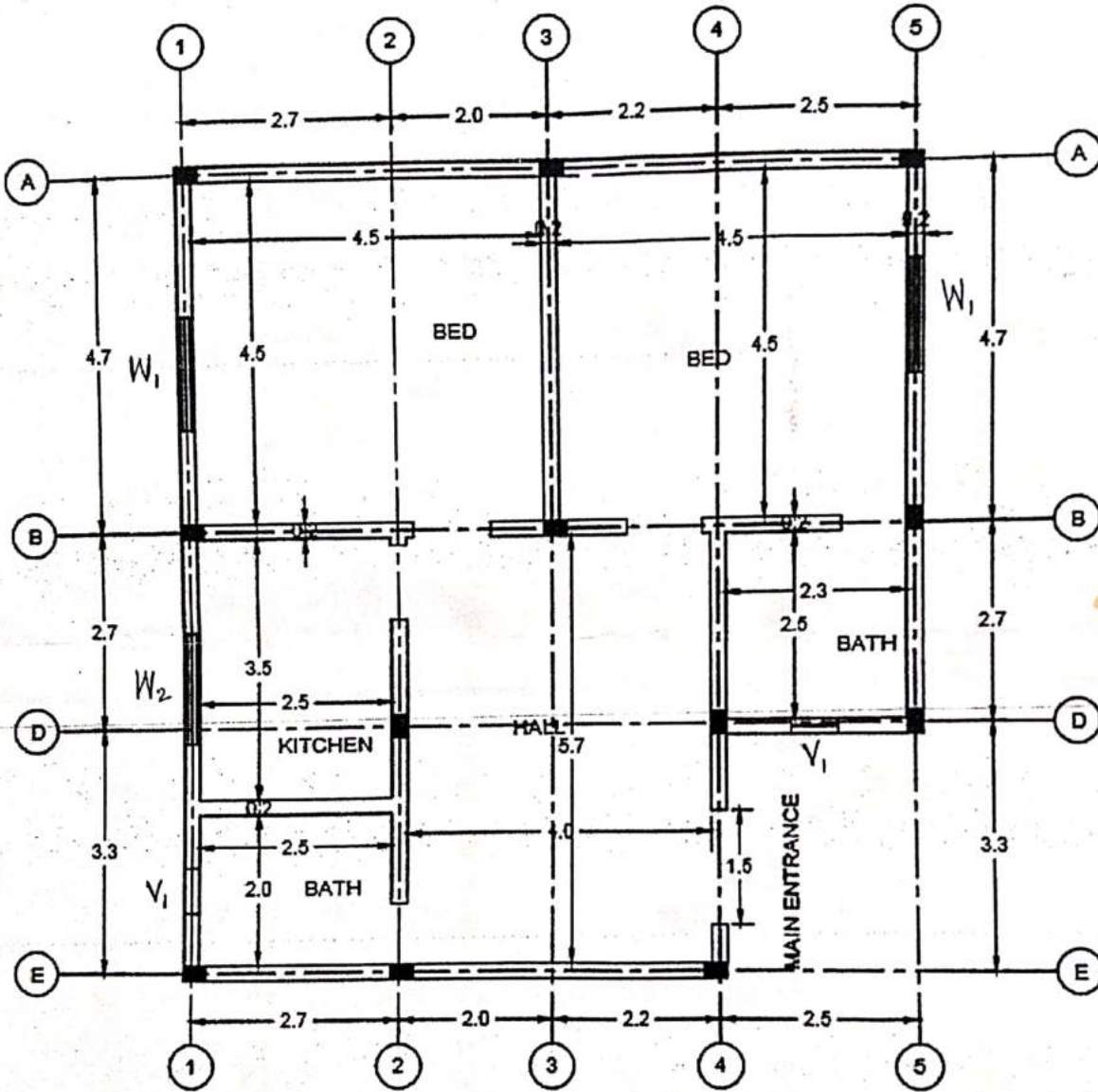


Draw with scale (1:50), Architectural Plan showing all detail and dimensions. Width of all walls and beams are 20 cm. Dimensions of columns and windows are listed in the given tables:

