

**PROPOSED DESIGN OF TWO-LANE TRUSS BRIDGE
IN GENERAL TRIAS, CAVITE**

Design Project

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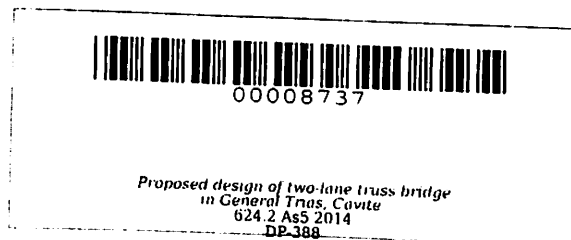
Indang, Cavite

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IN GENERAL TRIAS, CAVITE**

Undergraduate Design Project
Submitted to the faculty of the
College of Engineering and Information Technology
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree
Bachelor of Science in Civil Engineering



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ABSTRACT

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The design project was conducted from October 2013 to December 2013. It was evaluated on January 13, 2014 under the supervision of Engr. Marcelino A. Dagasdas Jr. at the Department of Civil Engineering, College of Engineering and Information Technology, Cavite State University, Indang, Cavite.

The study for the proposed design of two-lane truss bridge in General Trias, Cavite aimed to develop a short route to have direct access from Governor Ferrer's Drive to Arnaldo Highway.

The bridge design project aimed to enhance the knowledge of the researchers in designing a steel truss bridge. The proposed design included architectural drawings, detailed structural plans, and total project cost. The design served as a reference for the future implementation of the project. It would be of great help to the decision makers for future implementation.

The design of 40 meters, single span bridge is an appropriate replacement of the existing unpaved road. Steel truss type of bridge with two lanes was designed.

The direct estimated cost of the design project was P21,069,326.49.

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INTRODUCTION

An important component of economy which gives impact on development and welfare of populations is transportation. It is the solution to the nation's economic, energy and environmental challenges which bring us a better quality of life. To make ease of linking goods and services to customers and even passengers to destination, a good transportation is needed.

Bridges are built to cross an obstacle in such a way as to cut down the effort and time needed to do so. It helps automobile cross through difficult terrain in a shorter time. In General Trias, Cavite, an existing road is laid which provide vehicles direct access from Governor Ferrer's Drive to Arnaldo Highway. This road only allows small vehicle to cross not those bigger vehicle due to the narrow space, irregular structure and unguaranteed safety of the road. A bridge will solve these problems by providing good accessibility and ease of transportation to the location.