A LABORATORY STUDY ON BEHAVIOUR OF SINGLE PILE IN VIBRATED MARINE RESIDUAL SOIL

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DECLARATION OF THE CANDIDATE

I (RAYMI BINTI ARIP, 2003479633) confirm that the work is my own and that appropriate credit has been given where reference has been made to the works of others.

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I have made every effort to identify the original sources of information stated but, if there have been any accidental errors of omissions, I apologies to those concerned.

ABSTRACT

From previous experience of strong earthquake, pile foundation usually failed under liquefaction especially in the soft soil area. Thus, there is a need to study the pile and soil behaviour under vibration. The laboratory study on Prai soft soil will be conducted using vibrating table test. A transparent container 450x300x250 mm and a hollow circular tubing of 20 mm diameter were used in this laboratory. This report focused on observing the soil settlement, displacement and pile behaviour under strong shaking, within 1 translational direction. Settlement, displacement and boiling behaviour were observed and conclusions were made based on the test result obtained.