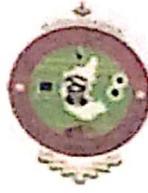


**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**  
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**PROJECT REPORT ON**  
**“EVALUATING THE PERFORMANCE OF PLASTIC**  
**WASTE IN PAVER BLOCK”**

**Submitted by**

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**In partial fulfillment of the requirements for the degree of**  
**BACHELOR OF ENGINEERING**

**In**  
**CIVIL ENGINEERING**

**Under the Guidance of**  
**Mr. SURENDRA P**  
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# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY



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## CERTIFICATE

Certified that the project work entitled "EVALUATING THE PERFORMANCE OF PLASTIC WASTE IN PAVER BLOCKS" is a bonafide work carried out by

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Are bonafide students of Department of Civil Engineering of Alva's institute of Engineering and Technology in partial fulfilment for the award of **BACHELOR OF ENGINEERING in CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**, during the year **2020-2021**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

  
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## **ABSTRACT**

The aim of this study is to Reuse Plastic Waste dumped in Landfill sites of Country in manufacturing of Paver Blocks. Plastic waste is used as Binding material and replace cement to reduce the cost of paver block when compared to that of convention concrete paver blocks. At present nearly 56 lakhs tones of plastic waste is produced in India every year. The degradation rate of plastic waste is also a very slow process. Hence the study is helpful in reducing plastic waste in a useful way. In this study we have used plastic waste with Sand. The study bears on plastics with transparent bags and films in PP, Polyethylene terephthalate [PET]. Plastic waste is melts and mixed with sand. The paver blocks were prepared and tested and the results were discussed.

This work aims to study the possibility of using plastic waste as a binding material instead of cement in the manufacturing of paver blocks. The study bears on plastics with a Polyethylene terephthalate basis. Plastic waste is carried to melt and mixed with a varying proportion of sand [PET 25-35 %]. The measurements of physical and mechanical properties show that plastic waste paver blocks and these proportion in plastic give's better results than concrete paver blocks.

Plastic is a non-biodegradable material. The amount of plastic waste in municipal is producing day by day, Making a wide range of perils Plastic is of various kinds, for example, High Thickness Poly-ethylene [HDPE], Low thickness poly-ethylene [LDPE], and so forth. Subsequently, these waste plastics is to be successfully used in making paver squares. low thickness polyethylene are spotless included with the sand and aggregate at different rates to get high quality blocks that have warm and sound protection properties to deal with contamination and to decrease the general expense of development, this is probably the most ideal approaches to keep away from the collection of plastic waste which is a non-degradable toxin. The point of this task is to supplant the holding by concrete in paver hinders with the dissolved plastic waste.