac{5,607+1,197}{2}\times 14,50\right)$	= 55,13	= 55,13 + 30,32 : 2 = 42,72 × 4,80 — 30 y 31 — = 205,056
31	$\left(\frac{5,733+2,193}{2}\times 7,65\right)$	= 30,32	= 30,32 + 50,13 : 2 = 40,22 × 2,50 — 31 y 32 — = 100,550
32	$\left(\frac{7,643+2,235}{2}\times 10,15\right)$	= 50,13	= 50,13 + 31,15 : 2 = 40,66 × 3,70 — 32 y 33 — = 150,442
33	$\left(\frac{8,352+6,679}{2}\times 4,15\right)$	= 31,19	
Pº X	$\left(\frac{6,00\times 1,80}{2}\right)\times\left(\frac{9,623+8,352+6,679}{3}\right)$		= 44,377
Pº Y	$\left(\frac{2,50\times 4,10}{2}\right)\times\left(\frac{9,823+9,338}{2}\right)$		= 166,880
			14.357,156
Pº Z	$\left(\frac{3,25\times 2,60}{2}\right)$ 9,832 — a deducir		= 41,540
			14.315,616

Ayuntamiento de Madrid

Obras del nuevo Mercado de pescado

Movimiento de tierras para el sótano zona comprendida entre la Ronda Toledo (32,85 mts) Mundo Nuevo (54,47 mts) y arganzuela 29,97

Perfiles		Superficie	Entre Perfiles
1	$\left(\frac{2,918+1,842}{2}\right)\times 3,950$	= 72,59	= 72,59+167,33 : 2 = 119,96 × 1,00 — 1 — = 119,960
2	$\left(\frac{5,410+5,277}{2}\right)\times 2,965$	= 167,33	= 167,33 + 156,50 : 2 = 161,91 × 0,80 — 2 y 3 — = 129,528
3	$(5,425\times 3,40)+\left(\frac{5,425+5,198}{2}\right)\times 14,75+\left(\frac{5,198+6,015}{2}\right)\times 19,65$	= 156,50	= 156,50 + 148,02 : 2 = 152,28 × 2,25 — 3 y 4 — = 342,585
4	$(5,425\times 3,40)+\left(\frac{5,425+5,239}{2}\times 14,75\right)+\left(\frac{5,239+6,435}{2}\times 8,70\right)$	= 148,02	= 148,02 + 149,73 : 2 = 148,87 × 1,75 — 4 y 5 — = 260,322
5	$(5,425\times 1,40)+\left(\frac{5,425+6,672}{2}\times 23,50\right)$	= 149,73	= 149,73 + 160,40 : 2 = 155,06 × 2,13 — 5 y 6 — = 330,277
6	$\left(\frac{6,703+6,958}{2}\times 2,85\right)+\left(\frac{6,958+6,903}{2}\times 11,90\right)+\left(\frac{6,903+7,276}{2}\times 8,25\right)$	= 160,40	= 160,40 + 153,30 : 2 = 156,85 × 2,85 — 6 y 7 — = 447,022
7	$\left(\frac{7,552+7,625}{2}\times 5,80\right)+\left(\frac{7,625+7,593}{2}\times 2,85\right)+\left(\frac{7,593+7,428}{2}\times 3,70\right)+\left(\frac{7,428+7,764}{2}\times 7,90\right)$	= 153,30	= 153,30 + 115,26 : 2 = 134,28 × 5,96 — 7 y 8 — = 800,308
8	$\left(\frac{7,829+7,902}{2}\times 2,85\right)+\left(\frac{7,902+7,843}{2}\times 6,00\right)+\left(\frac{7,843+7,891}{2}\times 5,80\right)$	= 115,26	= 115,28 + 106,16 : 2 = 110,71 × 1,20 — 8 y 9 — = 132,852
9	$\left(\frac{7,915+7,813}{2}\times 13,50\right)$	= 106,16	= 106,16 + 100,96 : 2 = 103,56 × 1,50 — 9 y 10 — = 155,340
10	$\left(\frac{8,397+8,429}{2}\times 12,00\right)$	= 100,96	= 100,96 + 57,72 : 2 = 79,34 × 5,75 — 10 y 11 — = 456,205
11	$\left(\frac{8,786+8,973}{2}\times 6,50\right)$	= 57,72	= — — $\left(\frac{6,50\times 6,00}{2}\right)\times\left(\frac{8,786+8,973+9,824}{3}\right)$ — = 171,510
12	9,824 Vértice		
13	$\left(\frac{1,068+1,283}{2}\times 21,14\right)+\left(\frac{1,283+1,403}{2}\times 28,60\right)$	= 63,33	= 63,33 + 122,16 : 2 = 92,74 × 1,00 — 13 y 14 — = 92,740
14	$\left(\frac{1,528+3,075}{2}\times 23,50\right)+\left(\frac{3,075+1,495}{2}\times 29,80\right)$	= 122,16	= 122,16 + 167,71 : 2 = 144,93 × 1,20 — 14 y 15 — = 173,916
15	$\left(\frac{1,842+4,209}{2}\times 25,45\right)+\left(\frac{4,209+1,615}{2}\times 31,15\right)$	= 167,71	= 167,71 + 230,93 : 2 = 199,32 × 2,25 — 15 y 16 — = 348,470
16	$\left(\frac{5,322+5,048}{2}\times 22,85\right)+\left(\frac{5,048+1,739}{2}\times 33,15\right)$	= 230,93	= 230,93 + 285,77 : 2 = 258,35 × 1,50 — 16 y 17 y 17ª — = 387,525
17 y 17ª	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)+\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 285,77	=
17	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)$	= 199,08	= 199,08 + 175,97 : 2 = 187,52 × 5,25 — 17 y 18 — = 984,480
18	$\left(\frac{6,364+6,842}{2}\times 13,55\right)+\left(\frac{6,842+6,843}{2}\times 13,38\right)$	= 175,97	= 175,97 + 155,40 : 2 = 165,73 × 2,15 — 18 y 19 — = 356,319
19	$\left(\frac{6,842+6,349}{2}\times 10,80\right)+\left(\frac{6,349+6,693}{2}\times 12,87\right)$	= 155,40	= 155,40 + 138,11 : 2 = 146,80 × 2,40 — 19 y 20 — = 352,320
20	$\left(\frac{6,975+6,529}{2}\times 8,70\right)+\left(\frac{6,529+6,867}{2}\times 11,85\right)$	= 138,11	= 138,11 + 110,56 : 2 = 124,33 × 4,75 — 20 y 21 — = 590,560
21	$\left(\frac{7,860+7,643}{2}\times 3,00\right)+\left(\frac{7,643+7,741}{2}\times 11,35\right)$	= 110,56	= 110,56 + 95,24 : 2 = 102,90 × 1,95 — 21 y 22 — = 200,655
22	$\left(\frac{8,103+7,972}{2}\times 11,86\right)$	= 95,24	= 95,24 + 24,89 : 2 = 60,06 × 7,05 — 22 y 23 — = 423,423
23	$\left(\frac{9,324+9,823}{2}\times 2,60\right)$	= 24,89	
24	$(9,823\times 22,00)$	= 216,11	= 216,11 + 216,11 : 2 = 216,11 × 24,00 — 24 y 25 — = 5186,640
25	$(9,823\times 22,00)$	= 216,11	
26	$(9,823\times 2,25)$	= 22,10	= 22,10 + 11,30 : 2 = 16,70 × 2,10 — 26 y 27 — = 35,070
27	$(9,823\times 1,15)$	= 11,30	= 11,30 + 42,24 : 2 = 26,77 × 1,68 — 27 y 28 — = 44,974
28	$(9,823\times 4,30)$	= 42,24	= 42,24 + 54,03 : 2 = 48,13 × 14,32 — 28 y 29 — = 689,221
29	$(9,823\times 5,50)$	= 54,03	
Pº V	$\left(\frac{5,50\times 3,90}{2}\times 9,823\right)$		= 105,352
17ª	$\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 86,69	= 86,69 + 55,13 : 2 = 70,91 × 5,25 — 17ª y 30 — = 372,277
30	$\left(\frac{5,607+1,197}{2}\times 14,50\right)$	= 55,13	= 55,13 + 30,32 : 2 = 42,72 × 4,80 — 30 y 31 — = 205,056
31	$\left(\frac{5,733+2,193}{2}\times 7,65\right)$	= 30,32	= 30,32 + 50,13 : 2 = 40,22 × 2,50 — 31 y 32 — = 100,550
32	$\left(\frac{7,643+2,235}{2}\times 10,15\right)$	= 50,13	= 50,13 + 31,15 : 2 = 40,66 × 3,70 — 32 y 33 — = 150,442
33	$\left(\frac{8,352+6,679}{2}\times 4,15\right)$	= 31,19	
Pº X	$\left(\frac{6,00\times 1,80}{2}\right)\times\left(\frac{9,623+8,352+6,679}{3}\right)$		= 44,377
Pº Y	$\left(\frac{3,50\times 4,10}{2}\right)\times\left(\frac{9,823+9,338}{2}\right)$		= 166,880
			14.357,156
Pº Z	$\left(\frac{3,25\times 2,60}{2}\right)$ 9,832 — a deducir		= 41,540
			14.315,616

Ayuntamiento de Madrid

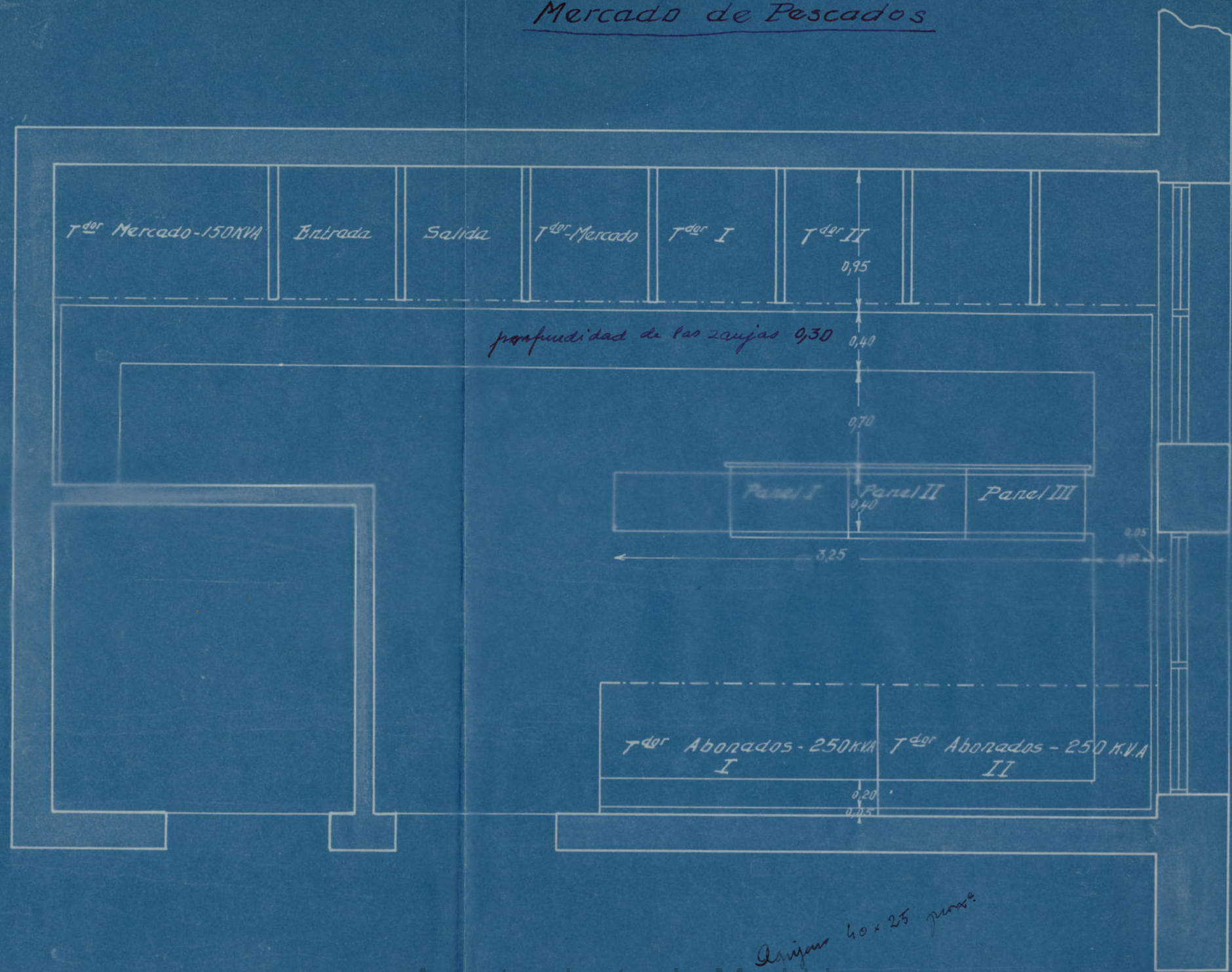
Obras del nuevo Mercado de pescado

Movimiento de tierras para el sótano zona comprendida entre la Ronda Toledo (32,85 mt) Mundo Nuevo (54,47 mt) y arganzuela 2997.