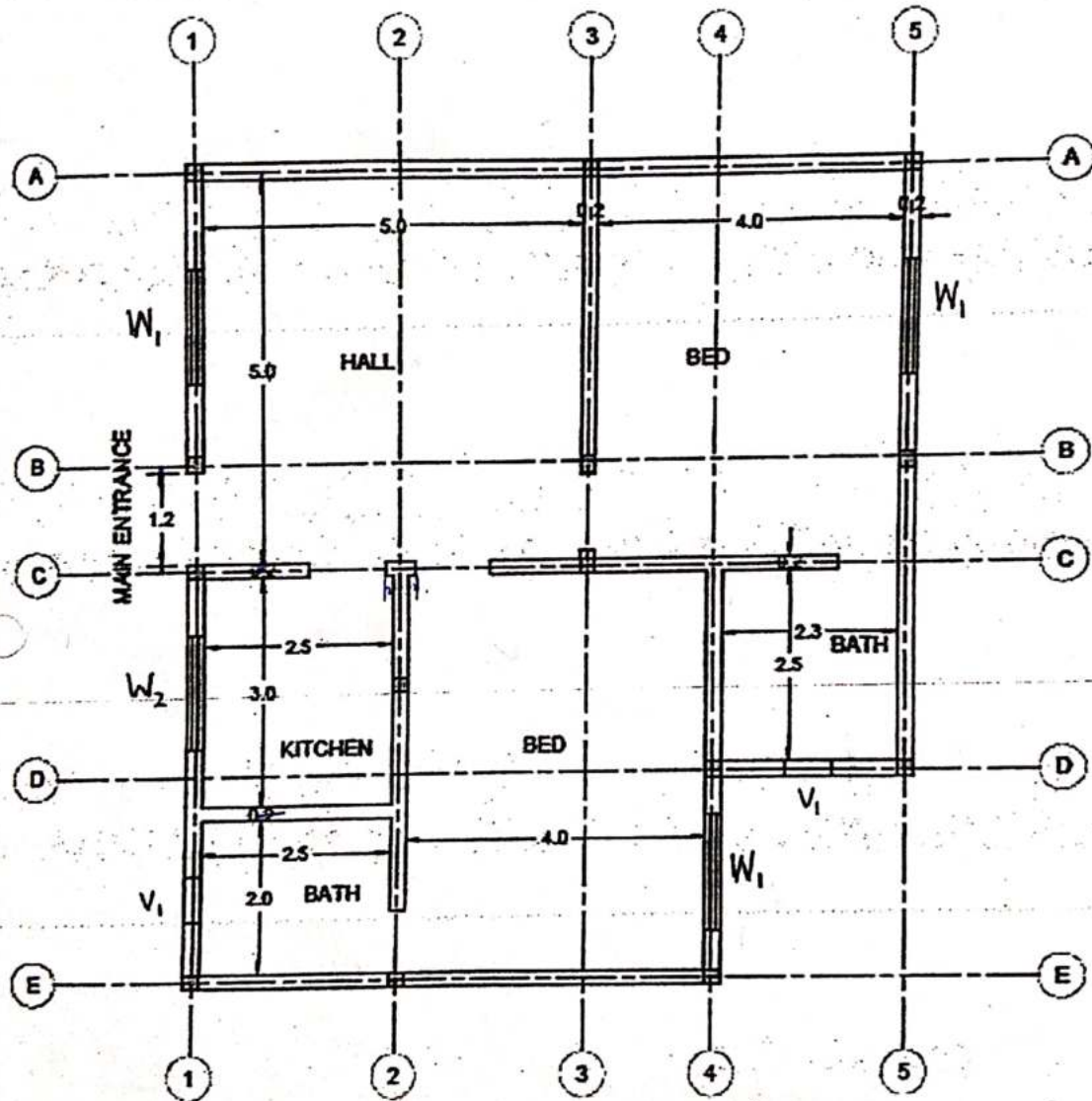


ARCHITECTURAL PLAN

Component	Mark no.	Dimensions (cm)	Remark
Column	C1	30×20	
	C2	20 × 30	
Window	W1	160 × 20	Room & Hall Window
	W2	120 × 20	Kitchen Window
Ventilator	V1	60 × 20	Bathroom Ventilation

Prepared by : Er Afzal Husain Khan

Draw with scale (1:50), Architectural Plan showing all detail and dimensions. Width of all walls and beams are 20 cm. Dimensions of columns and windows are listed in the given tables:

