

Task 5

Jagtvej no. 94 – 118. Merge of apartment 110 ground floor left and 112 ground floor right.

The owner association of Jagtvej no. 94 – 118 has allowed merging the apartments 110 ground floor left and 112 ground floor right. The task is to design the new structures to replace the walls.

List of drawings attached:

1. Floor plan and Facades of the building complex.
2. Cross section, 1:100 (A3)
3. Detailed dimension of apartments 110 ground floor, 1:50 (A3)
4. Plan of walls to be removed, 1:100 (A3)
5. Floor construction, princip.

List of codes:

1. DS/EN 1990, Eurocode 0, Basis of structural design.
2. DS/EN 1990, Eurocode 1, Actions on structures.
3. DS/EN 1990, Eurocode 3, Steel structures.
4. DS/EN 1990, Eurocode 6, Masonry structures.

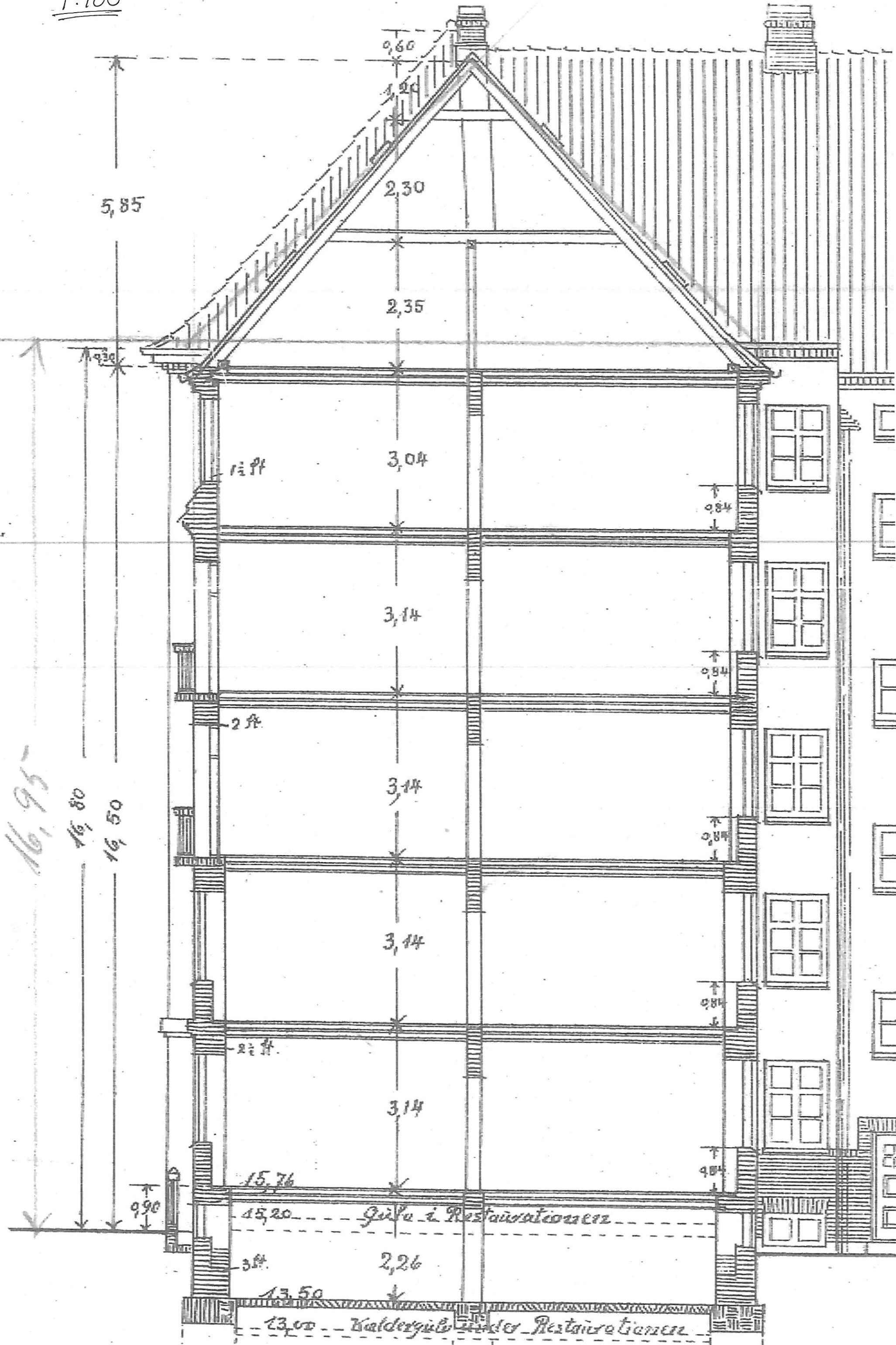
Parametres:

