

**REHABILITATION AND IMPROVEMENT OF EXISTING WATER SUPPLY
SYSTEM OF TAGAYTAY CITY**

Undergraduate Design Project
Submitted to the Faculty of the
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In partial fulfillment
of the requirements for the degree of
Bachelor of Science in Civil Engineering



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*Rehabilitation and improvement of existing
water supply system of Tagaytay City*
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ABSTRACT

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The design project was conducted from July 2003 to February 2004. It was evaluated on February 2004 at the College of Engineering and Information Technology.

The proposed rehabilitation of existing water system of Tagaytay City was composed of elevated concrete reservoir, pipe network analysis and control panel for pump and motor. It provided the necessary documents such as design and computation of concrete reservoir, water distribution system estimate and the existing water supply system of Tagaytay City, data on hydraulic simulation needed in designing water supply system.

The reinforced concrete design of concrete reservoir was based on the output of Structural Aided Analysis and Design (STAAD), the standard prescribed of the National Structural Code of the Philippines (NSCP), ACI code and specification for Ultimate Stress Design (USD). It was provided by structural plan and detailed cost estimates. The principle and considerations in designing of concrete reservoir were safe, aesthetic and economical.

A scaled model was developed to overview the outcome of the design project.

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