## HYDRAULIC DESIGN OF CULVERT IN URBAN INDUSTRIAL AREA

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## ABSTRACT

Efficient water management today is necessary to ensure that availability of adequate water supplies in the future. World population continues to grow, placing greater pressure on available water supplier for human use, industrial production and many others.

Water is collected and regulated to serve a wide variety of purpose. Flood mitigation, storm drainage and highway culverts are example of hydraulic structure that are applied into water resource engineering to the control of water so that it will not cause excessive damage to property, inconvenient to the public or loss of life.

Pollution threatens the utility of water for municipal and irrigation uses and seriously despoils the aesthetic value of rivers. That is way pollution control or water quality management has become important phase water resource engineering. Indeed, things like flood damage and the preservative of natural beauty are also important factor that should take into consideration by engineers while in designing hydraulic structures.