

Reg. No. : .....

Name : .....

**Third Semester B.Tech. Degree Examination, October 2016  
(2013 Scheme)**

**13.306 : ENGINEERING DRAWING (MP)**

Time : 4 Hours

Max. Marks : 100

**PART – A : Machine Drawing**

Time : 2 Hours

Max. Marks : 50

Answer **any two** questions from Module – I and question from Module – II. Assume missing dimension if **any**.

**Module – I**

1. Draw the bottom half sectional elevation and an end view of a socket and spigot joint for connecting two C.I. pipes of  $\phi$  150 mm. (Refer Fig. 1).

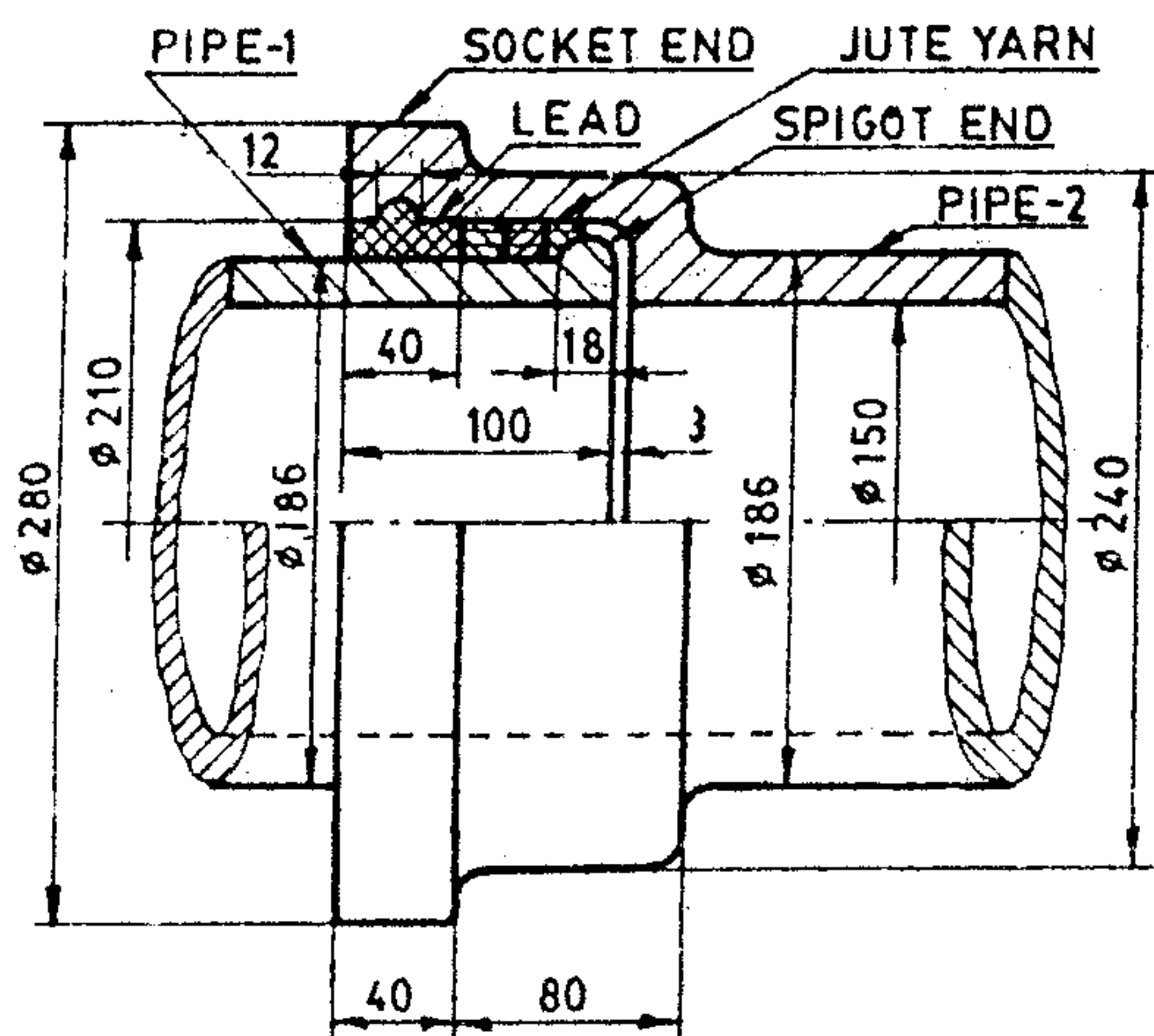


Fig. 1

2. Draw sectional elevation and plan of a single riveted double strap butt joint. Take thickness of plates as 10 mm.
3. Draw neat dimensioned sketches of the Lewis and Rag end type foundation bolts for  $\phi$  30 mm. (10×2=20 Marks)



Module - II

4. Fig. 2 shows an isometric view of Knuckle joint. Draw
- 1) Bottom half sectional elevation and
  - 2) Side view looking from the forked end side.