Type of construction:	Simple and traditional.
Consequence class:	High CC3
Ψ - faktorer, payload:	$\Psi_0 = 0,5, \Psi_1 = 0,3, \Psi_2 = 0,2$
Ψ - faktorer, snow:	$\Psi_0 = 0,6, \Psi_1 = 0,2, \Psi_2 = 0,0$
Ψ - faktorer, wind load:	$\Psi_0 = 0,6, \Psi_1 = 0,2, \Psi_2 = 0,0$
Characteristic payload:	Eurocode 1, table 6.2.
Plaster on 2 sides of walls:	0,4 kN / m ²
Dead load floor:	1,6 kN / m ²
Steel	S235
Masonry	Stone 15 and lime KC 60/40/850

Tasks:

1. Describe choice of "Type of Construction" and "Consequence Class"
2. Describe static model wall 1 and wall 2.
3. Set up load combination for ultimate limit state (ULS) and serviceability limit state (SLS)
4. Calculate internal forces and reactions in new supports.
5. Design new supports, construction, materials
6. Check support bearings.
7. Describe demands to fire resistance.
8. Describe demands for execution with respect to safety coordination during design phase.

1:100



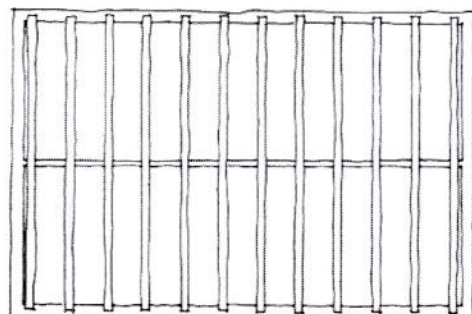
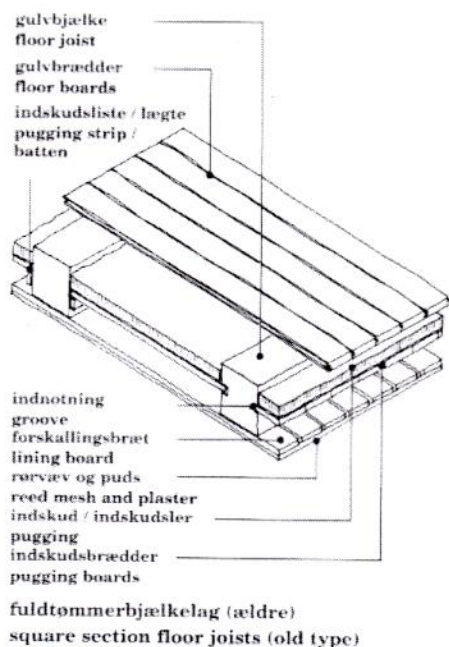
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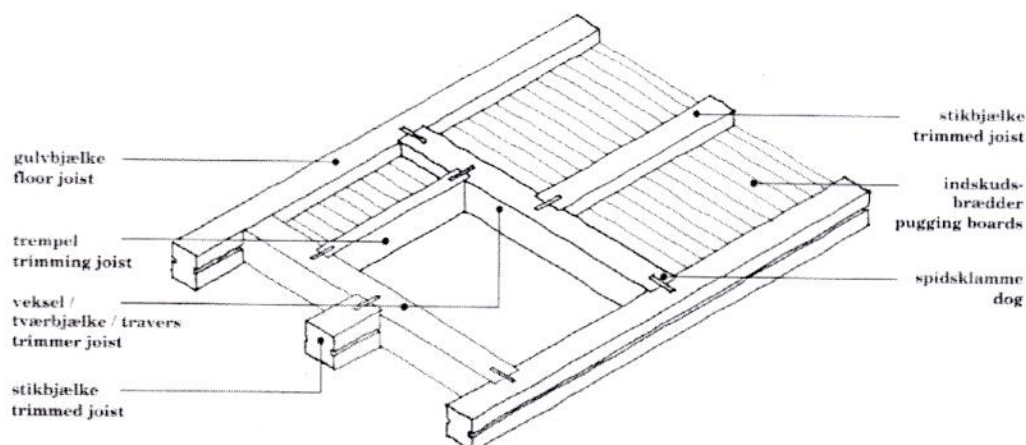
ACTIVE IN

