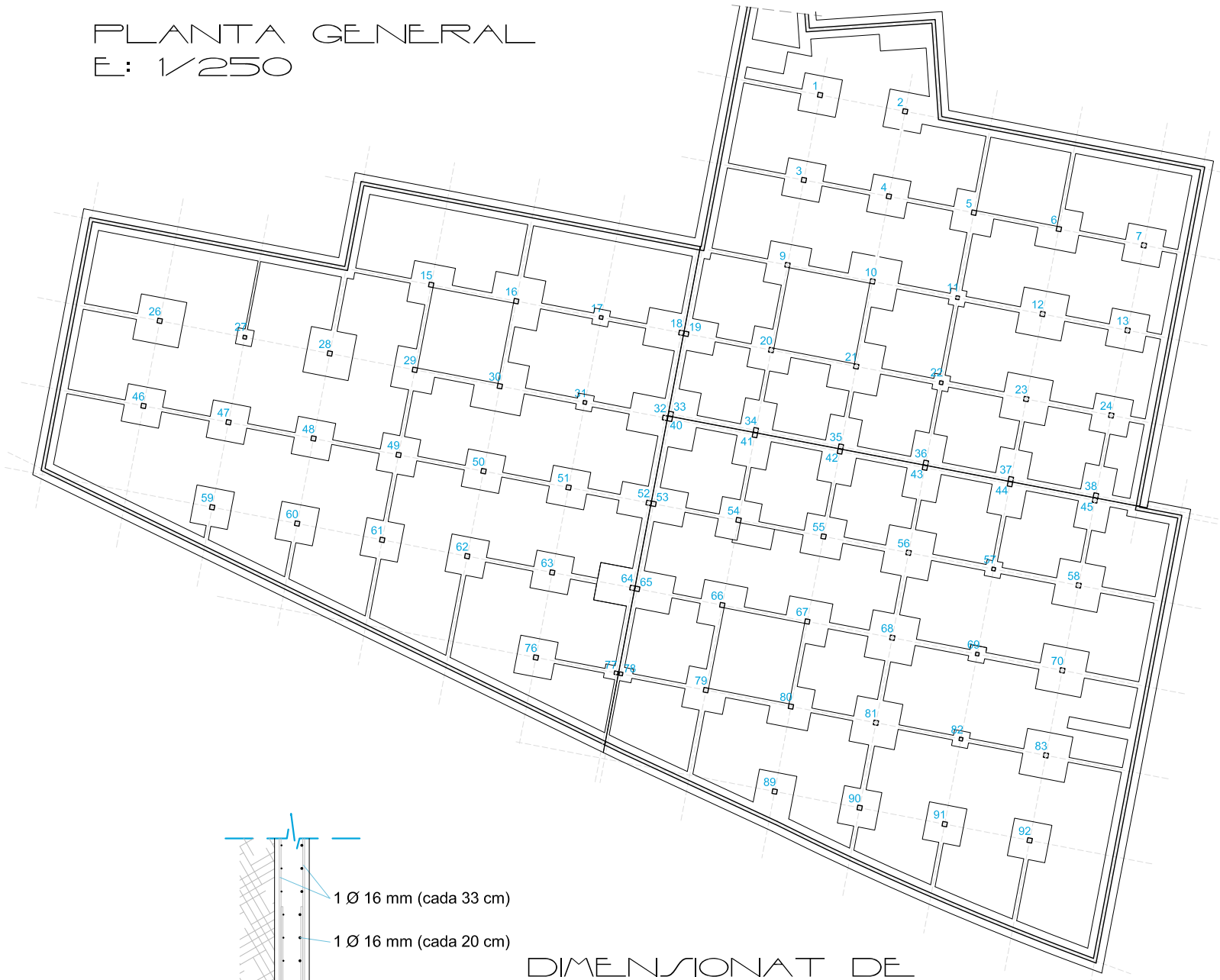
17. ESTRUCTURA

PLANTA GENERAL
E: 1/250



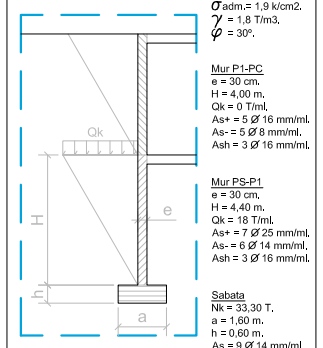
CIMENTACIÓ

DIMENSIONAT DE CIMENTACIÓ

DESCENS DE CARREGUES

CARREGA COBERTA JARDÍ:	
TERRA+SORRA+100% AIGUA (50 cm)	500 k/m2
POLIETILÉ	5 k/m2
FORMIGÓ CEL-LULAR (10 cm)	150 k/m2
PES PROPI FORJAT	130 k/m2
CAPA COMPRESSIÓ (5 cm)	125 k/m2
CARREGA D'ÚS (espai públic)	400 k/m2
CARREGA DE NEU	50 k/m2
	1360 k/m2
CARREGA COBERTA DE SERVEI:	
TERRA+SORRA+100% AIGUA (15 cm)	150 k/m2
POLIETILÉ	5 k/m2
FORMIGÓ CEL-LULAR (10 cm)	150 k/m2
PES PROPI FORJAT	130 k/m2
CAPA COMPRESSIÓ (5 cm)	125 k/m2
CARREGA D'ÚS (manteniment)	100 k/m2
CARREGA DE NEU	50 k/m2
	710 k/m2
CARREGA PLANTA PIS:	
TERRA TERRAZO + CIMENT COLA	80 k/m2
PES PROPI FORJAT	130 k/m2
CAPA COMPRESSIÓ (5 cm)	125 k/m2
CARREGA D'ÚS (espai públic)	500 k/m2
	835 k/m2
CARREGA TANCAMENTS:	
PARET DE GERO (15 cm)	225 k/m2
MAMPOSTERIA EXTERIOR (10 cm)	240 k/m2
FORMIGÓ AMB ESCORIES (15 cm)	225 k/m2
PLADUR (2x12'5 mm + estructura)	40 k/m2
	730 k/m2
CARREGA PARAMENT INTERIOR:	
PARET DE TOTXANA (2 x 9 cm)	200 k/m2
