SUMMARY

Danu Kurniawan, Department of Civil Engineering, Faculty of Engineering, University of Brawijaya, in July 2016, *Effects of Rate D / B And Number Layer Geogrid Reinforcement in Sand Land Against Land's Bearing Capacity With Continuous Foundation*, Supervisor: As'ad Munawir and Suroso.

Sand is a land that has a lower carrying capacity of the load. To obtain an adequate carrying capacity, then the banking is done by using geogrid. To determine the effect of depth and the number of layers of geogrid were able to increase the bearing capacity effectively, it is in need of research which uses a variation d / B and the number of layers of geogrid.

Testing modeled using the test box measuring 150x100x100 cm. Geogrid used is biaxial geogrid with hole 40x40. This test uses the relative density of the RC 85%. Making test specimen is divided into seven layers to maintain uniformity of density. Control of the density of the ground-based control volume and density test at each layer of the test specimen. The use of foundation and geogrid is 10 cm wide and 60 cm with the distance of the first layer of geogrid u / B = 0.25. Factors used depth d / B = 0, 0.5 and 1. The factor is the number of geogrid reinforcement 1, 2 and 3 layers. After preparation is complete, the foundation tested by using hydraulic jacks gradually and do readings for every load of 50 kg. Readings of decrease LVDT and load using Load cell.

Based on the analysis BCIu, the greater ratio of the depth and the deeper foundation, then the value BCIu also getting bigger. The percentage increase of the value obtained that the effect of variation in the effect of the use of geogrid efectif is the sheer number of two layers of geogrid at a depth 0,5B with the addition bearing capacity value of 57% of the variation of the layers of geogrid.

Keywords: Soil sand, continuous foundation, Geogrid, d/B ratio and the number of layers of geogrid