

# PILE FOUNDATION DESIGN

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## ABSTRACT

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All engineering construction resting on the earth must be carried by a foundation. The foundation is the part of an engineered system which transmits to, and into, the underlying soil or rock the loads supported by the foundation and its self-weight. Usually, piles are used where the soil conditions are poor. In this case, soil investigation is a very important role, which is very relevant to pile foundation design.

A site investigation is one form or another is always required for any engineering or building structure. The considerable depth below the surface by means of boreholes and in-situ and laboratory tests on the materials encountered.

There are two basic methods of installing piles, namely driving them into the ground, or excavation of the ground, usually boring and filling the void with concrete. Other methods has evolved to cope with certain ground or groundwater conditions, or to be more economic over particular load capacities.