Perfiles		Superficie	Entre Perfiles
1	$\left(\frac{2,918+1,842}{2}\times 3,950\right)$	= 72,59	= 72,59 + 167,33 : 2 = 119,96 × 1,00 — 2 — = 119,960
2	$\left(\frac{5,410+5,872}{2}\times 29,65\right)$	= 167,33	= 167,33 + 156,50 : 2 = 161,91 × 0,80 — 2 y 3 — = 129,528
3	$(5,425\times 3,40)+\left(\frac{5,425+5,178}{2}\times 14,75\right)+\left(\frac{5,178+6,015}{2}\times 19,65\right)$	= 156,50	= 156,50 + 148,02 : 2 = 152,28 × 2,25 — 3 y 4 — = 342,585
4	$(5,425\times 3,40)+\left(\frac{5,425+5,239}{2}\times 14,75\right)+\left(\frac{5,239+6,435}{2}\times 9,70\right)$	= 148,02	= 148,02 + 149,73 : 2 = 148,87 × 1,75 — 4 y 5 — = 260,322
5	$(5,425\times 1,40)+\left(\frac{5,425+6,672}{2}\times 23,50\right)$	= 149,73	= 149,73 + 160,40 : 2 = 155,06 × 2,13 — 5 y 6 — = 330,277
6	$\left(\frac{6,703+6,958}{2}\times 2,85\right)+\left(\frac{6,958+6,903}{2}\times 11,90\right)+\left(\frac{6,903+7,276}{2}\times 8,25\right)$	= 160,40	= 160,40 + 153,30 : 2 = 156,85 × 2,85 — 6 y 7 — = 447,022
7	$\left(\frac{7,552+7,625}{2}\times 5,80\right)+\left(\frac{7,625+7,533}{2}\times 2,35\right)+\left(\frac{7,533+7,428}{2}\times 3,70\right)+\left(\frac{7,428+7,764}{2}\times 7,90\right)$	= 153,30	= 153,30 + 115,26 : 2 = 134,28 × 5,95 — 7 y 8 — = 800,308
8	$\left(\frac{7,829+7,902}{2}\times 2,85\right)+\left(\frac{7,902+7,843}{2}\times 6,00\right)+\left(\frac{7,843+7,891}{2}\times 5,80\right)$	= 115,26	= 115,26 + 106,16 : 2 = 110,71 × 1,20 — 8 y 9 — = 132,852
9	$\left(\frac{7,915+7,813}{2}\times 13,50\right)$	= 106,16	= 106,16 + 100,96 : 2 = 103,56 × 1,50 — 9 y 10 — = 155,340
10	$\left(\frac{8,397+8,429}{2}\times 12,00\right)$	= 100,96	= 100,96 + 57,72 : 2 = 79,34 × 5,75 — 10 y 11 — = 456,205
11	$\left(\frac{8,786+8,973}{2}\times 6,50\right)$	= 57,72	= — $\left(\frac{6,50\times 6,00}{2}\right)\times\left(\frac{8,786+8,973+9,324}{3}\right)$ — = 171,510
12	9,324 Vértice		
13	$\left(\frac{1,068+1,283}{2}\times 21,14\right)+\left(\frac{1,283+1,403}{2}\times 28,60\right)$	= 63,33	= 63,33 + 122,16 : 2 = 92,74 × 1,00 — 13 y 14 — = 92,740
14	$\left(\frac{1,529+3,075}{2}\times 23,50\right)+\left(\frac{3,075+1,495}{2}\times 29,80\right)$	= 122,16	= 122,16 + 167,71 : 2 = 144,93 × 1,20 — 14 y 15 — = 173,916
15	$\left(\frac{1,842+4,209}{2}\times 25,45\right)+\left(\frac{4,209+1,615}{2}\times 31,15\right)$	= 167,71	= 167,71 + 230,93 : 2 = 199,32 × 2,25 — 15 y 16 — = 348,470
16	$\left(\frac{5,322+5,048}{2}\times 22,85\right)+\left(\frac{5,048+1,739}{2}\times 33,15\right)$	= 230,93	= 230,93 + 285,77 : 2 = 258,35 × 1,50 — 16 y 17, 17ª — = 387,525
17, 17ª	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)+\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 285,77	=
17	$\left(\frac{5,734+6,120}{2}\times 21,15\right)+\left(\frac{6,120+5,917}{2}\times 12,25\right)$	= 199,08	= 199 + 175,97 : 2 = 187,52 × 5,25 — 17 y 18 — = 984,480
18	$\left(\frac{6,364+6,842}{2}\times 13,55\right)+\left(\frac{6,842+6,843}{2}\times 13,38\right)$	= 175,97	= 175,97 + 155,40 : 2 = 165,73 × 2,15 — 18 y 19 — = 356,319
19	$\left(\frac{6,842+6,349}{2}\times 10,80\right)+\left(\frac{6,349+6,693}{2}\times 12,87\right)$	= 155,40	= 155,40 + 138,11 : 2 = 146,80 × 2,40 — 19 y 20 — = 352,320
20	$\left(\frac{6,975+6,529}{2}\times 2,70\right)+\left(\frac{6,529+6,867}{2}\times 11,85\right)$	= 138,11	= 138,11 + 110,56 : 2 = 124,33 × 4,75 — 20 y 21 — = 590,560
21	$\left(\frac{7,860+7,643}{2}\times 3,00\right)+\left(\frac{7,643+7,741}{2}\times 11,35\right)$	= 110,56	= 110,56 + 95,24 : 2 = 102,90 × 1,95 — 21 y 22 — = 200,655
22	$\left(\frac{8,103+7,972}{2}\times 11,35\right)$	= 95,24	= 95,24 + 24,89 : 2 = 60,06 × 7,05 — 22 y 23 — = 423,423
23	$\left(\frac{9,324+9,823}{2}\times 2,60\right)$	= 24,89	
24	$(9,823\times 22,00)$	= 216,11	= 216,11 + 216,11 : 2 = 216,11 × 24,00 — 24 y 25 — = 5186,640
25	$(9,823\times 22,00)$	= 216,11	
26	$(9,823\times 2,25)$	= 22,10	= 22,10 + 11,30 : 2 = 16,70 × 2,10 — 26 y 27 — = 35,070
27	$(9,823\times 1,15)$	= 11,30	= 11,30 + 42,24 : 2 = 26,77 × 1,68 — 27 y 28 — = 44,974
28	$(9,823\times 4,30)$	= 42,24	= 42,24 + 54,03 : 2 = 48,13 × 14,32 — 28 y 29 — = 689,221
29	$(9,823\times 5,50)$	= 54,03	
P.N	$\left(\frac{5,50\times 3,90}{2}\times 9,823\right)$		= 105,352
17ª	$\left(\frac{5,917+1,893}{2}\times 22,20\right)$	= 86,69	= 86,69 + 55,13 : 2 = 70,91 × 5,25 — 17ª y 30 — = 372,277
30	$\left(\frac{5,607+1,197}{2}\times 14,50\right)$	= 55,13	= 55,13 + 30,32 : 2 = 42,72 × 4,80 — 30 y 31 — = 205,056
31	$\left(\frac{5,733+2,193}{2}\times 7,65\right)$	= 30,32	= 30,32 + 50,13 : 2 = 40,22 × 2,50 — 31 y 32 — = 100,550
32	$\left(\frac{7,643+2,235}{2}\times 10,15\right)$	= 50,13	= 50,13 + 31,15 : 2 = 44,66 × 3,70 — 32 y 33 — = 150,442
33	$\left(\frac{8,352+6,679}{2}\times 4,15\right)$	= 31,19	
B.X	$\left(\frac{6,00\times 1,20}{2}\right)\times\left(\frac{9,623+8,352+6,679}{3}\right)$		= 44,377
P.Y	$\left(\frac{8,50\times 4,10}{2}\right)\times\left(\frac{9,823+9,338}{2}\right)$		= 166,880
			14.357,156
P.Z	$\left(\frac{3,25\times 2,60}{2}\right)$ 9,832	= 41,540	— a deducir — = 41,540
			14.315,616

Ayuntamiento de Madrid

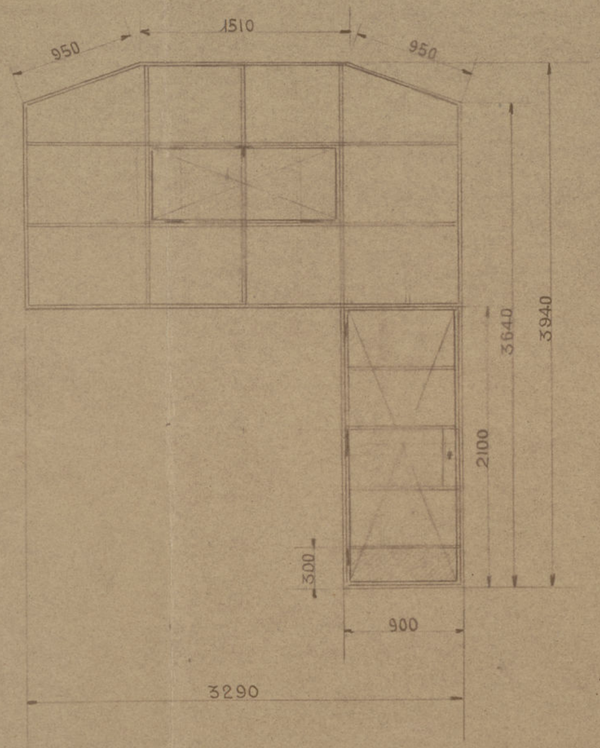
Mercado de Pescados



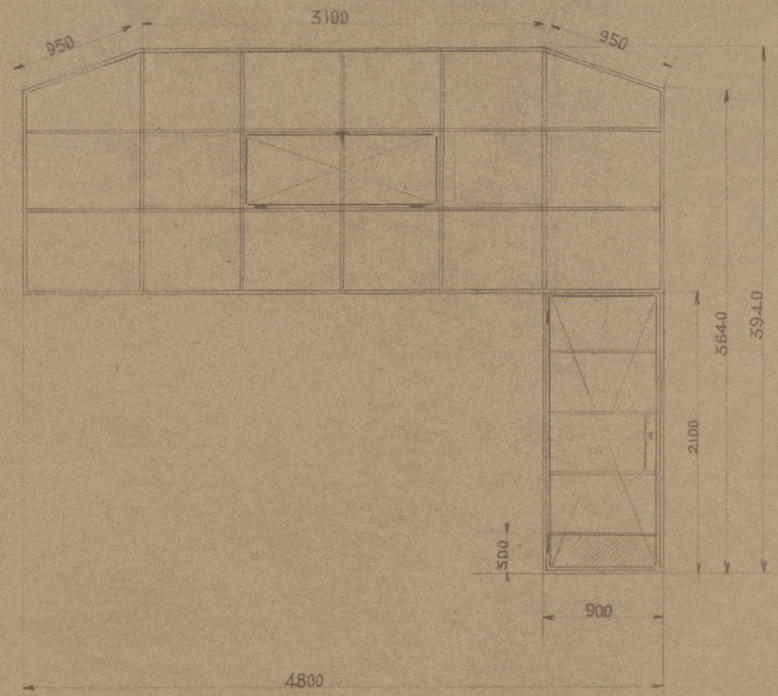
Dibujo 40 x 25 prox.

Ayuntamiento de Madrid

Tipo K-1, 1 solo



Tipo L-1, 1 solo



Perfiles T4, B y C

Designacion Cancelas

Cliente Mercado de pescados de Madrid

Arquitecto

Dibujado por

Calcado por

Comprobado por C Tabla

Madrid 18 de agosto 1933

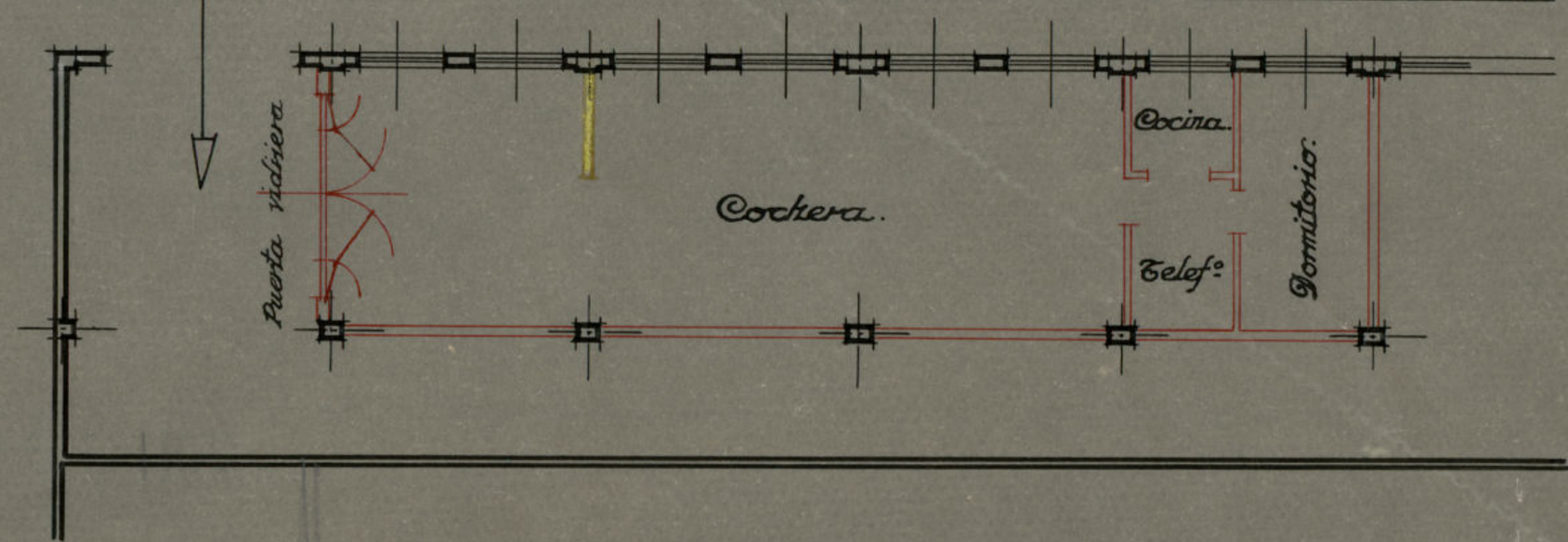
Plano nº 190-2

Escala 1:30

Ayuntamiento de Madrid

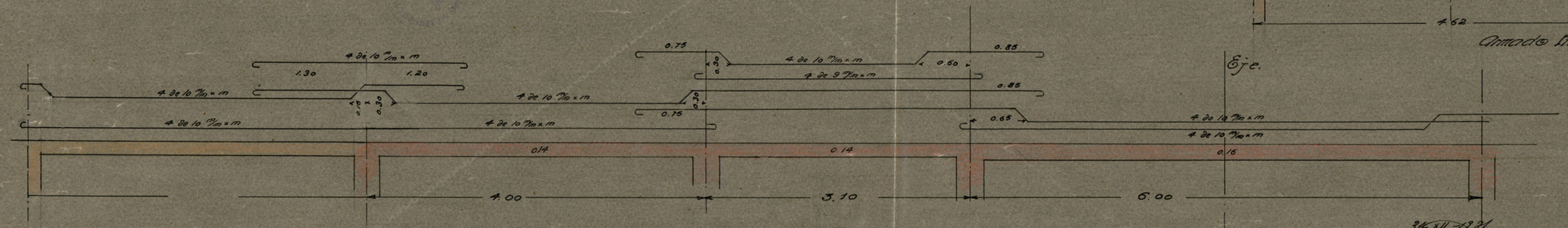
Adaptación de nave del mercado de Pescado para cochera y retén.

Calle de la Arganzuela.



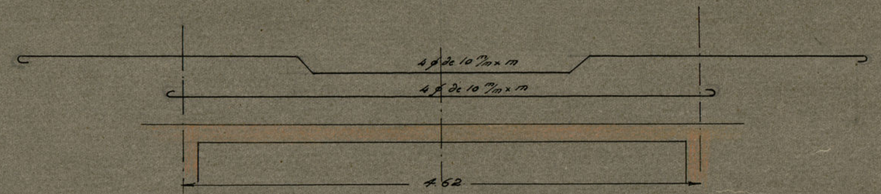
~ Escala ~ 1:200 ~

Ayuntamiento de Madrid



Losa de 7 tramos

Escala 0.03×100.

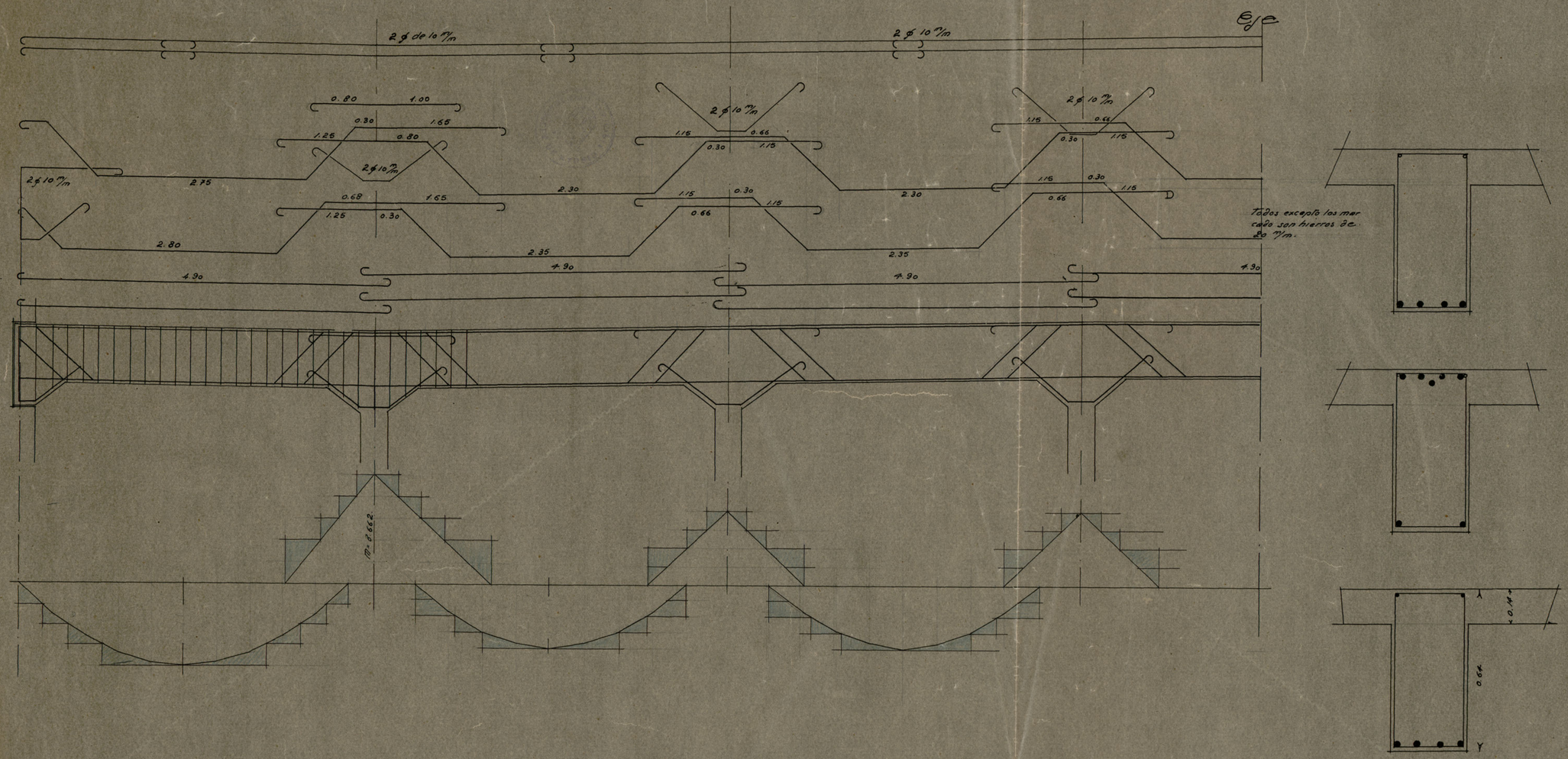


Armado transversal.

