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# QUANTITY SURVEYOR'S LIABILITY DURING PRE TENDER STAGE

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A project report submitted in partial fulfillment of the requirement for the award of the degree of Master of Sciences (Construction Contract Management)

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#### **ABSTRACT**

Quantity Surveyor is one of the professionals that normally involved in the pre tender stage of the construction development. The duties of quantity surveyor the pretender stage include preparing cost estimate, measuring quantities, preparing bills of quantity and giving suggestion on credible contractor to carry the construction project. The quantity surveyor will require delivering his duties with reasonable skill and care. In recent time, there have been many allegations against the professionals by clients for contractual negligent and by third party under the law of tort due to breach of duties by the quantity surveyor in performing his task at the pre tender stage. This research seeks to examine liability of quantity surveyor during pre-tender stage in term of producing cost estimate, measuring quantity, preparing bills of quantity and giving suggestion on credible contractor to carry the construction project. The analysis was carried out by referring to relevant law cases. This study found that generally, the professional owe a duty of care to perform his duty with diligent and with reasonable skill in accordance to the standard of duties stated. If he fails he is liable for resulting damages to his client. There are also claims from the third partier against clients due to the failure of the quantity surveyors who act as their agents.

#### **ABSTRAK**

Juruukur bahan adalah salah seorang professional yang terlibat dalam pembangunan pembinaan semasa peringkat pre-tender. Penglibatan juruukur bahan pada peringkat tersebut adalah sebagai penasihat berkaitan dengan kontrak dan kos yang telah dilantik oleh pihak klien untuk memjalankan tugas seperti Anggaran kos, membuat 'bills of quantity' dan memberi nasihat kepada pihak klien mengenai kontraktor yang mepunyai kredebiliti untuk menjalankan projek tersebut. Pada masa ini, terdapat banyak pertuduhan di majukan kepada pihak profesional di dalam industri binaan akibat kecuaian dalam menjalankan tanggungjawab. Kajian ini bertujuan untuk menyiasat liabiliti yang di tanggung oleh juruukur bahan semasa peringkat pre-tender berkenaan dengan penghasilan anggaran kos, penghasilan senarai kuantiti dan memberi saranan berkaitan kontraktor yang bakal di cadangkan di dalam laporan tender. Analisis untuk kajian ini dijalankan dengan merujuk kes mahkamah yang menunjukkan kesalahan yang biasa berlaku dalam perlakuan professional semasa peringkat pre tender. Kesimpulan daripada kajian ini ialah pihak juruukur bahan mempunyai kewajipan menjalankan kerja dengan tekun dan kemahiran yang munasabah menurut terma kontrak, jika dia gagal, dia bertanggungjawab kerana mengakibatkan kecederaan, kerugian atau kerosakan kepada pihak klient. Terdapat juga tuntutan daripada pihak ketiga kepada klien akibat kegagalan juruukur bahan menjalankan tanggungjawab tugas dengan baik dan sebagai seorang agen kepada klien, juruukur bahan bertanggungjawab untuk menanggung kerugian.

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### **CHAPTER 1**

#### INTRODUCTION

### 1.1 Background of the study

Although quantity surveying is a relatively old profession, nature of service has changed considerably as the nature of the construction industry has changed. The core function of Quantity Surveyor also remains the same as described in nineteenth century case *Taylor v. Hall*<sup>1</sup> namely,

'taking out in detail the measurement and quantity from plan prepared by an Architect for the purpose of enabling builders to calculate the estimate for which they would execute the plans'.

In the broadest definition, the quantity surveyor is a person to control construction costs by accurate measurement of required, the application of expert

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<sup>&</sup>lt;sup>1</sup> Taylor (1870) 4 IRCL 467 at 476

knowledge of costs and prices of work, labour, materials and plant required<sup>2</sup>. The usual duties of a quantity surveyor can be described with reference to different stages of development process. Pre-tender stage is where at the outset and before a building contract is entered, a quantity surveyor may be engaged by the employer to advise him of the estimated cost of the project and prepare detailed bill of quantities and schedules. The quantity surveyor may also be called upon to give general advice<sup>3</sup>.