The drawing should be fully dimensioned as per standards. Take suitable scale.

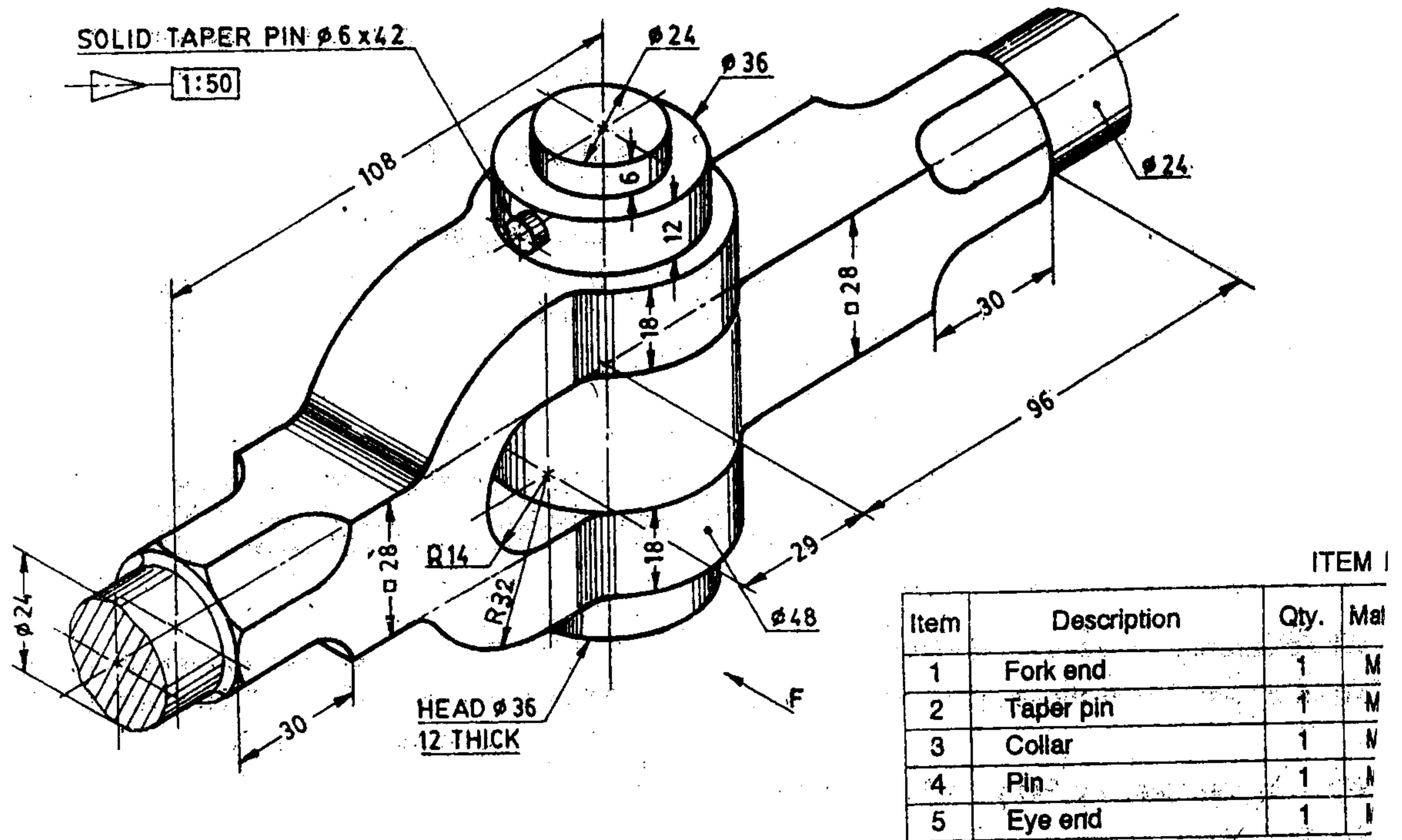


Fig. 2



**PART - B : Civil Engineering Drawing and Estimation**

Time : 2 Hours

Max. Marks : 50

Answer **any one** question **each** from Module - III and Module - IV.  
(Assume suitably missing data if any).