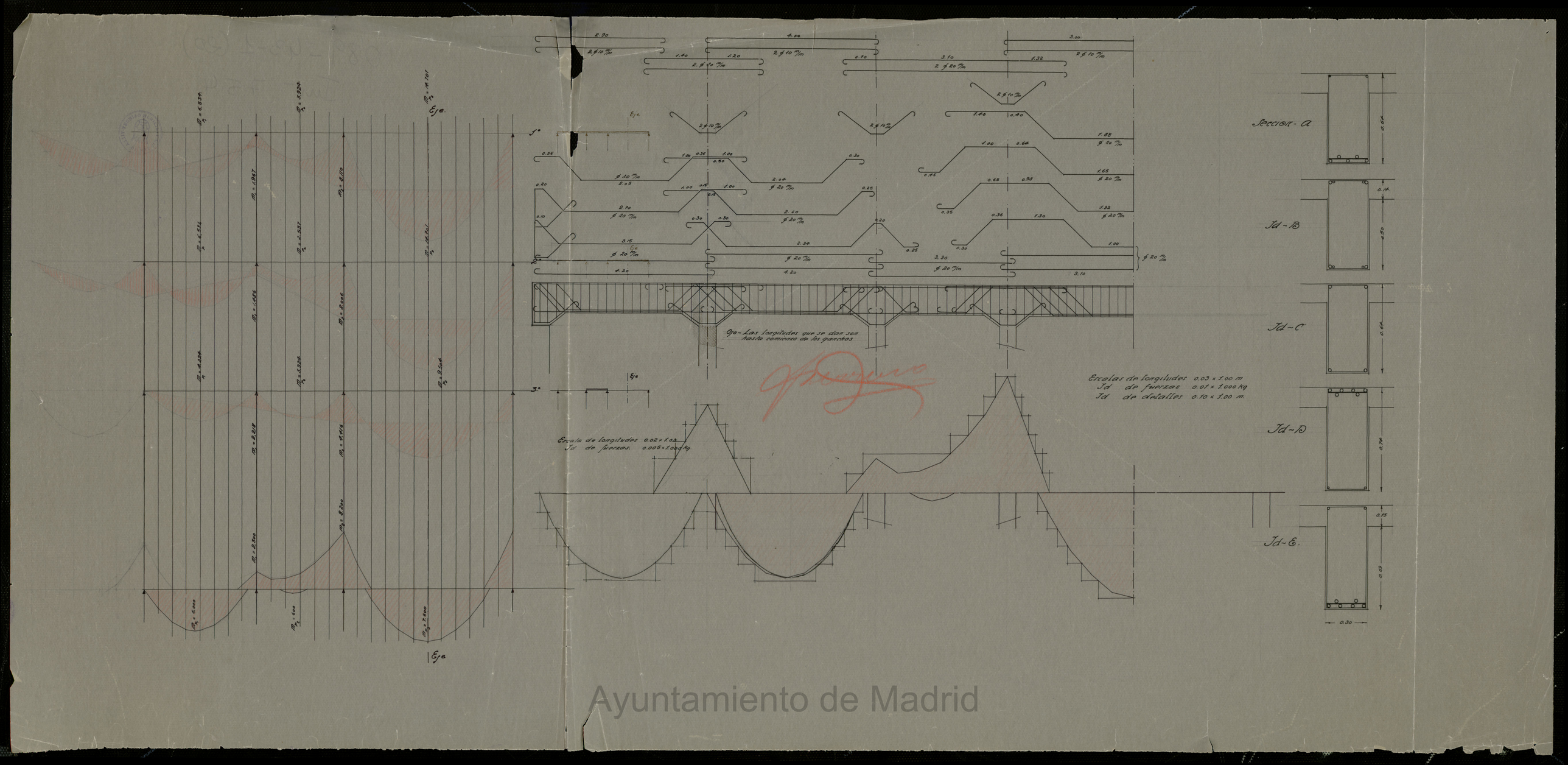
31-XII-1931

Ayuntamiento de Madrid

Ayuntamiento de Madrid

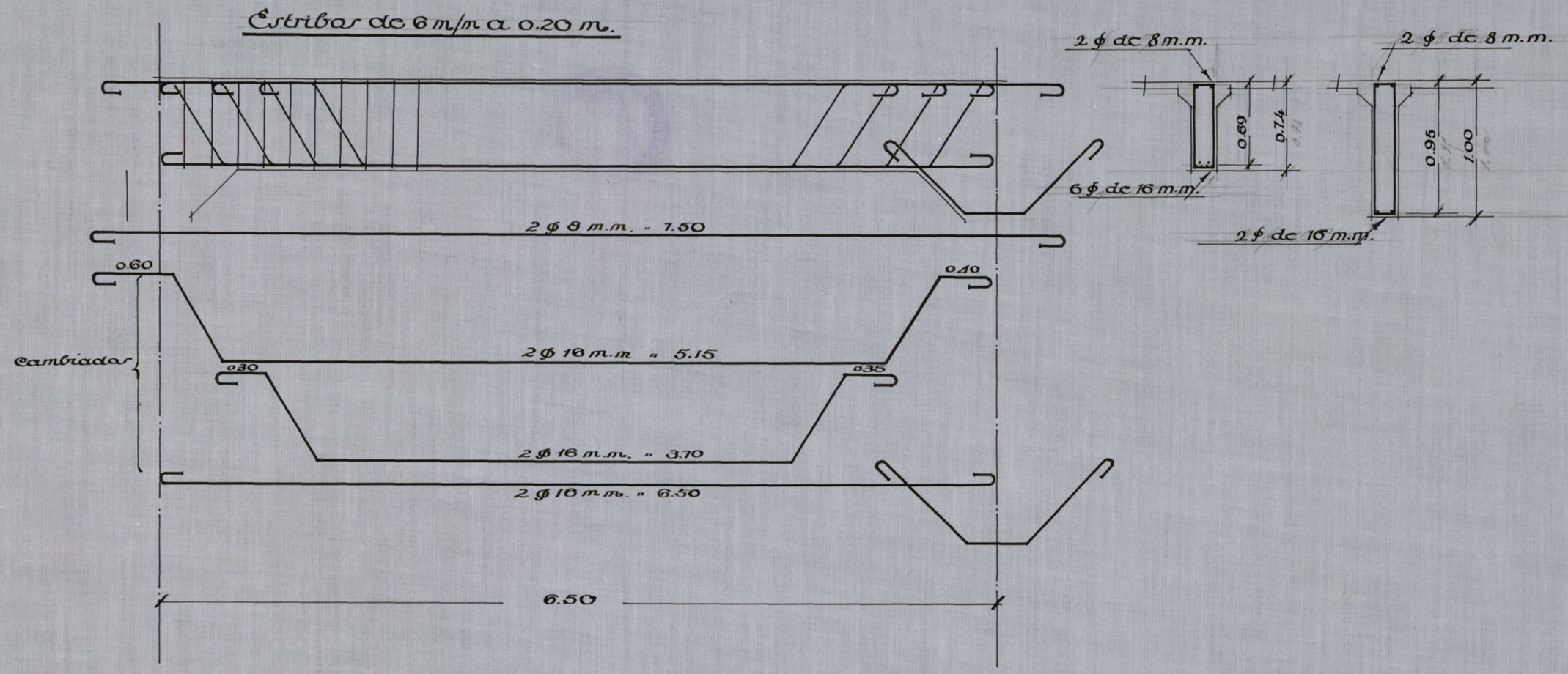


Ayuntamiento de Madrid



Ayuntamiento de Madrid

Escala 1:30

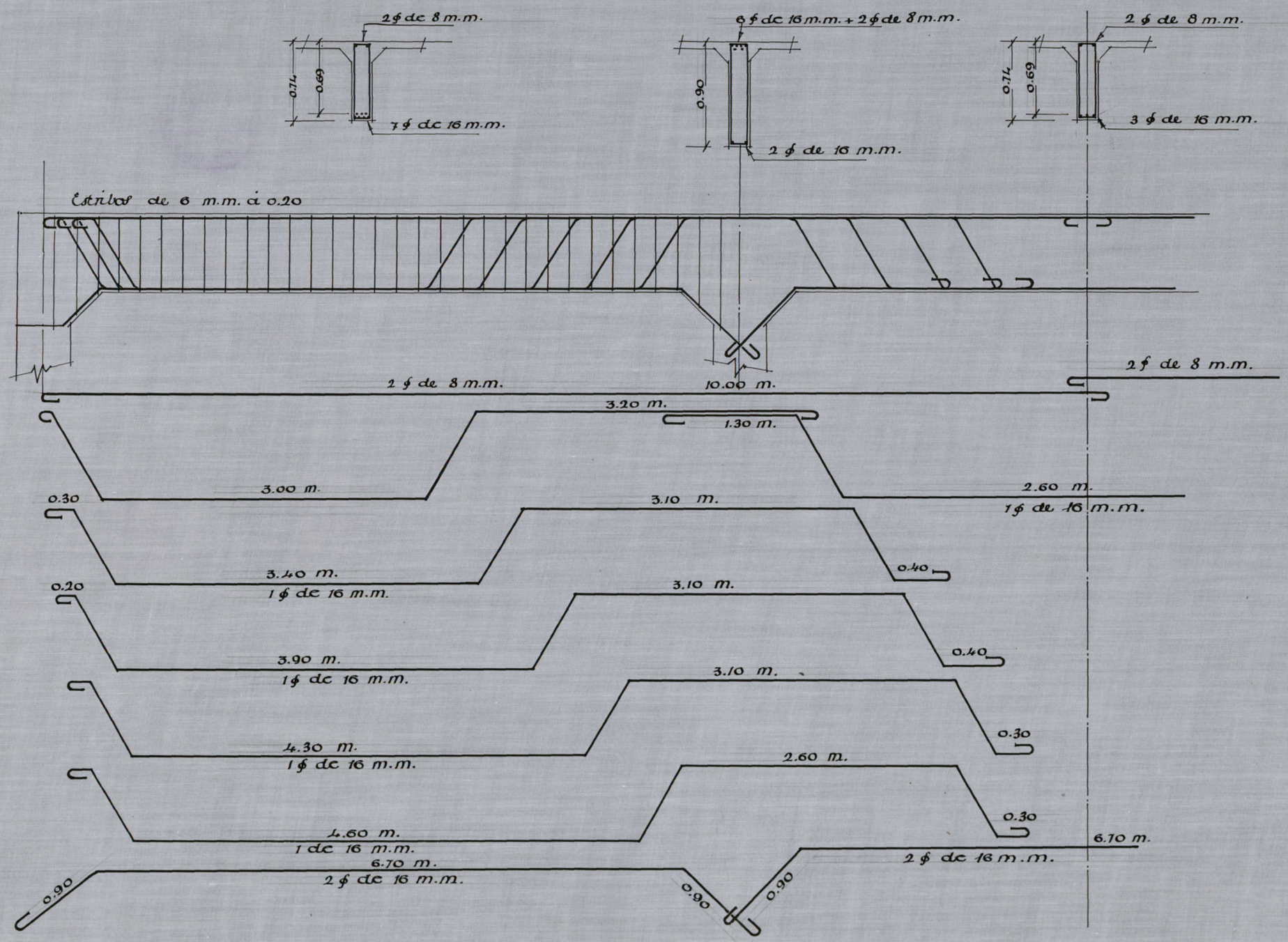


Viga intermedia apoyada (un solo tramo) á colocar en todos aquellos sitios donde con luces de 6.50 metros se va dando la vuelta, es decir se quebranta la linea recta.

Ayuntamiento de Madrid

Viga intermedia (Tres tramos)

Escala 1:30

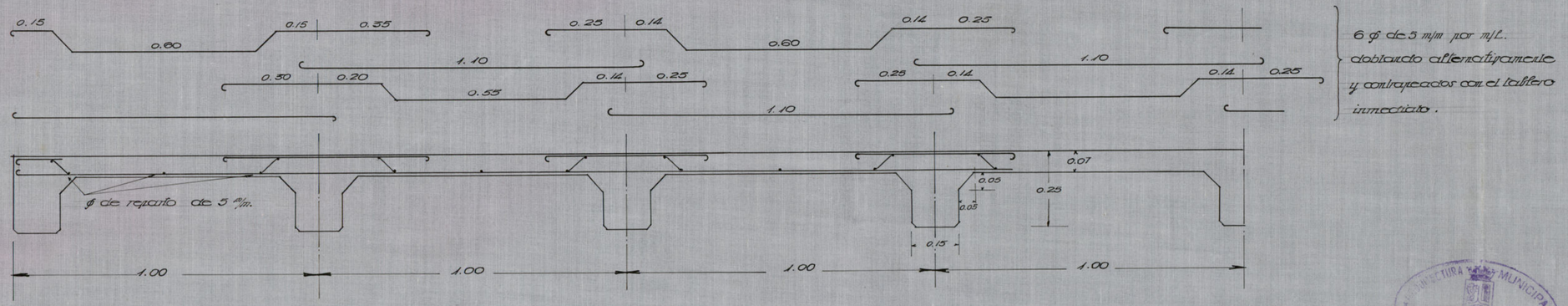


Ayuntamiento de Madrid

(Azotea) Forjado en los tramos de 4.00 m. (20 tableros)

Tramos 1º y último — Tramos 2º y penúltimo — Tramo general (16 tramos).

Altura útil 5.5 cm.
Id. total 7.0 cm.

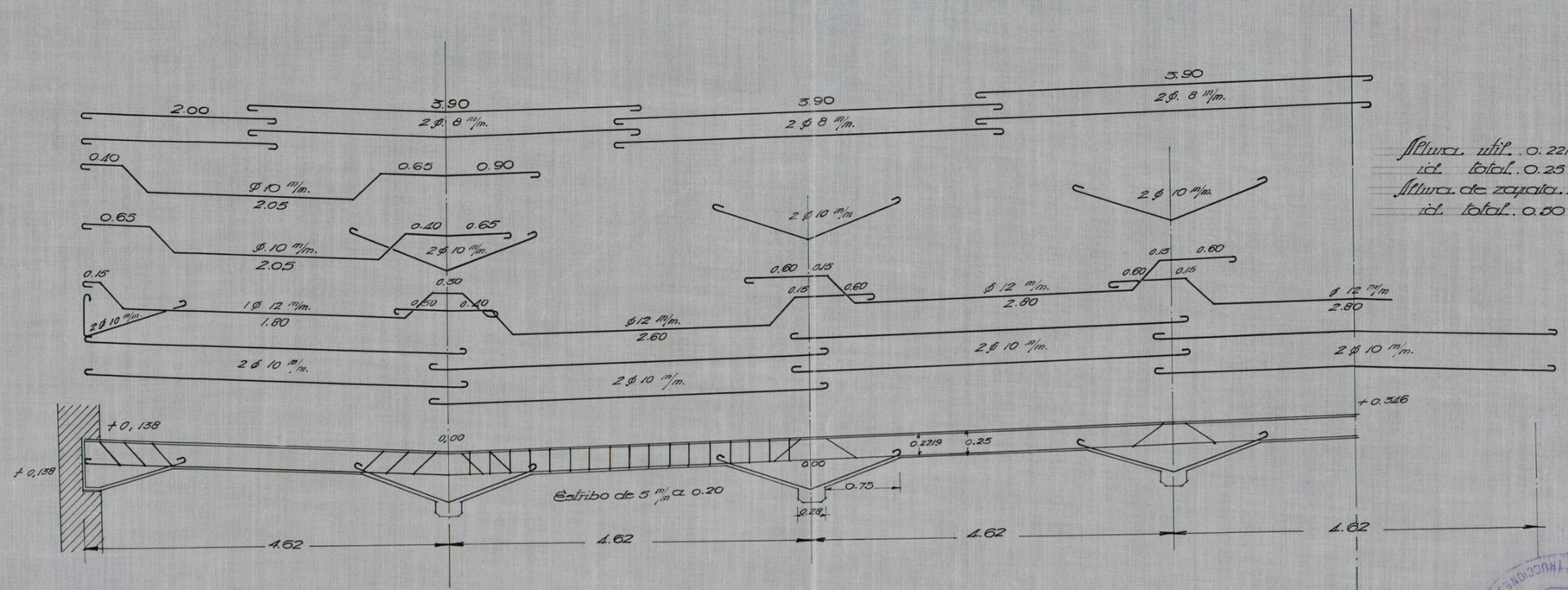


Escala 1:10

ARQUITECTURA MUNICIPAL
MADRID
SECCION DE CONSTRUCCIONES

Ayuntamiento de Madrid

~ Azotea ~ viguetas de 1.62 en tramos de 1.00 ~



Altura util. 0.2219
id. total. 0.25
Altura de zapata. util. 0.1611
id. total. 0.20

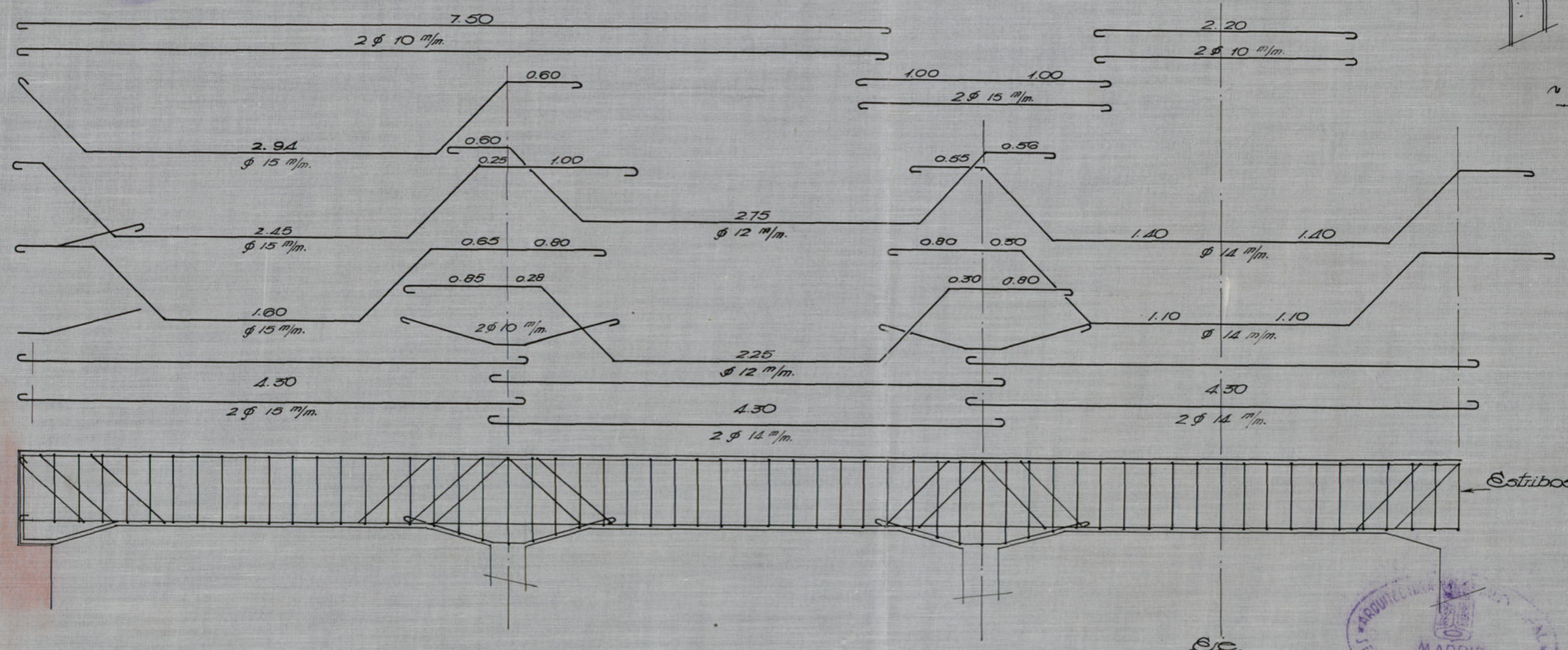
~ Escala 0,05 por m.º ~

. Ejc .

