

Give Introduction of Contouring

Contouring is the science of representing the vertical dimension of the terrain on a two dimensional map. We can understand contouring by considering a simple example.

Let us assume that a right circular cone of base 5m diameter and vertical height 5m is standing upright on its base. Let the base be resting on a horizontal plane at zero level as shown in Figure 1.

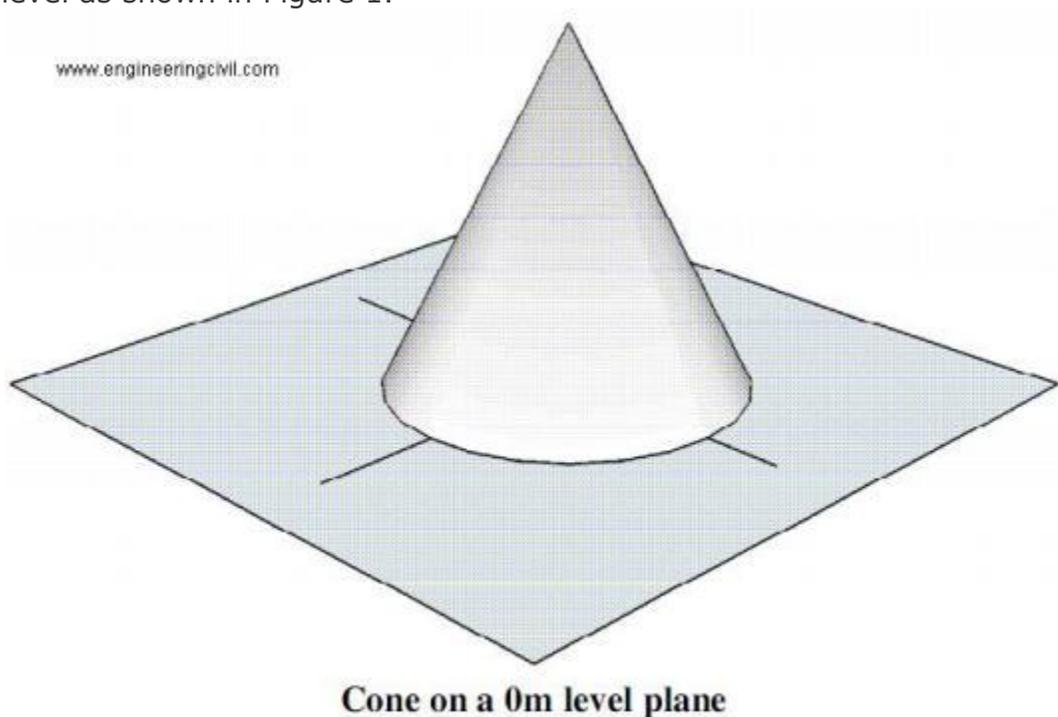
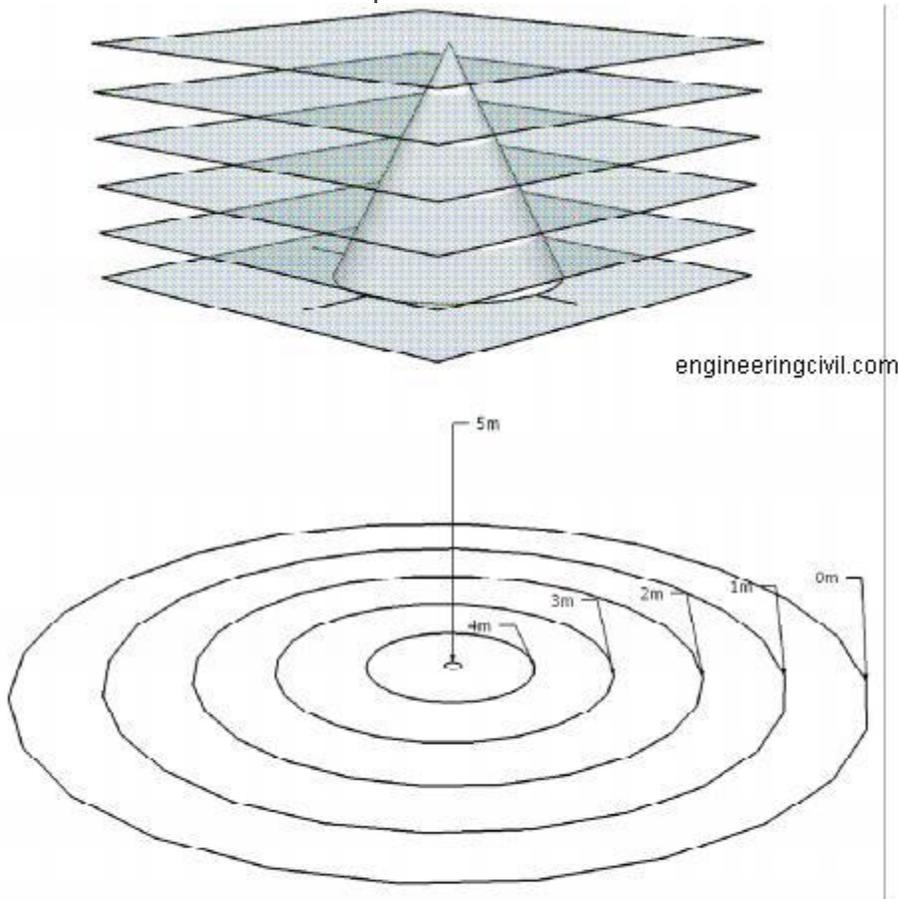


FIGURE-1

At zero level, the outline of the cone will be a circle of 5m diameter. This circle is the contour line at 0m elevation for the cone. We draw this first contour line on paper to a convenient scale.

Let us now slice the cone at 1m height from the base. This will produce another circular outline corresponding to the diameter of the cone at 1m elevation. Let us draw this second circle on our contour map using the same scale. The second circle being smaller in diameter than the first will appear as a concentric circle within the first circle.

Similarly, we continue to draw the outline of the cone at 2m, 3m, 4m and 5m levels on our contour map. Our contour map for the conical object is now ready. The circles on the map are called contour lines. (see figure-2)



**Cone sliced at 1m intervals (top)
Contour map of the cone drawn to a convenient scale (bottom)**

FIGURE-2

Like the cone in our example, hills project upwards from ground level. The contour map of a hilly terrain will be similar to that of the cone, except that instead of perfect circles, the contour lines would be of irregular shapes. The important point of similarity to note here is that hilly terrain would be represented by contour lines with increasing elevation towards the centre. In contrast to this, a pond or depression would be represented by contour lines with decreasing elevation towards the centre.

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