Quantity Surveyor is one of the professionals involved in the construction industry. In accordance to *Shrike*<sup>4</sup>, the term professional refers to a person who is skilled and specialized, holds some special qualifications derived from training or experience and conforms to high standard of performance and work ethics. This professional belongs to a regulatory body which prescribes common rules of conduct and standard practice. This professional must perform his duty under a standard of performance.

The explanation of Standard of Performance by Bingham LJ in *Eckersly v. Binnie & Partners* <sup>5</sup> should be applied equally to any construction professional. Bingham LJ commented that

'A professional man should command the corpus of knowledge which forms part of the professional equipment of the ordinary member of his profession. He should not lag behind other ordinary assiduous and intelligent members of his profession in knowledge of new advances, discoveries and developments in his field. He should alert to the hazards and risks inherent in any professional

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<sup>&</sup>lt;sup>2</sup> Patten, B (2003) Professional Negligence in Construction Spon Press: London at Pg 72

<sup>&</sup>lt;sup>3</sup> Patten, B (2003) Professional Negligence in Construction Spon Press:Great Britain Page 73

<sup>&</sup>lt;sup>4</sup> Shrike,S (2009) 2 MLJ cl xii 2 MLJA 162 : Professional Negligence in the Construction Industry, MLJ Articles

<sup>&</sup>lt;sup>5</sup> [1998] 10 Con LR 1.

task that he undertakes to the extent that other ordinarily competent members of profession would be alert. He must bring to any professional task he undertakes no less expertise, skill and care than other ordinary competent members would bring but need bring no more. The standard is that of the reasonable average. The law does not require of a professional man that he be a paragon combining the qualities of polymath and prophet."

He is acting as an agent of the construction client to administer the contract on behalf of the client. An agent is a person that is authorized to create rights and obligations for the principle which in this particular case is the construction client through formation of contract or by appointment of the principle without contract or may be inferred from the principle's conduct<sup>6</sup>.

The agent must display complete loyalty and good faith, obey instruction to the letter and not attempt to exceed the authority that has been granted<sup>7</sup>. Extend and nature of duties owed to the client by the quantity surveyor as well as the powers and authority granted to the client will be determined by the contract for services between them<sup>8</sup>.

The professional not only required to do the work but also to do it competently where his failure to do so constitutes negligence<sup>9</sup>. Thus, the surveyors who miscalculate the estimated cost of a project, where in a case the clients think the cost would be cheaper, is likely to be in breach of his contractual obligation to use reasonable skill and care<sup>10</sup>.

<sup>&</sup>lt;sup>6</sup> Sinha & Deeraj (2000) Legal Dictionary 2<sup>nd</sup> Edition ILBS: Reprinted Edition Malaysia

<sup>&</sup>lt;sup>7</sup> Hinze, J Construction Contracts 2<sup>nd</sup> Edition, McGraw-Hill Higher Education: New York Page 60

<sup>&</sup>lt;sup>8</sup> Ashworth, A & Hogg, K (2007) Willi's Practice and Procedure for the Quantity Surveyor 12the Edition Blackwell Publishing: Britian Page 83

<sup>&</sup>lt;sup>9</sup> Ryan v Morgan Spear Assocs.,Inc,546 S.W 2d 678,681

<sup>&</sup>lt;sup>10</sup> Copthorne Hotel (Newcastle) Ltd v. Arup Associates (1996) 58 Con LR 105

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Negligence is defined in the Cunard & Anor v. Antifyre Ltd<sup>11</sup> as the absence of

the care which a prudent and reasonable man would take in the circumstances. Lord

Wright in Lochgelly Iron and Coal Co Ltd v M'Mullan<sup>12</sup> said:

"In legal analysis, it is more than heedless or careless conduct, whether in

omission or commission: it properly connotes the complex concept of duty,

breach and damage thereby suffered by the person to whom the duty owed."