Typer, etagedæk / Types, suspended floors



tværbjælkelag
short-span joists

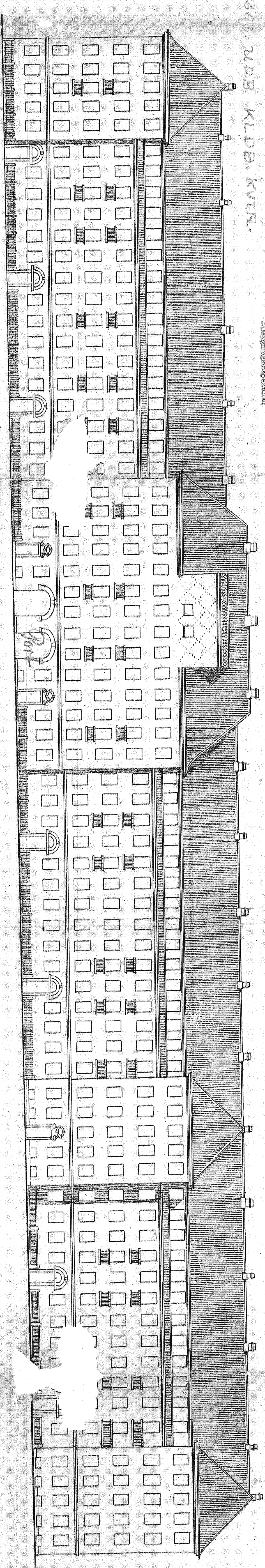
Bestanddele, etagedæk Components, suspended floor



