

RISK MANAGEMENT OF BRIDGE CONSTRUCTION PROJECT

IN INDONESIA

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DECLARATION

I declare that this thesis entitled "*Risk Management of Bridge Construction Project in Indonesia*" is the result of my own research except as cited in the references. The thesis has not been accepted for any degrees and is not concurrently submitted in candidature of any other degree.

Signature : 

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Date : 29/8/12

DEDICATION

“To Indonesia Ministry of Public Works, **Waskita**, my parents, my brother and sister, my beloved wife and sons, all families and friends”

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ABSTRACT

Risk management in bridge construction projects are considered to have more inherent risks because of the involvement of multiple contracting parties, such as owners, designers, contractors, subcontractors, and suppliers. Project delay and cost overrun are recognized as the most common problems faced by contractors, including for Bridge Construction project. To minimise these problems, identification of the most probable potential risks and the impact level of the risk can affect to the objectives the Bridge Construction project become important. The result of this research will provide preliminary data to simplify the Risk Management procedure. Research strategy to realise the objectives of this research is through document-based data collection and both quantitative and qualitative data analysis might therefore be a suitable strategy. Research data obtained from 5 Overhead Bridge construction project reports in Java Island – Indonesia, that have been completed within year 2006-2011. Sample data were analyzed quantitatively by frequency distribution analysis to obtain the objectives of the research, and complement by qualitative analysis for the risk analysis by using the Risk Analysis Matrix. Result of the research, Review Design risk recognized as the most probable risk/opportunity that affecting to Time. Subsequently, Additional Cost of Interest on Bank Loans risks as the most probable risk that affecting to Cost. And lastly, for the most probable risk that affecting in both Time and Cost is Delay in Material Procurement risk. It is also found that Construction Method Improvement is also predicted as the most probable risk/opportunity that might occur during construction. Lastly, Inaccurate Cost Estimates due to Misunderstanding of Specifications was found as the actual risk that gave Impact to the cost in one project.