




① Title Bar - [blue tab, Auto CAD 2007]

② Menu Bar. - [File, Edit, view. . . .]

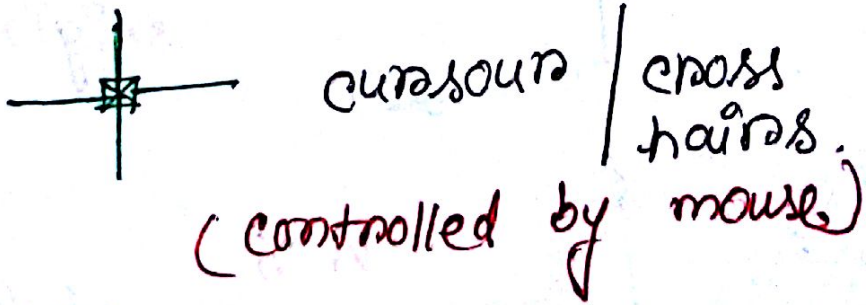
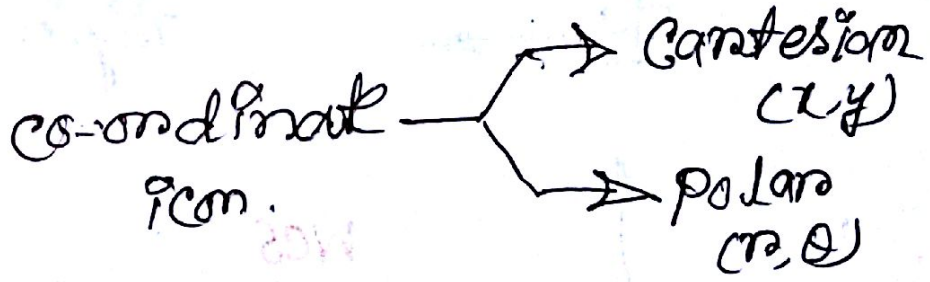
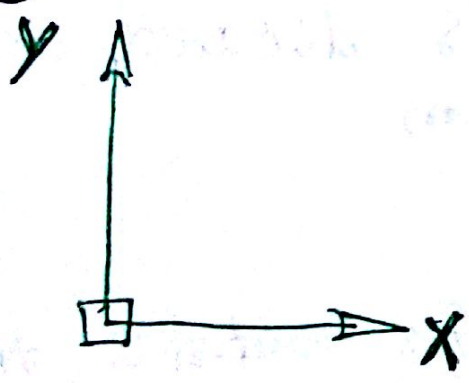
③ Tool Bar. - [Standard Tool Bar. 
Draw " " 
Modify " " 
Others.

④ Drawing Area.

⑤ Model / Layout Tab.

⑥ Command window

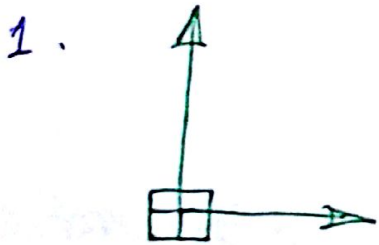
⑦ Status Bar.



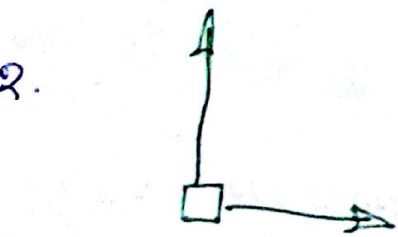
Drawing lines — Draw Bar
 — Menu Bar (Draws)
 — Command Window.

- 1. Line drawing.
- 2.
- 3. (0,0) (15,10)
- 4. 30°, 15 m.

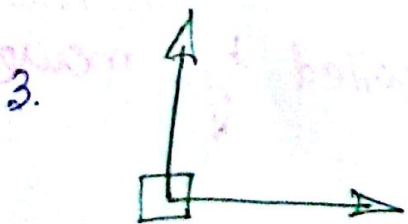
5. command bar (i) ves
 (ii) ob.



WCS = World co-ordinate system.
 origin is located on icon.

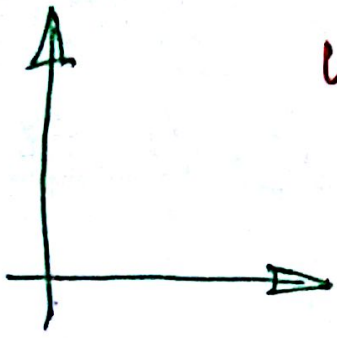


WCS
 origin is outside the screen.



