

**“DESIGN OF STORM WATER DRAINAGE SYSTEM FOR
MANGALORE CITY”**



PROJECT REPORT

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In partial fulfilment of the requirements for the degree of
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In

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-590018.

Under the Guidance of

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CERTIFICATE

Certified that the project work entitled "DESIGN OF STORM WATER DRAINAGE SYSTEM FOR MANGALORE CITY" has been successfully completed by

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The bonafide students of Department of Civil Engineering ,Alva's Institute of Engineering and Technology in partial fulfillment for the award of BACHELOR OF ENGINEERING in CIVIL ENGINEERING of the VISVESVARAYA TECHNOLOGICALUNIVERSITY BELAGAVI during the year 2020.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 seminar work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Urban storm water drainage systems have got priority in India only after drinking water supply and sewerage projects in majority of the cases. Due to fast pace of urbanization and migration of people from rural areas to urban areas in quest of livelihood and better education, there has been immense pressure on urban infrastructure, worsening the problem of urban drainage systems in India. In view of the existing status of drainage systems in urban areas, that causes frequent flooding leading to loss of property and life, it necessitates looking into the problem more closely and coming out with planning, designing, implementation and operation & maintenance guidelines to overcome the problems in urban areas.

In the present work an attempt is being made to forecast the flood and increase the discharge in the stormwater drainage system compare to the existing drainage system. The main objective of present study is (1) To propose redesign of the drainage system for Mangalore city (Kottara chowki). (2)To study the existing condition of drainage system of the road. (3)Identification of problems that present in the existing system. (4)To provide efficient drainage network system.

The data used for preparing the new drainage master plan is. Existing drainage map, meteorological data namely, rainfall intensity, soil study, humidity, temperature and existing drainage levels. The hyetograph will be prepared for the 60 years rainfall data. The drainage master plan is prepared by using the discharge calculation of the both existing drainage system and proposed drainage system and the project report presents the proposed drainage system which carries storm water of 60% more than the existing storm water drainage system.