(2x25=50 Marks)

**Module - III**

1. The line sketch of a residential building is shown in the fig. I.

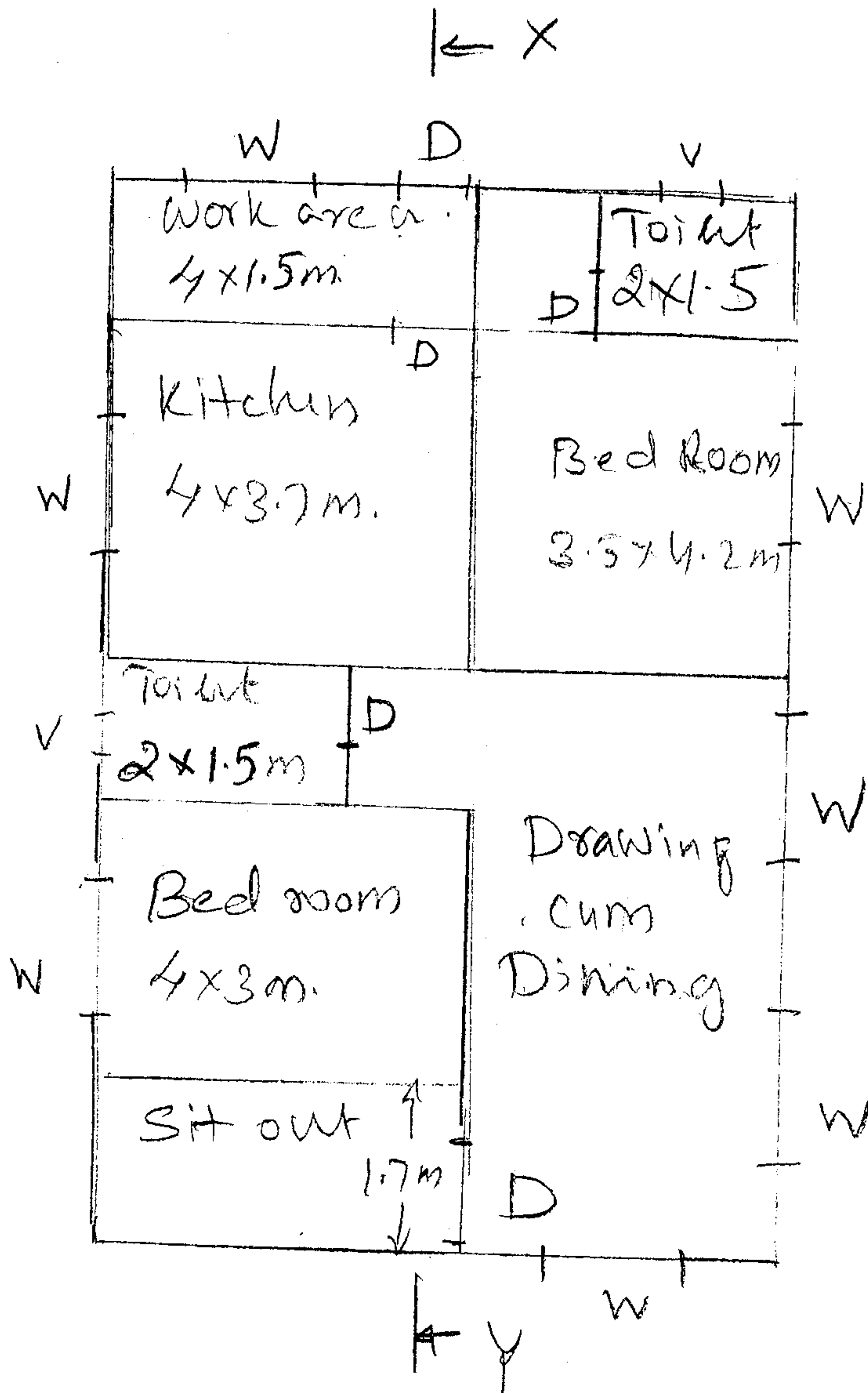
