CHAPTER 5

CONTRACT DOCUMENTS

![Amendment List](image)

**Note:** The parts of the PAH shown in blue and bold should only be updated by Works Branch of Development Bureau. Amendment No. 3/2009

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2008 Edition
This Chapter provides a handy reference to the various standard documents, forms and information that are regularly used in the preparation of contract documents for civil engineering works. In some cases, standard forms and exact wording to be included in contract documents are reproduced in the Chapter. However, where a printed version of a standard document is available or where the information is contained in a well-known document, the Chapter makes reference to such documents or source rather than reproducing them. Standard documents referred to in this Chapter should be of the latest editions of the General Conditions of Contract for Civil Engineering Works, Standard Method of Measurement for Civil Engineering Works, General Specification for Civil Engineering Works, Sub-contract Articles of Agreement and Conditions for Civil Engineering Works, Contractor Management Handbook and Construction Site Safety Manual. The information in this Chapter would also be useful in the preparation of documents for term contracts.

A contract for civil engineering construction is a very complex legal document containing several inter-related documents each of which plays an important role in defining the obligations and responsibilities of the parties concerned or in providing information on the works to be constructed. It is therefore essential that the contract documents for each contract are prepared with great care and by an experienced professional who has thorough knowledge of the works to be constructed. The documents forming a contract must be scrutinized for comprehensive coverage, accuracy and consistency with one another before tenders are invited.
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I. ABBREVIATION

I.01 The meaning of the abbreviations assigned in this Chapter of the Project Administration Handbook for Civil Engineering Works shall only apply to this Chapter.

I.02 The following list shows the meaning of the abbreviations for the common terms used in this Chapter of the Project Administration Handbook for Civil Engineering Works:

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<td>Alkali-Aggregate Reaction</td>
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<td>BQ</td>
<td>Bills of Quantities</td>
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<td>CCC</td>
<td>Conditions of Contract Committee</td>
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<tr>
<td>CCGO</td>
<td>Central Cyber Government Office</td>
</tr>
<tr>
<td>CCIP</td>
<td>Contractor Controlled Insurance Programme</td>
</tr>
<tr>
<td>CEDD</td>
<td>Civil Engineering and Development Department</td>
</tr>
<tr>
<td>CPFS</td>
<td>Contract Price Fluctuation System</td>
</tr>
<tr>
<td>C&amp;D</td>
<td>Construction and Demolition</td>
</tr>
<tr>
<td>DCED</td>
<td>Director of Civil Engineering and Development</td>
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<tr>
<td>DEVB</td>
<td>Development Bureau</td>
</tr>
<tr>
<td>DEVB TCW No.</td>
<td>DEVB Technical Circular (Works) No.</td>
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<td>DLO</td>
<td>District Lands Office</td>
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<tr>
<td>DRA</td>
<td>Dispute Resolution Adviser</td>
</tr>
<tr>
<td>EDP</td>
<td>Electronic Dissemination Package</td>
</tr>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>E&amp;M</td>
<td>Electrical and Mechanical</td>
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<tr>
<td>EMSD</td>
<td>Electrical and Mechanical Services Department</td>
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<tr>
<td>EP</td>
<td>Environmental Permit</td>
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<td>EPD</td>
<td>Environmental Protection Department</td>
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<td>ER</td>
<td>Employer’s Requirements</td>
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<td>ETWB</td>
<td>Environment, Transport and Works Bureau</td>
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<td>Financial Circular No.</td>
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<td>GCC</td>
<td>General Conditions of Contract for Civil Engineering Works (1999 Edition)</td>
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<td>GCE/S&amp;T</td>
<td>Chief Geotechnical Engineer/Standards and Testing</td>
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<td>Geotechnical Engineering Office</td>
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<td>HATS</td>
<td>Habour Area Treatment Scheme</td>
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<td>Legal Advisory Division (Works) of Development Bureau</td>
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<td>Public Fill Committee</td>
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<td>Quality Powered Mechanical Equipment</td>
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<td>Standing Committee on Concrete Technology</td>
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<tr>
<td>SCT</td>
<td>Special Conditions of Tender</td>
</tr>
<tr>
<td>SDEV</td>
<td>Secretary for Development</td>
</tr>
<tr>
<td>SETW</td>
<td>Secretary for Environment, Transport and Works</td>
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<tr>
<td>SFST</td>
<td>Secretary for Financial Services and the Treasury</td>
</tr>
<tr>
<td>S for W</td>
<td>Secretary for Works</td>
</tr>
<tr>
<td>SMP</td>
<td>Sub-contractor Management Plan (Amendment No. 6/2009)</td>
</tr>
<tr>
<td>SPID</td>
<td>Standard Phraseology of [Bill of Quantities] Item Descriptions (Amendment No. 7/2009)</td>
</tr>
<tr>
<td>SRM</td>
<td>Systematic Risk Management</td>
</tr>
<tr>
<td>SSC</td>
<td>Site Safety Cycle</td>
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<tr>
<td><strong>Abbreviation</strong></td>
<td><strong>Term</strong></td>
</tr>
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<td>-----------------</td>
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<tr>
<td>WTO GPA</td>
<td>Agreement on Government Procurement of the World Trade Organization</td>
</tr>
</tbody>
</table>
II. GLOSSARY OF TERMS

II.01 Words and expressions to which meanings are assigned in this Chapter of the Project Administration Handbook for Civil Engineering Works (PAH) shall only apply to this Chapter.

