

Basics of Plan Table Survey

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Plan table survey



Plan table survey

- Plane table surveying is a Graphical method of surveying in which plotting and the observation is done at a time.
- In this method of surveying a table top, similar to drawing board fitted on to a tripod is the main instrument.
- A drawing sheet is fixed on to the table top, the observations are made to the objects, distances are scaled down and the objects are plotted in the field itself.

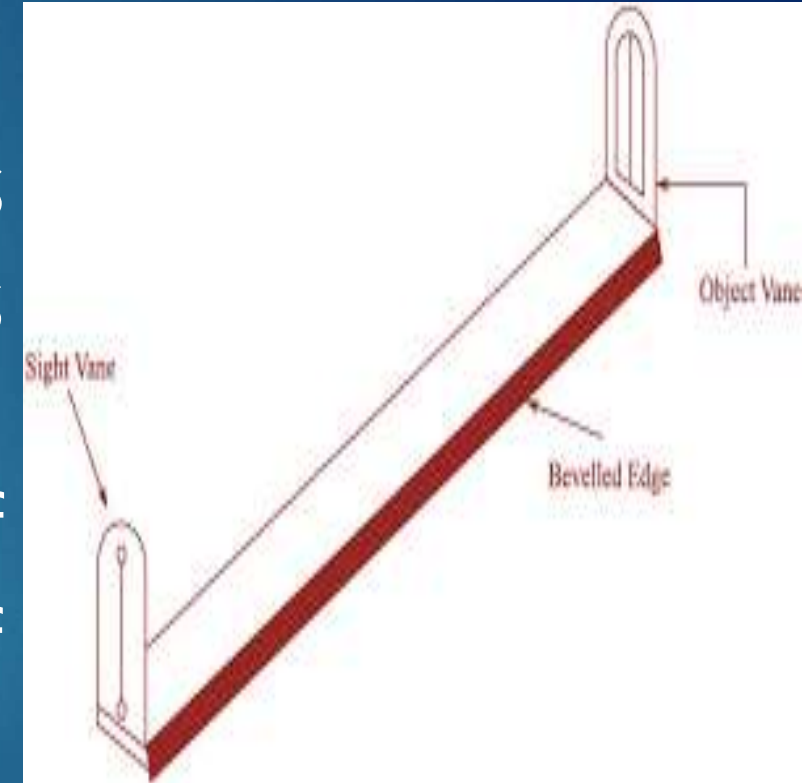


ACCESSORIES USED IN PLANE TABLE SURVEY

➤ Alidade

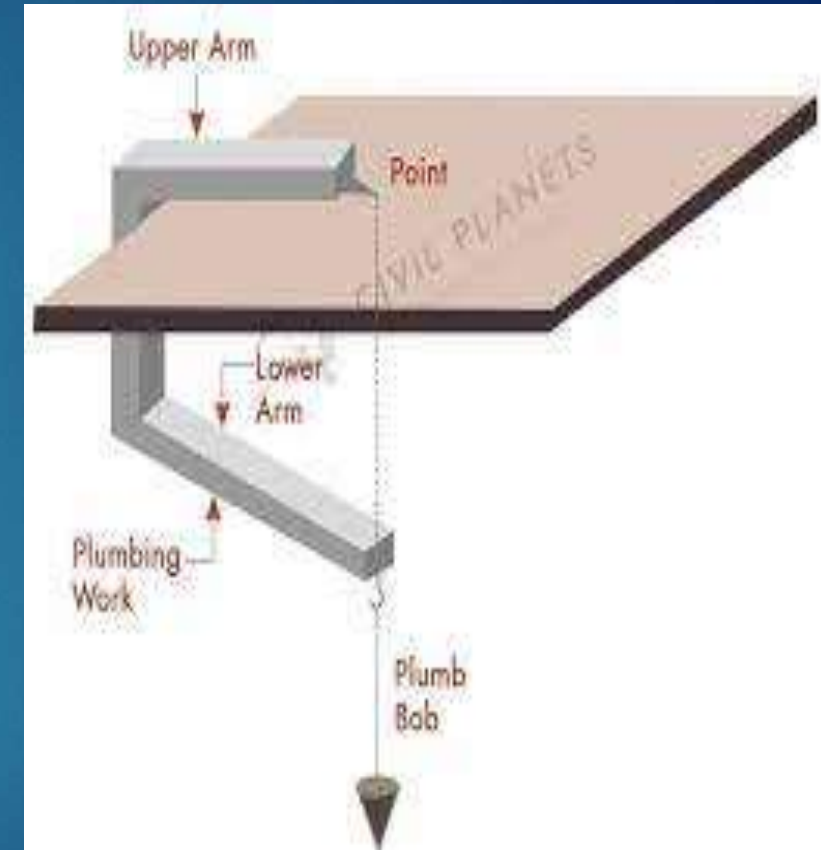
It is a straight edge ruler having some form of sighting device. One edge of the ruler is beveled and is graduated. Always this edge is used for drawing line of sight. Depending on the type of line of sight, there are two types of alidade:

- (a) Plain alidade.
- (b) Telescopic alidade.



