

عنوان مقاله:

Comparison of pile dynamic and static load tests in clayey deposits of Southwest Iran with special attention on soil setup

محل انتشار:

چهارمین کنفرانس ملی مهندسی ژئوتکنیک ایران (سال: 1398)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

It is well known that driven piles in clayey deposits typically undergo a time -dependent increase in capacity following initial installation due to soil setup . The static and the dynamic pile testing methods are the two main types of pile tests that are periodically used to assess the pile load capacity and setup measurement. The main objective of this study is to compare the static and dynamic load tests results and to evaluate the ability of the High Strain Dynamic Test (HSDT) using CAPWAP method to estimate the static capacity of driven piles and setup measurement. This paper compiles the test results of HSDT and SLT at two piling project sites within clayey deposits of Southwest Iran. Evaluation of the test results indicates that shaft resistance has considerably increased over time at the study sites. Examination of the full scale static load test data and CAPWAP analyses suggested that HSDT could provide a suitable tool to assess static driven pile capacities. The dynamic load pile test, which is a simple quality control test offering a considerable savings of time and cost and requires less space, can be used for predicting pile capacity and .pile integrity under proper care and it should be calibrated by static tests

کلمات کلیدی:

.Clayey Deposits, Pile Bearing Capacity, Dynamic Load Test, Static Load Test

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