II.02 In this Chapter of the PAH the following words and expressions shall have the meaning hereby assigned to them except when the context otherwise requires:

“Government” means the Government of the Hong Kong Special Administrative Region.

“project office” means the office responsible for the planning, design and construction of the project.
(Where these functions are performed by different offices at different stages, the project office shall mean the office responsible at each particular stage.)


“Schedule of Rates” and “Works Order” are as defined in the General Conditions of Contract for Term Contracts for Civil Engineering Works (2002 Edition).

II.03 Words importing the singular only also include the plural and vice versa where the context requires.
1. GENERAL

1.1 SELECTION OF TYPE OF CONTRACT

Contracts for construction may be broadly classified into the following types:

(a) a remeasurement contract containing Bills of Quantities or a measurement contract containing a Schedule of Rates,

(b) a lump sum contract with drawings and specification,

(c) a lump sum contract with firm Bills of Quantities,

(d) a cost reimbursement contract,

(e) a design and build contract involving both design and construction by the Contractor. This type of contract is normally priced as a lump sum. (See WBTC No. 31/99)

Paragraph 10 stipulates (Amendment No. 7/2009) that lump sum contracts with firm Bills of Quantities should be regarded as the preferred procurement approach for all civil engineering works. The criteria set out in Paragraph 10 (Amendment No. 7/2009) should be followed in determining the type of contract to be adopted. A measurement contract with a Schedule of Rates should normally be used for term contracts involving maintenance works or works of a recurrent nature or works of a minor nature.

Other types of contract may be used subject to the prior approval of the Head of Office/Division who may seek higher authority as necessary.

1.2 COMPOSITION OF TENDER AND CONTRACT DOCUMENTS

For a typical civil engineering contract the tender documents generally include the following:

(a) Notes to Tenderers (see Paragraph 11.2),

(b) General Conditions of Tender (GCT) (see Paragraph 2.1),

(c) Special Conditions of Tender (SCT) (see Paragraph 2.2),

(d) Form of Tender (see Paragraph 3.1, Appendix 5.1 & 5.2),

(e) Schedule of Proportions for calculating the Price Fluctuation Factor (see Paragraph 3.2, Appendix 5.3 & 5.4),

(f) General Conditions of Contract (GCC) (see Paragraph 5.1),

(g) Special Conditions of Contract (SCC) (see Paragraph 5.2),
(h) General Specification (GS) (see Paragraph 6.1),

(i) Particular Specification (PS) (see Paragraph 6.2),

(j) Standard Method of Measurement (SMM),

(k) Particular Preambles (if any),

(l) Bills of Quantities (BQ) (see Paragraph 7.1)

(m) Drawings (see Paragraph 8.1), and

(n) Any relevant pre-contract correspondence with the Contractor (e.g. tender addendum, circular letter to tenderers) (see WBTC No. 6/95).

Usually, only documents (d) to (n) listed above, the letter of acceptance of the tender and the Articles of Agreement form the contract documents (see WBTC No. 6/95A).

The type or edition of document used shall be the current version as promulgated by DEVB TCWs or other appropriate circular. Reference should also be made to the current corrigenda issued to the GS and the SMM (see ETWB TCW No. 6/95B).

1.3 CONSISTENCY AMONGST DOCUMENTS

Care should be taken to avoid any ambiguities or discrepancies in the documents which form a contract as contractual claims and disputes are often caused by inconsistencies in or between the documents. If any ambiguities or discrepancies exist, it should be noted that the provisions of the SCC prevail over those of the GCC, which in turn prevail over the PS and the Drawings, which in turn prevail over the GS. GCC Clause 5(1) and GS Clause 1.01 are relevant in this aspect.

In the drafting of SCC or PS clauses, reference should be made whenever appropriate to the GCC and the GS, using phrases such as:

(a) “Pursuant to General Conditions of Contract Clause ……”, or

(b) “GS Clause …… is deleted and replaced by ……..” etc.

1.4 COMMENTS ON DOCUMENTS BY CONTRACT ADVISERS

The responsibility for ensuring that tender documents are properly prepared rests with the professional officers handling the project. They may however seek advice from Contract Advisers on tender documents when genuine doubts emerge. When seeking such advice the officer concerned shall inform the Contract Adviser of the doubts he has and the aspects of the case on which he wants advice (see paragraph 21.2.1 of Chapter 7 of the PAH (Amendment No. 2/2006)).
1.5 LEGAL VETTING OF TENDER DOCUMENTS

1.5.1 Contracts Estimated to Exceed $300M

All tender documents for contracts estimated to exceed $300M in value must be submitted through the appropriate Contract Adviser to the Legal Advisory Division (Works) of DEVB (LAD(Works)/DEVB) for legal vetting prior to calling for tenders. Before submission to LAD(Works)/DEVB, it is advisable to request the relevant Contract Adviser to comment on the documents. Comments made by the relevant Contract Adviser on the draft should be attached for LAD(Works)/DEVB’s information.

