

PRACTICE NOTES FOR QUANTITY SURVEYORS

Valuation of Variations

Preface

A Working Committee with representatives of the Hong Kong Institute of Surveyors, the Association of Consultant Quantity Surveyors and the Hong Kong Construction Association was set up in October 2010 to establish a set of Practice Notes for the benefit of Quantity Surveying professionals in Hong Kong.

The Practice Notes are not intended to promulgate a standard of practice, but rather to produce some basic guidelines for the following core practices :

1. Tendering
2. Cost Control and Financial Statements
3. Valuation for Interim Payment Certificates
4. Valuation of Variations
5. Handling of Contractual Claims
6. Settlement of Final Account

As different client organisations will have their own procedures and requirements, the Practice Notes, which are prepared mainly for private sector projects using the HKIA/HKIS Standard Forms of Building Contract, should be adapted as appropriate.

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Valuation of Variations**1. General**

Variations are often defined as changes to the design, quality or quantity of the works set out in the original scope of works under the contract and therefore will normally result in either additions to or deductions from the contract sum.

Variations are to be instructed by the Architect (or Project Manager, Engineer, Employer's representative depending on the provisions of the contract) and will normally consist of one or more of the following:

- Alteration or modification to the design, quality or quantity of the works;
- Additions, omissions or substitution of items of work;
- Confirmation of the expenditure of Prime Cost or Provisional Sums;
- Changes to sequence, method or timing of the works;
- Changes to line, level, position or dimension of part or the whole of the works; or
- Any other changes under the Contract.

It is essential to carry out an early evaluation of the issued variations and communicate these with the Contractor as soon as possible for various reasons:

- (a) To enable close monitoring of the final contract sum;
- (b) To identify any potential claims arising from variations;

- (c) To provide the Contractor with the Quantity Surveyor's assessed amount of the variation as early as possible; and
- (d) To expedite final account settlement.

Item (c) above is actually exercising a partnering approach. If the Contractor knows approximately how much he would be paid for a particular variation before he commits himself to a Sub-contractor, he would be able to control his cost more effectively. This will make finalisation of final accounts much easier.

2. Methodology

- (a) Logging the changes

It is important to log all the changes instructed under the contract.

Instructions may take the form of:

- Issue of revised drawings
- Architect's Instructions / Project Manager Instructions / Engineer's Instructions
- Drawing Amendment Notification (DAN)
- Site Instructions
- Verbal Instructions including Confirmation of Verbal Instructions (CVI) or Confirmation Letters submitted by the Contractor

An up to date schedule of all changes recorded on the project should be available at all times. The Contractor should submit requests for endorsement of verbal instructions on a regular basis such that the schedule of changes can cover all the changes instructed.

Under the HKIA/HKIS Standard Form of Building Contract, Confirmations of Verbal Instructions (CVI) have the same status as Architect's Instructions in the Contract.

Sometimes the Special Conditions require that CVIs must be covered by a proper A.I. before they become valid. In such cases, many Quantity Surveyors tend to neglect the cost effect of CVIs

when preparing Financial Statements until they are covered by an A.I. However, the Architect's endorsement of CVIs is normally done at a very late stage of the Contract (usually after Practical Completion / Substantial Completion) and in most cases, all CVIs are endorsed. This will then create a sudden increase in the anticipated Final Account figure which can not only be very embarrassing but is also likely to cause a budget over-run. Also, given the nature of CVIs, a lot of information required for proper assessment of the cost will be lost due to the time lapse, making assessment of CVIs tedious and frustrating. Therefore, it is advisable for the Quantity Surveyor not to delay the assessment of CVIs simply because the validity of the CVIs is subject to confirmation by the Architect.

It is noteworthy that the prevailing Government Standard Form of Building Contract and some other forms of contract in the industry have no provision for CVIs. It is therefore prudent for Quantity Surveyors to acquaint themselves with the contract provisions concerning legitimacy of CVIs.

In dealing with Verbal Instructions / Site Memos adding further changes to the issued Architect's Instructions.

(a) Logging the changes (Cont'd)

- Quantity Surveyors shall check whether the Contract accepts the above as a formal instruction;
- If so, incorporate the further changes into the measurement of the issued Architect's Instruction;
- Be sure to attach a copy of the Confirmation of Verbal Instruction and/or the Site Memo to the Architect's Instruction and file them together to clearly identify the scope covered by the measurements;

- If all variations are to be covered only via written Architect's Instruction, inform the Contractor that those further changes cannot be included in the current measurement and he has to separately seek the issue of another Architect's Instruction.

(b) Quantifying the changes

- (i) Study the contents of the Architect's Instruction to fully understand the scope of changes;
- (ii) Check from the updated Drawing Register to identify the last revision to the respective drawings that are the subject of the variation;
- (iii) Identify the changes between the drawings and highlight the changes on the new drawings;
- (iv) Start off by measuring the omissions from the "old" drawings and then measure the additions from the revised drawings;
- (v) For contracts with schedules of rates, wherein the quantities do not form part of the Contract, it is imperative to ensure that the schedule of rates quantities shall not be used as the basis for quantifying omissions.

(c) Assessing the rates

- (i) Check if contract rates shall apply, if so, insert the BQ reference against the measured item;
- (ii) If not, check if the appropriate contract rate can be used as the basis for forming a pro-rata rate;
- (iii) Failing this a fair valuation should be made for the variation works using "star" rates;

- (iv) Where there are works which cannot be measured according to the SMM, assessment on a daywork basis may be made provided that the prerequisite conditions by which the work is to be valued on a daywork basis under the concerned contract are satisfied.