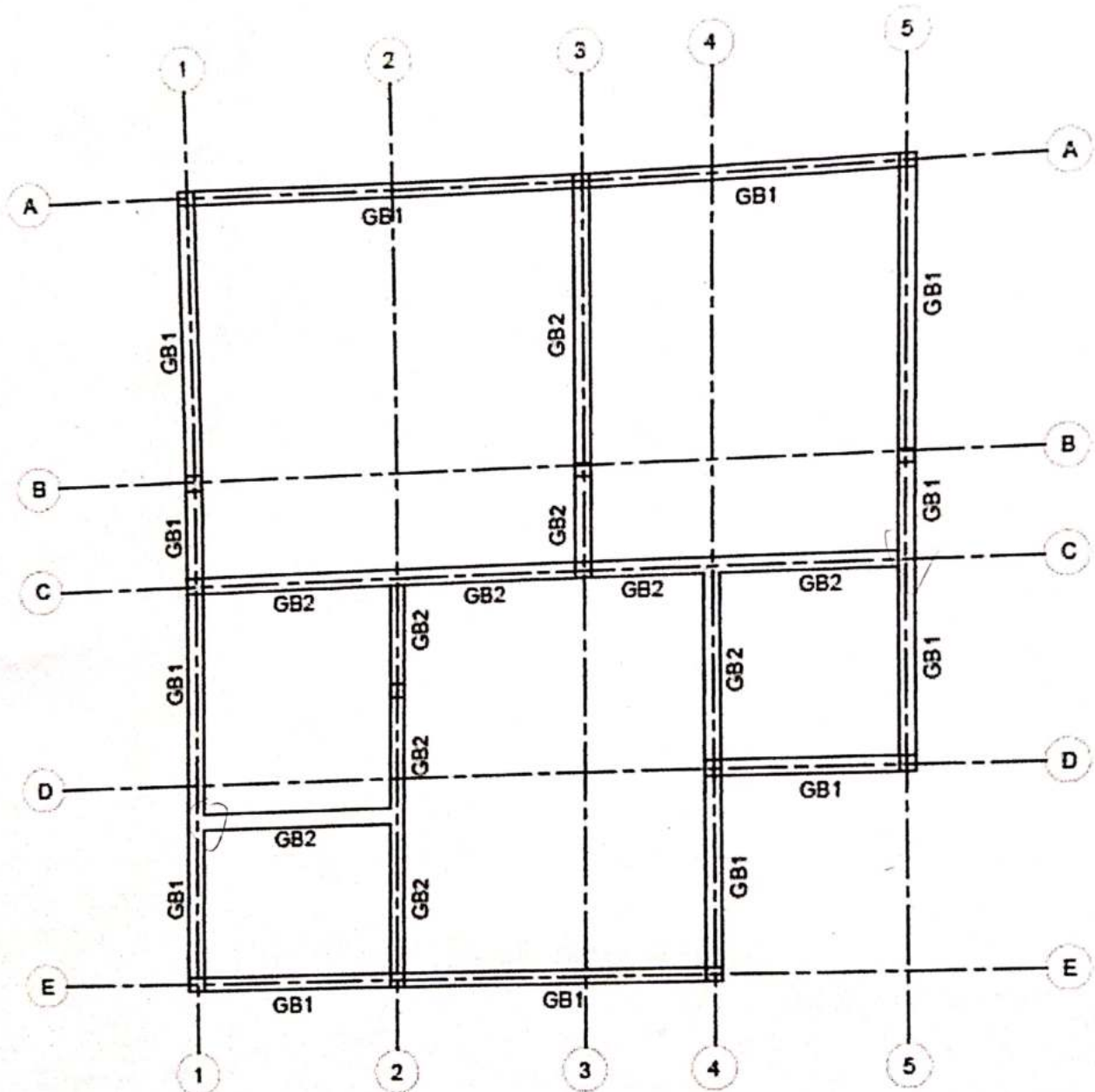


ARCHITECTURAL PLAN

Component	Mark no.	Dimensions (cm)	Remark
Column	C1	20 × 20	20
Window	W1	160 × 20	Room & Hall Window
	W2	120 × 20	Kitchen Window
Ventilator	V1	60 × 20	Bathroom Ventilation

Prepared by : Er Afzal Husain Khan

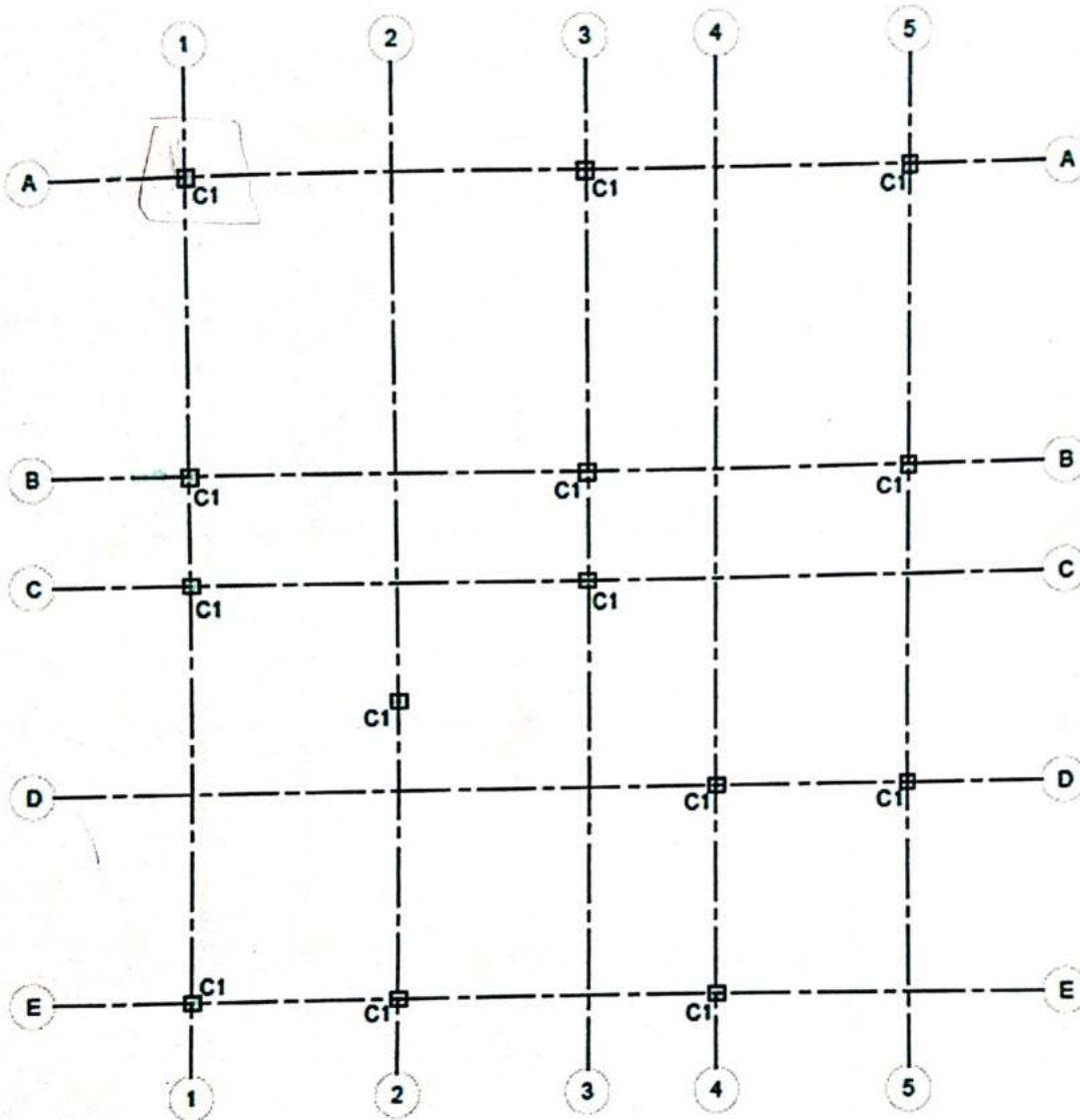
For the Architectural Plan of a Two Bed room house shown below . draw with scale (1:50) Structural Plan. The width of all walls and beams are 20 cm and dimensions of columns and beams are listed in the given tables:



Component	Mark no.	Dimensions (cm)	Remark
Beam	GB1	20 × 40	Cross-section
	GB2	20 × 50	"
Column	C1	20 × 20	"

Draw with scale (1:50), of the following Footing Plan of a Two Bed room house :