The tender documents to be submitted shall include the following:

(a) Special Conditions of Tender,
(b) Form of Tender and Appendix thereto (if these have been altered from the standard version shown at Appendix 5.1),
(c) Articles of Agreement (if these have been altered from the standard printed version),
(d) Special Conditions of Contract,
(e) Particular Specification, and
(f) Bills of Quantities, including General and Particular Preambles.

A memo shall accompany the tender documents, drawing attention to the following:

(a) SCT clauses and SCC clauses together with reasons for their incorporation,
(b) alterations, if any, to the standard versions of the Articles of Agreement and the Form of Tender and Appendix thereto, and
(c) any clause in the PS, any item in the BQ, or any other matter relating to the tender documents or to the Contract which may have significant contractual or financial implications.

LAD(Works)/DEVB will consider these documents (retaining a copy for future reference) and may recommend amendments they consider advisable to the works division/regional office concerned, who should incorporate such amendments as necessary into the documents before calling for tenders. The vetting by LAD(Works)/DEVB will take at least three weeks and provision should be made in the programme for tender preparation.

If owing to urgency, or some other reasons, the documents cannot be submitted through Contract Adviser then the reason for the same should be explained in the covering memo to LAD(Works)/DEVB. However, action should then be taken to forward the comments made by Contract Adviser as soon as they are received.
1.5.2 Design and Build Contracts

The Administrative Procedures issued under WBTC No. 31/99 should be followed as closely as possible. In particular, the procedures laid down in the “Guidance Notes on the Preparation of the Employer’s Requirements” (Appendix C of the Administrative Procedures) should be followed in order to avoid any unnecessary design changes after the contract is awarded. Prior approval of SDEV must be obtained if alternative procedures are considered necessary or desirable in individual cases. The legal vetting requirement as described in Paragraph 1.5.1 applies equally to design and build contracts. The Administrative Procedures can be found on the DEVB website (under Publications and Press Releases\Publications\Standard Contract Documents\).
2. CONDITIONS OF TENDER

2.1 GENERAL CONDITIONS OF TENDER

Commonly used GCT clauses to be included in the Conditions of Tender for works contracts other than design and build contracts are given in ETWB TCW No. 26/2004. The project office may use the GCTs promulgated under ETWB TCW No. 26/2004 selectively since not every item of the provisions is applicable to a particular contract. For the latest version, please refer to the DEVB website:

2.2 SPECIAL CONDITIONS OF TENDER

Any alterations to a GCT shall be effected by a SCT. Commonly used SCT clauses to be included in the Conditions of Tender for works contracts other than design and build contracts are provided in ETWB TCW No. 26/2004. The project office may use the SCTs promulgated under ETWB TCW No. 26/2004 selectively since not every item of the provisions is applicable to a particular contract.

The inclusion of the standard SCT clauses requires the approval of an officer at D1 rank or above. When non-standard SCT clauses are needed, approval will have to be given by an officer of at least D2 rank. When seeking such approval, the reasons for their inclusion and a draft of them should be submitted.

For projects which funding has not been secured before tender invitation pursuant to FC No. 2/2003, an appropriate SCT shall be incorporated in the tender documents reflecting correctly the funding status of the project and reminding the tenderers that the Government is not responsible for their costs of preparing the bids.

The GCTs and SCTs promulgated under ETWB TCW No. 26/2004 have been uploaded to the DEVB website under standard contract documents in the publications section and they will be updated from time to time when new technical circulars are promulgated which may affect the library content.

For the latest version, please refer to the DEVB website:
3. FORM OF TENDER AND SCHEDULE OF PROPORTIONS

3.1 STANDARD FORM OF TENDER

For capital works contracts, the standard Form of Tender as shown at Appendix 5.1 should be used. Guidelines for completing the Form of Tender are given at Appendix 5.2. Regarding Form of Tender for term contracts, reference should be made to PAH Chapter 8.

3.2 SCHEDULE OF PROPORTIONS

A Contract Price Fluctuation System (CPFS) is used in all civil engineering contracts to cover changes in the cost of labour and materials between the time of tender submission and the time payment is made for Works completed. A description of the system and guidelines for the preparation and administration of contracts using the CPFS are provided in ETWB TCW No. 21/2003.

The CPFS requires the inclusion of a Schedule of Proportions in the contract documents, which will be used to calculate a Price Fluctuation Factor for adjusting payments to the Contractor for items valued at tendered rates. The standard format for the Schedule of Proportions and guidelines on its preparation are given at Appendix 5.3 and Appendix 5.4 respectively.