The above listed sequential order for assessing rates must be followed; Quantity Surveyors are not at liberty to randomly select their approach unless otherwise specified under the Conditions of Contract.

Attention shall be paid to the item coverage in Preambles or in the SMM in order not to over-value changes.

Where the Contractor provides quotations, Quantity Surveyors shall not simply accept the quotation but shall verify the applicability, reasonableness and reliability of the submitted information.

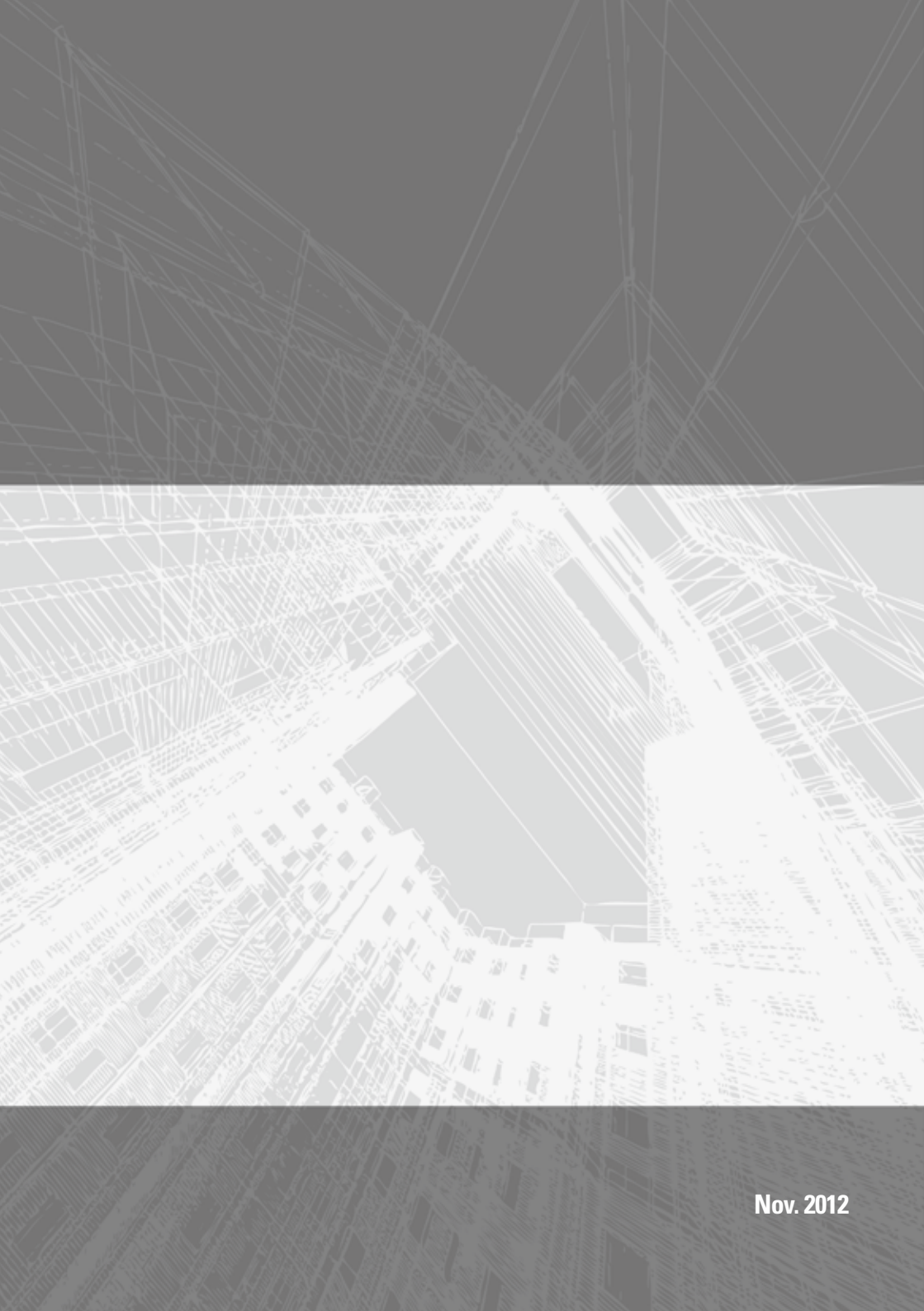
3. Cost Review Meetings

To provide stringent post contract cost control and to expedite the settlement of Final Accounts, Quantity Surveyors shall aim at having periodic cost review meetings with the Contractors to settle the valuation of instructed variations.

To achieve this, Quantity Surveyors shall:

1. Take the initiative, at the commencement of the contract, to set up a timetable with the Contractor on the frequency of cost review meetings for discussion and settlement of instructed variations. Where appropriate, invite relevant consultants other than the Architect to provide their opinion / comments on the information and details on which the assessment of instructed variations is based.
2. Both the Quantity Surveyor and the Contractor's QS shall discuss the best approach in terms of time and resources required for the measurement of instructed variations.
3. Ensure that the cost review meetings are productive by preparing and issuing an agenda for the next cost review meeting one week before the meeting. The purpose of these meetings should be to:
 - (a) List out and identify all issues (instructed variations / claims etc.) that are to be discussed and/or to be settled in the cost review meeting.
 - (b) Resolve ambiguities in the instructions. Additional information may be sought from the Architect or Engineer for clarification.
 - (c) Exchange assessments and have discussions on the variances between each side's figures.

All variations should be assessed and the assessment issued to the Contractor for agreement within a reasonable time of its issue. Agreement on the valuation of instructed variations reached from time to time shall be recorded on a regular basis.



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