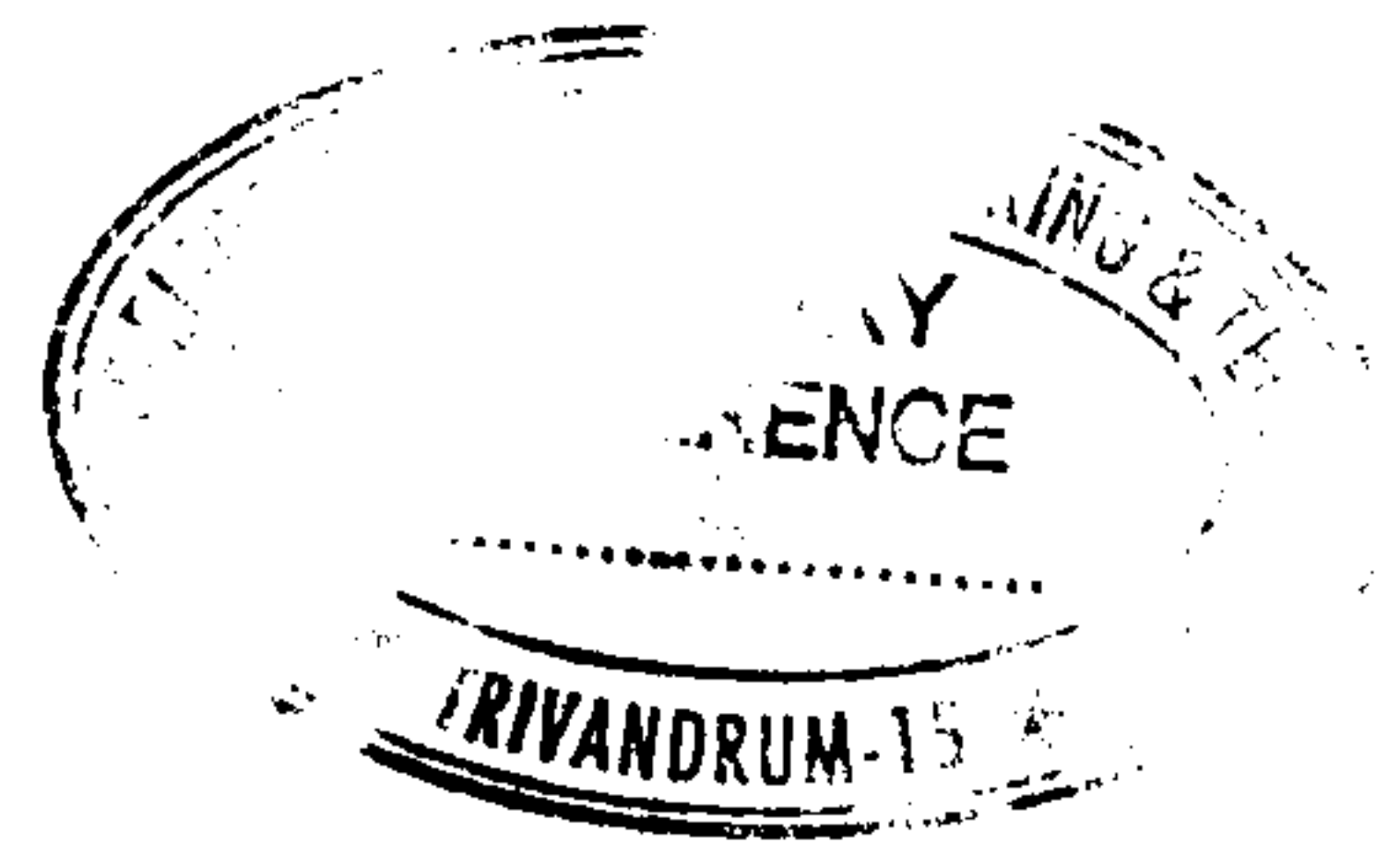


Fig. I

Draw the following :

- a) Plan at sill level
- b) Section on X-Y
- c) Front Elevation.