Definition given by Baron Alderson in the case of Blyth v Birmingham Water

Works Co. 13 has general to apply:

"Negligence consists in the omission to do something which a reasonable man

guided upon those consideration which ordinarily regulate human affairs,

would do, or, doing something which a reasonable and prudent man would not

do"

The negligence act by the said professional resulting damages to another party

can be severe in both human and term of cost. In the event of negligence occurred, the

case-laws are then used to judge the nature of legal duties to which professional

quantity surveyor might owe their clients and the extent to which professional might

held liable to pay damages and to what extent the claims can be made towards this

professional.

<sup>11</sup> [1953] 1 KB 551; [1932] All ER Rep 558

<sup>12</sup> [1934] AC 1,at p 25

13 [1850] 11 Exch 781

#### 1.2 Statement of issues

During the last fifteen or so years, there has been an explosion of claims against professionals precipitating a liability crisis within the profession where the professional were held liable to the project owner and others for failures to perform their professional obligations in accordance with the standard of care<sup>14</sup>.

Similar to other profession, the standard contract or the retainer between a quantity surveyor and client will contain express term that both parties agree at the time contract entered.<sup>15</sup> Therefore the surveyor will be under a duty to his client under the contract to exercise reasonable skill and care, where in a case of breach of the contract, the client is entitled to damages to remedy the breach<sup>16</sup>. Later, the client has a right to recover all losses arising naturally from the breach.

The quantity surveyor involved in the various of development stage including the pre-tender stage where the are few duties or responsibilities will be carried out as preparing cost estimate, preparing bills of quantity and giving suggestion on suitable contractor. Under a contract term, the quantity surveyor will need deliver his duties with reasonable skill and care.

16 Ibid

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<sup>&</sup>lt;sup>14</sup> Matthew J. Sullivan & Chris S. Stacy. Theories of Liability against Architects & Engineers Retrieved 24 May 2009, from http://www.utcle.org/eLibrary/preview.php?asset\_file\_id=1301

 $<sup>^{15}</sup>$  Wilson, S (2006) Surveys and valuations – Breach of contract and negligence, Journal of Building Appraisal Vol 2 No 4 PP 294-300 : Palgrave Macmillan Ltd

Although quantity surveyor rarely featured in negligent cases<sup>17</sup> but there are few cases on allegation made to the Quantity Surveyor. In one of Australian case, *Bains Harding Construction & Roofing (Aust) Pty Ltd v. McCredie Richmond & partners Pty Ltd*<sup>18</sup>, the allegation made by client towards the quantity surveyor for the missing pages in the tender documents. The defendant is a quantity surveyor engaged by plaintiff to prepare a quantity breakdown for a purpose pricing a tender. However, the bill prepare by the defendant appear to have missing page causing BHC to underbid. Plaintiff claimed its loss from the defendant and it was successful.

In addition, Information given by the quantity surveyor at the pre-contact or tender stage would be necessary as well as helpful especially to the contractor in determining contract pricing document. In the case of *Meigh v. Stocking ford Colliery Company Limited*<sup>19</sup>, quantity surveyor is obliged to prepare an accurate quantity for the builders or contractor to price. The mistake in preparing bills of quantity will cause the client to the losses.

The extend of the standard of care is a subjective issue that could in fact induce a significant effect when come to decision in the court case involve in the law of negligence. It is a focus of this study to establish the liability of the quantity surveyor to his client with respect to breach of duty during the pre tender stage.

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 $<sup>^{17}</sup>$  R.W Craig (1999  $\,$  ) Procurement law for Construction and Engineering Works and Services, Blackwell Science Limited:London Pg 515

<sup>&</sup>lt;sup>18</sup> [1988] 13 NSWLR 437.Supreme Court of New South Wales, Smart J,10.6.1998

<sup>&</sup>lt;sup>19</sup> Cited [1922] Hudson's Building Case 7<sup>th</sup> Edition Pg 308

## 1.3 Objective of Study

The objective of this study is to identify liability of Quantity Surveyor towards the client with respect of breach of duties in pre-tender stage under the traditional procurement by studying/observing principle of law governing court decision.

