

FINAL REPORT  
APPROVAL PAGE

HIGHWAY IMPROVEMENT PROJECT OF  
SP.TANGAH PADANG – KALO KALO

This report is intended to be complete academic terms in the 6<sup>th</sup> semester  
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By:

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CIVIL CONSTRUCTION



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2007/2008

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**"Highway Improvement Project of SP.Tengah Padang-Kalo Kalo at Tanah Datar Regency"**

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**ABSTRACT**




Road is a way transport important to connect one place to others place so that it needed effective way in execution the road project construction to achieved a good result, and also give the comfortable for any parties that using the road.therefore, the road from SP.tengah Padang-Kalo Kalo with length of road is 3, 8 km is needed to be up grade and enhanced its function.

**HIGHWAY IMPROVEMENT PROJECT OF SP.TANGAH PADANG-KALO KALO AT STA (0+000 – 3 + 800)**

In executing the road with the length is 3,8 km and wide of pavement is 3 m,the surface is C-WC the thickness is 4 cm,and base is Class A Aggregate the thickness 15 cm sub base is Class aggregate the thickness is 20 cm cost estimating of the project are Rp 3,572,941,000,00 the duration for execution the project is 98 day

In the specific review is calculating the thickness of pavement which any data such as age of road design 20 years, terrain average 5 %,arterial road with 4 lane 2 toward (4/2 B) to calculate the thickness of flexible pavement can be the surface is AC-WC the thickness' 4 cm,And base is Class A Aggregate the thickness of base is 25 cm and sub base is Class c Aggregate and the thickness 20 cm

The final project had been presented in the evaluation and the it had been certified on November, 20<sup>th</sup> 2008.The abstract had been approved by evaluation team as follows.

Signature			
Name	Wisafri, ST., MT	Lusiana ST,MT	Monika Natalia, ST., Era Alfansyuri, ST., MT

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# CHAPTER I

## INTRODUCTION

### 1.1 Background of Writing

In globalization era and free market, the claiming society must have knowledge and must know the technology. According district autonomy this time, more support in replying that challenge represent

Polytechnic is one university of means and a place to expand the knowledge and technology that produce the manpower skilled and professional. There are 60 % theory and 40 % practice at Polytechnic Curriculum. It means both of them should be done with balance and depend on knowledge program in polytechnic, each student must make the final report, wherever that is one condition to follow the Diploma III program in polytechnic. Depend on this basic with civil construction department, so to write this final report writer take this title is **“HIGHWAY IMPROVEMENT PROJECT OF SP.TANGAH PADANG –KALO KALO”**.

Writer take the title depend on some basic, there are:

1. Writer have got data to make the final report
2. The project have a standard to be written as the final project report
3. This project has been agreement by head of civil construction program.
4. Requirement to graduated from Padang State Polytechnic

### 1.2 Purpose of Final Report

The purpose of writing final project report in polytechnic, especially at civil engineering department is to provide the final grade student with the experience to work after they study at Polytechnic.

#### 1.2.1 General Purpose

- a. To fulfill pass condition at Diploma III in Polytechnic
- b. The realization of knowledge and students rebound

### 1.2.2 Specific Purpose

In writing of this final project report, students have to design and construct a road beside on the knowledge that we get in college and direct experience when done the field work, some of that are:

- a. Be able to read and analysis the design execution
- b. Be able to calculate the volume of each activity
- c. Be able to calculate the capacity and cost the equipment per hour
- d. Be able to plan and execute a road and compare with theoretical background in the collage and direct experience during field work activity, among others are:
  - Be able to read and analysis execution picture
  - Be able to calculate the volume from each work
  - Be able to calculate equipment expense and capacities per hour
  - Be able to calculate work unit price
  - Be able to calculate summary and budget and recapitulation of work
  - Be able to make network planning
  - Be able to make time schedule
  - Be able to determine the width of flexible pavement with use Bina Marga method.

### 1.3 Scope of Writing Report

Considering limitation of time and writer ability and according to final project condition in Polytechnic, writer make the scope of final project are:

1. Studying the problem of handling project shortly and clear
2. Analyzing cost estimate and construction cost recapitulation of Sp.Tengah Padang – Kalo Kalo Highway Improvement Project
3. Evaluate to network planning execution and time schedule
4. Evaluating the width of flexible pavement SP.Tengah Padang –Kalo Kalo Highway Improvement Project

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