**ABSTRACT**

**THE INFLUENCE OF CURING TIME ON THE BEARING CAPACITY OF SOFT CLAY SOIL STABILIZATION USING TX-300**

By

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Soil is a material that serves as an support for the basis of a constuction, be it construction of buildings, bridges and roads. Each region has different soil characteristics in other regions, there is high and has a bearing capacity of those that are low. To improve the soil characteristics that can lead to low bearing capacity, the necessary repairs to soil stabilization methods. Stabilization efforts are often undertaken by stabilizing additives. In this research using a chemical additive material that is TX-300, which is expected to improve the characteristics of the soil so the soil is worthy of a construction established.

Soil samples that tested in this research is the soft clay are derived from Rawa Sragi, East Lampung. This study used soil mixed with ash content about 0,9 ml with the optimum variation of curing time used is 7 days, 14 days and 28 days. Based on the test of physical properties of original soil, AASHTO classifies soil samples in group A-7 (clay soil) and subgroup A-7-5, while the USCS classifies soil samples as fine-grained soil and belonging to CH group.

The results of laboratory studies indicate that the stabilization material using TX-300 can improve the physical and mechanical properties of soft clay. The soil that has been stabilized with TX 300 has increased the value of specific gravity and bearing capacity and it is decreased of liquid limit and indeks plastisity of soft clay. Based on the test results, this type of clay is not too good to be used as a ground subgrade for road construction, because its PI’s value is about ≥ 10% despite value of CBR is plenty high.

Key Words : TX-300, Soft Clay, CBR.