## 1.4 Limitation of Study

The scope of this study will be confined to the following areas:

- Cases fall under conventional system because this method still is the common method used.
- This study will be limited to contractual liability between the client and the quantity surveyor.

### 1.5 The Significant of Research

From the research finding, the future research on corrective measures can be carried out later to overcome or decrease the number of claims towards the professionals with the intention that the professionals are remain trustable and reliable

## 1.6 Research Methodology

Below are several approaches that will be taken to achieve the objectives.

Firstly, initial literature review was done in order to obtain the overview of the concept of this topic. Discussions with supervisor, lecturers, as well as course mates, were held so that more ideas and knowledge relating to the topic could be collected. The issues and problem statement of this research will be collected through books, journal, cases, articles and magazines. The objective of this research will be formed after the issue and problems had been identified.

The next stage is the data collection stage. After the research issue and objectives have been identified, various documentation and literature review regarding to the research field will be collected to achieve the research objectives.

Generally, primary data is collected from Malayan Law Journals and other law journals via UTM library electronic database, namely Lexis-Nexis Legal Database and other Legal Database, WestLaw. The secondary sources include books, articles, seminar papers, newspaper as well as information from electronic media database on the construction contract law. These sources are important to complete the literature review chapter.

After the data collection stage, the author will analyse all the collected cases, information, data, ideas, opinions and comments. This is started with the case studies on the related legal court cases. The analysis will be conducted by reviewing and clarifying all the facts and issues of the case.

The final stage of the research process mainly involved the writing up and presenting the research findings. The author will review the whole process of the research with the intention to identify whether the research objectives have been achieved. Conclusion and recommendations will be made based on the findings during the stage of analysis.

#### REFERENCES

- Ashworth, A & Hogg, K (2007) Willi's Practice and Procedure for the Quantity Surveyor 12the Edition Blackwell Publishing: Britain
- Barrett, K (2008) Defective Construction Work, and Wiley-Blackwell: United Kingdom believes me, when you feel sad, pray to Allah, the Almighty. Insyha'Allah, you will feel very calm been in the situation lately
- Barros. A. A. J. (1989). Professional Liability and Construction. England: Chartered Institute Of Building Engle mere, Kings Ride, Ascot, Berkshire SL5 8BJ
- B.M McLachlin, W.J Wallace & A.M Grant, the Canadian Law of Architecture & Engineering, 2nd ed. (Toronto: Butterworths, 1994)
- Bockrath, J T (2000) Contracts and the Legal Environments for Engineers and Architects 6th Edition, McGrawHill: United States
- Brook, M (2004) Estimating and Tendering for Construction Works 3<sup>rd</sup> edition, Elsevier:Oxford
- Cecil Ray (1986) Professional Negligence, the Architecture Press: London

- Chiet, Chai Voon (2007) Professional Liability of Civil Engineer, UTM Master Dissertation (unpublished)
- Charlesworth & Percy (1998) Negligence (9th Edition) Sweet & Maxwell Ltd : London
- Contract Journal (1995) Some Good advice assessed at http://www.contractjournal.com/ Articles/1995/09/21/27269/some-good-advice.html on 8 November 2009
- Davies, C.M. (1989). Avoiding Claims: Practical Guide for the Construction Industry.