WCS
 origin is on/off the screen.

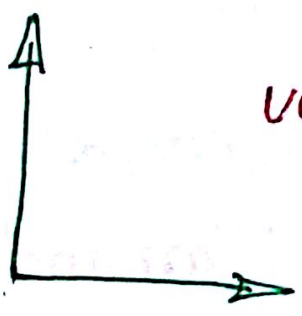
4.



VCS = User defined coordinate system.

Origin is located on screen.

5.



VCS

origin is outside the screen.

—x—

① @ UCS. when user gonna write any point.

UCS \Rightarrow WCS

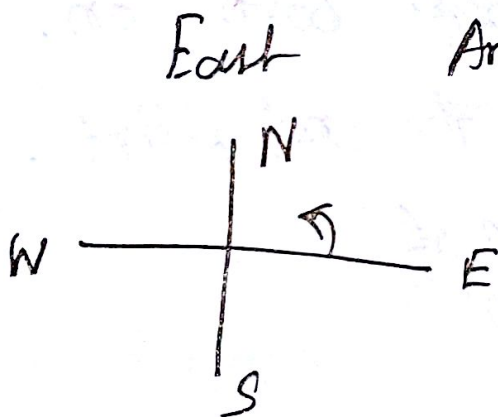
- ① Command
- ② UCS
- ③ W.

Unit -

① Format - unit

② Type - Eng - f. inch

Arch - 0'-0.1/16"



Drawing Limit.

① Format

② Drawing Limits.

③ point.

④ status - grid.

Hand sign

① Draw a line.

② Hand sign \rightarrow move / send press

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① zoom real time.

② zoom window.

⊛ Undo ↙

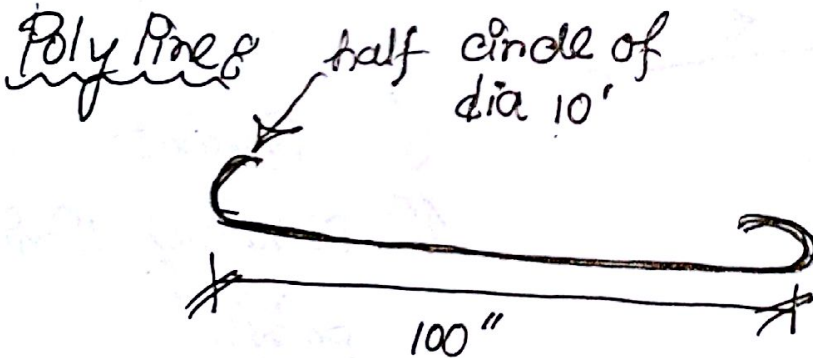
⊛ Redo ↘

⊛ ORTHO
= Horizontal, verticale.

⊛ OSNAP - Right ⇒ setting
⇒ ok ⇒ line.

ORTHO & Osnap both on.

click to the end point.



① Polyline.

② A ⇒ enter.