According to ETWB TCW No. 21/2003, the CPFS should not be applied to contracts where the time for completion of the Works (excluding Establishment Works period, if any) or Contract Period (for term contracts) is 21 months or less. Nevertheless, SDEV made amendment to this requirement via his memo ref. DEVB(PS) 107/3 dated 18.7.2008 that all government capital works contracts should apply the CPFS regardless of the contract duration. However, the Head of Department has discretion not to apply the CPFS if it is considered impractical or undesirable to do so due to reasons such as for contracts involving predominant use of proprietary products/systems and/or there are no suitable cost indices for price fluctuation computation. Please see SDEV’s memo ref. DEVB(PS) 107/3 dated 18.7.2008 for details.

3.3 LIQUIDATED DAMAGES

The liquidated damages (LD’s) formula to be entered in the Appendix to the Form of Tender should be a genuine pre-estimate of the likely loss to the Employer resulting from delay in completion of the Works, or any Section of the Works, as the case may be. GCC Clause 52 has been drafted on the basis that if any part of the Works is designated as a Section, the remainder of the Works must also be designated as a Section. If a contract contains Sections, LD’s should be calculated for each Section of Works instead of the Works.

If it is possible to carry out a cost-benefit analysis, LD’s shall be calculated using the daily rate of economic benefit likely to be generated by the project after completion and those additional costs due to the delay in completion of the Works, if any. Where such analysis is not possible, as is usually the case in public sector construction contracts, an estimate being a genuine pre-estimate of the likely loss to the Employer may be stipulated as the LD’s.
In estimating the likely loss to the Employer, there is a widely accepted formula method which includes the following components:

(a) loss of revenue or interest on the capital invested in the project;
(b) supervisory costs during the delay period;
(c) the additional sum payable to the Contractor in respect of fluctuations in the cost of labour and materials; and
(d) any special damages specific to the particular project.

The empirical formulae and guidelines for calculating LD’s based on the above components are given in ETWB TCW No. 4/2003.

The amount of LD’s is subject to proportional reduction pursuant to GCC Clause 52(2), due to the completion or handing over of a part of the Works or part of a Section in advance of the whole. Under certain circumstances, this proportional reduction may not reflect the real effect of delay. For example, a partial completion of the Works would not help in reducing the special damages. Also, in practice, there is a limit on the minimum size of the site supervisory staff beyond that no further reduction is possible. In these circumstances, a SCC specifying the minimum amount of LD’s should be incorporated in the contract (in accordance with the recommendation in paragraph 13 of ETWB TCW No. 4/2003) by adding a sub-clause (5) to GCC Clause 52. The sum calculated in respect of the special damages and the minimum supervisory staff costs shall then be inserted in the Appendix to the Form of Tender as the “Minimum amount of liquidated damages (per day)”.

It should be noted that the concept of minimum site staff establishment may not be applicable to Sections, other than the last Section, as the supervision can be carried out by the supervisory staff for the remaining Sections. However, there are exceptions, for instance, if a Section of the Works is geographically or technically separated, entailing the need to deploy staff purely for that Section of the Works. Another example is where some of the staff could be released on completion of a major Section, leaving some minor works such as landscaping works as the last Section to be completed.

Where the amount of LD’s is to a certain extent related to the contract value of the Works or the Section, the rate of LD’s shall be stipulated as a function of the Contract Sum or the contract value of the Section and an appropriate footnote should be added to deal with possible anomalies which may arise as a result of negative pricing by the tenderers (see paragraph 16 of ETWB TCW No. 4/2003).

It is important that those responsible for calculating LD’s should ensure that the calculations are logical and free from error. In all cases, the full implications of the contract must be considered in applying the formulae given in ETWB TCW No. 4/2003. In this respect, LD’s calculations should always be subject to an independent check by a senior professional officer. Calculations from which LD’s are derived must be set out clearly and kept on file for future reference. Full record of any review of LD’s together with all related calculations should also be kept on file.

As a provision for LD’s is enforceable only if the rate fixed is a genuine pre-estimate of the Employer’s loss judged at the time of entering into the contract, there is a need to
review the formula immediately before a tender is accepted (see paragraph 21 of ETWB TCW No. 4/2003).
4. ARTICLES OF AGREEMENT

Standard Articles of Agreement attached to the respective editions of the GCCs shall be used, namely, GF 548 for capital works contracts for Civil Engineering Works as modified by Appendix A of WBTC No. 20/2000 (GF 546 for term contracts for Civil Engineering Works), GF 549 for Design and Build Contracts, GF 541 for Building Works, and GF 550 for Electrical & Mechanical Works. Appropriate modification to the attestation clauses should be made in accordance with ETWB TCW No. 54/2002.

For Nominated Sub-contracts, the Articles of Agreement in the “The Government of the Hong Kong Special Administrative Region, Sub-contract Articles of Agreement and Conditions for Civil Engineering Works” (GF 543) shall be used for all Nominated Sub-contracts to capital works contracts.