ENRAJOLAT + MORTER (5 cm)	50 k/m2
PLADUR (2x12'5 mm + estructura)	40 k/m2
	290 k/m2

MUR A PLANTA SOTERRANI



Terreny:
σ adm.= 1,9 k/cm2.
γ = 1,8 T/m3.
φ = 30º.

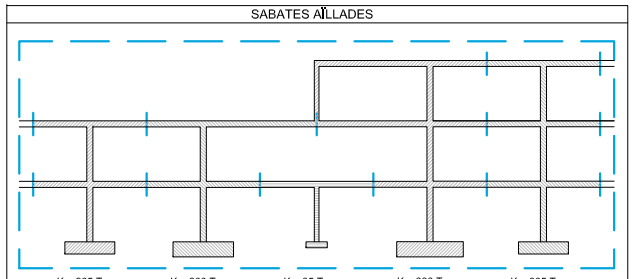
Mur P1-PC
e = 30 cm.
H = 4,00 m.
Qk = 0 T/ml.
As+ = 5 Ø 16 mm/ml.
As- = 5 Ø 8 mm/ml.
Ash = 3 Ø 16 mm/ml.

Mur PS-P1
e = 30 cm.
H = 4,40 m.
Qk = 18 T/ml.
As+ = 7 Ø 25 mm/ml.
As- = 6 Ø 14 mm/ml.
Ash = 3 Ø 16 mm/ml.

Sabata
Nk = 33,30 T.
a = 1,60 m.
h = 0,60 m.
As = 9 Ø 14 mm/ml.
Ac = 4 Ø 25 mm/ml.

QUADRE DE CARACTERÍTIQUES		
ELEMENT	ESPECIFICACIÓ	COEF. PONDERACIÓ
FORMIGÓ	HA-25-P-40-IIb	1,5
ACER	B-400S	1,2
EXECUCIÓ		1,6

SABATES AÏLLADES



K < 205 T.
A = B = 330 cm.
H = 75 cm.
As = 1 Ø 20 mm
cada 20 cm.

K < 290 T.
A = B = 400 cm.
H = 90 cm.
As = 1 Ø 16 mm
cada 11,1 cm.

K < 35 T.
A = B = 140 cm.
H = 40 cm.
As = 1 Ø 10 mm
cada 16,7 cm.

K < 330 T.
A = B = 415 cm.
H = 95 cm.
As = 1 Ø 16 mm
cada 11,1 cm.

K < 235 T.
A = B = 350 cm.
H = 80 cm.
As = 1 Ø 14 mm
cada 10 cm.

K < 195 T.
A = B = 360 cm.
H = 80 cm.
As = 1 Ø 16 mm
cada 12,5 cm.