④ ce

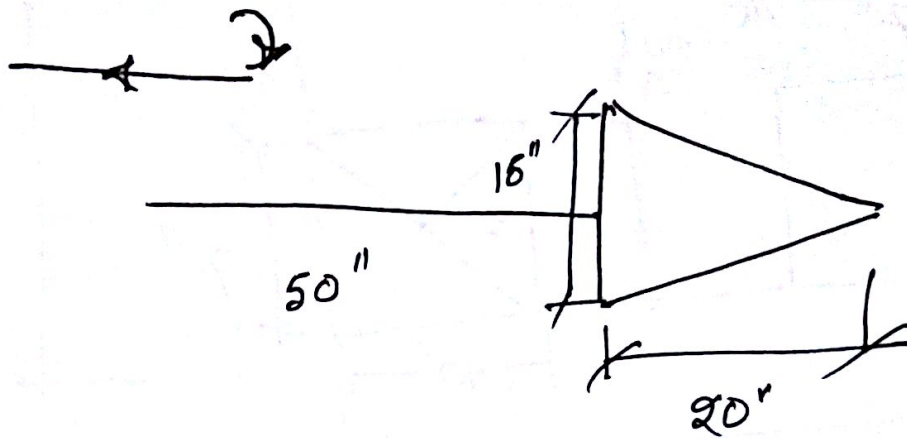
⑫ @ 0, -5

⑮ @ 0, -10

⑯ L - enter

⑰ @ 100, 0

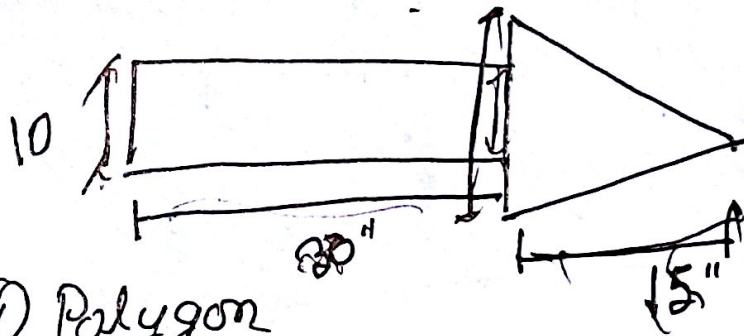
Angle. (i) Arc (ii) @ (0, -5)
 (iii) angle (iv) -180
 (v) (-100, 0)



(i) Polygon line.

(ii) # (iii) W (iv) 15
 @ 50, 0 (v) 0 (vi) @ (20, 0)