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A - 6568

**Specification :**

- Bed concret 80x15 cm is 1:4:8 P.C.C.,
- Foundation and Basement : R.R. masonry in C.M. 1:6, size of foundation - 60x60 cm, size of Basement - 45x45 cm,
- Super structure wall : Brick masonry in C.M. 1:5, 23 cm thick, Height of walls 3 m. Assume suitable size for doors, windows and ventilators.

2. The line sketch of a small scale industrial building is shown in the fig. II.

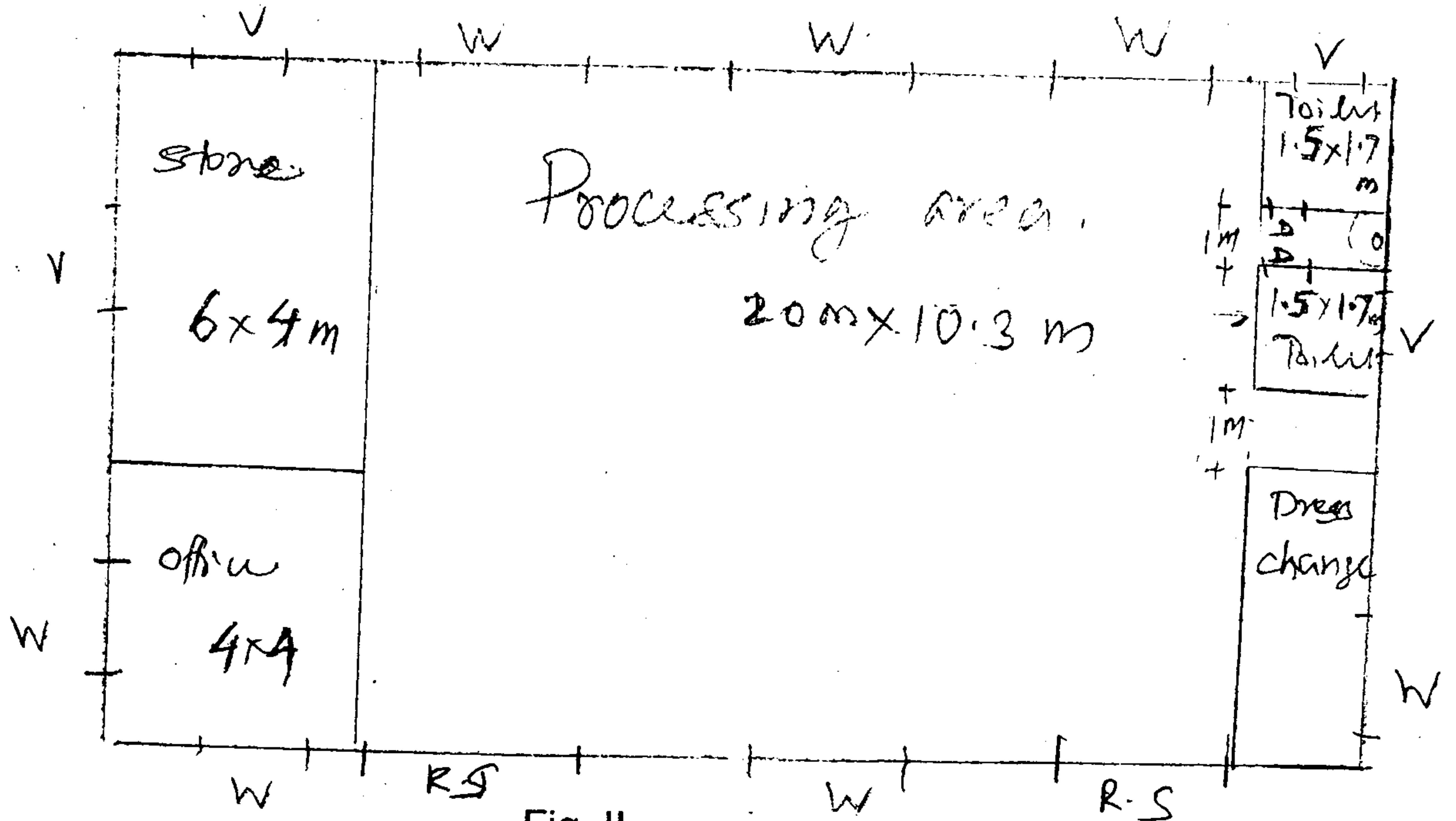


Fig. II

Draw the following :

- Plan at sill level.
- Section on X-Y.
- Elevation.

