

STRENGTHENING BLACK COTTON SOIL WITH RHA AND MOORUM FOR PAVEMENT SUBGRADE

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ABSTRACT

Due to variable nature of soil, the subgrade strength changes inconsistently, as a result engineers face so many difficulties or challenges during the design of a pavement. The subgrade strength is very much dependent on moisture content. As the subgrade is intended to variation of moisture due to precipitations or other climatic changes, it is necessary to enable or understand the subgrade according to the variation of moisture. Black cotton soil (weak soil) can be strengthened by stabilizing it with agriculture waste material and locally available material like Rice Husk Ash and Moorum. It can be one of the economic and effective methods of stabilization. Geotechnical properties of virgin black cotton soil and the soil treated with RHA and Moorum with 10%, proportions and RHA taken to be 10% which is the optimum does for black cotton soil. The positive response has been observed with the addition of RHA and moorum.

KEYWORDS: Black Cotton Soil, Moorum, Pavement, Rice Husk Ash & Stabilization