Abstract

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The presence of highly organic soils is a significant obstacle for any construction project, including the creation of roads and structures. Construction projects are scheduled practically everywhere because of growing industrialization and population increase, this includes areas that have soils that are rich in organic matter. It is usual practise in the construction industry to replace organic matter soils with acceptable fill material, however, if the depth of the organic matter soil is greater, then this may not be an economical construction practise. Stabilising the soil itself using an appropriate stabiliser is one of the many viable options for building on organic matter soils, and it's a strategy that should be considered among the most promising of these choices. In the current study, an effort was made to evaluate the effects of various types of stabilisers (Cement, lime+cement, Organosilane, and calcium chloride) on the stabilisation of the organic soil sample acquired from the IIT Kanpur campus. This attempt was done in order to learn more about the effect these stabilisers have on the soil. By measuring the unconfined compressive strength of samples stabilised in the laboratory, the goal of this paper is to point out the feasibility of stabilising soils that have organic matter.