K < 280 T.
A = B = 440 cm.
H = 100 cm.
As = 1 Ø 20 mm
cada 20 cm.

K < 225 T.
A = B = 380 cm.
H = 85 cm.
As = 1 Ø 16 mm
cada 14,3 cm.

K = 80 T.
A = B = 245 cm.
H = 55 cm.
As = 1 Ø 20 mm
cada 16,7 cm.

QUADRE DE SABATES	
TIPUS	REFERÈNCIA
A	1,2,3,4,7,13,24,46,47,48,49,50,51, 59,60,61,62,63,76,89,90,91,92.
B	12,23,26,28,81,83.
C	11,17,22,27,31,57,69,82.
D	56,58,68,70.
E	54,55.
F	5,6,9,15,20,29,79,80.
G	10,16,21,30.
H	66,67.
I	33.
J	40.
K	19,34,35,36,37,38,45,52.
L	18,32,64,65.
M	77,78.
N	41,42,43,44,53.

K < 105 T.
A = B = 280 cm.
H = 65 cm.
As = 1 Ø 20 mm
cada 25 cm.

Biga centradora
K < 105 T.
a = 40 cm.
b = 65 cm.
As = 12 Ø 32 mm.
Atr. = 4 Ø 8 mm,
cada 14 cm

K < 145 T.
A = B = 330 cm.
H = 75 cm.
As = 1 Ø 16 mm
cada 14 cm.

Biga centradora
K < 145 T.
a = 50 cm.
b = 75 cm.
As = 10 Ø 40 mm.
Atr. = 4 Ø 10 mm,
cada 12,5 cm.

K < 18 T.
A = B = 120 cm.
H = 65 cm.
As = 1 Ø 10 mm
cada 20 cm.

Biga centradora
K < 18 T.
a = 40 cm.
b = 65 cm.
As = 5 Ø 20 mm.
Atr. = 2 Ø 8 mm,
cada 25 cm.

K = 90 T.
A = B = 260 cm.
H = 55 cm.
As = 1 Ø 25 mm
cada 25 cm.

Biga rlostra
K < 330 T.
a = b = 55 cm.
As = 12 Ø 20 mm.

K < 118 T.
A = B = 300 cm.
H = 65 cm.
As = 1 Ø 16 mm
cada 14 cm.

Biga centradora
K < 118 T.
a = 40 cm.
b = 65 cm.
As = 8 Ø 40 mm.
Atr. = 4 Ø 10 mm,
cada 20 cm

Biga rlostra
K < 205 T.
a = b = 45 cm.
As = 12 Ø 16 mm.

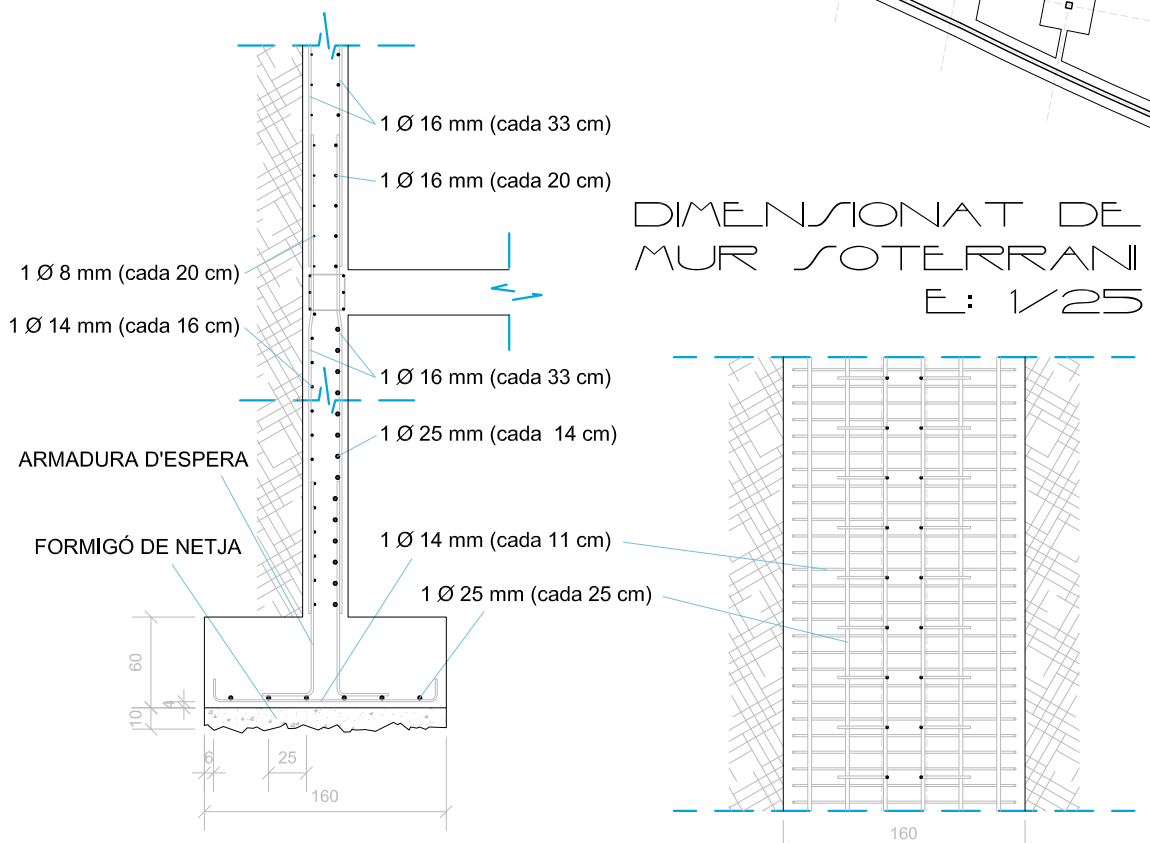
Biga rlostra
K < 290 T.
a = b = 50 cm.
As = 10 Ø 20 mm.