  Great Britain: St. Edmundsbury Press Ltd.
- Duty of care and negligence at http://www.villamanta.org.au/edit/Information\_Sheets/DUTY%20OF%20CARE%20&%20NEGLIGENCE.PDF
- Daniel Atkinson. An error of bills at http://www.atkinson-law.com/ cases/CasesArticles/CNews\_1999\_06\_03.htm assessed by 1 August 2009
- Evans, R. And Galbraith, A. (1979). Revision Notes on Building Law. London: Newnes –Butterworths.
- Foster, N; Trauner T.J; Vespe R.R; Chapman W.M (1995) Construction Estimates From Take Off to Bid. McGraw Hill: United States of America.
- Farial Hanum Nurul Ain Bt Khalid (2007) Comparison of Consulting Contract, Master of Science (Construction Management): UTM, Unpublish
- Flyvbjerg B, Holm M S & Buhl S (2002) Underestimating Costs in Public Works
  Projects Error or Lie? APA Journal Vol 68 No 3Pg 279 assessed at http://
  Flyvbjerg.plan.aau.dk/JAPAASPUBLISHED on 1 October 2009

- Frank E. and James A. (1988). *Building Subsidence: Liability and Insurance*. London: Oxford BSP Professional Books.
- Greenwood, W (1965) Management and Organizational Behavior Theories: An Interdisciplinary Approach. Cincinnati, OH: Southwestern Publishing.
- Hinze, J Construction Contracts 2nd Edition, McGraw-Hill Higher Education: New York
- Howard (2000), Professional Ethics and Rules of Conduct for the Royal Institution of Chartered Surveyors (RICS). United Kingdom: College of Estate Management
- Ir Harban Singh K.S (2002) Engineering Construction Contract Management Pre-Contract Award Practise, LexisNexis: Malaysia
- Ir Harban Singh K.S (2002) Law and Principle, LexisNexis: Malaysia
- John L. Powell. Professional Negligence the Changing Coastline of Liability at http://www.4newsquare.com/Files/PDF/Article/JP% 20article.doc assessed on 1 October 2009.
- Johnson Peter et al (1980) Pre-Contract Practice For Architect and Quantity Surveyors, Aqua Group, Granada: London
- Knowles Roger. Professional Liability of Consultants in the Construction and Engineering Industries. (Unpublished)
- Marianne, J. (2005). Building defects spoil homeowners' dreams. Portland: *The Oregonian News*. The Aldrich Law Office, P.C. 522 SW 5<sup>th</sup> Avenue.

- Matthew J. Sullivan & Chris S. Stacy. Theories of Liability against Architects & Engineers Retrieved 24 May 2009, from http://www.utcle.org/eLibrary/preview.php?asset\_file\_id=1301
- Noor Ashikin Khalid (1978). SMM dan Penggunaanya Dalam Industri Binaan. Skudai : Universiti Teknologi Malaysia: unpublished.
- Osborn P.G. & Bone S (2001) Osborn's Concise Law Dictionary Sweet & Maxwell: London
- Patten B (2003) Professional Negligence in Construction Spon Press: London
- Powell J.L & Jackson R.M (1987) Professional Negligence: Sweet & Maxwell: London
- Ramus, J, Birchall, S & Griffiths,P (2006) Contract Practise For Surveyors, Fourth Edition, Butterworth-Heinemann:UK
- R.M. Jackson and J.L. Powell. Professional Negligence 5th Edition
- R.W Craig (1999) Procurement law for Construction and Engineering Works and Services, Blackwell Science Limited: London Pg 515
- Seel, C (1984) Contractual Procedure for Building Students : Holt,RineHart and Winston Ltd : Oxford
- Sinha & Deeraj (2000) Legal Dictionary 2nd Edition ILBS: Reprinted Edition Malaysia
- Shrike,S (2009) 2 MLJ cl xii: Professional Negligence in the Construction Industry, MLJ Articles: Lexis Nexis

- Wilson, S (2006) Surveys and valuations Breach of contract and negligence, Journal of Building Appraisal Vol. 2 No 4 PP 294-300: Palgrave Macmillan Ltd

  Wikipedia, Quantity Surveyor assessed 2.9.2009 at http://en.wikipedia.org/wiki/Quantity\_surveyor
- Xavier G (1998) Contractor's Obligation in a Malaysian Construction Contract, Construction Journal: Westlaw