

PROPOSED DEVELOPMENT PLAN OF CAVITE STATE UNIVERSITY.

TRECE MARTIRES CITY CAMPUS

Design Project

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**PROPOSED DEVELOPMENT PLAN OF CAVITE STATE UNIVERISTY –
TRECE MARTIRES CITY CAMPUS**

**Undergraduate Design Project
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*Proposed development plan of Cavite State
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ABSTRACT

FERNANDEZ, DAVE CYRIL M. and GETES, PRINCE PATRICK M. Proposed Development Plan of Cavite State University – Trece Martires City Campus, Cavite. Undergraduate Design Project. Bachelor of Science in Civil Engineering, Cavite State University, Indang, Cavite. June 2019. Adviser: Engr. Roslyn P. Peña.

The study was conducted from October 2018 to April 2019 at the College of Engineering and Information Technology, Cavite State University, Indang, Cavite to provide a site development plan and design and analysis of cantilever retaining wall along the riverside of Cavite State University – Trece Martires City Campus, Cavite. Specifically, it aimed to: 1. provide development site of campus; 2. investigate the current condition of the campus and along the riverside; 3. design a cantilever retaining wall that will stabilize the soil; 4. provide the estimated cost of the proposed cantilever retaining wall; and 5. provide a tarpaulin for the physical appearance of site development plan and proposed cantilever retaining wall.

Interview resource persons were conducted to know the current condition of the lot area. The length and exact location of the proposed structures and reinforced concrete retaining wall were determined through surveying. Researchers were conduct data collection to gather information for the development of the site, analysis and design of cantilever retaining wall.

The proposed site development plan of Cavite State university – Trece martires City Campus land area is about 10 348.02 m² and the design and analysis of cantilever retaining wall along riverside has an overall span of 114.30 meters. The design of base, stem, heel and toe of cantilever retaining wall was considered in the study. The height of

the design retaining wall is 8.0 m, 7.0 m and 6.50 meter. The total estimated cost for proposed designs of cantilever retaining wall was Php 9, 051, 394.22.

A detailed analysis of the design guidelines, procedure and specifications was applied in the study. The parameters used were carefully studied and detailed as to arrive to an efficient and effective design.

In the design and analysis of cantilever retaining wall, ultimate strength design was used. Detailed structural drawings, structural design, detailed surveying, design specification and detailed estimates were included in the study. A tarpaulin which contains the illustration of the physical appearance of the proposed cantilever retaining wall was then provided and presented after the completion of the analysis and design process.

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INTRODUCTION

The Cavite State University (CvSU) has its humble beginnings in 1906 as the Indang Intermediate School with the American Thomasine as the first teachers. Several Transformations in the name of school took place: Indang Farm School in 1918, Indang Rural High School in 1927, and Don Severino National Agriculture School in 1958. In 1964, the school was converted into a State College by virtue of Republic Act 3917 and became known as Don Severino Agricultural College (DSAC).

On January 22, 1998, by virtue of Republic Act No.8468, DSAC was converted into Cavite State University. In 2001, Cavite College of Fisheries (CACOF) in Naic, Cavite and Cavite College of Arts and Trade (CCAT) in Rosario, Cavite, were integrated to the University by virtue of CHED Memo No. 27 s. 2000. Since then, additional campuses in the province were established through memoranda of agreement with the LGUs. At present, CvSU has eleven (11) campuses in the province, one of this is the