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Tıme Schedule Analysıs Of Green House Project Batam

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Abstract

Practical work is a compulsory subject taken by students. Practical work carried out by the author aims to analyze the time schedule in the initial plan for the Batam green house development project. Practical work carried out by the author starts from October 25, 2021 until January 25, 2022. In collecting practical work data, the author uses observation methods and instruments. The author collects work data directly from the project field, so that the results of the analysis can be used to compare the initial plan and the realization time of the time schedule in the field. This aims to find out whether there is a delay in the project. After doing practical work, the final result obtained by the author is a delay in the time schedule from the original plan. The project was delayed by five weeks. One of the factors causing delays is the weather.

Keywords: green house, time schedule analysis, project delay, realization time

Introduction

The project is a temporary construction activity that takes place in a limited time with the planned objectives. The end result of project activities is limited by time and cost. In the process of project activities, cost planning is very limited. the start and end time of a project has been clearly and in detail. Therefore, in the construction sector, the time schedule is very important to be planned beforehand, to be a reference in project work so that it is in accordance with the planned plan. This research was carried out on a green house construction project. Green house is a building that aims to protect plants to be resistant to pests and weather. In the process of working on the green house project, the author found several obstacles that became obstacles in working on this project. This constraint causes delays in the time that has been planned from the beginning. Therefore, for this practice report, the authors conducted a study with the title "Time Schedule Analysis of Green House Project Batam".

Methods

To obtain information and data in the implementation process of working on practical work reports regarding time schedule analysis on the green house project, the authors use the following data collection techniques:

1. Observation

The author uses field observation techniques to obtain accurate data regarding the time schedule for the ongoing project.

2. Instrument

The author uses the instrument as a tool for the data retrieval process by using a camera to capture project work, stationery to write the necessary data, as well as documents obtained from the company in completing this report.

Result and Discussion

There are five parts of a green house development project that are used as a reference in analyzing the time schedule or scheduling, namely:

1. A zone cut and fill work

Overall, cut and fill work in zone A has been completed 74.52% from 100%.

2. Zone A . Road Works

The road work section of zone A did not experience delays in the planning of its time schedule, because this section has been completed 100% in the 10th week.

3. Fence Installation

If combined, all the work in this section has been completed 66.310% from 100% in week 14.

4. Road Works and Drainage At Zone A

The work of sowing bauxite and compaction of soil is one of the most frequent works carried out in this project, because this project is in the clearing of new land adjacent to the swamps so that more soil compaction is required compared to other projects. Overall, the road works and drainage section at zone A has been completed 73.080% from 100%.

5. Water Reservoir

In the water reservoir work has been completed 73.770% from 100%.

6. Installation Works Gh, Coloumn, Frame, Plastic Uv, and Transparent Wall

Overall, this part has been completed as much as 54.425% from 100%.

No	Work Delay
1.	5 weeks from initial plan
2.	7 weeks from initial plan
3.	3 weeks from initial plan
4.	7 weeks from initial plan
5.	5 weeks from initial plan
6.	5 weeks from initial plan

Table 1. Work Delay

The delay factors in the green house construction project are:

1. Rainy weather
2. Materials arrive late
3. Fuel prices go up
4. Lack of construction worker resources

The results of the analysis of the time schedule for the green house construction project are obtained by comparing the initial plan and the actual time during the field. The delay in this project can be seen from the image on the red dotted line.

Information :

1. Yellow : The original plan
2. Green : Project completed on time
3. Gray : Project delay time
4. Orange S curve: The curve of the data schedule planning
5. Red S curve: The curve of the actual schedule data
6. Blue dotted line : The agreed contract limit
7. Dotted red line : Time delay

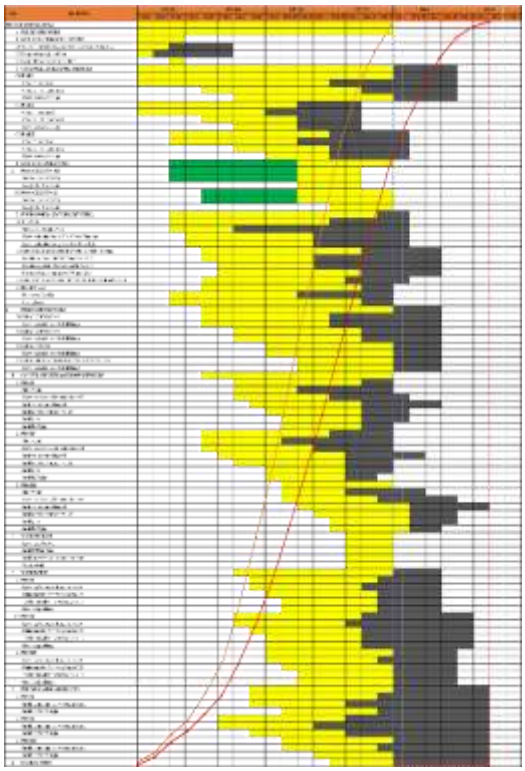

Figure 2 Data Time Schedule Actual

By analyzing the delay in this project, solutions to problems that cause delays can be found such as sowing bauxite to accelerate soil compaction, checking material availability, and checking the condition of the equipment used.

Conclusions

In the implementation of the Batam green house construction project, there are several obstacles that cause delays. The delay factors for this project consist of weather, late arrival of materials, lack of manpower and additional work due to adjustment to rain and soil conditions in the field.From the results of the time schedule analysis that has been carried out, it can be seen in Figure 25 that there is a red dotted line indicating the time delay of the project for five weeks. Time schedule is very important to control a project. Therefore we need the right solution in order to overcome the problems in the field that cause delays. Delays in the project will require additional work so that time, cost, and effort increases.

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