الأبعاد من C1



فرسانة حلبة
Reinforced concrete

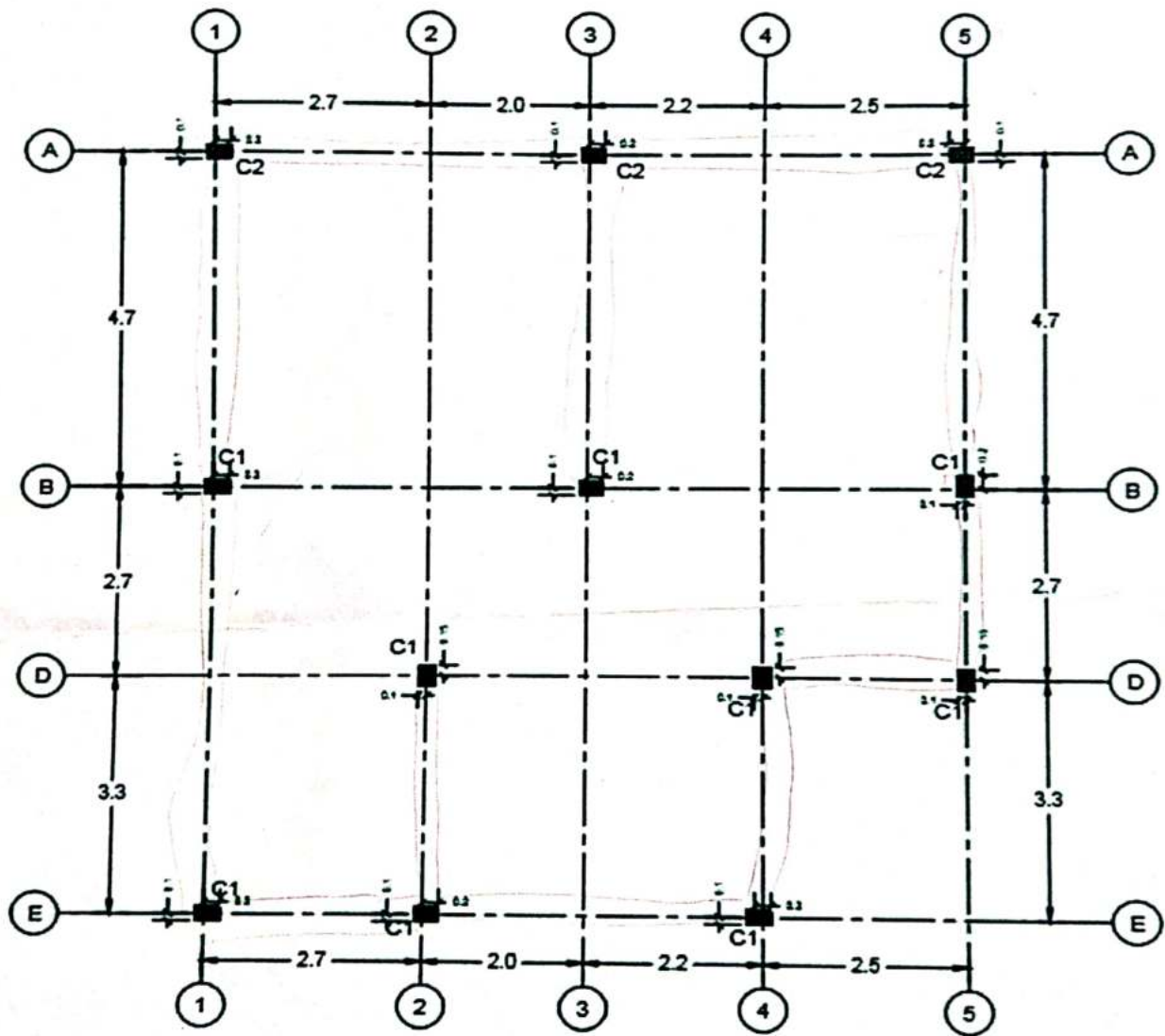
فرسانة غير حلبة
Plain concrete

Footing mark no.	Size of RC footing			Size of PC footing			Reinforcement			
	Length	Width	Thickness	Length	Width	Thickness	Short direction		Long direction	
F1	1000	1000	350	1200	1200	100	5Ø14/m	-	5Ø14/m	-

Column	C1	20 × 20
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Scale من mm لا cm تقريباً ب scale
وبعداً نفس المقياس

Draw with scale (1:50), of the following Footing Plan of a Two Bed room house :



COLUMN AND AXIS PLAN

Footing mark no.	Size of RC footing			Size of PC footing			Reinforcement			
	Length	Width	Thickness	Length	Width	Thickness	Short direction		Long direction	
F1	1000	1000	350	1200	1200	100	5Ø14/m	-	5Ø14/m	-

Column	C1	30cm x 20cm
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C2

20 x 30 cm²

Draw with scale (1:10), Longitudinal and Cross-section (at end and middle of beam) of beam showing all detail and dimensions. Width and depth of beams are 200 mm and 300 mm. Width of end support is 300 mm Middle support is 200 mm Clear span = 3.0 m Effective span = 3.20m

