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(57) Abstract :
The present invention discloses the impact of waste industrial materials such as marble dust, fly ash on the subgrade attributes of Expansive soil. The laboratory investigation is concluded to assess the effect of waste industrial materials addition on the engineering properties and shrink-swell behavior of stabilized expansive soils. Atterberg limits, OMC and MDD, California Bearing Ratio (CBR), swelling pressure tests are performed on natural and proposed soil samples. Measure the results obtained of the natural and treated samples, the CBR increases by 250% (when 30% marble dust and fly ash are added) and the swelling reduction of 58% is found, depending on additive content. The results conclusion shows that the modification of expansive soils by fly ash and marble dust admixture is successful and more economical.

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