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