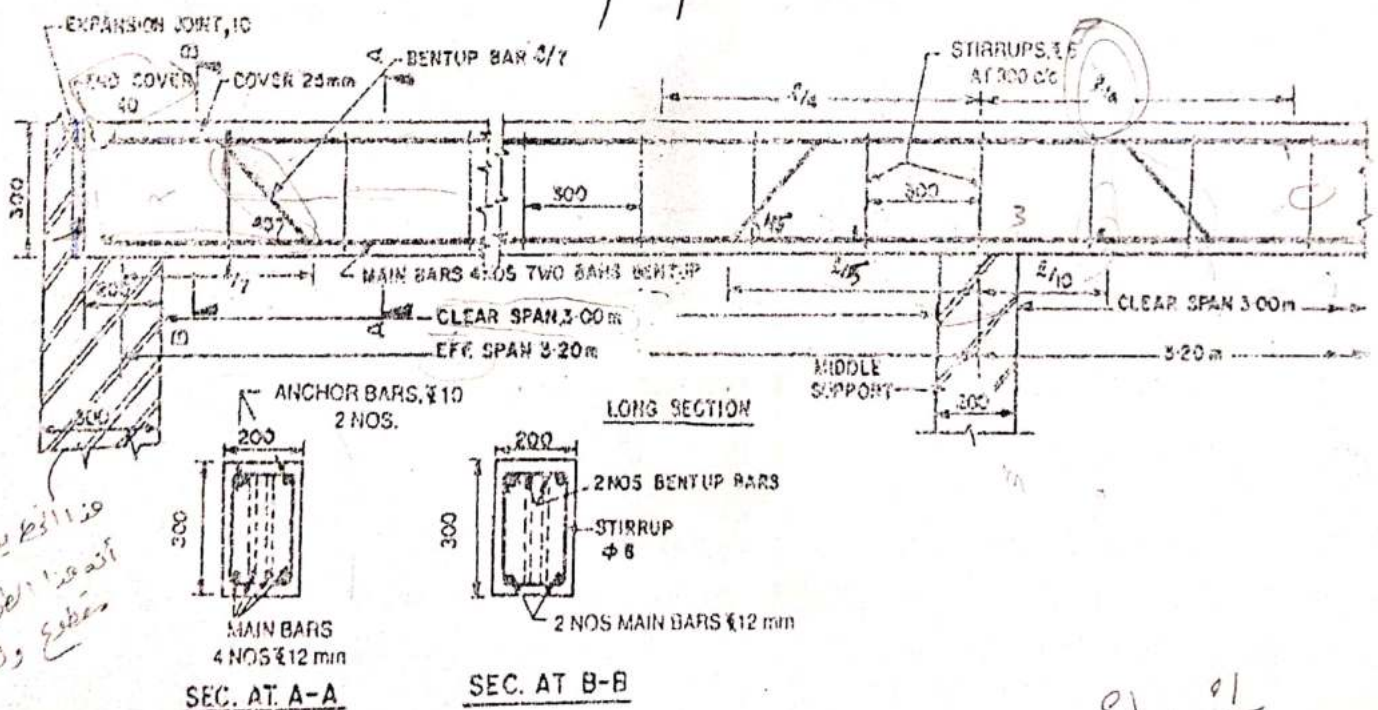
Expansion joint = 10 mm

End cover = 40 mm, Clear cover = 25 mm

Top reinforcement = main bar 2nos $\phi 12$ mm

Bottom reinforcement = main bar 4nos $\phi 12$ mm,

two bent-up Anchor bars = 2nos $\phi 10$ mm Stirrups $\phi 6$ @ 300 cm c/c



$$L = \text{clear span} \times \frac{1}{2} \times \frac{1}{2}$$

$$L_e = \text{Reff}$$

Draw with scale (1:¹⁰50), Longitudinal and Cross-section of Cantilever beam showing all detail and dimensions. Width of the wall is 350 mm.

Width of beam is 300 mm and depth of beam are 150 mm (free end) and 450 mm (support). Clear span = 3.20 m

