

PILE SETTLEMENT ACCEPTANCE CRITERIA

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BY

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DECLARATION BY THE CANDIDATE

I, Fauziah Binti Nawi, UiTM no 2004335641 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

.....May 16, 2007

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ABSTRACT

Nowadays, piles become the most efficient method that acts as a foundation to prevent all types of structures from failure. This failure is may be because of the weakness of soil strength, geological and more. In Malaysia, the application of the pile is very broaden. However, there is a limited of standard on pile settlement that can be used today in order to provide a safety of the structure in future.

Towards the problem, this research studies the behavior of pile driven in soft ground and its displacement behavior. In order to investigate the pile settlement criteria in clay, the mechanisms of pile installation is simulated. Pulling test is used to check the pile shaft capacity. No separation of pile capacity is required since the pulling test is only focused on the pile shaft capacity. Total 12 number of model pile is tested which 8 of them installed in container and others in field. Testing result shown that the range of displacement which relevant to its failure is about 3.21% - 7.77% of pile diameter.