ARQUITECTURA MUNICIPAL
SECCION DE CONSTRUCCIONES
MADRID

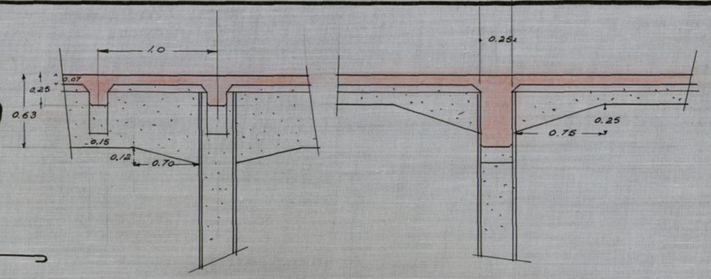
Ayuntamiento de Madrid

Azotea - Jácena en tramos de 4.00 m. (5 tramos.)

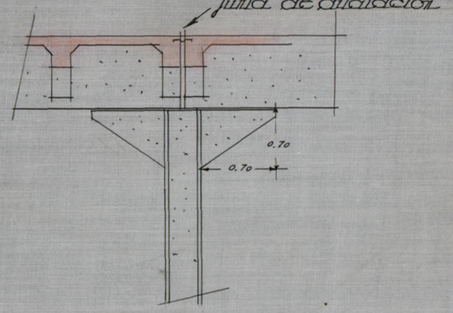


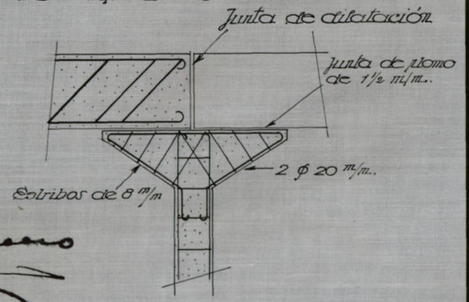
Esc.

Escala 0.05 por m.º



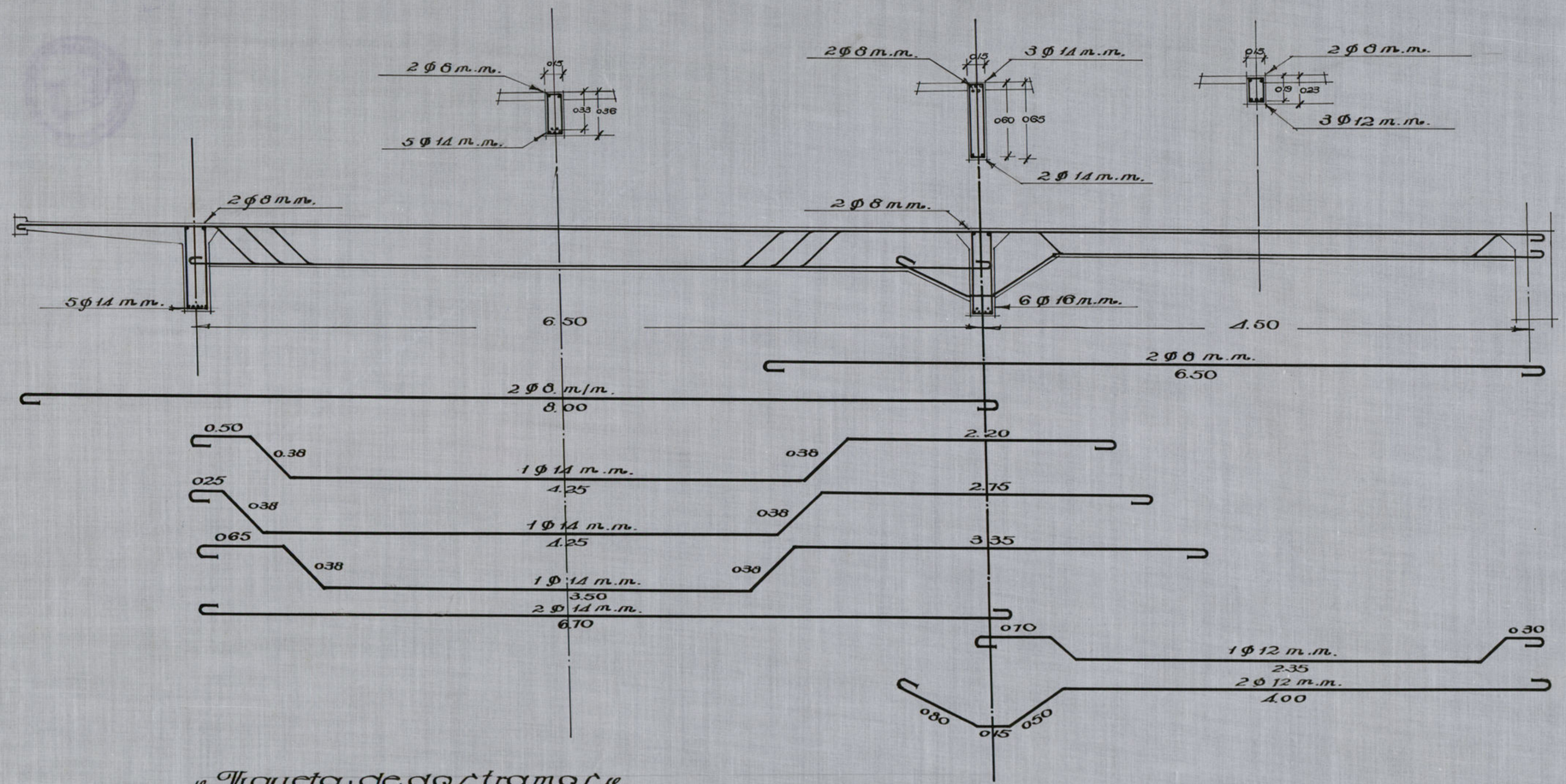
Detalles





ARQUITECTURA MADRID SECCION DE CONSTRUCCIONES

Ayuntamiento de Madrid

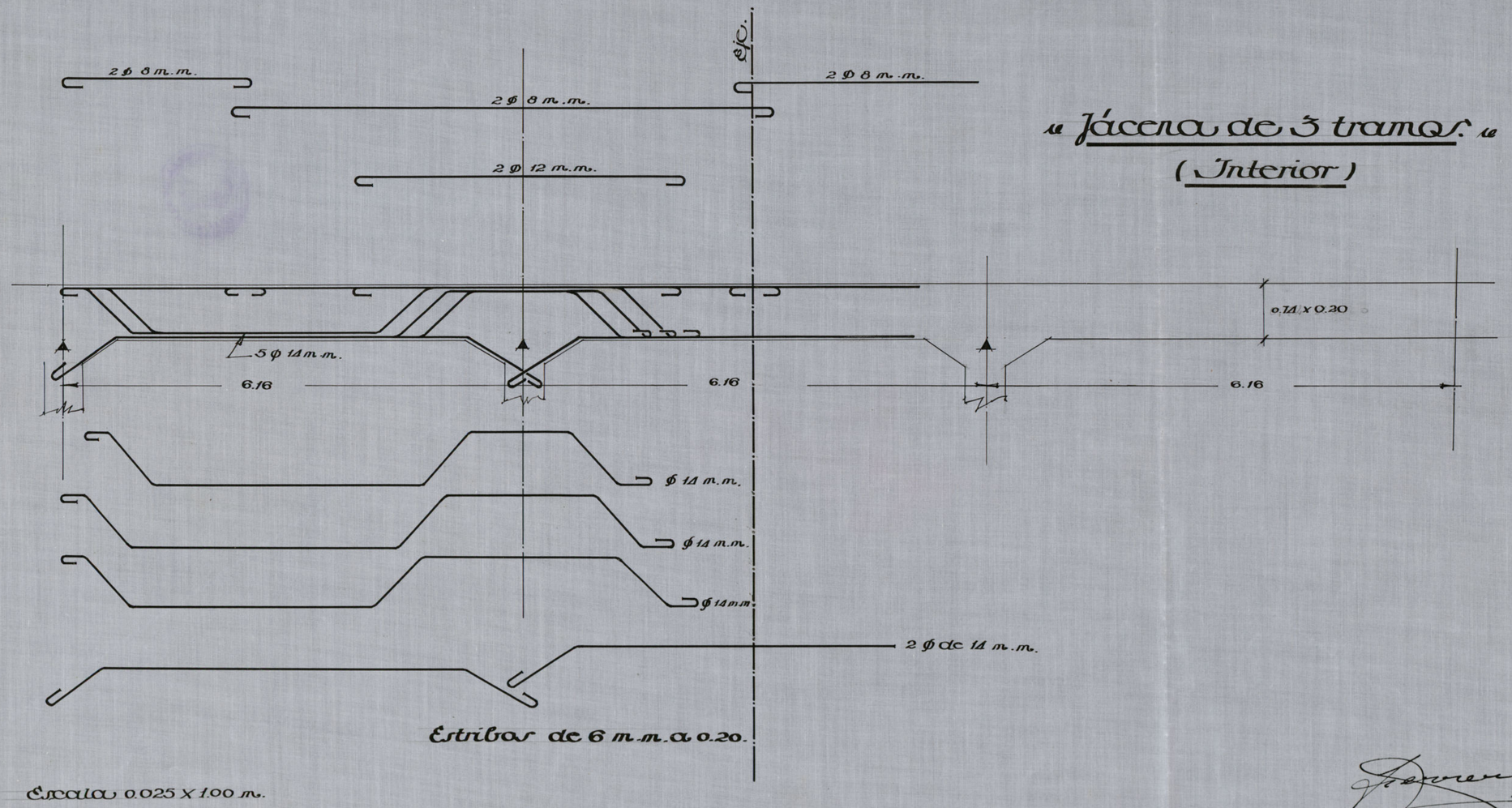


Vigueta de dos tramos

Longitudes acotadas sin contar ganchos.

Escala 1:30

Ayuntamiento de Madrid

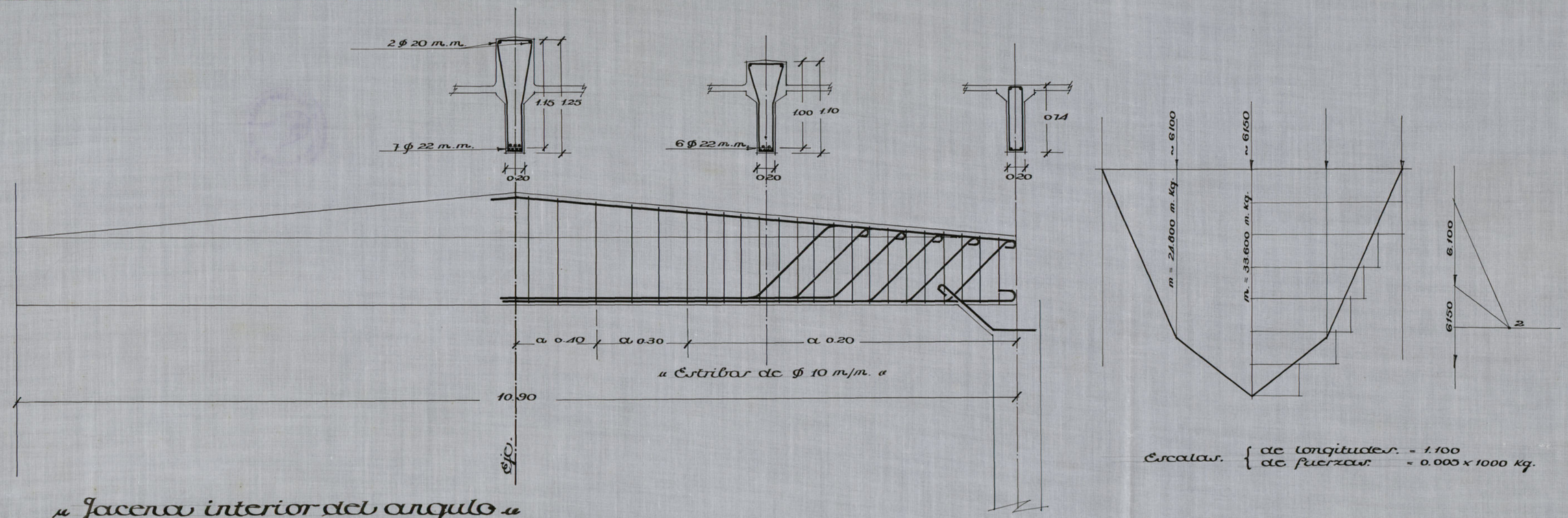


Jácena de 3 tramos
(Interior)

Estribos de 6 m.m. a 0.20.

Escala 0.025 x 1.00 m.

