

CBR IMPROVEMENT OF CLAYEY SOIL WITH GEO-GRID REINFORCEMENT

A PROJECT REPORT

Submitted to

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in partial fulfillment of the requirements for the award of the degree of
Bachelor of Engineering



DEPARTMENT OF CIVIL ENGINEERING

Suresh Angadi Education Foundation's

ANGADI INSTITUTE OF TECHNOLOGY & MANAGEMENT

Savagoan Road, Belgaum – 590 009.

Sponsored by

Karnataka State Council for Science and Technology
Indian Institute of Science Campus, Bangalore 560 012

2013 - 14

Abstract

The quality and life of pavement is greatly affected by the type of sub-grade, sub base and base course materials. The most important of these are the type and quality of sub-grade soil. But in India most of the flexible pavements are need to be constructed over weak and problematic sub-grade. The California bearing ratio (CBR) of these sub-grade have very low, it needs to more thickness of pavement. Decrease in the availability of suitable sub base and base materials for pavement construction have leads to a search for economic method of converting locally available problematic soil to suitable construction materials. The present research have to study the effect of geo-grid reinforcement on maximum dry density (MDD), Optimum Moisture Content (OMC) and California Bearing Ratio (CBR) value of sub-grade soil. The clayey type of soil and one type of geo--grid were selected for this study. From the study it is clear that there is considerable improvement in California Bearing Ratio (CBR) of sub-grade due to geo-grid reinforcement.