World Academy of Science, Engineering and Technology International Journal of Geotechnical and Geological Engineering Vol:10, No:07, 2016

Comparison of Improvement with Bored Piling and Stone Column in a Selected Area in Kocaeli

Authors: Utkan Mutman, Omer Ayhan

Abstract : In highway work in a field that is selected in Kocaeli/TURKEY district to the ground improvement and piling is done. In this study, the degree of improvement was observed on the ground after the columns made of stone and bored piles in the field and compared. In this context, improving the ground before and after analysis and solution analysis made with values obtained by the finite element method, which was made Plaxis program. On the improved ground, in order to control of manufactured bored piles, continuity of bored piles and pile load tests were carried out. In addition, the test of load capacity specified in the project is made of stone columns. Test results of the soil improvement were observed to be successful, the results obtained in the field and the results obtained from Plaxis program were compared.

Keywords: bored piling, stone columns, plaxis, soil improvement

Conference Title: ICCGE 2016: International Conference on Civil and Geological Engineering

Conference Location : Venice, Italy **Conference Dates :** July 18-19, 2016