Where a contract is awarded to an unincorporated joint venture, the revised Articles of Agreement at Appendix E of ETWB TCW No. 50/2002 shall be used. Where the contractor is an incorporated joint venture, the ordinary form of Articles of Agreement shall be used.
5. CONDITIONS OF CONTRACT

5.1 GENERAL CONDITIONS OF CONTRACT

The following standard documents are available:

(a) The Government of the Hong Kong Special Administrative Region, General Conditions of Contract for Civil Engineering Works (1999 Edition)

(b) The Government of the Hong Kong Special Administrative Region, General Conditions of Contract for Term Contracts for Civil Engineering Works (2002 Edition)

(c) The Government of the Hong Kong Special Administrative Region, General Conditions of Contract for Building Works (1999 Edition)


(f) The Government of the Hong Kong Special Administrative Region, General Conditions of Contract for Electrical and Mechanical Engineering Works (1999 Edition);

(g) The Government of the Hong Kong Special Administrative Region, General Conditions of Contracts for Term Contracts for Electrical and Mechanical Engineering Works (2007 Edition); and

(h) The Government of the Hong Kong Special Administrative Region, General Conditions of Contract for Design and Build Contracts (1999 Edition)

Copies of the GCC are issued to all approved contractors on the DEVB Lists and it need not be reproduced in tender documents.

The GCCs have been uploaded to the DEVB website (under standard contract documents in the publications section and they will be updated from time to time when new editions are promulgated which may affect the library content. (http://www.devb-wb.gov.hk/press_releases_and_publications/publications/contract_doc/index.aspx?langno=1&nodeid=852)

5.2 SPECIAL CONDITIONS OF CONTRACT

5.2.1 General Considerations

Any amendments, additions, deletions and amplifications to the GCC should be effected by the inclusion of SCC clauses. However, SCC clauses should only be included when there is a genuine need to alter or supplement the GCC.

Matters concerning materials or workmanship standards or detailed arrangement for the execution of Works should not in general be stipulated in the form of SCC. Such matters, if
not adequately covered by the GS, should be dealt with in the PS.

5.2.2 Library of Standard Special Conditions of Contract

Standard SCC clauses for use with the General Conditions of Contract for Civil Engineering Works (1999 Edition) are included in the Library of Standard Special Conditions of Contract promulgated and updated regularly by DEVB in WBTC Nos. 18/2000, 18/2000A and 18/2000B. In addition, any SCC clauses promulgated by means of memos/respective technical circulars after promulgation of the Library shall be deemed to have been included in the Library. The Library shall also be used with the GCC for Building Works (1999 Edition) and the GCC for Electrical & Mechanical Engineering Works (1999 Edition). All additions and deletions from the Library of standard SCC will be vetted by the Conditions of Contract Committee (CCC) and approved by the SDEV. To maximize the usefulness of the Library, any SCC developed for a particular contract that will have repeated use or could be of use to others should be submitted to the CCC through the department’s representative with a view to placing the clause in the Library of standard SCC.

5.2.3 Approval of Special Conditions of Contract

In accordance with the technical circulars promulgating the Library of Standard Special Conditions of Contract, except for the clause deleting provision for extension of time due to inclement weather, standard SCC clauses may be used as required with the approval of the chief engineer (or a higher rank officer in cases of SCC for Sections subject to excision, care of the Works insurance, third party insurance and designs or alternative designs by tenderers) responsible for the administration of the particular contract. The use of the standard SCC clause deleting the provisions for extension of time due to inclement weather must however be approved by the Head of Department and endorsed by DEVB (attention PAS(W)3).

All non-standard SCC clauses may be drafted and used as required on the approval of the Head of Department/Office or those officers (not below the rank at D1) to whom this responsibility has been delegated. When seeking such approval, the reasons for the inclusion of the SCC clause and a draft of the clause should be submitted. Should the Head of Department/Office or the delegated officer have any doubt as to the wording of a proposed SCC not contained in the Library then the clause may be forwarded to LAD(Works)/DEVB for advice, through the relevant Contract Adviser.

Contentious cases involving a major point of principle or change in policy should, at the discretion of Head of Department/Office, be referred to the Works Group Directors’ Meeting for consideration.
6. SPECIFICATION

6.1 GENERAL SPECIFICATION (Ref. WBTC No. 18/92)

The latest edition of the General Specification for Civil Engineering Works (GS) and its amendments can be found on the CEDD website. The GS covers general requirements and may need varying degrees of amplification and modification to suit individual contracts, e.g. on the general description (major items only) of the Works, the list of Drawings, works by other contractors on the Site running concurrently with the Works under the contract. Amplifications and modifications to the GS should be made in the Particular Specification (PS), with the approval of an officer at D1 rank or above administering the contract. It is essential to ensure that the PS does not alter or conflict with the GCC or SCC.

Copies of the GS need not be reproduced in contract and tender documents. The incorporation of the GS into the contract is effected by reference in the PS. If any amendments have been issued, the attention of the tenderers should be drawn to the specific websites where the amendments are available or the amendments should be incorporated in full in the tender documents.

