DISCREPANCY BETWEEN DESIGN AND CONSTRUCTION WORK

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ABSTRACT

Normally, a designer is responsible to design for a particular project based on the client's requirements and a contractor is responsible to transfer the designs into practical reality. However, before the designs are transferred into the practical reality during the actual construction work, there might occur some unwanted mistakes, errors or variations such as design errors. Thus, discrepancies do occur between the designs and actual construction work. Discrepancy at the interfaces between design and actual construction work may cause losses for the particular project such as delay of time, compromise on quality, cost overrun and also bad reputation for the project and parties involved in the problem. The objectives of this study were to identify the causes of discrepancy between design and construction work and identify the methods to reduce the discrepancy between design and construction work. The study covered registered architects, registered civil engineers and G7 contractors who were registered under LAM, BEM and CIDB in Johor. The study was carried out through questionnaire. All data analysis of the research was done by using Microsoft Excel 2007. The research showed that the main causes of discrepancy between design and construction work were lack of coordination, incomplete plans and specifications and time limitation in design phase and the methods to reduce it were preparation of clear specifications, thorough detailing design and continuous coordination and direct communications.

ABSTRAK

Biasanya, pereka bentuk bertanggungjawab untuk mereka sesuatu projek pembinaan berdasarkan keperluan klien dan kontraktor bertanggungjawab untuk menjadikan rekaan tersebut bertukar kepada realiti. Walaubagaimanapun, sebelum rekaan tersebut bertukar kepada realiti, ia mungkin melakunya beberapa kesalahan dan perubahan yang tidak diingini seperti salah reka. Oleh itu, perbezaan antara rekaan dan kerja pembinaan yang sebenar dihasilkan. Perbezaan di antara rekaan dan kerja pembinaan boleh menyebabkan kerugian kepada projek yang berkenaan seperti penangguhan masa, penambahan kos pembinaan dan juga reputasi buruk kepada projek dan pihak yang berkaitan. Objektif kajian ini adalah untuk menentukan penyebab-penyebab yang menjadikan perbezaan antara rekabentuk dan kerja pembinaan dan menentukan cara-cara yang boleh digunakan untuk mengurangkan perbezaan antara rekabentuk dan kerja pembinaan. Kajian ini melibatkan akitek, jurutera sivil dan kontraktor G7 yang berdaftar dengan LAM, BEM dan CIDB di Johor. Instrumen kajian ialah soal selidik. Semua data dalam kajian ini dianalisis oleh Microsoft Excel 2007. Didapati kekurangan koordinasi, pelan dan spesifikasi yang tidak sempurna dan keterbatasan masa di peringkat rekabentuk adalah penyebab-penyebab utama kepada perbezaan antara rekabentuk dan kerja pembinaan dan penyediaan spesifikasi yang jelas, perincian rekabentuk yang menyeluruh, koordinasi yang berterusan dan komunikasi langsung adalah cara-cara yang paling bagus untuk mengurangkan perbezaan antara rekabentuk dan kerja pembinaan.