#



H.W

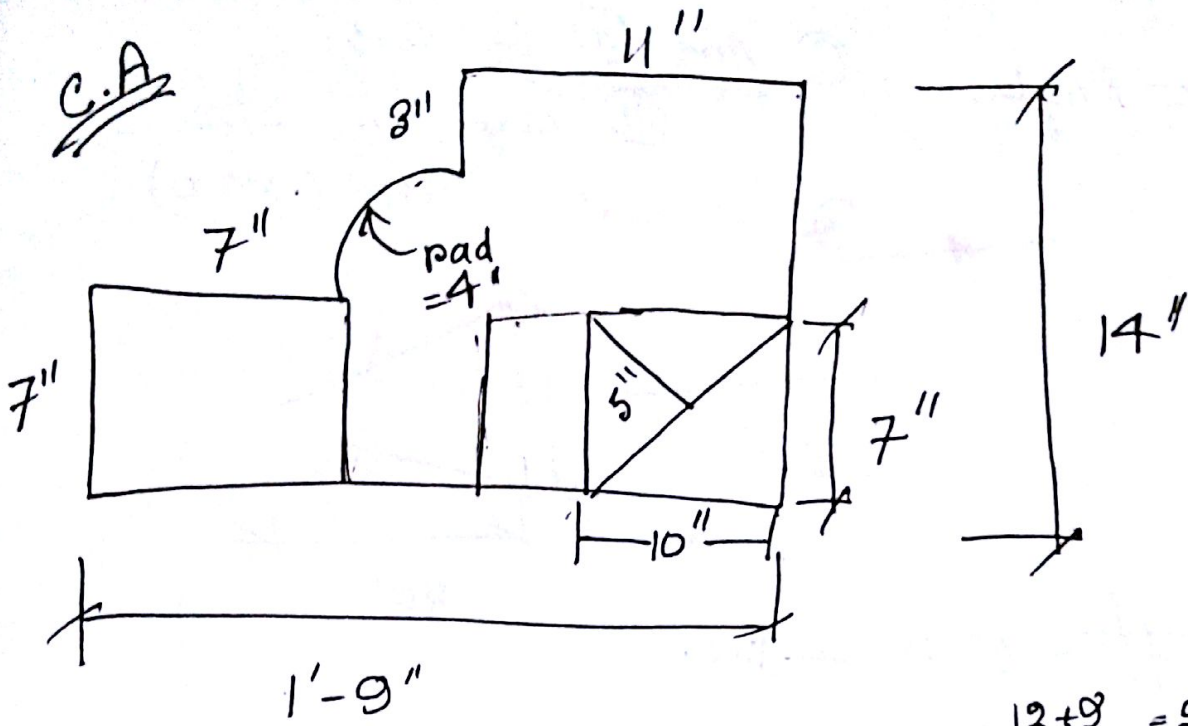
#

(i) Polygon
 (ii) 6 (iii) I/c (iv) 90

Rectangle - (i) A (ii) 120 (iii) 30

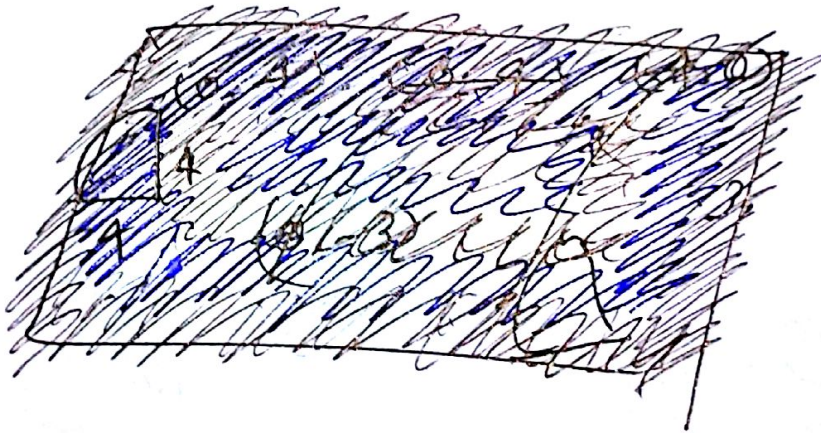
circle -

C.A



$$12 + 9 = 21'$$

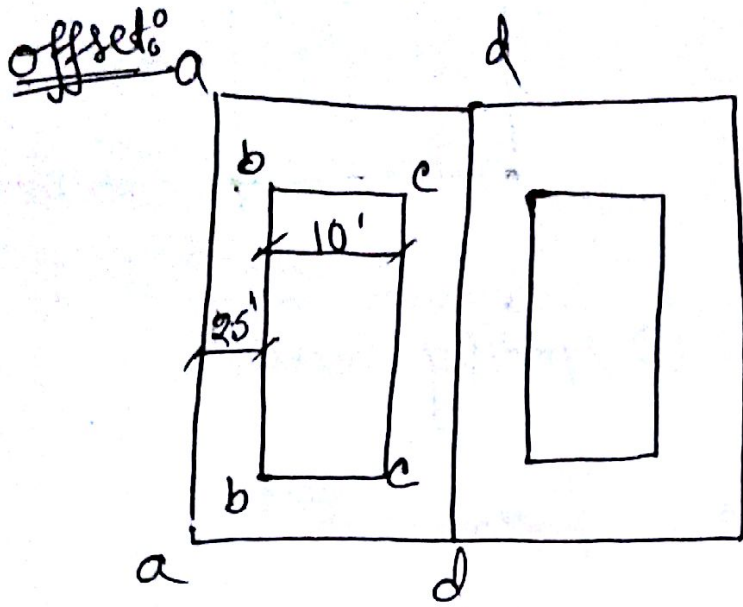
(0, -4) (-3, 0)



Civil drawing

The modify bars.

mirror es 2 en.
A en.



① offset
→ specify

② 2.5

③ offset

④ 10'

① Line

② a, d

③ offset.

④ object.

⑤ 2.5

① extend.

② upper line.

③ click object. ④ enter ⑤ extend.

then → mirror

Copy



Trim

① draw object

② select scissors

③ select excess line

Array

① object select

② enter.

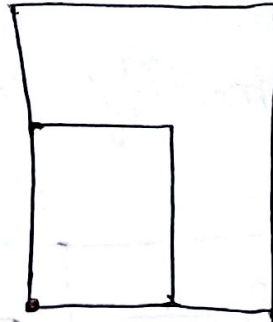
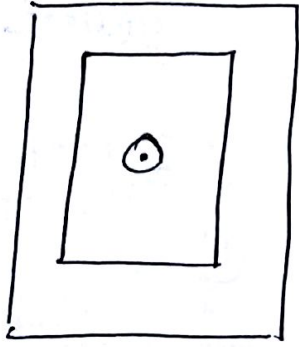
③ array ④ Preview

move enter.

Rotate follow command.

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select obj → enter.



According to base point

① specify scale.

stretch

Hatch brick.

Next class

Single line text with special characters.

27/11/12

CAD

- ① Single line. — every line same obj
- ② Multi line. — selects every line as one obj

double click while changing the front and size.