Ayuntamiento de Madrid

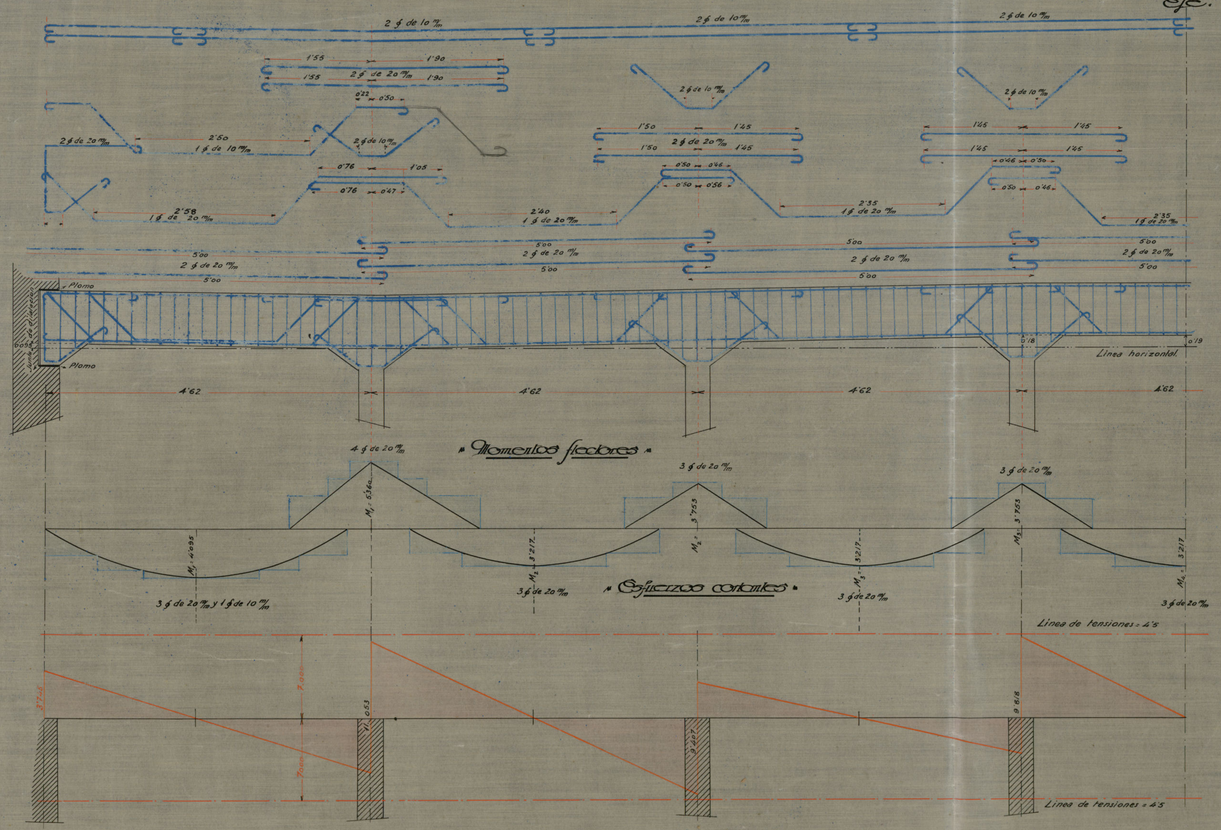


« Jacena interior del angulo »

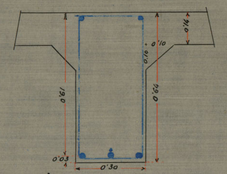
« Escala 1:300 »

Ayuntamiento de Madrid

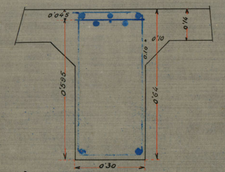
Vigas transversales de 7 tramos de 4.62 y entre pilares de 4.62 x 4.00



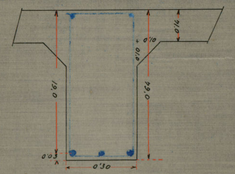
Sección en el 1º tramo.



Sección en el 2º apoyo



Sección en los restantes tramos.

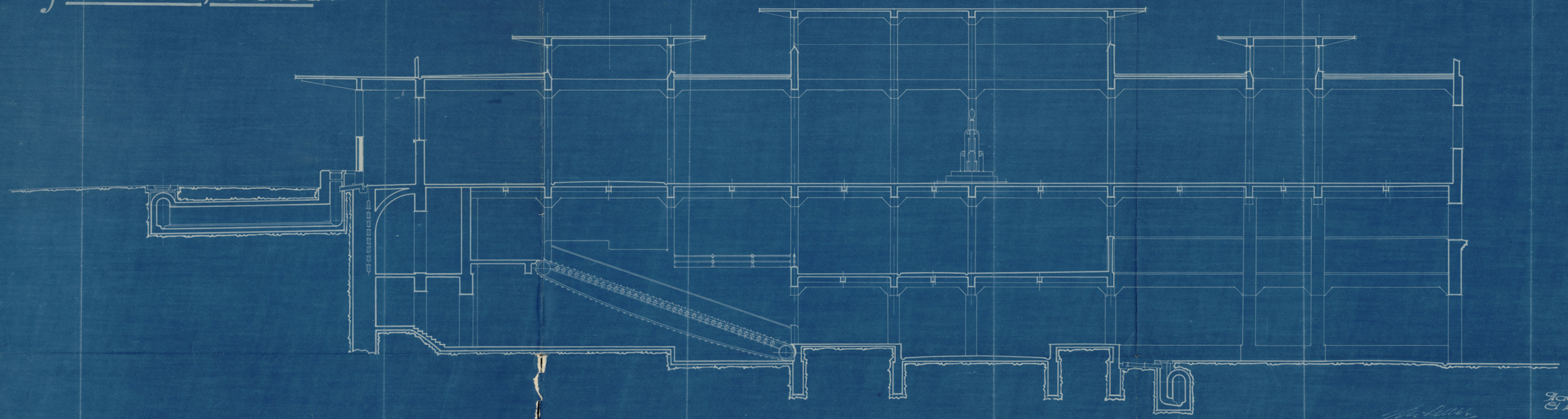


Escalas
De longitudes. 0.05 × 1.00 m.
" fuerzas. 0.005 × 1.000 kg.
" detalles. 0.10 × 1.00 m.

Madrid Mayo 1931
El Arquitecto Director:

Ayuntamiento de Madrid

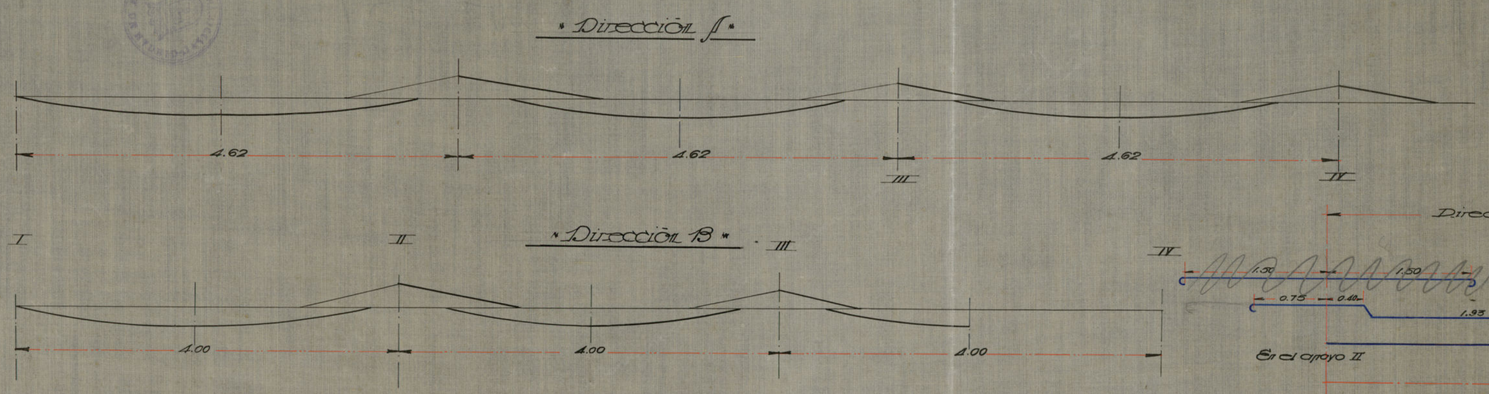
Sección esquemática

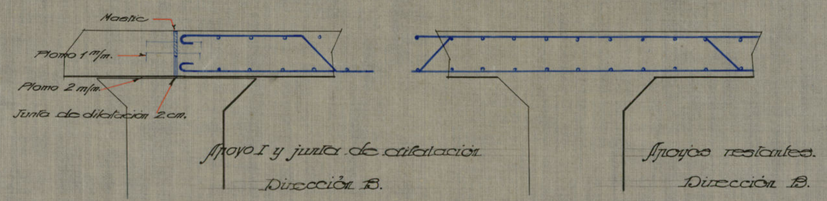


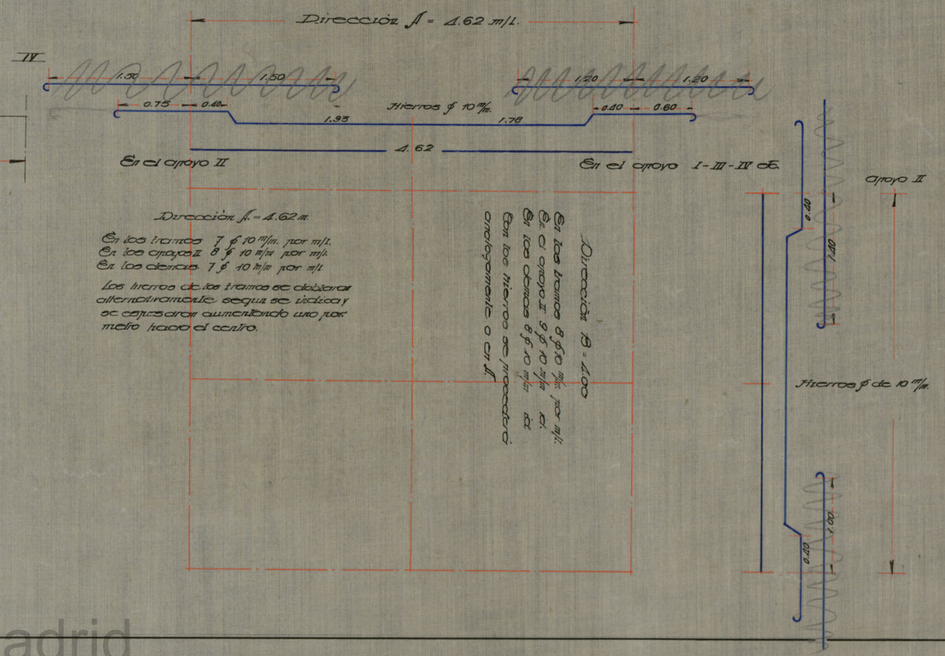
Escala 1:100.
Madrid 20 Junio 1957.
El Arquitecto Municipal,

Ayuntamiento de Madrid

Losas ortogonales de 4.62 x 4.00 m.







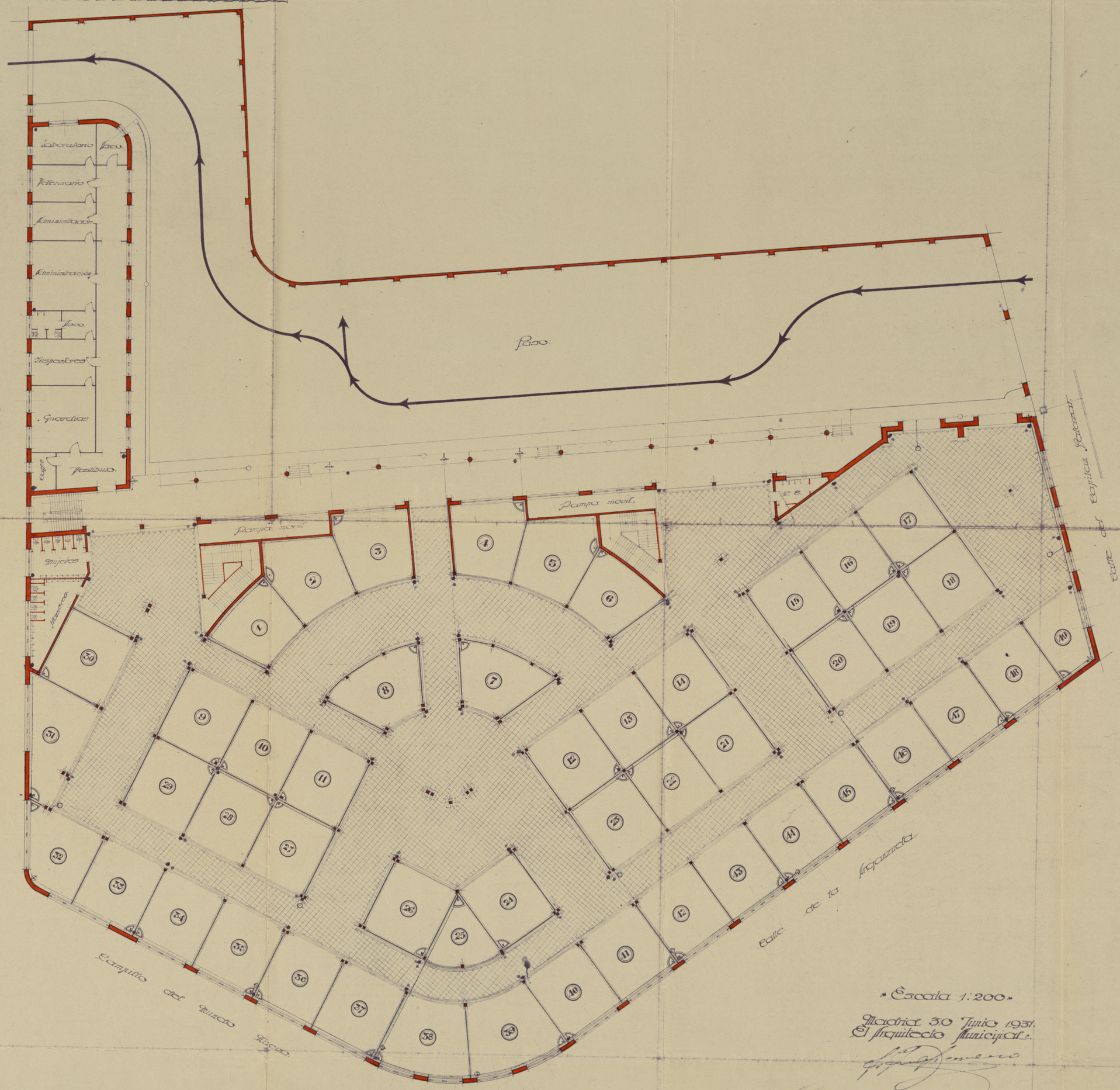
Escalas

De fuerzas = 0.01 x 1000 kg.
" longitudes = 0.03 x 1.00 m.
" detalles = 0.100 x 1.00 m.

Madrid Mayo 1931
El Arquitecto Inspector.

Ayuntamiento de Madrid

Planta de Mercado.