(Amendment No. 7/2009)

6.2 PARTICULAR SPECIFICATION

Each contract will require a different set of PS clauses to suit its own circumstances (See Paragraph 6.1). Standard clauses/guidelines may be available from DEVB TCWs for the following subjects:

(i) For capital works or maintenance works (including tree planting) within or adjacent to the Kowloon-Canton Railway (Hong Kong) Section, Tsim Sha Tsui Extension, Ma On Shan Rail and Lok Ma Chau Spur Line, reference should be made to ETWB TCW No. 2/2005 and DEVB’s emails dated 3.9.2007 and 25.9.2007;

(ii) For public works to be carried out within the Railway Protection Area for the completed facilities of the West Rail, reference should be made to ETWB TCW No. 33/2003;

(iii) For public works to be carried out within the protection boundary for completed facilities of the Mass Transit Railway Corporation, reference should be made to WBTC No. 19/2002;

(iv) For contracts involving permanent prestressed ground anchors, reference should be made to ETWB TCW No. 16/2004;

(v) For reclamation contracts involving public filling, reference should be made to WBTC Nos. 10/92, 2/93, 2/93B, 16/96, 4/98 & 4/98A and subsequent revisions;

(vi) For contracts including computer facilities as an item to be provided by the Contractor, reference should be made to ETWB TCW No. 12/2004;
(vii) For construction site safety, reference should be made to WBTC No. 30/2000 and the Construction Site Safety Manual

(viii) For application of double-barrier coating system to concrete structure, reference may be made to ‘Model Specification for Protective Coatings for Concrete’ which is available on the CEDD website (ref. http://www.cedd.gov.hk/eng/downloading/index.htm#11)

(ix) **For the control of alkali-aggregate reaction (AAR) in concrete, reference should be made to Appendix 5.9** (Amendment No. 3/2008 & 3/2009);

(x) For contracts involving importation of sand from the People’s Republic of China by barges, reference should be made to WBTC Nos. 10/95 & 10/95A;


(xii) For contracts including contract transport, reference should be made to LWBTC No. 11/84;

(xiii) For independent checking of the Design, Erection, Use and Removal of Temporary Works, reference should be made to Paragraph 9.35 (Amendment No. 7/2009);

(xiv) **For contract measures to prevent non-payment of wages, reference should be made to Paragraph 9.11 of this Chapter.** (Amendment No. 5/2008)

(xv) For the trip-ticket system for disposal of construction and demolition (C&D) material at public facilities or landfills, reference should be made to ETWB TCW No. 31/2004;

(xvi) For contracts requiring employment of qualified tradesmen and intermediate tradesmen, reference should be made to WBTC No. 13/2002 and SDEV’s memo ref. (01M97-01-4) in DEVB(PS) 105/64/1 dated 17.12.2007;

(xvii) For control of dogs on construction sites, reference should be made to SETW’s memo ref. (014DQ-01-8) in ETWB(W)L/M(4)505/91/01 dated 29.8.2006.

(xviii) For contracts involving reinforced fill structures, references should be made to ETWB TCW No. 24/2003 and the model specification in Appendix A to Geoguide 6, “Guide to Reinforced Fill Structure and Slope Design”, which is available on the CEDD website http://www.cedd.gov.hk/eng/downloading/index.htm#11 (the project department shall submit the specification to GEO for checking in accordance with ETWB TCW Nos. 29/2002 & 29/2002A);
(xix) Not used;

(xx) For contracts with concrete used in marine environment, reference should be made to the ‘Recommended Specification for Reinforced Concrete in Marine Environment’ issued by the Chairman of Standing Committee on Concrete Technology (SCCT), which is available on the CEDD website (ref. http://www.cedd.gov.hk/eng/downloading/index.htm#11);

(xxi) For environmental management on construction sites, reference is to be made to ETWB TCW No. 19/2005, the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, SDEV’s memos ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007 and ref. (01N5V-01-2) in DEVB(W) 810/83/09 dated 24.12.2007;

(xxii) For metallic site hoardings and signboards, reference should be made to WBTC No. 19/2001;

(xxiii) For contracts involving management of dredged/excavated sediment, reference should be made to ETWB TCW No. 34/2002;

(xxiv) Not used;

(xxv) For contracts involving alternative designs by tenderers, reference should be made to ETWB TCW No. 25/2004 and SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009; (Amendment No. 11/2009)

(xxvi) For enhanced control of site cleanliness and tidiness, reference should be made to WBTC No. 6/2002 & ETWB TCW No. 6/2002A;

(xxvii) For implementation of additional measures to improve site cleanliness and control mosquito breeding on construction sites, reference should be made to Appendix A to ETWB TCW Nos. 22/2003 and 22/2003A;

(xxviii) For contracts involving the use of recycled aggregates in concrete production or in road sub-base construction, reference should be made to Para. 9.37 for details while for contracts involving the use of concrete paving units made of recycled aggregates, reference should be made to ETWB TCW No. 24/2004; (Amendment No. 10/2010)

(xxix) For implementation of Site Safety Cycle and provision of welfare facilities for workers at construction sites, reference should be made to ETWB TCW No. 30/2002;