The options will appear.

H.A ⇒ To know the special connectors like % % U. ⇒ gets underlined

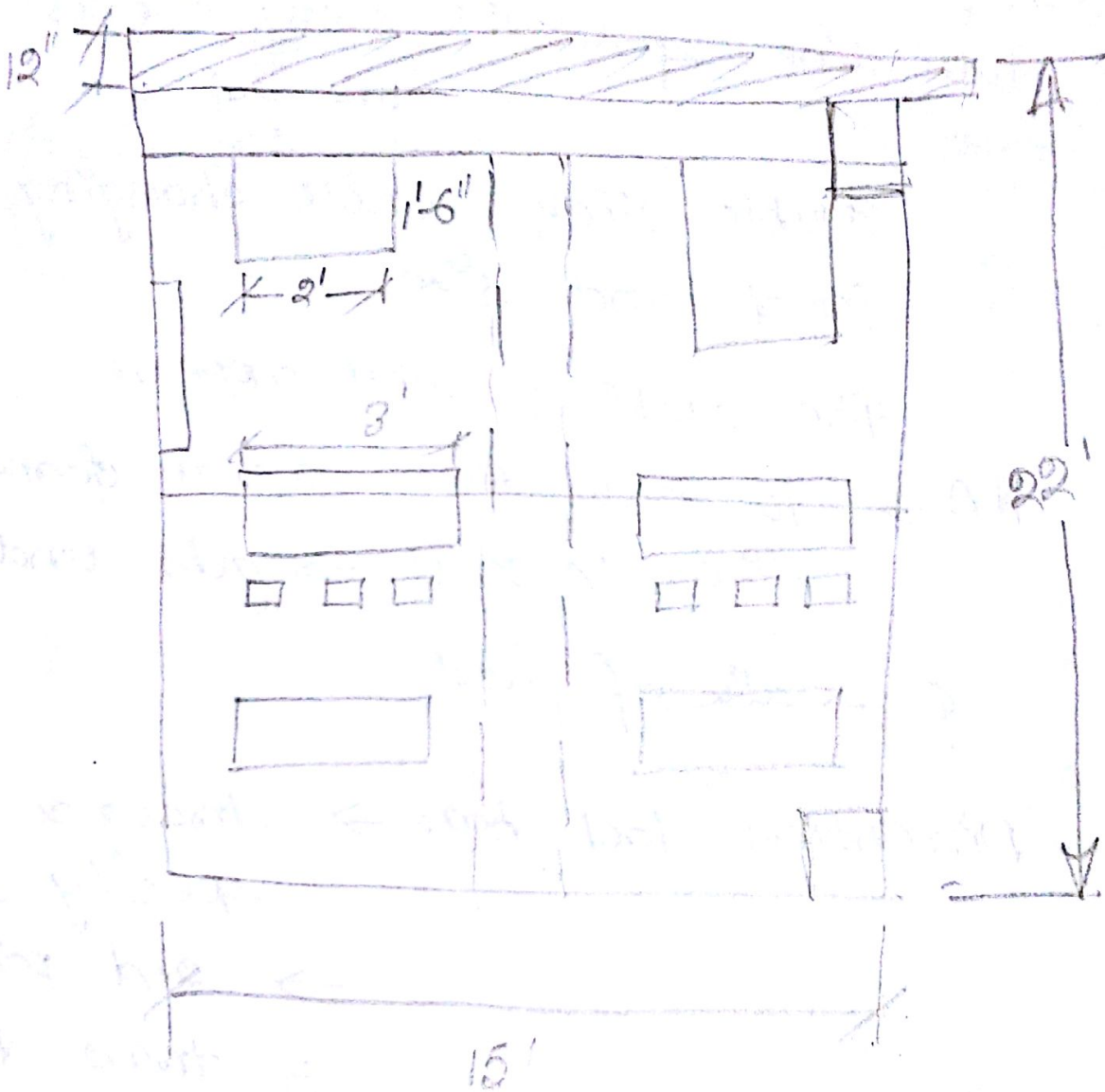
ϕ → dia of rod.

Dimension tool bar → draw a line.
→ specify 1st & 2nd point.

→ draw the mouse to right.

① * Baseline, continuous.

② * Dimension Layers



Layers — wall
 doors
 Column
 Beam
 Furniture.