Schedule of openings :

W - 150x140 cm

R.S. - Rolling shutter - 300x300 cm

V - 100 cm x 60 cm

Specification :

**Foundation :**

- Bed concrete 90x20 cm in 1:4:8 P.C.C.
- R.R. Masonry 60x60 cm in C.M. 1:5, Basement - R.R. masonry 45 cm width and 40 cm height Super structure :  
Brick masonry in C.M. 1:5, Roof steel truss with GI sheet roof.



### Module - IV

3. Estimate the quantities of the following items of work for the building shown in the fig. 1.

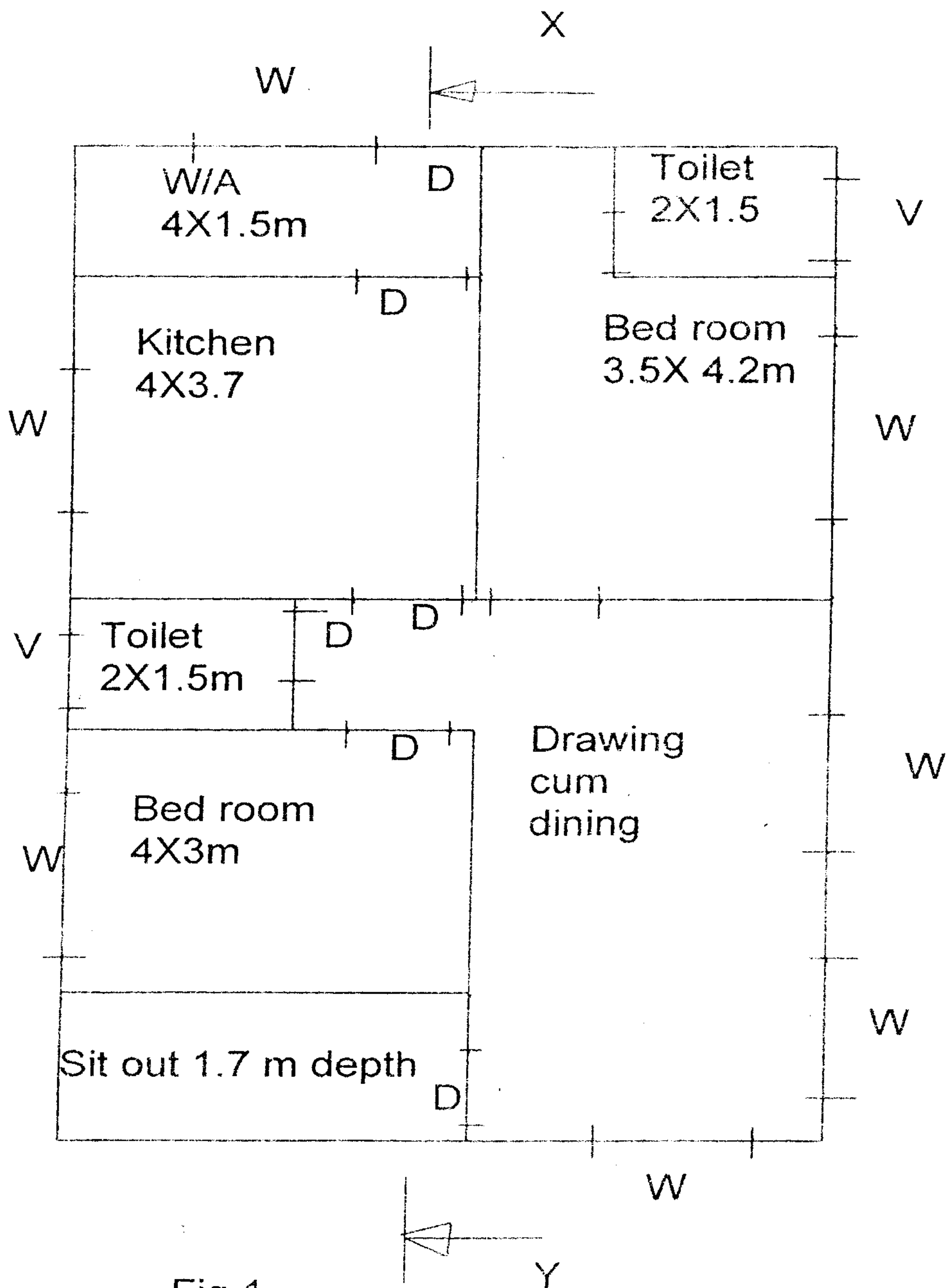


Fig 1

- a) Plastering of walls in C.M. 1:4.
- b) R.C.C. lintels and sunshades.



