

# **REDESIGN OF BORED PILE FOUNDATION ON WISMA KARTIKA GROGOL BUILDING**

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## **ABSTRACT**

Wisma Kartika construction project is designed by using bored pile foundation type. The design should be able to be reviewed by comparing it with other foundation dimensions, so that it can be spelled out the effectiveness of each of the foundation's designs and taken most effective in holding service loads and earthquake loads. To know how much the bearing capacity of the bored pile foundation, then the calculation of axial bearing capacity using Reese and Wright method is done. The amount of bearing capacity is calculated to get to know the strength of the foundation which is withstand loads above it. Bearing capacity foundation is calculated is calculated using different diameter, that is 80 cm, 90 cm, and 120 cm. The result of ultimate bearing capacity calculation ( $Q_u$ ) at 80 cm is 818,339 tons with 669 poles, the result at 90 cm is 933,415 tons with 573 poles and the result at 120 cm is 1296,649 tons with 448 poles.

Keywords : Foundation, Standard Penetration Test (SPT),

Bored pile Foundation, Pile Bearing Capacity