

**RELIABILITY OF JACK-IN METHOD IN ASSESSING PILE
BEARING CAPACITY**

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DECLARATION BY THE CANDIDATE

I, Mozzi Solomon Bensing, 2003194205 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.



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ABSTRACT

Nowadays construction is centered around urban environment where there will be a lot of civilians and buildings surrounding the environment. The use of conventional types of pile installation machine will create noise and vibration which is sometimes a nuisance to the public and the vibration from the pile installation process may damage the nearby buildings. This disadvantage will definitely create a lot of public complaints during the execution of construction and contractors will face a dilemma where the local authority would issue fines and much worse, imposing a 'stop work order' to their project.

The study will focus on the reliability of Jack-in method in assessing pile bearing capacity. Analysis on comparing jack-in data will be with the result from pile bearing capacity obtained from pile test on the same point is done through variation of pile capacity in time, length over diameter ratio and factor of safety criteria. 11 data obtained from local authorities were interpreted and compared. From the analysis done, it shows that the jack-in method is acceptable in the reliability of confirming the pile bearing capacity.

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