

CONSTRUCTION OF LOW BUDGET ROAD USING STEEL INDUSTRIES WASTE, LIKE BLAST FURNACE SLAG BOULDERS AND FLY ASH

S. R. DEBBARMA

Senior Scientist, & Head Civil Engineering Division,
CSIR-Central Mechanical Engineering Research Institute,
P.O: M.G.Avenue, Durgapur-713209, West Bengal, India.

Abstract

In present scenario, the construction cost of flexible pavement base-course is one of the major parts of the total project cost due to increase in price of the conventional materials like stone aggregates, brickbats etc. To overcome this problem, other alternative materials for base-course may be the industrial wastes like blast furnace slag boulders and fly ash. Uses of these waste materials will ultimately reduce the cost of construction and also environmental hazards. To examine their usefulness as a better substitute and cost effective base material, a project was undertaken to construct a 3.0 meter width road of 2.6 km length along the Institute boundary wall for patrolling of security personals. The road was constructed using slag boulders as a base material, fly ash as a filler and moorum as a topping. The construction procedure, engineering properties achieved and the savings in construction cost in comparison to other conventional material are reported in this paper. This paper will also encourage, the use of industrial wastes like slag boulders and fly ash for construction of base-course of low budget roads.

Keywords: Industrial waste, Slag boulder, Base course, Low-budget road, Fly ash, Moorum

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