

PART IV

PREAMBLES TO THE BILL OF QUANTITIES [Applicable to Options B and D]

GENERAL PREAMBLES

Method of
Measurement

1. This *bill of quantities* has been prepared in accordance with the procedures set forth in the Standard Method of Measurement for Civil Engineering Works, 1992 Edition (The Government of the Hong Kong Special Administrative Region), hereinafter referred to as the "Method of Measurement". **[For building and E&M contracts, please amend to suit.]**

General directions

2. Items shown in the bills ~~within of~~ the *bill of quantities* are items of work. In ~~the~~ this bill of quantities and the Method of Measurement, the headings, sub-headings, item descriptions and the matters listed against the relevant marginal headings "Item coverage" in Part V of the Method of Measurement and the Particular Preambles identify the work covered by the respective items, but such descriptions or identifications may not be exhaustive. Subject to clause [4.3] of the Scope, the ~~The~~ exact nature and extent of an item of work must be ascertained by reference to the Scope which includes Drawings ~~and~~ Specifications, BIM Contents, and to the *conditions of contract*, as not all requirements may be stated in the item description or its item coverage. Furthermore, whilst the item description and item coverage may make specific reference to certain parts of the Scope such as Drawings, BIM Contents and/or Specifications, the item of work described is deemed to include for all requirements shown in the Scope pertaining to that item of work irrespective of whether or not all related parts of the Scope are stated in the item description or item coverage. The item description of an item of work is deemed to include ~~the an~~ item coverage for the carrying out of all work, services and actions necessary or desirable for the satisfactory completion of such item of work in accordance with the contract.

The rate inserted against an item of work in the bill within the *bill of quantities* is deemed to be the full inclusive value of executing, completing, maintaining and/or supplying such item of work including any incidental work, services and actions thereto, unless expressly stated otherwise elsewhere in the *bill of quantities*. The expression "incidental work, services and actions" includes, but is not limited to, the carrying out of all work, services and actions and complying with all obligations which are specified or reasonably implied in the contract and which are related to, arise out of or are connected with the item of work as described in its headings, sub-headings, item description and item coverage. The rates inserted against the items of work in the bills within the *bill of quantities* shall include, but are not limited to, the following:

- (i) provision of labour and costs in connection therewith;
- (ii) provision of Equipment and costs in connection therewith;
- (iii) supply, transportation, handling and storage of Plant and Materials;

- (iv) multiple handling of any kind;
- (v) sampling and testing and costs in connection therewith;
- (vi) assembling, fixing, erecting, installing or placing of Plant and Materials in position;
- (vii) preparation of surfaces and other preparatory work for follow-on activities;
- (viii) wastage, bulking, shrinkage and the disposal of surplus Plant and Materials;
- (ix) temporary protection and its subsequent removal;
- (x) Temporary Works, including design;
- (xi) taking precautions and measures as far as is reasonable and practical to prevent interference with or damage to existing structures and utilities, roads, footpaths and paved areas, watercourses and drainage systems, public and private vehicular and pedestrian accesses, trees, graves and burial urns, including the provision of alternative access, if necessary;
- (xii) keeping the *works* where necessary, and as near as may be practical, free of water and protected from damage due to water and from weather conditions which may adversely affect the *works*, and taking measures to prevent floatation of new or existing structures;
- (xiii) taking all measures required to execute the *works* as affected by non-tidal open water or tidal water;
- (xiv) provision of working space and upholding the sides of excavations;
- (xv) carrying out trial mixes, trial runs and all other trials, demonstrations and mock-ups;
- (xvi) completion of formation and earthwork final surfaces;
- (xvii) recording, taking readings, measurements and observations, and submitting to the *Project Manager* all drawings, details of procedures and methods of construction to be used, technical literature, test certificates and any other documents or information required to be submitted under the contract;
- (xviii) in the case of any Plant and Materials supplied by the *Client* as specified in the Scope, return of the surplus;
- (xix) in the case of any Equipment and Plant supplied by the *Client* as specified in the Scope, protection, maintenance and repair of such Equipment and Plant while it is on the Site, costs in connection with operating such Equipment and Plant, and return of Equipment and Plant to the *Client* or replacement of such Equipment and Plant if it is damaged beyond repair or lost;
- (xx) notifying, making arrangements and liaising with all relevant Government Departments, authorities or other interested parties to obtain and maintain all licences and permits necessary for the execution of the *works*, and costs in connection therewith including the costs of complying with the terms and conditions of the licences

and permits;

(xxi) liabilities, obligations and risks involved in the execution of the *works* set forth or reasonably implied in the contract;

(xxii) establishment charges, overheads and profit.

[For building and E&M contracts, please amend to suit.]

Measurement	3.	<u>Subject to clause [4.3] of the Scope, the</u> The measurement of work is computed net from the Drawings <u>and BIM Contents</u> , unless stated otherwise in the Method of Measurement.
Item coverage	4.	If any item coverage includes reference to work which is the subject of item coverages elsewhere in the Method of Measurement, then the combined item coverages shall apply.
Use of alternative Plant and Materials or designs	5.	Where in the contract a choice of alternative Plant and Materials or designs is indicated for a given purpose, the description billed and rates inserted are deemed to cover any of the permitted alternative Plant and Materials or designs which the <i>Contractor</i> may elect to use.
Unpriced items	6.	Items against which no rate is entered are deemed to be covered by the other rates in the <i>bill of quantities</i> .
	7.	Not used
	8.	Not used
	9.	Not used
	10.	Not used
Cost and fee of test of Plant and Materials and workmanship	11.	Except for those tests provided for as separate items of work in the bills within the <i>bill of quantities</i> , the rates contained in the contract are deemed to include for the cost, overheads and profit of carrying out all tests on Plant and Materials and workmanship specified in the contract, including but not limited to, the cost, overheads and profit of packing and transport required for delivering samples to and collecting from the place of testing.
Discrepancy between the units of measurement given in the Method of Measurement and the bills	12.	<u>Subject to clause [4.3] of the Scope, where</u> Where there is discrepancy between the unit in the Method of Measurement and the unit for an item of work in the bills within the <i>bill of quantities</i> , the unit in the bill shall prevail, unless, by reference to the quantity in the bills and the nature of the item of work as identified by the Specifications, Drawings, <u>BIM Contents</u> , measurement rules, item description and item coverage in the Method of Measurement, the <i>Project Manager</i> determines otherwise.

