

## **ABSTRACT**

*Water Resource Controlling Department (PSDA) West Java Province in this matter takes responsibility for watering in West Java include irrigation. In this rehabilitation of irrigation or irrigation tunnel rehabilitation in Padawaras that encounters problem which is located at Kecamatan Cipatujah dan Kecamatan Bantarkalong Kabupaten Tasikmalaya. In this rehabilitation implementation of Padawaras irrigation, first thing to do is planning about time and cost of this project. Planning is the most important part of project management. Whether the project will be success or not depends on the planning that has been done before. This research will be focused on estimation and initial planning of the project or can be called Owner Estimate (OE). OE will discuss about two things, cost and duration of the project.*

*This research is done in a few steps to produce the expected output, including identification and initialization step, collecting and processing data, and the last is analyzing and concluding step. In identification and initialization step includes literature study and field study from the implementation of irrigation rehabilitation continued by formulation of problem and the goals of the research. In collecting and processing data includes collecting data that needed in OE calculation, and then data will be processed especially about cost will be calculated using unit price analysis method, and for duration of the project will use Precedence Diagram Method (PDM). This rehabilitation scheduling considers early start time and late start time that can be seen by using cost baseline design. For analyzing and concluding step, it is done by analyzing from duration, cost, cost baseline, and term of payment of this project. After the analysis has been done in all aspect of the project, continued by taking a conclusion and advising for the owner and the next research.*

*The conclusion of this project is Padawaras irrigation rehabilitation project need Rp5.231.496.576 in cost and the duration is 143 days or 20 weeks and 3 days. From the designed cost baseline could be inferred that scheduling using late start time will give an advantage to the owner.*

*Key word: project planning, owner estimate, unit price analysis, Precedence Diagram Method, cost baseline, early start time, and late start time.*