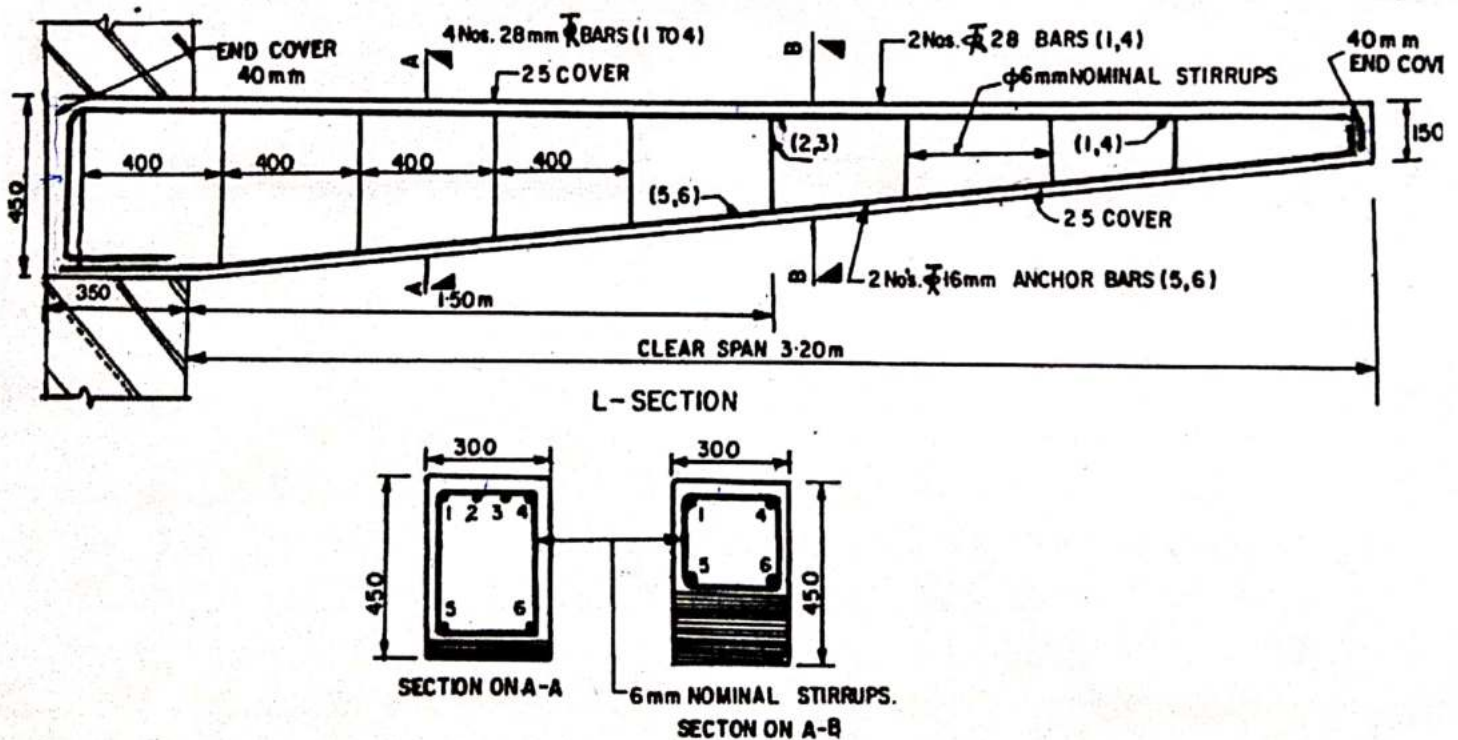
Expansion joint = 10 mm

End cover = 40 mm Clear cover = 25 mm

Top reinforcement = main bar 2nosØ12mm

Bottom reinforcement = main bar 4nosØ12mm,

two bent-up Anchor bars = 2nosØ10mm Stirrups Ø6 @300cm c/c

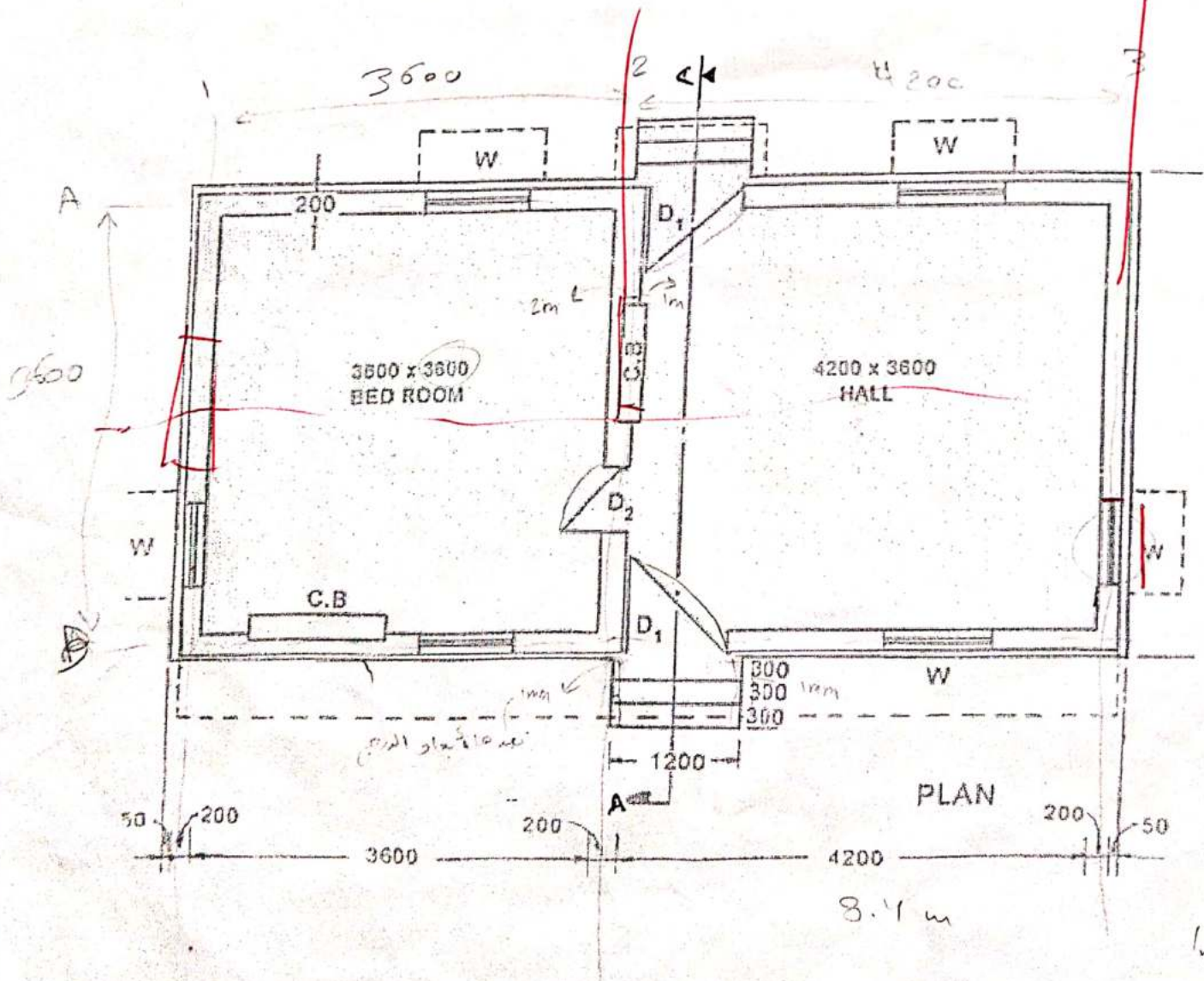


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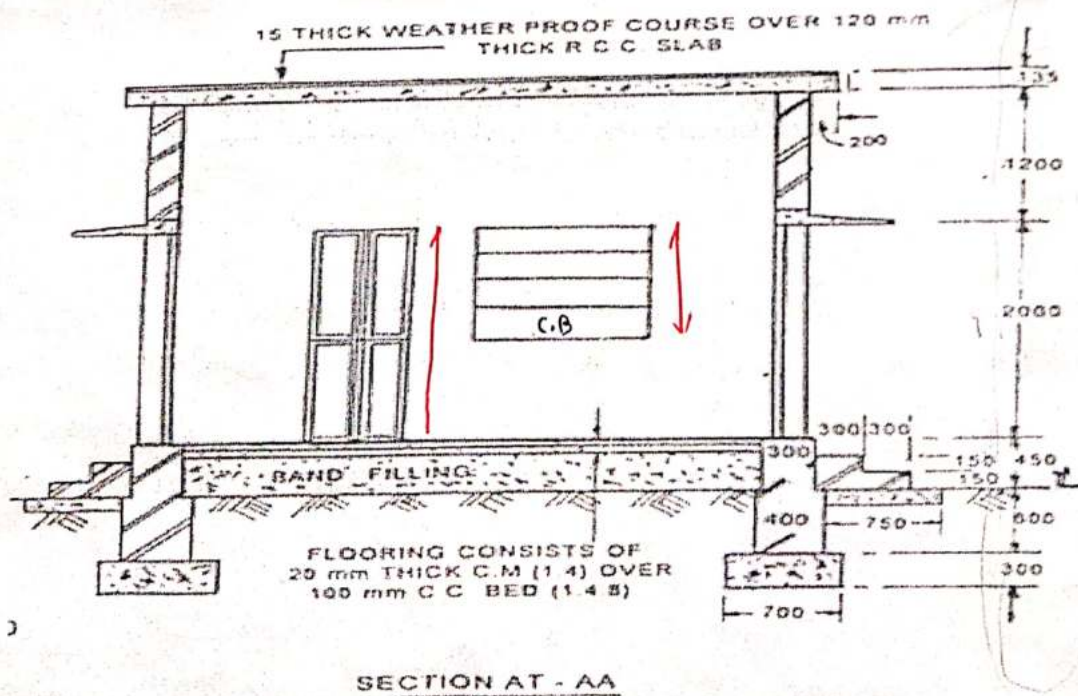
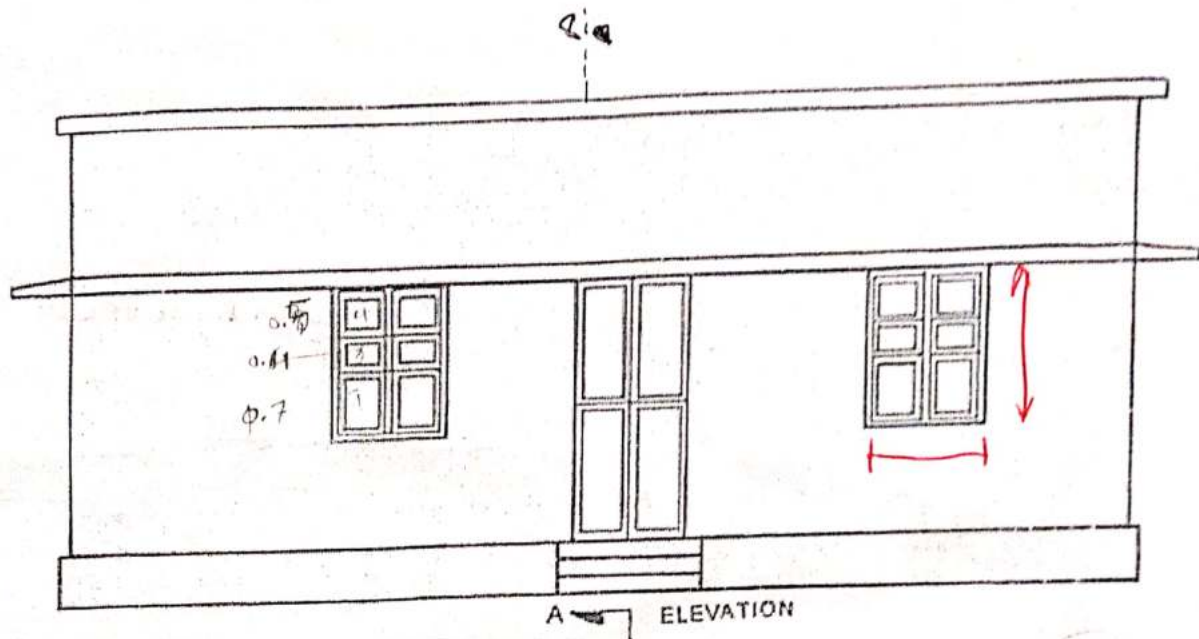
Draw (a) plan, (b) section through A-A and (c) front elevation of a two room residential building. (Scale of 1:50)

Designation	Numbering	Size	Specification
Door	D ₁	1000X2000	Fully Panelled Door
Door	D ₂	900X1800	Fully Panelled Door
Window	W	1000X1200	Window
Cupboard	C.B	150 X1200	

جميع الأبعاد بالمليمتر



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Draw with scale (1:10), Longitudinal and Cross-section (at end and middle of beam) of beam showing all detail and dimensions. Width and depth of beams are 200 mm and 300 mm. Width of end support is 300 mm Middle support is 200 mm Clear span = 3.0 m Effective span = 3.20m
Expansion joint = 10 mm
End cover = 40 mm, Clear cover = 25 mm
Top reinforcement = main bar 2nos $\phi 12$ mm
Bottom reinforcement = main bar 4nos $\phi 12$ mm,
two bent-up Anchor bars = 2nos $\phi 10$ mm Stirrups $\phi 6$ @ 300 cm c/c