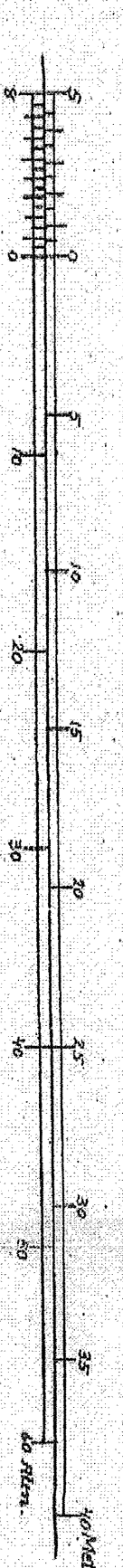
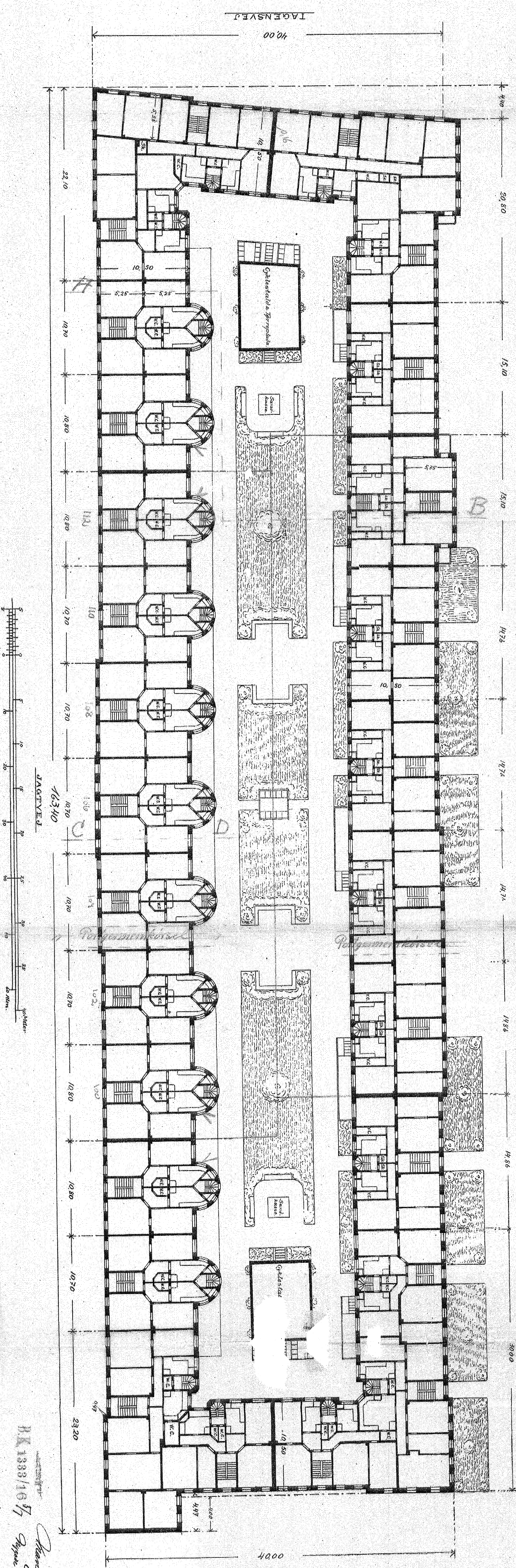
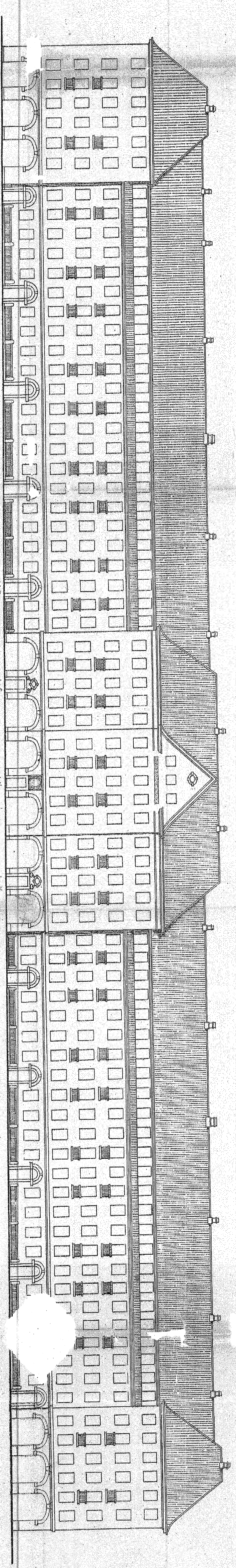
HJ. AL JAGTVEJ OG TAGEVNSVEJ
MÅT. N. 4613. UD. KLDB. KVR.