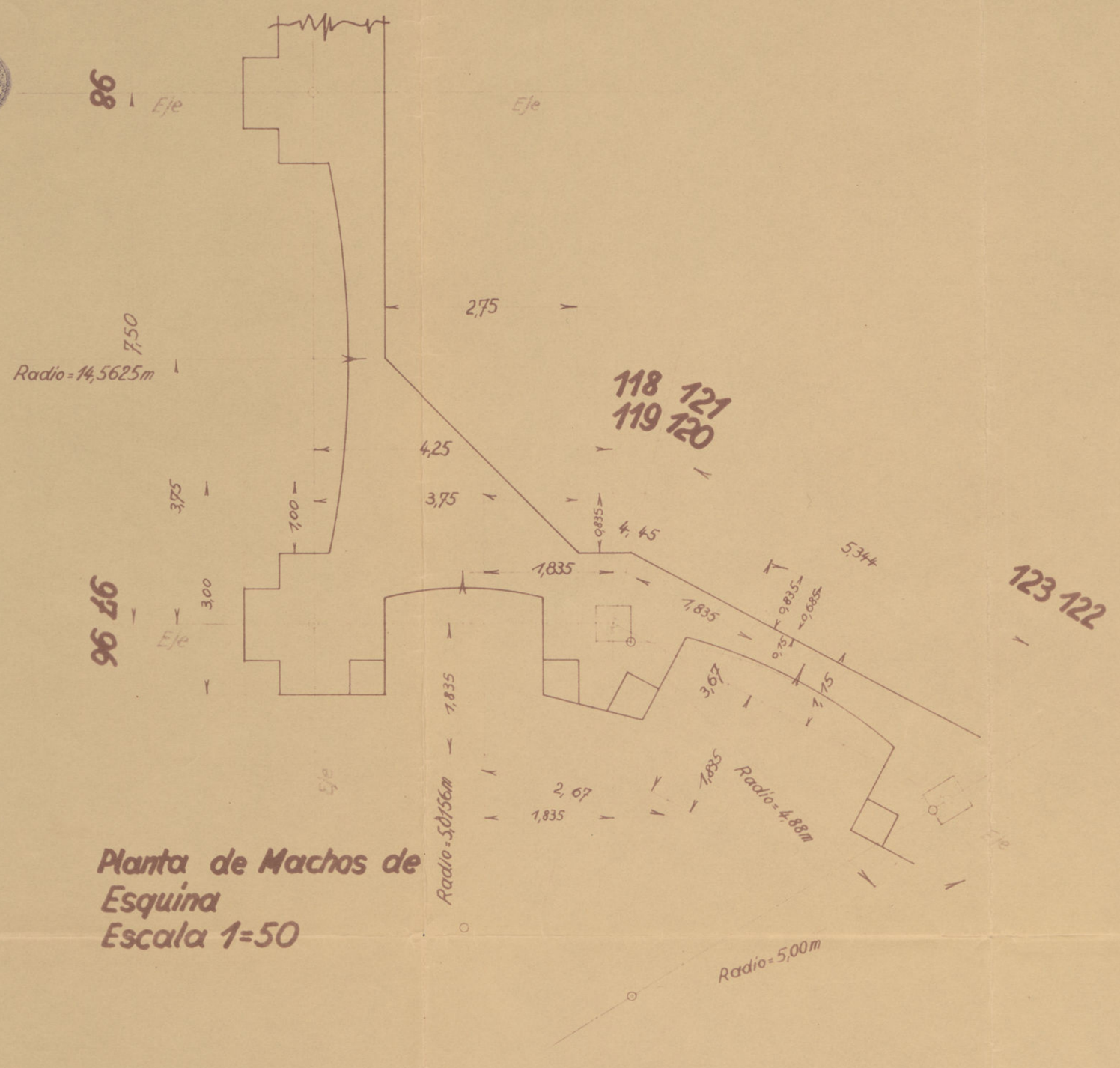
Ayuntamiento de Madrid

DETALLE DE FACHADA DEL SOTANO POR CAMPILLO MUNDO NUEVO Y RONDA TOLEDO

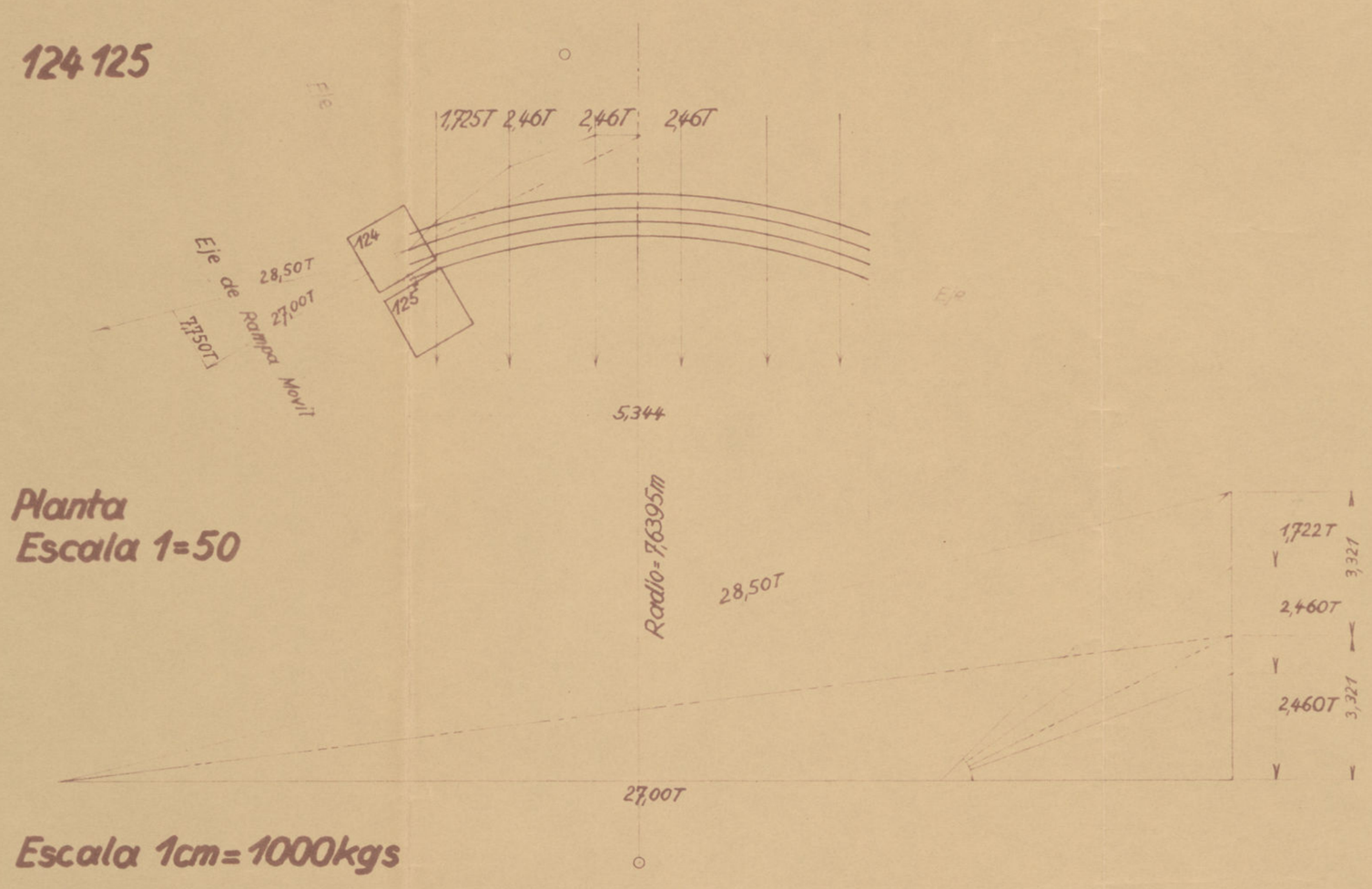
ESCALA 1=50

Ayuntamiento de Madrid

Muro de Contención

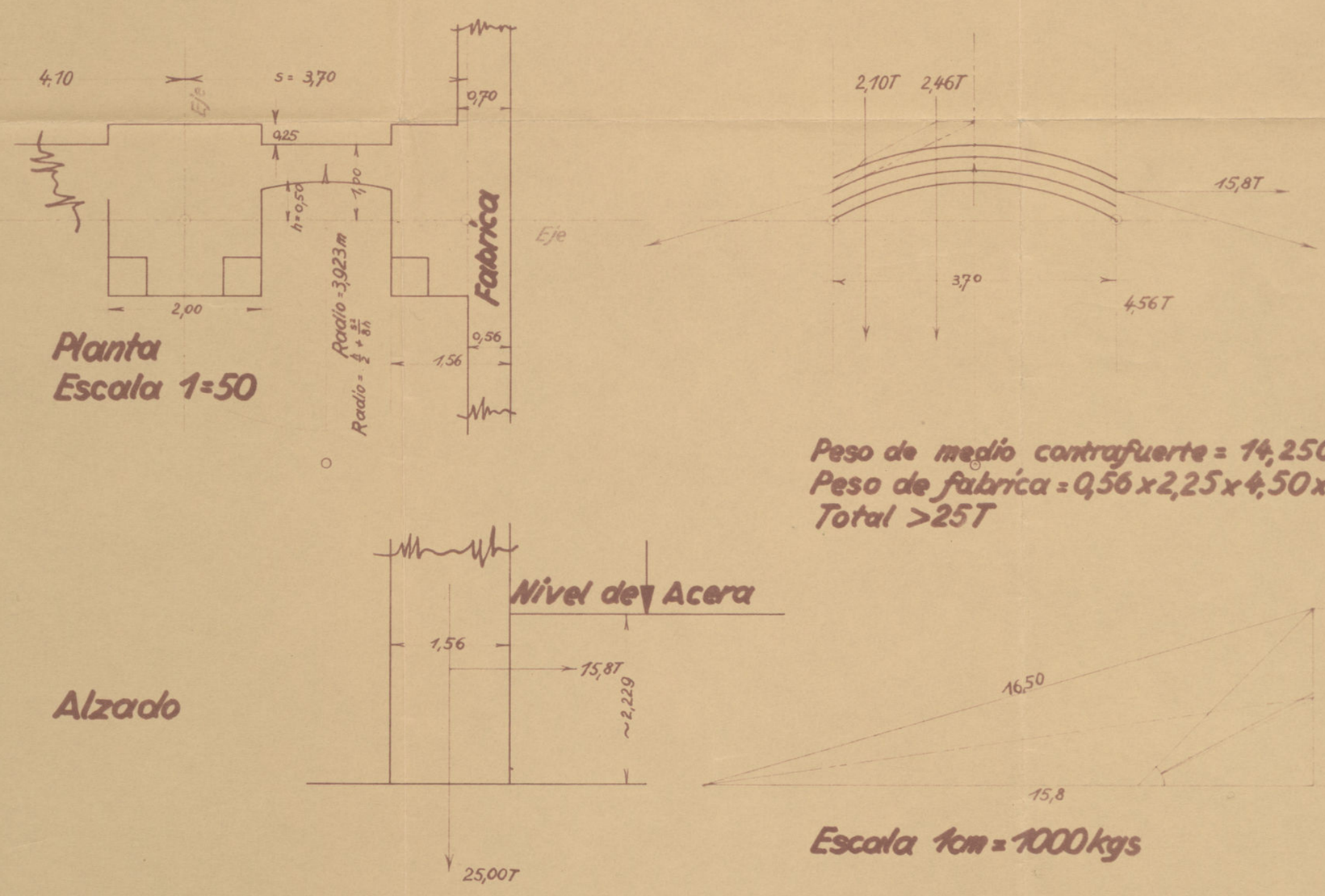


Planta de Machos de Esquina
Escala 1=50



Planta
Escala 1=50

Escala 1cm = 1000kgs



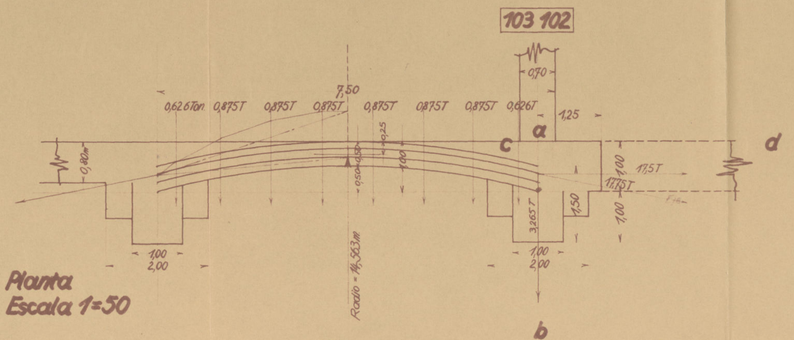
Peso de medio contrafuerte = 14,250
Peso de fabrica = 0,56 x 2,25 x 4,50 x 2,5 = 14,175
Total >25T

Alzado

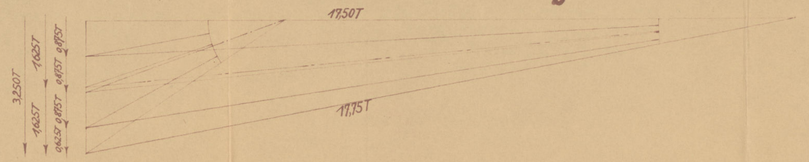
Escala 1cm = 1000kgs

Ayuntamiento de Madrid

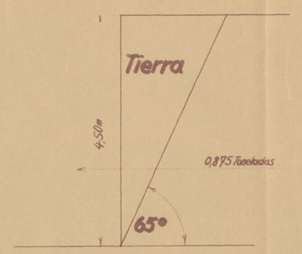
Muro de Contención
Planta de Semi-sótanos



Planta
Escala 1=50



Escala 1cm=0,625 Toneladas
1 Tonelada = 1,60cm
0,875 Ton = 1,4cm
0,625 » = 1cm
1,75 » = 28cm
17,75 » = 28,4cm

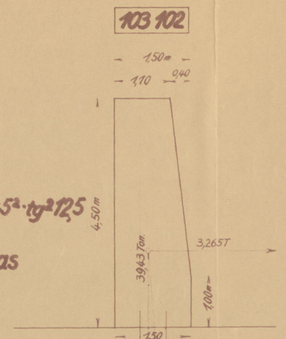


Sección
Escala 1=50

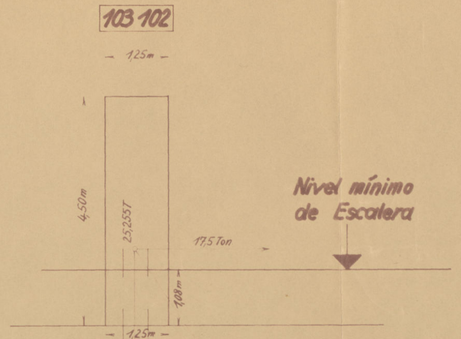
F = 1500 kgs.

$$Q = \frac{\delta}{2} \cdot H^2 \cdot tg^2 \frac{90^\circ - \varphi}{2} = \frac{1,5}{2} \cdot 4,5^2 \cdot tg^2 12,5$$

$$= 7,5 \cdot 4,5^2 \cdot 0,24^2 = 0,875 \text{ Toneladas}$$

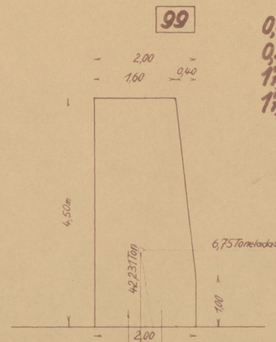


Sección a–b

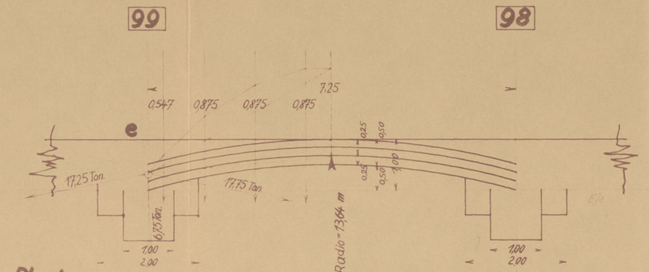


Nivel mínimo
de Escalera

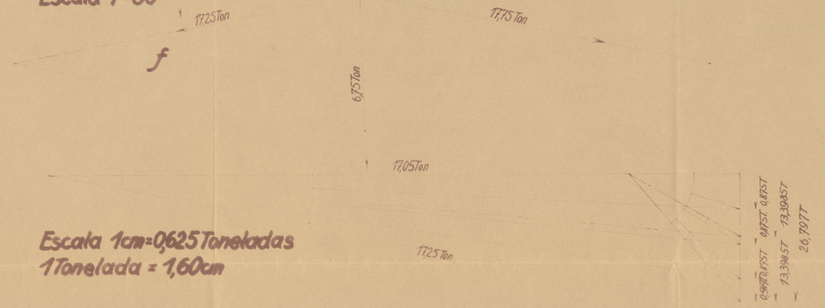
Sección c–d



Sección e–f
Escala 1=50



Planta
Escala 1=50



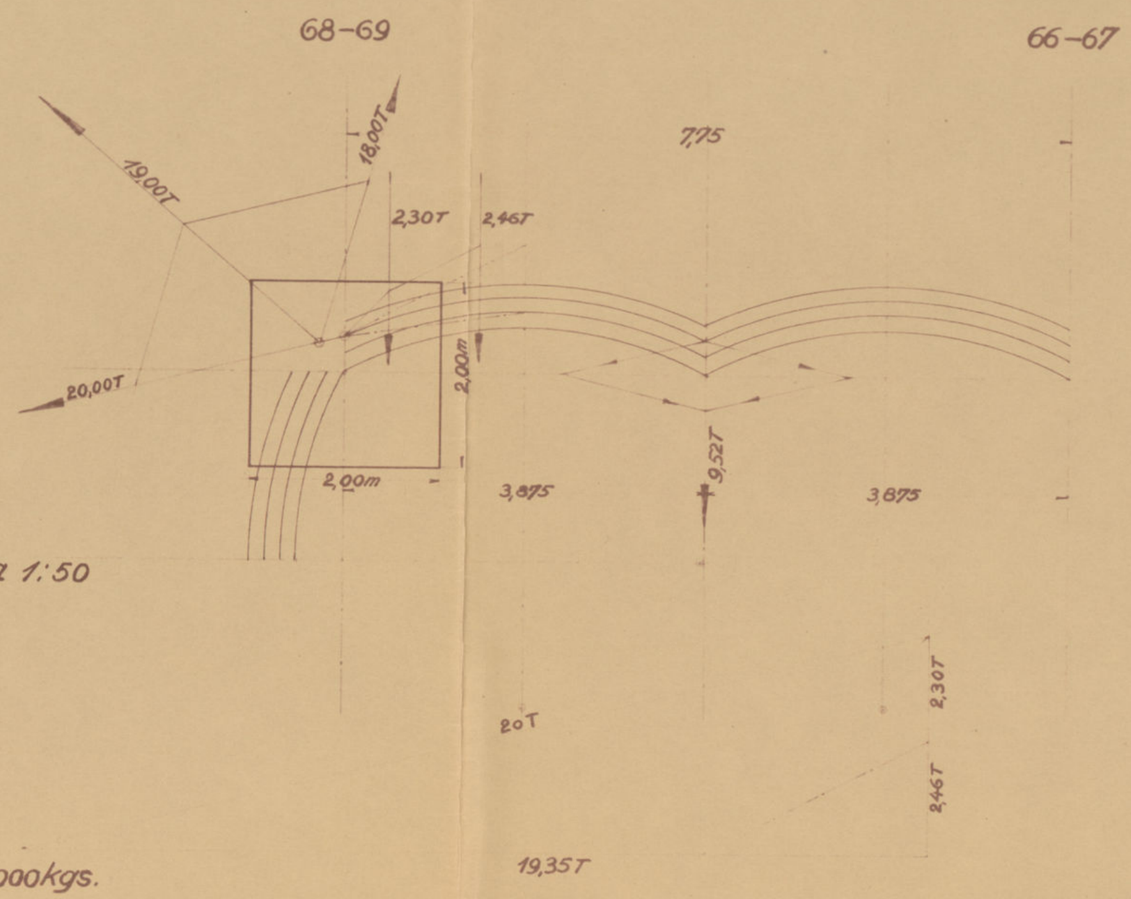
Escala 1cm=0,625 Toneladas
1 Tonelada = 1,60cm