ACCESSORIES USED IN PLANE TABLE SURVEY

- Plumbing Fork and Plumb Bob: Figure shows a typical plumbing fork with a plum bob. Plumbing fork is a U-shaped metal frame with an upper horizontal arm and a lower inclined arm.
- The plumb bob helps in transferring ground point to the drawing sheet and vice versa also.



ACCESSORIES USED IN PLANE TABLE SURVEY

- Spirit Level: A flat based spirit level is used to level the plane table during surveying. To get perfect level, spirit level should show central position for bubble tube when checked with its positions in any two mutually Perpendicular direction.



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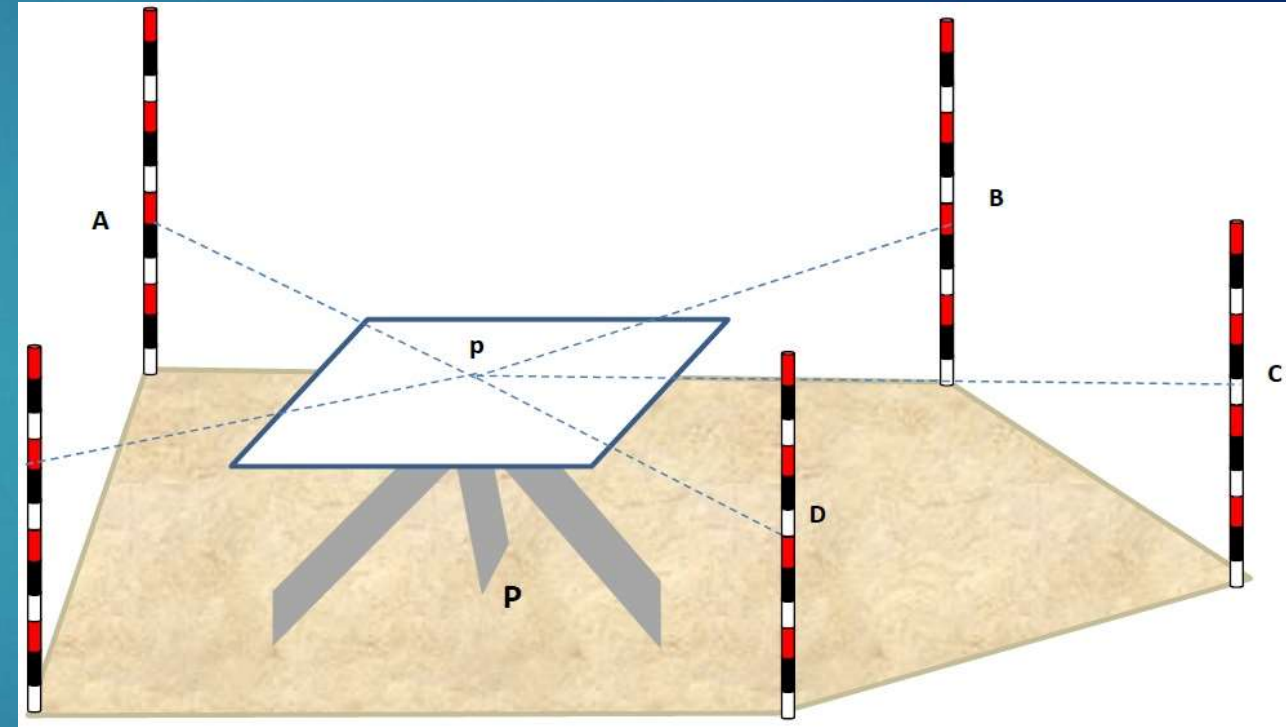
- Trough Compass: It consists of a 80 to 150 mm long and 30 mm wide box carrying a freely suspended needle at its centre. At the ends of the needle graduations are marked on the box to indicate zero to five degrees on either side of the centre. The box is provided with glass top to prevent oscillation of the needle by wind. When needle is centred (reading 0–0), the line of needle is parallel to the edge of the box. Hence marking on the edges in this state indicates Magnetic north–south direction.



METHODS OF PLANE TABLE SURVEY

Radiation Method

In the radiation method of plane table surveying, the direction of the objects or points to be located are obtained by drawing radial lines along fiducial edge of alidade after getting the objects or points bisected along the line of sight of the alidade



Thank you...