

The development of Road Construction Material Selection System (RC-MSS)

ABSTRACT

This paper looks into the development of a prototype Road Construction Material Selection System (RC-MSS) which based on the outcome through interviewed to the pavement experts to obtain the appropriate material for each pavement layer under particular design conditions. Data collected from the experts would be analysis using nonparametric statistical method to determine the ranking of each pavement material alternative prior to the development of RC-MSS. RC-MSS is developed with a prototype of an expert system using written using programming tool Microsoft Visual Basic 6.0 according the framework from the system. With this tool, better road design can also be achieved and save more time in the initial stage of on material selection, before scrutiny to laboratory test. This software would be the pioneer and provide guidance to engineers and consultants.

Keyword: Material selection; Expert system; Pavement; Road construction