

Chapter 1

Introduction

The modern quantity surveyor

The training and knowledge of the quantity surveyor have enabled the role of the profession to evolve over time into new areas, and the services provided by the modern quantity surveyor now cover all aspects of procurement, contractual and project cost management. This holds true whether the quantity surveyor works as a consultant or is employed by a contractor or subcontractor. Whilst the importance of this expanded role cannot be emphasised enough, success in carrying it out stems from the traditional ability of the quantity surveyor to measure and value. It is on the aspect of measurement that this book concentrates.

The need for measurement

There is a need for measurement of a proposed construction project at various stages from the feasibility stage through to the final account. This could be in order to establish a budget price, give a pre-tender estimate, provide a contract tender sum or evaluate the amount to be paid to a contractor. There are many construction or project management activities that require some form of measurement so that appropriate rates can be applied to the quantities and a price or cost established.

The general approach adopted in this book is to concentrate on the traditional approach to construction whereby the client will employ a designer, and once the design is complete the work is tendered through the use of bills of quantities. Other procurement approaches move the

need for detailed measurement to later stages of the project cycle and away from activity undertaken by the client's team to that of the contractor's team.

The need for rules

The need for rules to be followed when undertaking any measurement becomes clear when costs for past projects are analysed and elemental rates or unit rates are calculated and then applied to the quantities for a proposed project. For greater accuracy in pricing, it is important to be able to rely consistently on what is included in an element or unit, and this helps build a more reliable cost database.

Following the Royal Institute of British Architects (RIBA) 2013 Work Stages, the measurement undertaken at Stage 1 – 'Preparation' – needs to be of basic areas or functional units, and the guidelines of the Royal Institute of Chartered Surveyors (RICS) *Code of Measuring Practice* are commonly followed. This enables comparisons to be made between different schemes and options when assessing the feasibility of a project.

When preparing a cost plan, the need to include the same items in each element is important so that costs for that element can be accurately applied. In May 2009, the RICS published the first in its planned new set of rules for measurement dealing with the order of cost estimates and elemental cost planning. The RIBA work stages and the *New Rules of Measurement* (NRM) are explained further in Chapter 2.

The same need for rules applies when measuring for bills of quantities. If a document is to be used for tender purposes and included in a contract, then the contractor needs to know the basis of the measurement and what is included or excluded from an item to be priced. Historically, standard methods of measurement have been used to provide these rules and are available in various forms worldwide. The RICS NRM – detailed measurement for building works (NRM2) – have now been published and are part of the RICS 'black book' guidance for accepted practice in the United Kingdom. At post-contract stages, it is important that the rules used in the contract document (if applicable) are followed to minimise disputes.

Establishing the approach

The approach to take for any measurement is to decide its purpose and the level of design detail available, enabling the adoption of the most appropriate rules and procedures.

Chapter 3 will look at the early stages of a building project, and the remainder of the book will then focus on the detailed measurement for bills of quantities. Having an ability to read and understand the rules for measurement for bills of quantities should enable the measurer to appreciate the requirements of different rules and approaches.