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Comparative Study of Kaolinite Clay stabilized with Cement and Waste Beverage Cans

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Abstract: *Soil stabilization is physical or chemical process which increase the stability of a soil or improve its engineering properties. Waste Beverage Cans (WBC) and Cement used as stabilizing agent to stabilize the kaolinite clay. Aluminium Beverage cans are produced in huge amount. Aluminium cans are the largest sourceof aluminium waste. Aluminium recycling affects its quality. This attempt was a comparative study of kaolinite clay stabilized with cement and WBC. It is a cost effective and eco friendly method. The use of aluminium strips increases tensile strength and engineering properties as a Subgrade. The different percentages of WBC and Cement is mixed with Kaolinite clay in order to observe the changes in the geotechnical properties of thesoil. WBC is cut in to 5 mm strips and mixed with clay. The Compaction, CBR and UCC were conducted on the WBC and cement reinforced soil. The results expecting from this study is a significant enhancement in the soil properties such as maximum dry density, shear strength and CBR value.*

Keywords: WBC, Cement, Kaolinite Clay

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