0,875 Ton = 1,4cm
0,547 » = 0,875cm
17,05 » = 27,28cm
17,25 » = 27,60cm

Ayuntamiento de Madrid

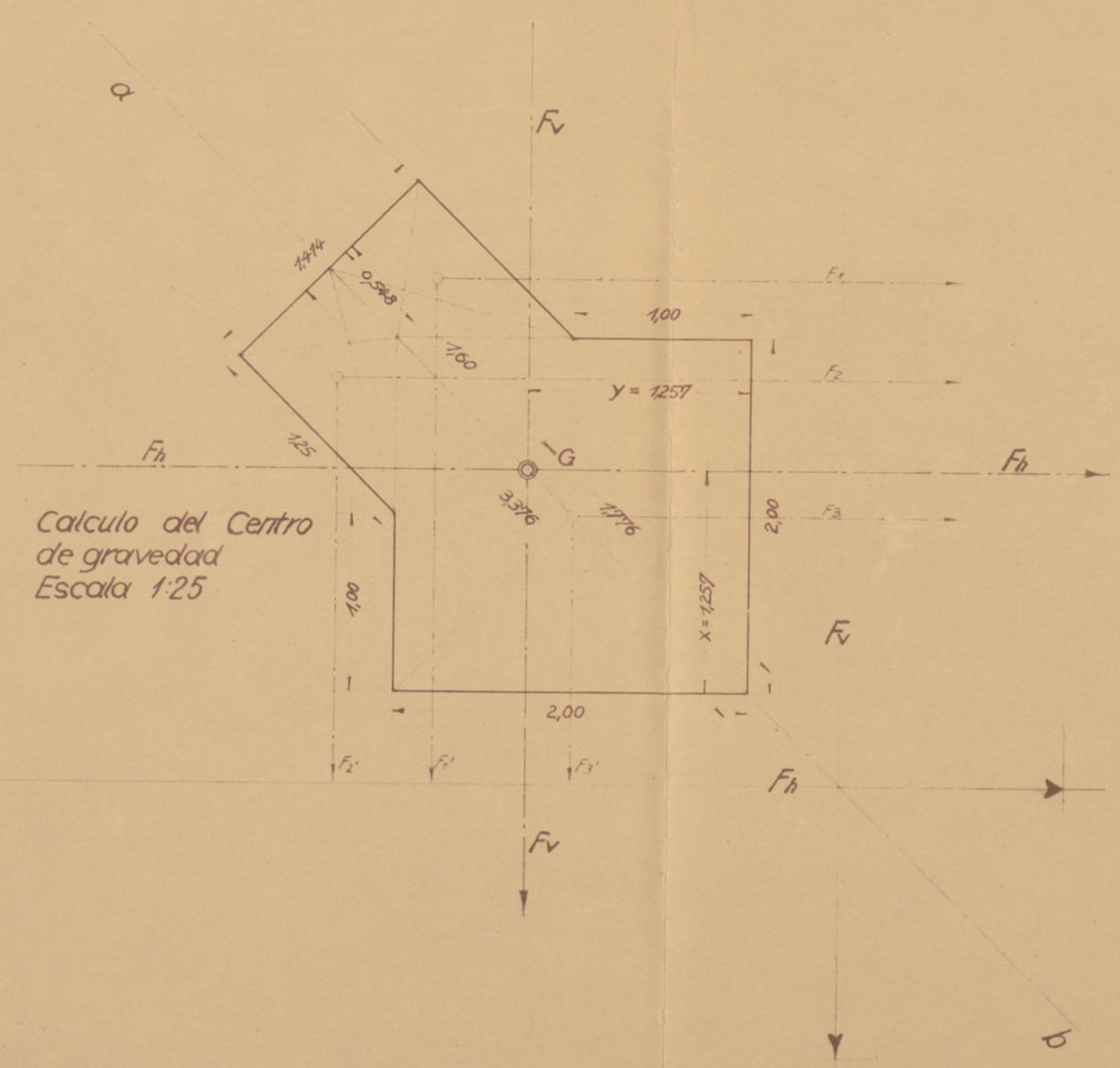
Muro de Contención

ARQUITECTURA MUNICIPAL
MADRID
SECCION DE CONSTRUCCIONES



Planta, Escala 1:50

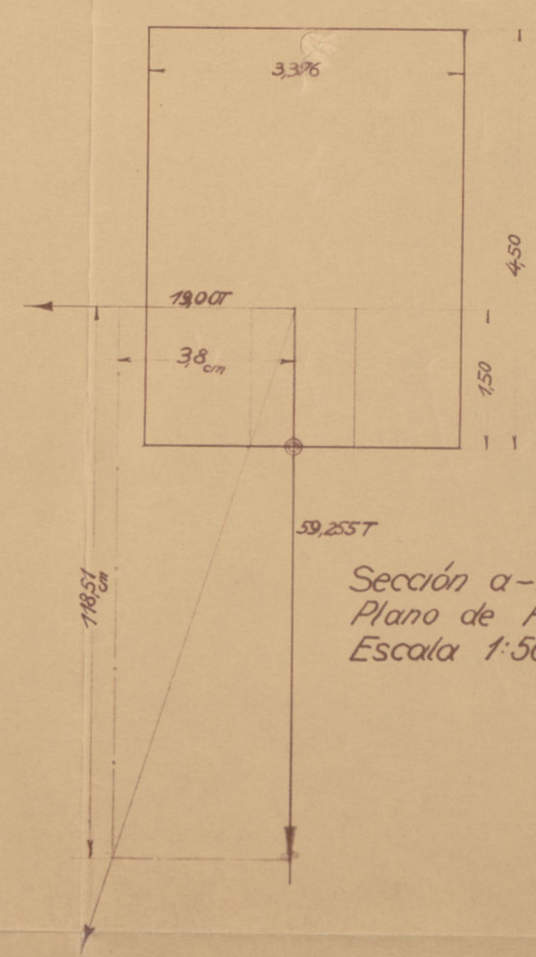
Escala 1cm = 1000kgs.



Calculo del Centro de gravedad
Escala 1:25

Escala: 1cm = 2000 cm²

Peso de la figura
1,414 x 1,25 x 4,50 x 2,5 = 19,884
7/8 x 2 x 2 x 4,50 x 2,5 = 39,375
Total : 59,255

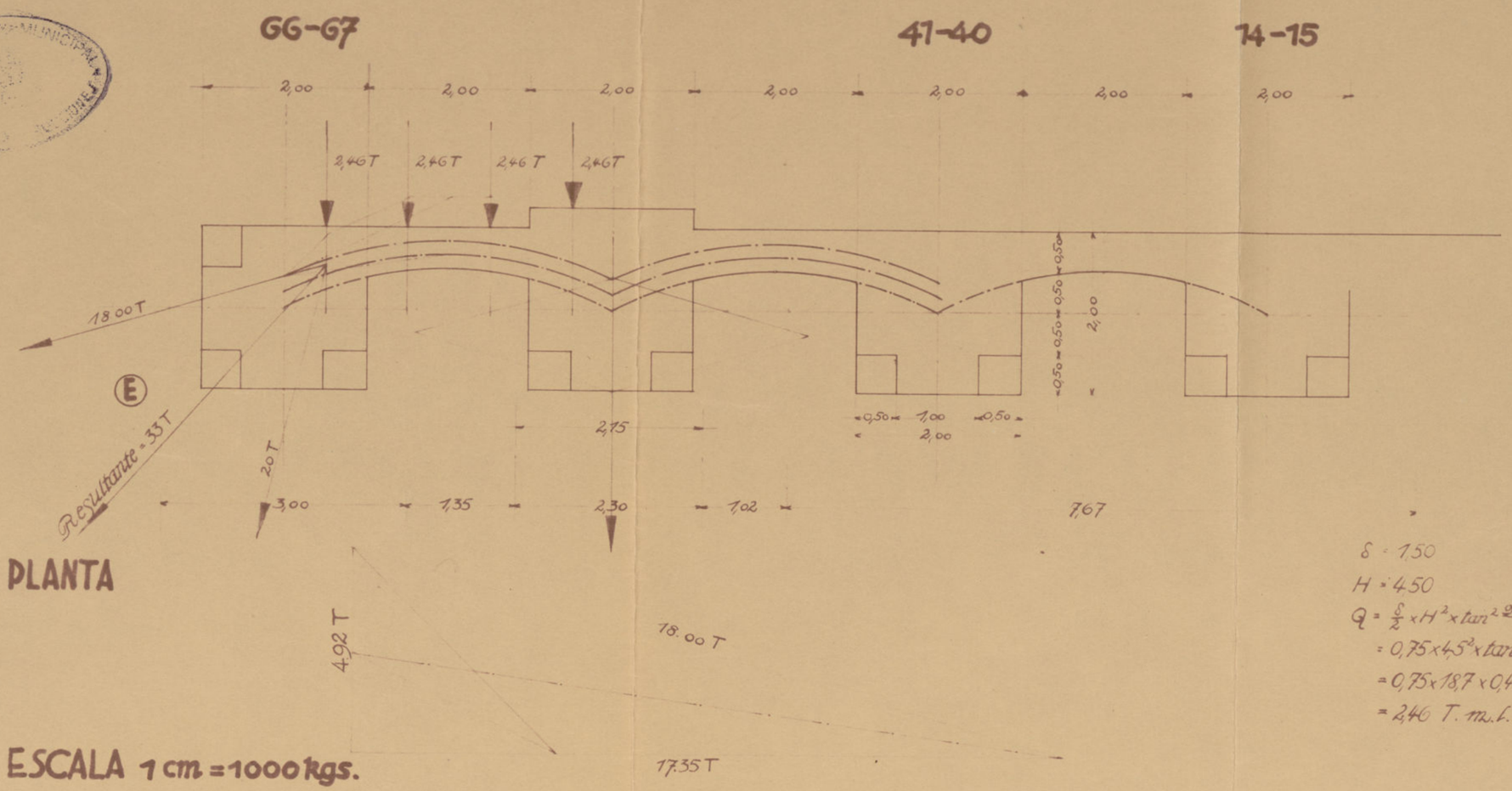


Sección a-b
Plano de Fuerzas
Escala 1:50

Ayuntamiento de Madrid

MURO DE CONTENCION

ESCALA 1:50



PLANTA

$\delta = 1{,}50$

$H = 4{,}50$

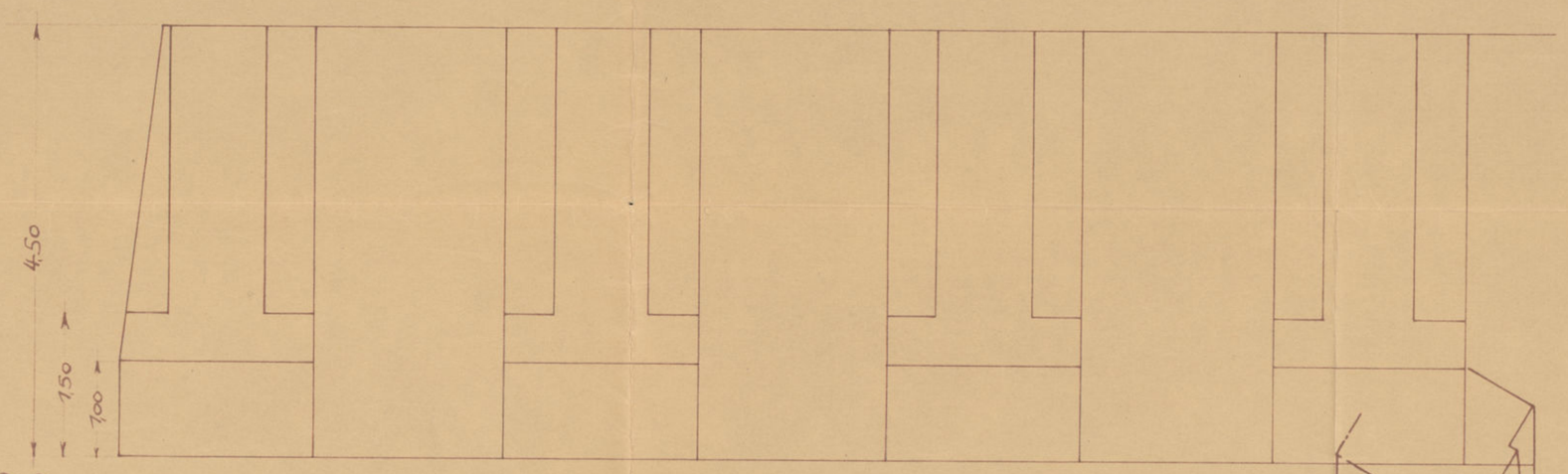
$Q = \frac{\delta}{2} \times H^2 \times \tan^2 \frac{90-\phi}{2}$

$= 0{,}75 \times 4{,}5^2 \times \tan^2 22{,}5^\circ$

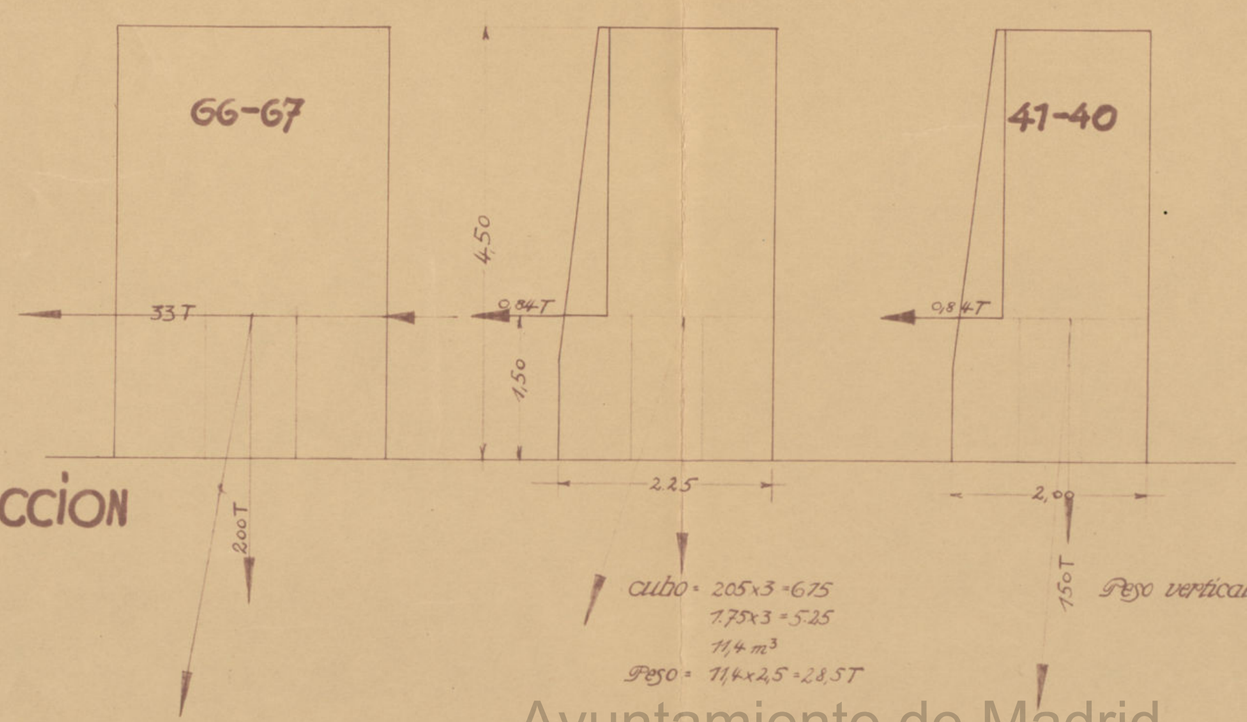
$= 0{,}75 \times 18{,}7 \times 0{,}4142^2$

$= 2{,}46$ T. m.l.

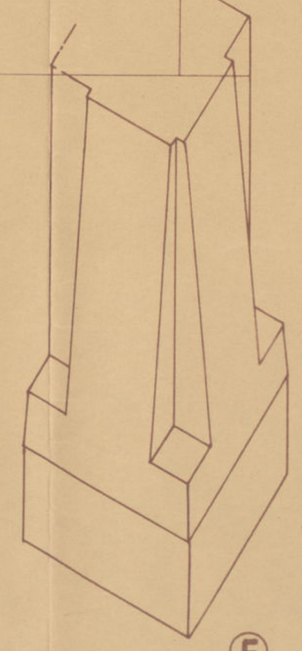
ESCALA 1 cm = 1000 kgs.