(XXX) For employment of technician apprentices and building & civil engineering graduates by contractors of public works contracts, reference should be made to ETWB TCW Nos. 12/2003 and 9/2005;

(XXxi) For preservation and protection of existing trees and, where required, the registered Old and Valuable trees and shrubs, reference should be made to ETWB TCW Nos. 29/2004 and 3/2006 and the Cyber Manual for Greening

(xxxii) For contracts implementing Systematic Risk Management (SRM), the standard particular specification in Annex I of ETWB TCW No. 6/2005 should be incorporated;

(xxxiii) For contracts where an Environmental Permit has been obtained by the project proponent for the works, the standard PS clause in Paragraph 1.6.5 in Appendix A to ETWB TCW No. 13/2003 should be included;

(xxxiv) For contracts involving excavation works on unleased land or streets maintained by Highways Department, the standard PS clauses on permits for excavation works under the Land (Miscellaneous Provisions) Ordinance, Cap. 28 distributed via SETW’s memo ref. ETWB(W)249/38/02[TC 13/2001] dated 29.3.2004 are to be incorporated;

(xxxv) For construction works and ground investigation works in the vicinity of the Harbour Area Treatment Scheme (HATS) Stage I sewerage tunnels, reference should be made to ETWB TCW No. 28/2003; and

(xxxvi) For contracts involving tunnel works, reference should be made to ETWB TCW No. 15/2005.

6.3 SPECIFICATION REGARDING CONTRACT PRELIMINARIES AND EQUIPMENT

6.3.1 General Principles

(i) Specification in Terms of Performance

In the drafting of any PS clause, it should be noted that according to Paragraph 9 of ETWB TCW No. 33/2004, technical specifications shall, where appropriate, be in terms of performance rather than design or descriptive characteristics and be based on international standards where such exist. The same principle applies regardless of whether or not the tendering procedures are governed by the Agreement on Government Procurement of the World Trade Organization (WTO GPA). There shall be no requirement for or reference to a particular trademark or trade name or patent or origin unless there is no sufficiently precise or intelligible way of describing the procurement requirements and provided that “products having equivalent functions or performance” shall always be permitted and indicated in the tender documentation. (see S for W’s memo ref. WB(W) 272/31/02D dated 4.4.2002)

In the project offices there should exist a three-tier checking/approval mechanism whereby design drawings/tender documents are prepared by one group of officers, checked by officers of other ranks and finally approved by officers of higher ranks. If brand named products are to be specified, they should also be subject to the same scrutiny mechanism.

(ii) Used Preliminaries

To accord with the green policy of the Government, used preliminaries can be accepted if they are in good working and serviceable condition and if they can comply with the requirements of the contract. In the preparation of tender documents, project offices are
encouraged to specify, as far as reasonable and practicable and as much as possible, used preliminaries which are to be supplied for use by Engineer during the contract period. In warranted cases, works departments could specify clearly preliminary items as “used, but in a condition acceptable to the Engineer” (or where appropriate, another more definitive specification such as “not more than 2 years old” for land transport, etc) to save costs for the government.

Moreover, on the requirement of providing a temporary accommodation for the Engineer, the project offices, before considering erection of a new office, should first investigate the feasibility of using any existing site office. In the event that a new office is required to be erected, preference should be given to the used prefabricated units which are in good working and serviceable conditions, and such preference should be stated in the tender documents.

6.3.2 Specification regarding Contract Preliminaries

(i) Central Acceptance and Distribution of Contract Preliminary Items

The following PS clause should be included in the tender documents for the provisioning of contract preliminaries:

“All contract preliminary items shall be provided to the office of the Engineer’s Representative for central acceptance and distribution. The Engineer’s Representative should inform the Contractor of the name of the officers responsible for accepting these items. The Contractor shall not provide the items directly to an individual member of the site supervisory staff.”

(ii) Avoid Over-provision of Preliminary Items

The following PS clause should be included in the tender documents for works contracts with estimated contract sum exceeding $15M:

“All equipment or facilities to be provided for the use of the Engineer’s staff are only required to meet the minimum requirements stipulated in the Contract. Where this is impracticable (e.g. when the model just satisfying the minimum requirements is outdated or out of stock), the Contractor may provide at his own cost equipment or facilities slightly exceeding the minimum requirements. Extravagant or out-of-the norm over-provision is unnecessary and should be avoided. In the event that a much higher quality than that stipulated shall be provided for legitimate reasons, the Contractor shall give prior notification to the Employer of such an over-provision.”

(iii) Contract Number/Title on Contract Transport

The contract transport for the Engineer should be required to be painted with the contract number/title and the Contractor’s name (or other suitable identifications, if such names/titles are too lengthy) for easy identification.

