

LABORATORY STUDIES OF DENSE BITUMINOUS MIXES-II WITH RECLAIMED PAVEMENT MATERIALS

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ABSTRACT

The present study addresses the issue of growing demand on our nation's roadways over that past couple of decades, decreasing budgetary funds, and the need to provide a safe, efficient, and cost effective roadway system has led to a dramatic increase in the need to rehabilitate our existing pavements and the issue of building sustainable road infrastructure in India. With these emergency of the mentioned needs and this are today's burning issue and has become the purpose of the study. In the present study, the samples of existing bituminous layer materials were collected from NH-48(Devahalli to Hassan) site. The mixtures were designed by Marshall method as per Asphalt institute (MS-II) at 20% and 30% RAP. RAP material was blended with virgin aggregate such that all specimens tested for the DBM-II gradation as per MoRT&H(4TH revision). Mixtures containing RAP showed significant variability and the variability increased with the increase in RAP content. The finding of the study will help in development of sustainable road infrastructure for recycling in India.

KEYWORDS: RAP, Marshall Stability, MS-II, Material Testing