ALZADO



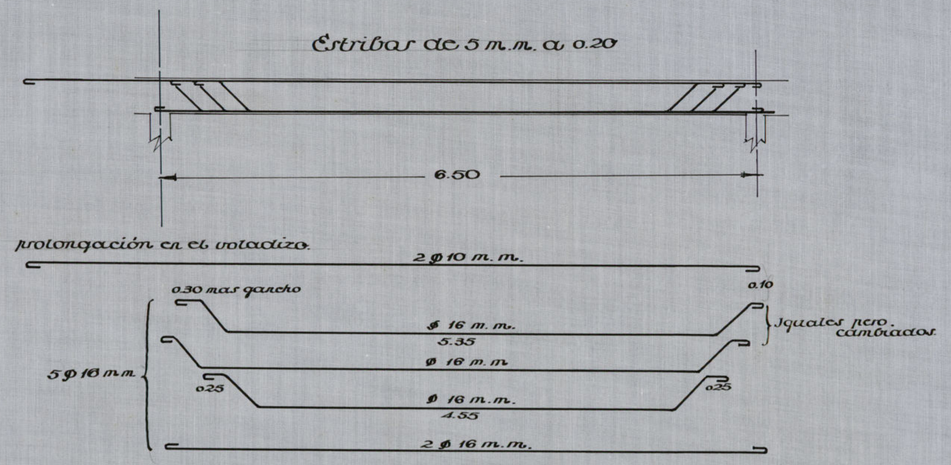
SECCION



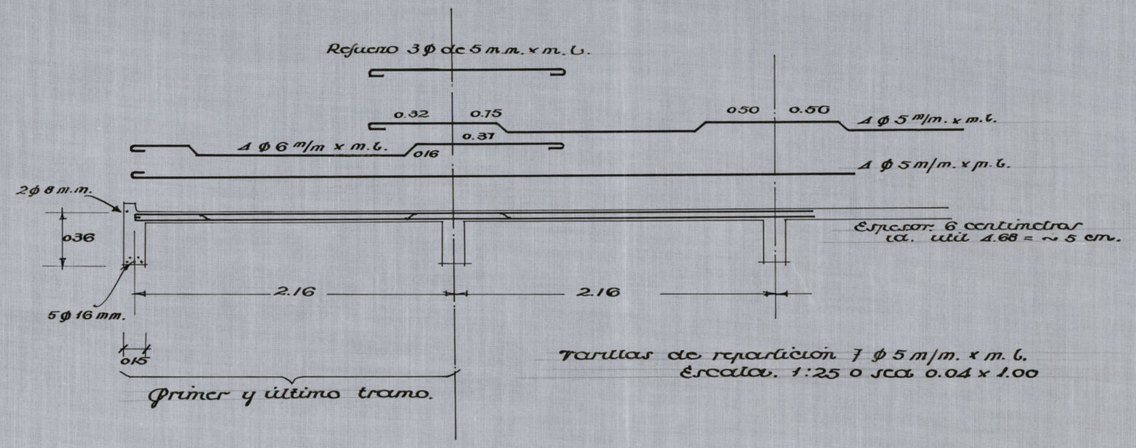
PERSPECTIVA DEL CONTRAFUERTE DE ESQUINA

Ayuntamiento de Madrid

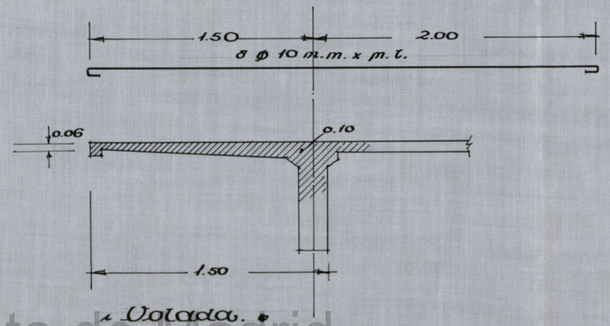
"Viguetas" de un tramo



Escala 0.025 x 1.00



Tarillas de reparticion 7 ϕ 5 m/m. x m.l.
Escala. 1:25 o sea 0.04 x 1.00



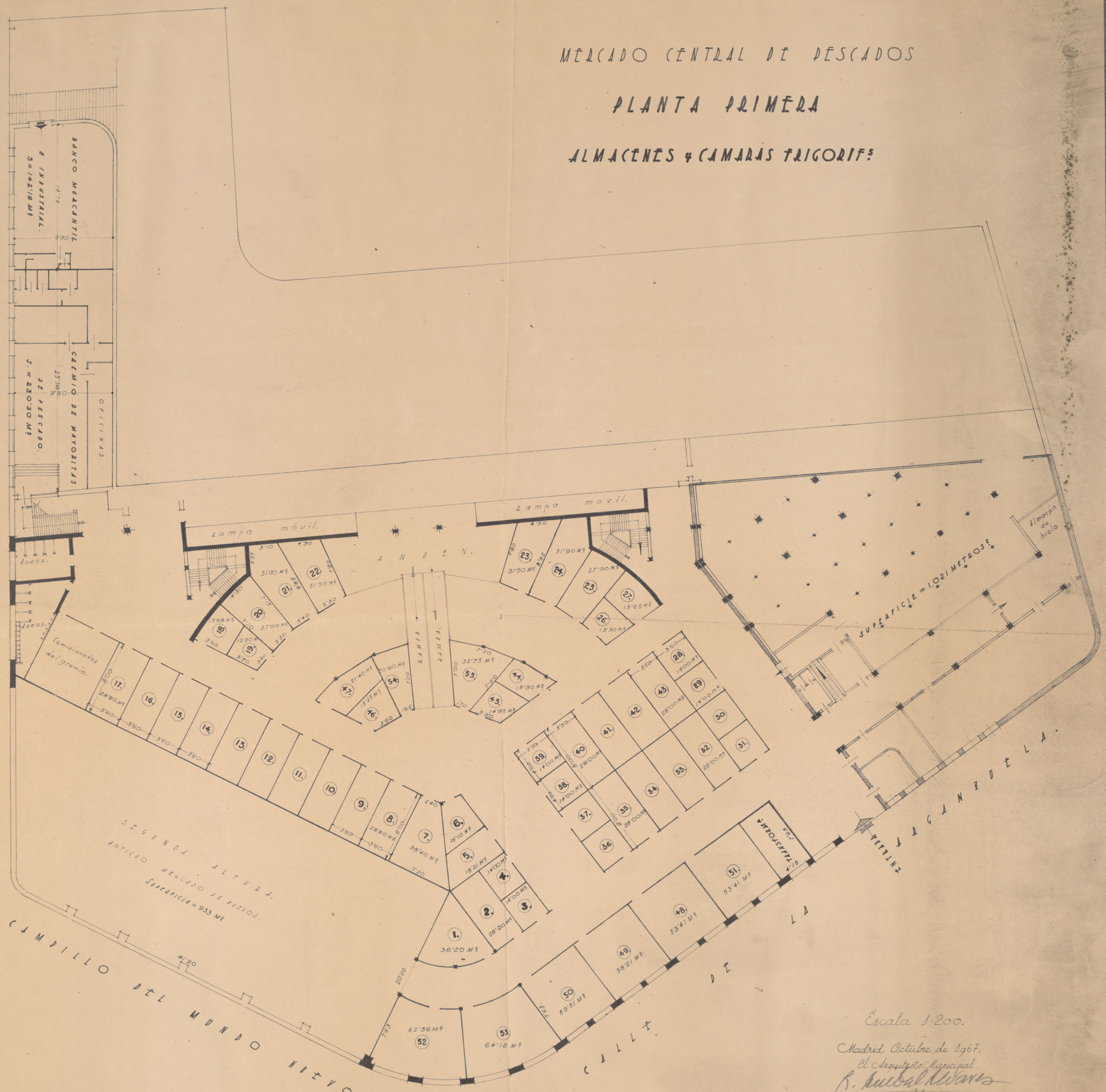
"Volada."

Ayuntamiento de Madrid

MERCADO CENTRAL DE PESCADOS

PLANTA PRIMERA

ALMACENES Y CAMARAS FRIGORIFS



Escala 1:200.

Madrid Octubre de 1967.

El Arquitecto Municipal.

R. Aguirre Alvarez

V.º B.º
El Director de Construcciones y Propiedades Municipales

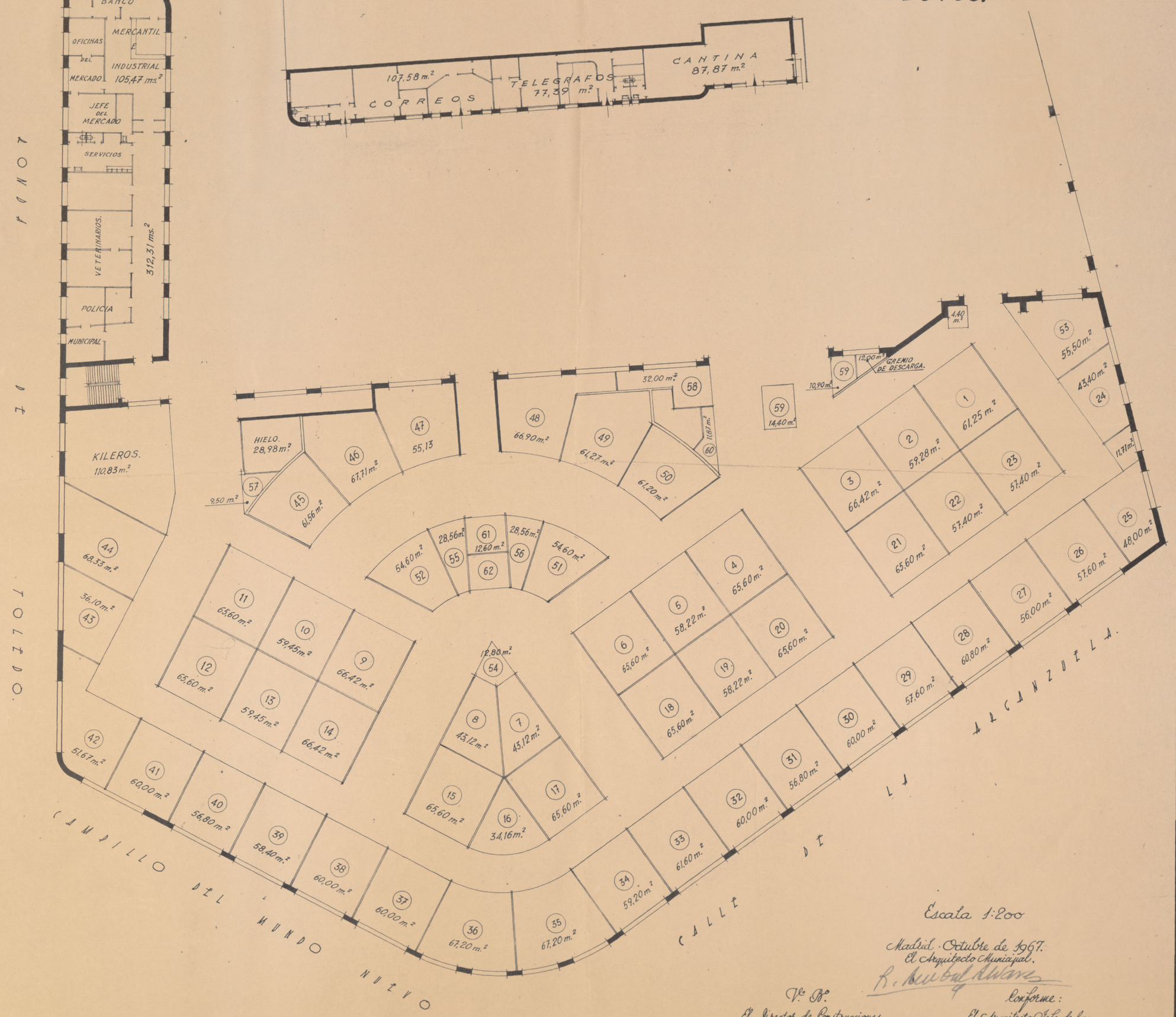
Conforme:
El Arquitecto Jefe de la Sección de Construcciones.

Ayuntamiento de Madrid

MERCADO CENTRAL DE PESCADOS

PLANTA SEGUNDA.

PUESTOS.



Escala 1:200

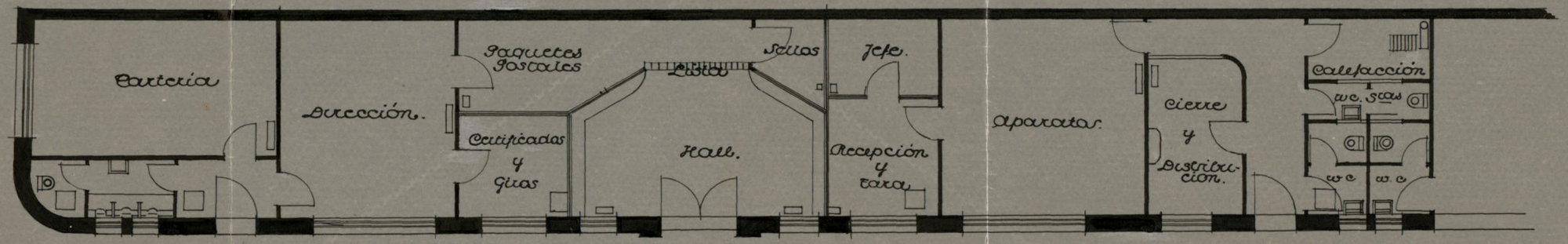
Madrid. Octubre de 1967.
El Arquitecto Municipal.

V.º B.º
El Director de Construcciones y Propiedades Municipales.

Conforme:
El Arquitecto Jefe de la Sección de Construcciones.

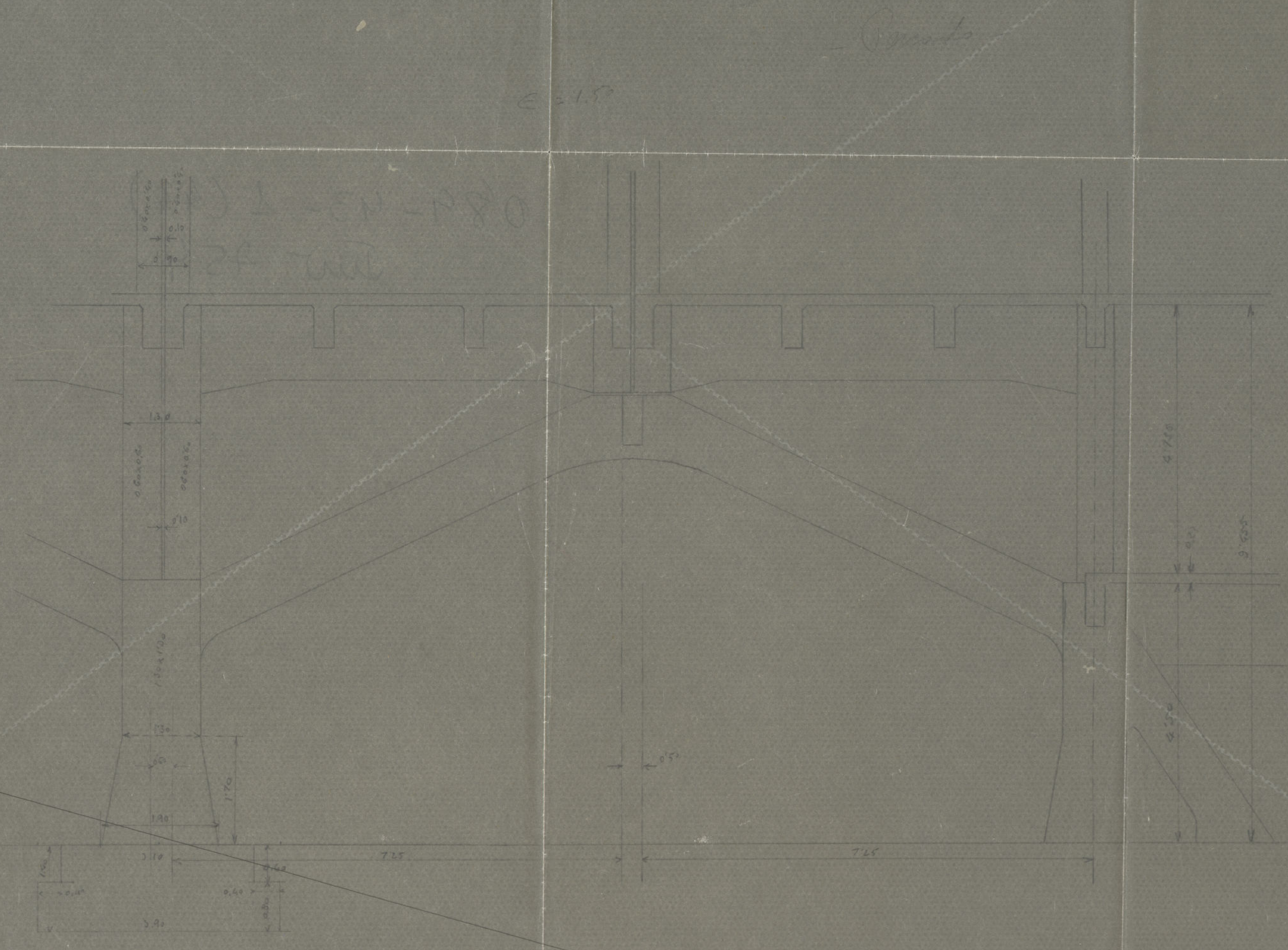
Ayuntamiento de Madrid

Pescados



Correos Telégrafos

Ayuntamiento de Madrid



Ayuntamiento de Madrid