

A Review of Paper on Design & Implementation of Roadside Drainage System with Blockage Detection & SMS Facility

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Abstract: *Efficient roadside drainage systems are crucial for preventing waterlogging, maintaining road safety, and reducing infrastructure damage. This project focuses on the design and implementation of an advanced roadside drainage system integrated with a blockage detection mechanism and SMS alert facility. The proposed system aims to monitor and manage drainage channels to ensure unobstructed water flow, which is especially critical during heavy rainfall or in areas prone to flooding. The drainage system is embedded with sensors to detect potential blockages caused by debris accumulation or sediment buildup. These sensors continuously monitor water flow rates, levels, and other key parameters within the drainage channels. When a blockage is detected, the system automatically sends an SMS alert to the responsible maintenance team, ensuring timely action and minimizing the risk of overflow or flooding. This smart drainage system reduces the need for manual inspections, promotes proactive maintenance, and enhances road safety. Additionally, the SMS alert feature ensures a fast response, facilitating efficient resource allocation for cleanup and repair. The project provides a scalable solution for urban and rural areas, contributing to resilient infrastructure and efficient water management practices.*

Keywords: Blockage, Drainage, Safety, Sensors

