



Društvo za geotehniku u Bosni i Hercegovini
Друштво за геотехнику у Босни и Херцеговини
Geotechnical Society of Bosnia and Herzegovina

GEO-EXPO 2016

Banja Luka, 7.-8. 10. 2016.



Altan ERDEM¹
Murat MOLLAMAHMUTOĞLU²
Eyübhan AVCI³

STRENGTH PROPERTIES OF MICROFINE CEMENT STABILIZED HIGHLY PLASTIC CLAY

Summary:

In this experimental study, strength properties of microfine cement stabilized high plasticity clay was investigated. The results showed that the physical and mechanical properties of high plasticity clay such as consistency limits, compaction behavior, unconfined compressive strength were influenced. Decrease in cement particle size decreased the liquid limit and dry unit weight but increased the wet unconfined compressive strength of high plasticity clay. In addition, the curing environment had an effect on the strength and consistency limits of microfine cement stabilized high plasticity clay such that UCS and plastic limit increased but the liquid limit decreased.

Keywords:

stabilization; cement grain size; clay; strength; consistency limits

¹Altan ERDEM, civil eng. geotechnics, Gazi University, Faculty of Engineering, Ankara, TURKEY, altanerdem@gmail.com

²Prof. Dr. Murat MOLLAMAHMUTOĞLU, civil eng. geotechnics, Gazi University, Faculty of Engineering, Ankara, Turkey, mmolla@gazi.edu.tr

³Ass. Prof. Dr. Eyübhan AVCI, construction, geotechnics, Hitit University, Technical Science of Vocational School, Çorum, Turkey, eyubhanavci@gmail.com