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(57) Abstract :

Expansive soils are extensively distributed worldwide, and are a source of great damage to infrastructure and buildings. In monsoon they imbibe water and swell and in summer they shrink on evaporation of water from there. Because of this alternative swelling and shrinkage, lightly loaded civil engineering structures like residential buildings, pavements and canal linings are severely damaged. It is, therefore, necessary to mitigate the problems posed by expansive soils and prevent cracking of structures. Many areas in Gujarat are located on highly expansive soil. Extensive laboratory / field trials have been carried out by various researchers and have shown promising results for application of such expansive soil after stabilization with additives such as sand, silt, lime, fly ash, etc. As fly ash is freely available, for projects in the vicinity of a Thermal Power Plants, it can be used for stabilization of expansive soils for various uses. The present paper describes a study carried out to check the improvements in the properties of expansive soil with fly ash in varying percentages

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