AUTOCAD

10/2/14.

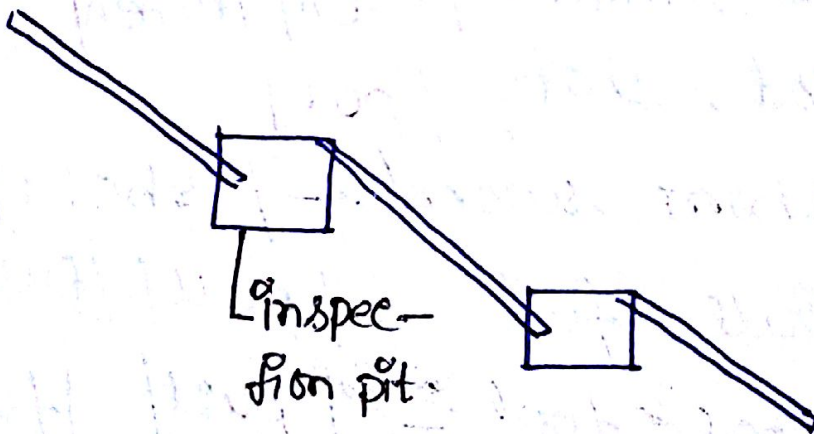
Report - 1st class after mid term.

Fixters - to bring waters to a point.

Soil matters + used waters \Rightarrow safely discharged.

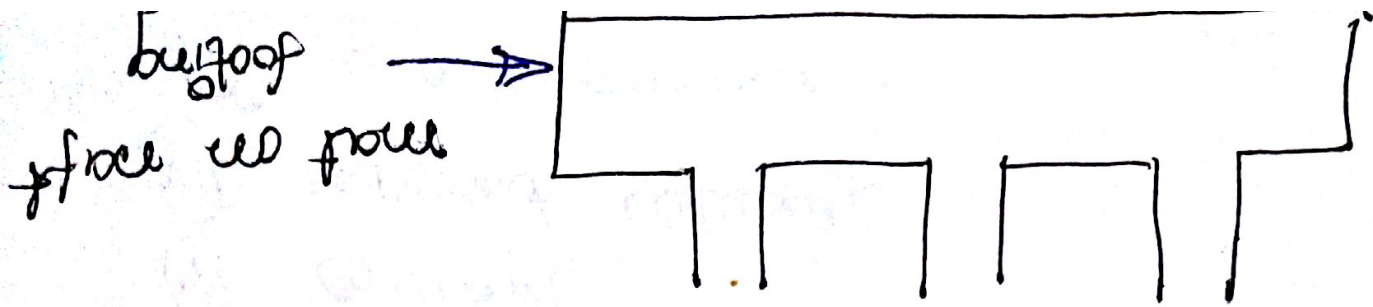
Its a kind of underground waters reservoir \Rightarrow septic tank