Biga rlostra
K < 35 T.
a = b = 20 cm.
As = 8 Ø 8 mm.

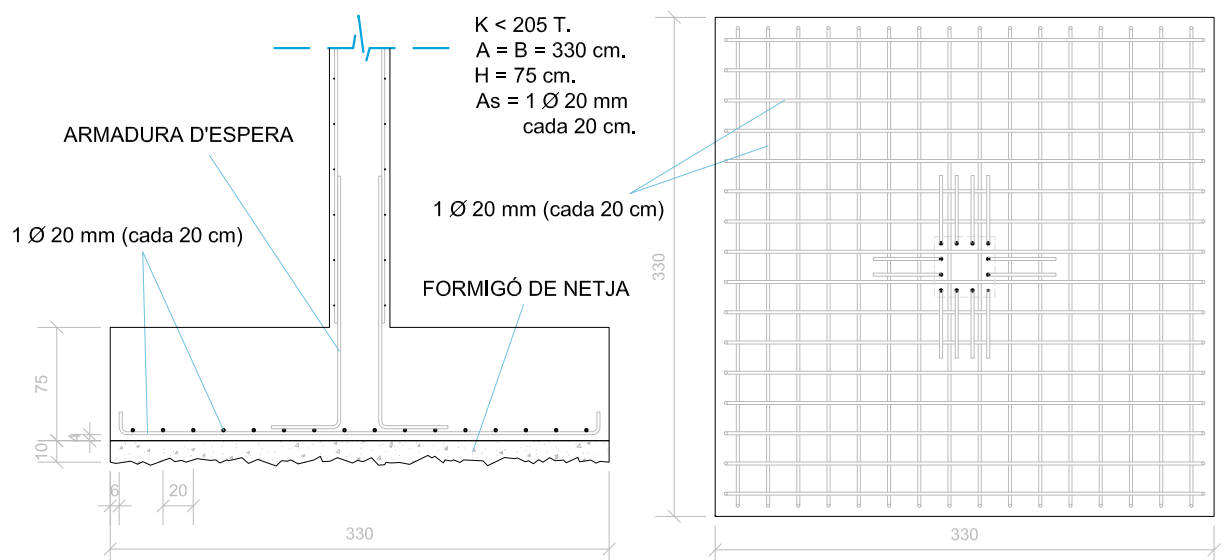
Biga rlostra
K < 330 T.
a = b = 55 cm.
As = 12 Ø 20 mm.

Biga rlostra
K < 205 T.
a = b = 45 cm.
As = 12 Ø 16 mm.

DIMENSIONAT DE MUR SOTERRANI
E: 1/25



DIMENSIONAT DE SABATA AÏLLADA
E: 1/25



INTERVENCIÓ A LA PLAÇA DE MONTSERRAT I L'ENTORN A LA MURALLA DE MANRESA

TEMA: ARQUITECTURA HÍBRIDA

AUTOR: JAVIER LAGUNA ESPAÑOL