

UTILIZATION OF PLASTIC WASTE TO IMPROVE THE PROPERTIES OF AGGREGATES USING DRY PROCESS

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ABSTRACT

The plastic waste has been increasing day by day due to increase in population, urbanization, industrialization, changes in the life style, and socio-economic conditions. The disposal of plastic waste is a menace and become a serious problem worldwide due to its non-biodegradability and unaesthetic view. It is need of the hour to use plastic waste for construction of flexible pavement to minimize the bitumen consumption, protect the environment, manage the plastic waste and improve the properties of the aggregates. Dry process is the most advanced technique in which plastic waste is used to coat the aggregates. The plastic coated aggregates exhibit improved soundness & specific gravity, less abrasion & impact value and extra resistant to water than that of plain aggregates. In this paper, the use of plastic waste in flexible pavement by using dry process has been examined and the properties of the plastic coated aggregates have been compared with the plain aggregates.

KEYWORDS: Aggregates, Dry Process, Environment Protection, Improved Properties, Non-Biodegradable, Plastic Waste