PARTICULAR PREAMBLES

- Amendments to the Method of Measurement
1. For the purpose of the contract, the Method of Measurement as amended by the Corrigenda Nos. 1/93, 1/94, 1/97, 1/99, 2/99, 1/2000, 2/2001, 3/2001, 1/2007 and 1/2011 attached as Appendix 1 herein is further amended in accordance with the following particular preambles.
- Part I: Definitions
2. Paragraphs 1(b) and 1(c) of Part I is deleted in its entirety and is replaced by "NOT USED".
- Part III: Rules for Preparing *bill of quantities*
3. Paragraph 1 of Part III is deleted and replaced by the following:
- The *bill of quantities* shall comprise the following:
- General and Particular Preambles
 - Bill No. 1 : Preliminaries
 - Bill No. 2 :
and other bills onwards
 - Grand Summary
4. Add the following unit abbreviation to paragraph 2 of Part III:
- | Unit | Abbreviation |
|--------------|--------------|
| Number week | nr-wk |
| Number month | nr-mth |

Part IV:
Preambles to the
bill of quantities

5. The following is added after paragraph 2(i) and before paragraph 2(ii) of Part IV :
 - (i)A provision of management and supervisory staff and their assistants, including but not limited to those specified in ACC Clause **[IV:1]**;
6. Paragraph 2(x) of Part IV is deleted and substituted by the following:
 - (x) Temporary Works, including design and the checking and certification by independent checking engineer(s) where required;
7. Paragraph 2(xix) of Part IV is deleted and substituted by the following:
 - (xix) in the case of any Equipment and Plant supplied by the *Client* as specified in the Scope, protection, maintenance and repair of such Equipment and Plant while it is on the Site, costs in connection with operating such Equipment and Plant, and return of Equipment and Plant to the *Client* or replacement of such Equipment and Plant if it is damaged beyond repair, stolen or lost;
8. The following are added after paragraph 2(xxii) of Part IV: **[Please amend as appropriate.]**
 - (xxiii) use of mechanical covers for dump trucks as specified in Clause *[Insert appropriate reference]* of the Particular Specification (PS);
 - (xxiv) testing of the *works* including site acceptance tests, factory acceptance tests, tests of individual systems of the *works* and completion tests of the *works*, and the associated cost for the *Supervisor's* inspection of all such tests;
 - (xxv) commissioning of the *works*;
 - (xxvi) all cost and charges due to construction constraints, obtaining consent and/or other requirements, including but not limited to those as specified in Clause *[Insert appropriate reference]* of the PS;
 - (xxvii) all cost and charges for complying with the requirements for facilities to other contractors;
 - (xxviii) all cost and charges for complying with the requirements for submission of as-constructed records;
 - (xxix) all cost and charges for complying with the requirements for payment of mandatory provident fund contributions for Site Workers; and
 - (xxx) all cost and charges for complying with the requirements for site uniform.
9. Add the following after paragraph 4 of Part IV :
 - 4A. The item coverage of the relevant item as stated in the Method of Measurement and/or these Preambles to the *bill of quantities* is not

meant to be a comprehensive or exhaustive list covering all costs in relation to ~~the~~ work of that item. The rate inserted in the *bill of quantities* is deemed to be inclusive of all necessary cost and fee for the work of that item as indicated in the Specification and shown on the Drawings and BIM Contents, subject to clause [4.3] of the Scope. Any item missed out from the item coverage shall not be measured unless it is expressly required to be measured under other provisions in the Method of Measurement.

10. The following is added after paragraph 12 of Part IV :

Precedence of
Particular
Preambles and
Part V of the
Method of
Measurement

13. In the case of ambiguity, the Particular Preambles shall have precedence over the General Preambles and Part V of the Method of Measurement.

Standard drawings

14. All references to standard drawings in the *bill of quantities* are deemed to be those latest standard drawings as listed in the Particular Specification or current on the date set for the return of tender, whichever is the latest.

Terminology
reference

15. In the *bill of quantities* and the Method of Measurement, references to the terms listed under the column heading "Method of Measurement Terms" are construed as references to the corresponding terms listed under the column heading "NEC4 ECC Terms" as defined or used in the *conditions of contract* :

<u>Method of Measurement Terms</u>	<u>NEC4 ECC Terms</u>
Bills of Quantities	<i>bill of quantities</i>
Employer	<i>Client</i>
Engineer	<i>Project Manager</i>
Contractor	<i>Contractor</i>
Engineer's Representative	<i>Supervisor</i>
Works	<i>works</i>
Section	<i>section</i>
Contract	<i>contract</i>
completion	<i>Completion</i>
expiration of the Maintenance	<i>defects date</i>
Period	
approval / satisfaction	acceptance
approved / satisfied	accepted
equipment (those items intended to be included in the permanent works)	Plant
materials (those items intended to be included in the permanent works)	Materials
plant (those items used by the <i>Contractor</i> to Provide the Works and which the Scope does not require him to include in the permanent works)	Equipment
defect	Defect

Part V:
Units and Method
of Measurement

11. The Units and Method of Measurement of Part V is amended by the following pages.