Byggeselskabet
111 S. 17. 1915. 50
København

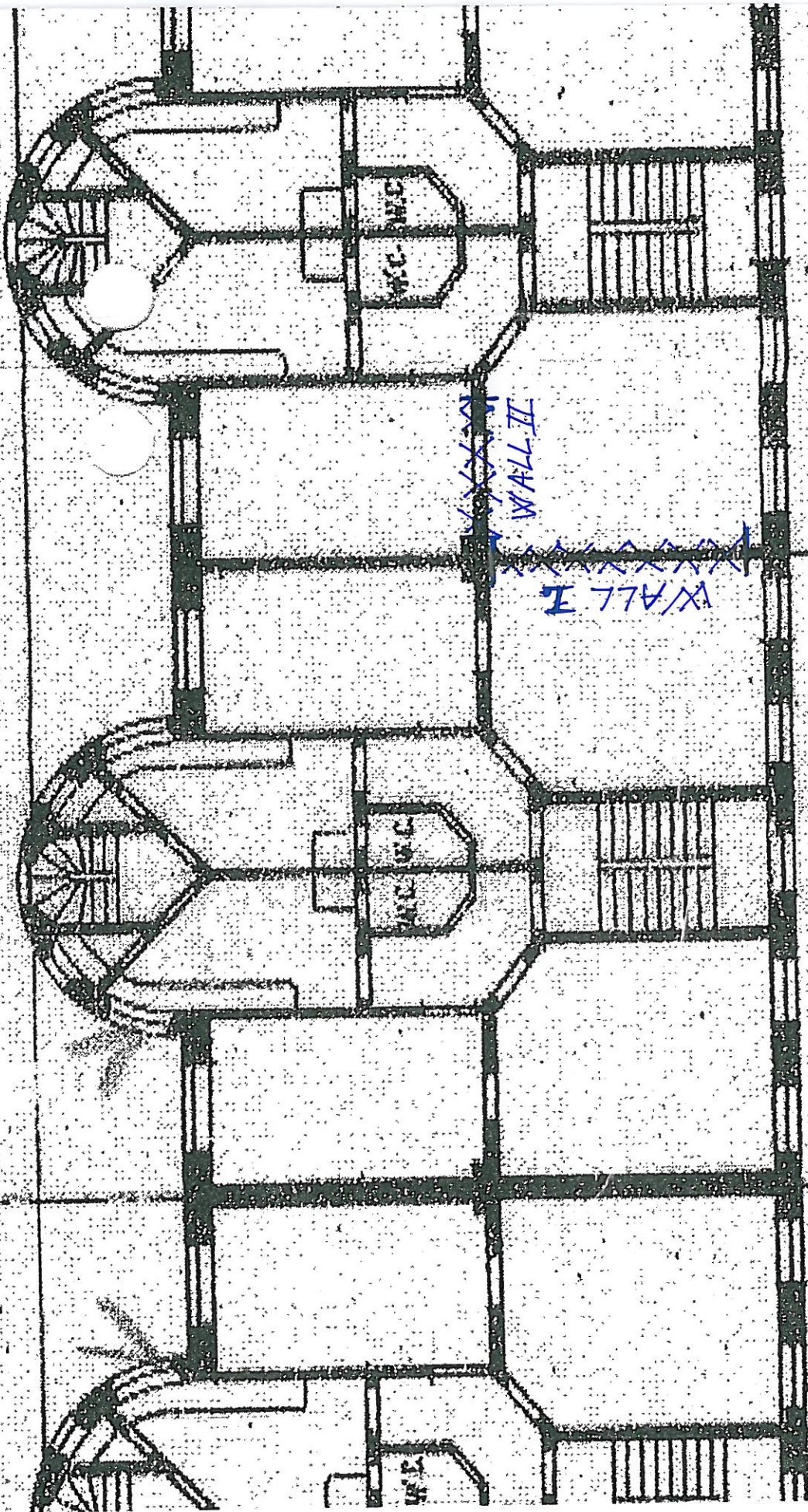
FACADE MOD GULDBERGSGADE



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