

Civil Engineering Tool Kit for Making Perfect Ellipses of Desired Dimensions on Very Large Surfaces

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Abstract : If an ellipse is to be drawn of given dimensions on a large ground, there is no formula, method or set of calculations & procedure available which will help in drawing an ellipse of given length and width on ground. Whenever a field engineer is to start the work of an ellipse-shaped structure like elliptical conference hall, screening chamber and pump chamber in disposal work etc., it is cumbersome for him to give demarcation of the structure on the big surface of the ground. No procedure is available, even in Google. A set of formulas with calculations has been made which helps the field engineer to draw an true and perfect ellipse of given length and width on the large ground very easily so as to start the construction work of elliptical structure. Based on these formulas a civil Engineering tool kit has been made with the help of which we can make perfect ellipse of desired dimensions on very large surface. The Patent of the tool kit has been filed in Intellectual Property India with Patent Filing Number: 201611026153 and Patent Application Filing Date: 30.07.2016. An App named 'KC's Mesh Formula' has also been made to ease the calculation work. This can be downloaded from Play Store. After adopting these formulas and tool kit, a field engineer will not face difficulty in drawing ellipse on the ground to start the work.

Keywords : ellipse, elliptical structure, foci, string, wooden peg

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