1-way slab

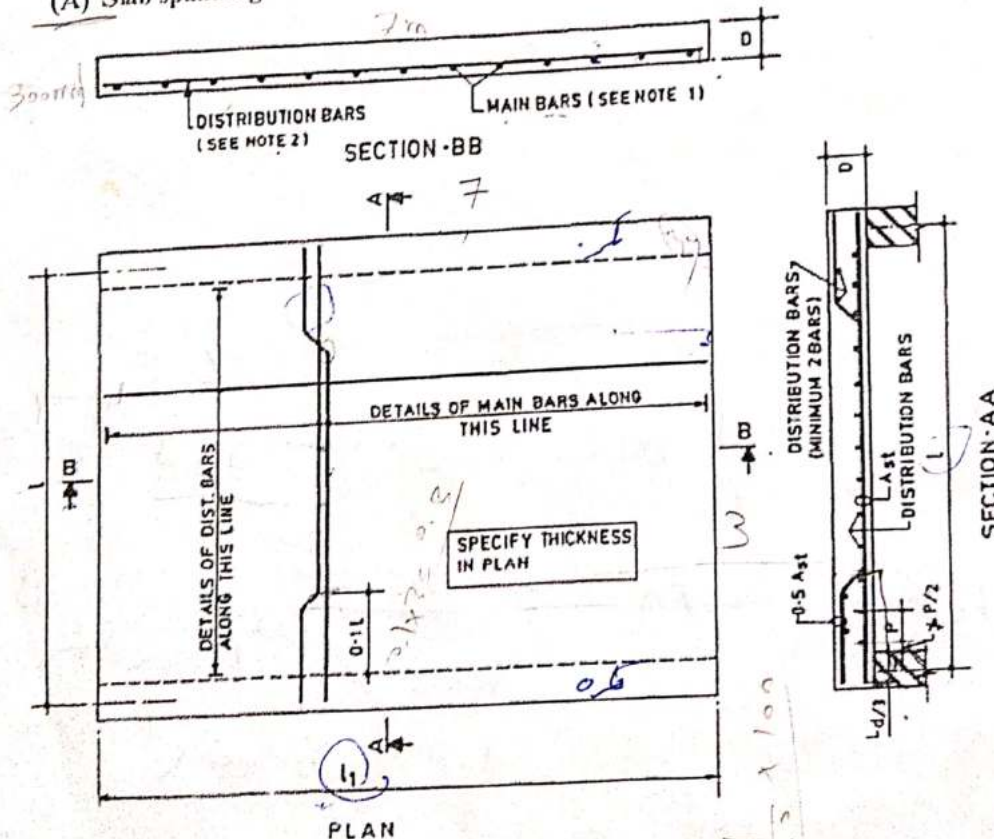
دابل في اليمين

2-way slab

$\frac{L}{w} < 2$

Draw with scale (1:10), of the following detailing drawings of slab :

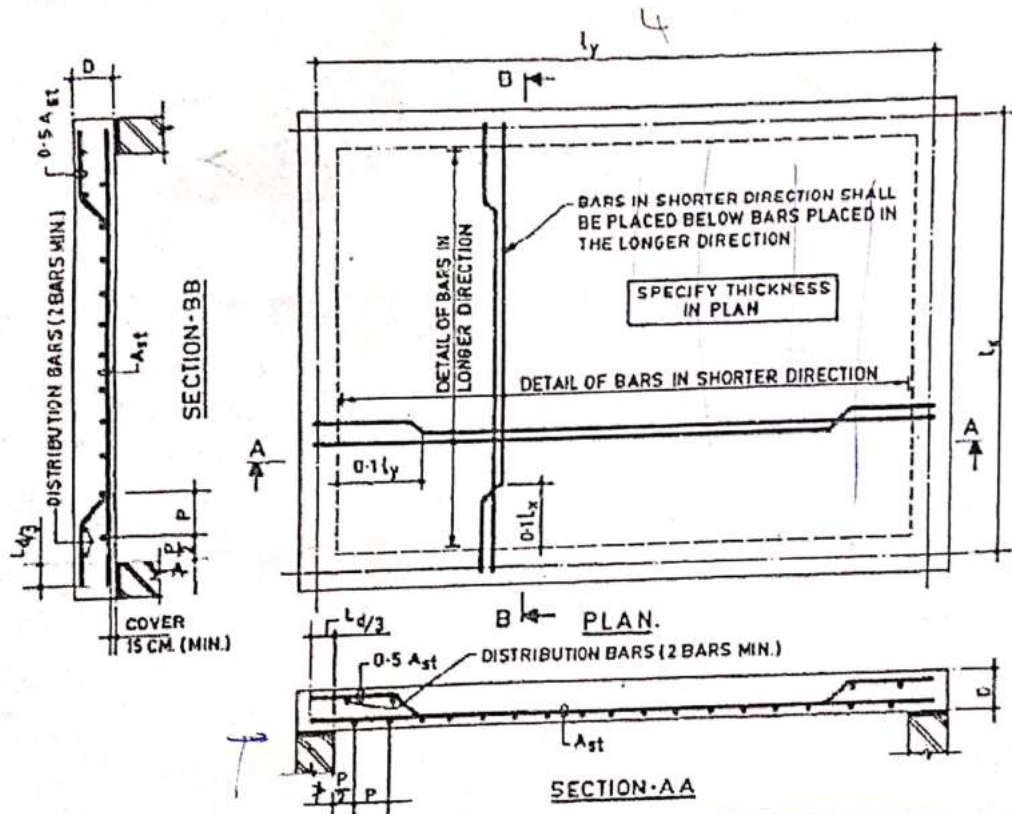
(A) Slab spanning in one direction (One-way slab)



مربع - short 6 $\phi 12$ / m²
مستطيل - Long

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(I) Slab spanning in Two direction (Two-way slab)



Aslab of size 6×4 m and Thickness
15cm with 4 bars
in one direction
in two way
short Rebar $6\phi 12$ / m
long $6\phi 10$ / m
Draw Plan
make section

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