- slope change - to flow easily
- bend
- joint

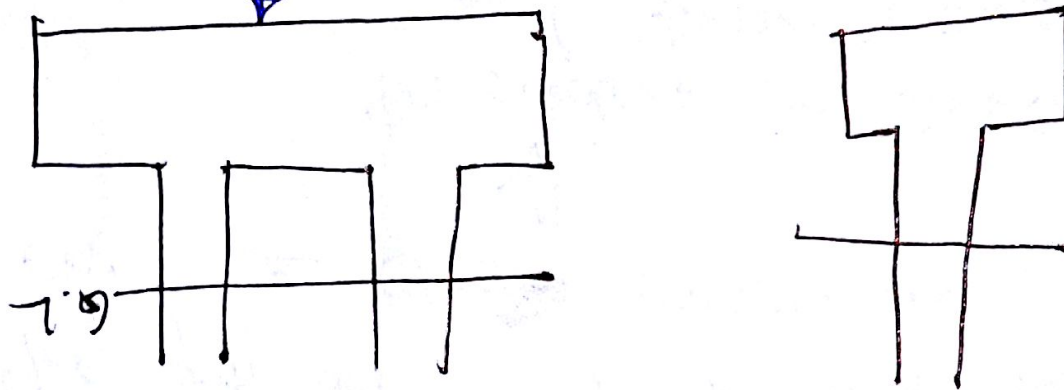


Inspection pit \rightarrow septic tank

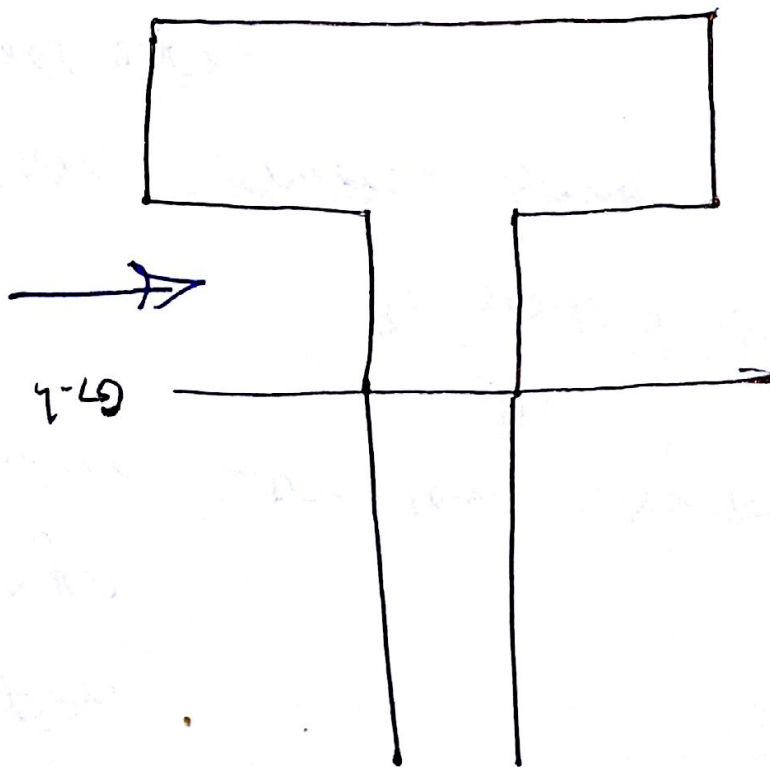
\rightarrow soak pit (only liquid)



combined footing



single footing



upper layers → upper layers
 sub layers → lower layers

foundation

shallow foundation.
 (15' below the ground)

Single footing
 " Combined "
 " raft or mat "

- ① excavation
- ② c.c layer
- ③ formwork - wood or frame

in order to shape.

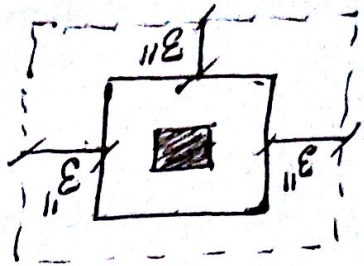
- ④ add some spacers block
- ⑤ Reinforce and

The gap betⁿ block and reinforcement = clear cover.

in order to save the rod from corrosion.

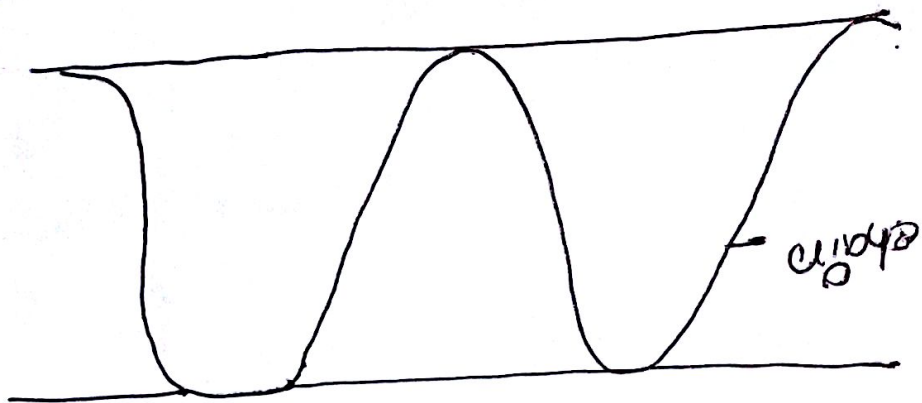
- ⑥ column
- ⑦ support column
- ⑧ add concrete.

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excavation is done keeping 3" gap.

grade beam = the beam of ground floor.



The separator between two layers is called a chair.

for most foundation we have to add piles along the shore.