4. Estimate the quantities of the following items of work for the building shown in the fig. 2.

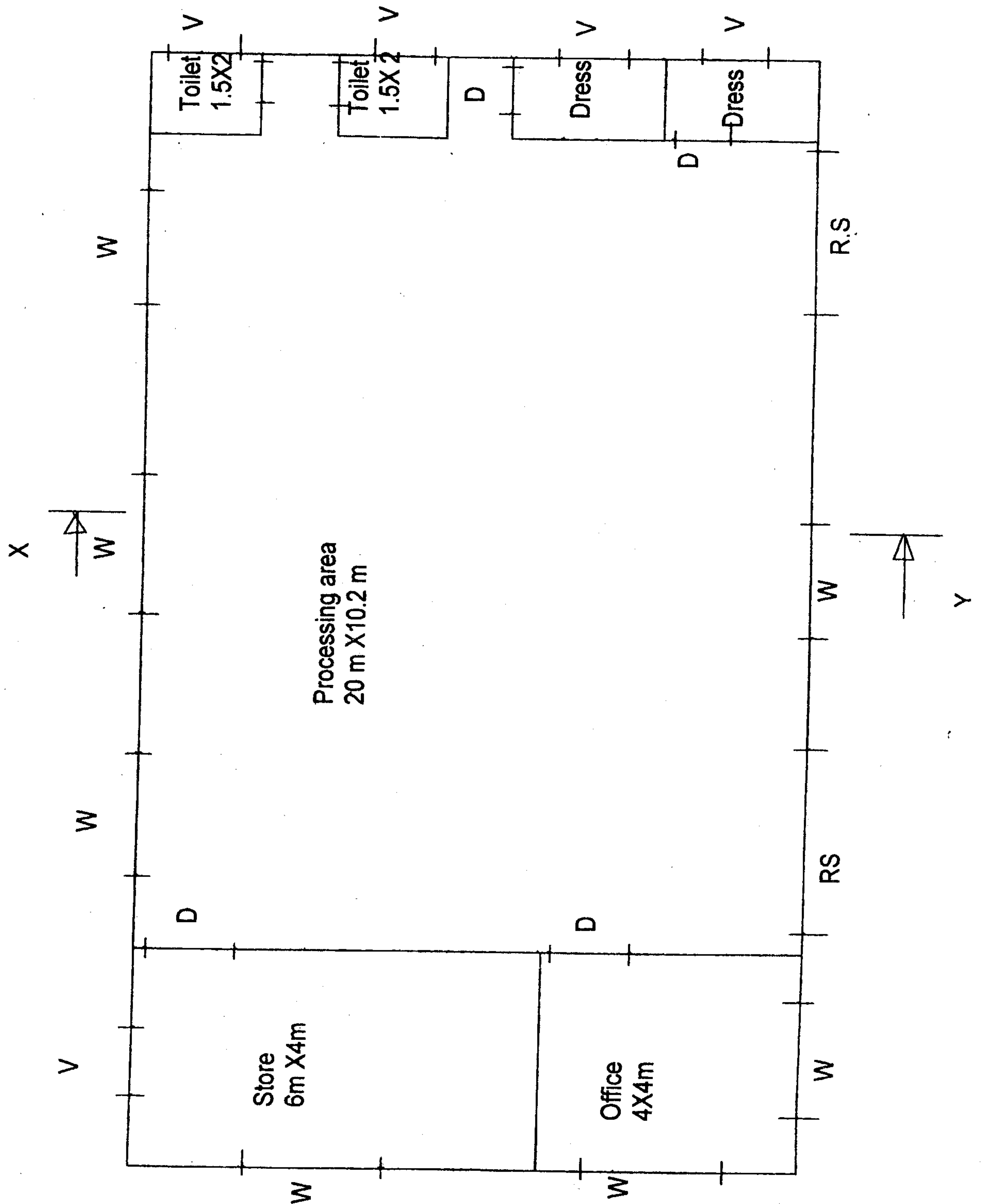


Fig. 2

- a) Earth work excavation for foundation.
- b) Brick masonry for super structure.