(iv) Intellectual Property Rights

In addition, it is necessary to include the following PS clause in accordance with S for W’s memo ref. WB(W) 209/32/110 Pt. 12 dated 9.1.2001: “Please note that if the Contractor intends to use the intellectual property rights of another party in performing his obligations under the Contract, appropriate licences should be obtained from the relevant owners.”
7. **BILLS OF QUANTITIES**

7.1 **GENERAL** *(Ref.: WBTC No. 18/92, 21/93, 21/93A and 21/93B) (Amendment No. 7/2009)*

The main functions of the BQ are:

(a) to allow a comparison of tender prices of tenders obtained from tenderers, and

(b) to provide a means of valuing the work executed when the Contract has been entered into.

Provided that the construction works are measured according to the Standard Method of Measurement for Civil Engineering Works 1992 Edition (SMM) and conform to the General Specification for Civil Engineering Works 2006 Edition (GS), the BQ should be prepared in accordance with the SMM and the Standard Phraseology of [Bill of Quantities] Item Descriptions (SPID) as the standardized method for composing works-contract bill of quantity items. The latest edition of the SMM and its corrigenda can be found on the CEDD website. In the interest of uniformity the SMM shall be strictly followed for the measurement of items it covers. Only where this is not practical or where the SMM does not cover the item required should any amendment or additional to the SMM be made. Amendments or additions to the SMM should be made in the form of a Particular Preamble which shall follow the General Preambles in the contract documents and shall be submitted to an officer at D1 rank or above administering the contract for approval.

It is not necessary to reproduce a copy of SMM in contract and tender documents. The incorporation of the SMM into the contract is effected by reference in the Particular Specification. Since it is a requirement of Clause 59(1) of the General Conditions of Contract for Civil Engineering Works, 1999 edition, that the Method of Measurement to be used in the contract is that which is stated on the Preamble to the Bills of Quantities, it is essential that the General Preambles detailed in Part IV of the SMM are included in every contract document.

Due attention is drawn to the amendments made to SMM regarding the use of lump sum BQ contracts in Paragraph 7.4.2 and Paragraph 10. The quantities in the lump sum BQ contract must be measured accurately and regarded as firm, not subject to remeasurement. Where quantities cannot be measured accurately, the respective items in the BQ should be marked as “provisional”.

*(Amendment No. 7/2009)*

To remove site safety from the realm of competitive tendering and to enhance environmental management on construction sites, all appropriate tenders as required under ETWB TCW No. 19/2005, the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, and SDEV’s memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007 shall include a separate ‘Site Safety and Environmental Management’ section in the BQ.
7.2 PREPARATION OF BILLS OF QUANTITIES

The rules for preparing BQ are contained in Part III of the SMM and they should be strictly followed. In accordance with the SMM, a BQ will comprise the following:

- General and Particular Preambles
- Bill No. 1: Preliminaries
- Bill No. 2 (for works items, see guidance below)
- Bill No. (for works items, see guidance below)
- Bill No.: Site Safety and Environmental Management *(a)
- Bill No.: Daywork
- Bill No.: Prime Cost and Provisional Sums
- Grand Summary.

*(a) This Bill is to be provided for all appropriate tenders as required under ETWB TCW No. 19/2005, the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, and SDEV’s memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007;

Separate bills may be considered, at the discretion of the project engineer, for work items charged to different financial votes. When a lump sum form of contract is used, the provisional quantities are included in the Bills wherever it is appropriate and sensible to do so. Individual items to be remeasured can be mixed in with the “firm” items, or a whole section can be shown separately and described as provisional. The items in each bill should be grouped into the appropriate section of Part V of the SMM in the order shown. A sample for the Grand Summary is given at Appendix 5.5.

Copies of the SMM have been issued to all the approved contractors on the DEVB Lists and it needs not be reproduced in contract and tender documents.

Specimen BQ items provided in DEVB TCWs for various subjects such as site cleanliness and tidiness, preservation and protection of preserved trees, Professional Indemnity Insurance for the Works, etc. should be adopted where applicable.

All works items should be included in the BQ and omitted items should be minimized as far as practicable. The BQ should undergo a checking process to ensure the completeness and accuracy of the BQ and elimination of major errors. This would facilitate competitive tendering, reduce resources for valuation of omitted items and minimize the disputes arising from the valuation of omitted items. (Audit Report No. 53 Ch. 3 - http://www.aud.gov.hk/pdf_e/e53ch03.pdf)

7.3 PREAMBLES TO THE BQ

A set of standard clauses for the “General Preambles to the Bills of Quantities” is contained in Part IV of the SMM. Any amendments or alterations to the SMM to be adopted in the preparation of the BQ shall have the prior approval of an officer at D1 rank or above.
administering the Contract and shall be included as Particular Preambles to the Bills of Quantities.

The Preambles should also contain any other information which is considered to be necessary for the pricing of the BQ but is not included elsewhere in the contract documents.

Standard Particular Preambles for various subjects set out in DEVB TCWs should be adopted where applicable.

7.4 PROVISIONAL ITEM

7.4.1 Provisional Items

Provisional Item means an item describing work, the requirement for which is uncertain at the time the tender documents are issued and which can only be carried out on the instruction of the Engineer for the Contract. All works described by a Provisional Item should be clearly specified and the provisional nature clearly explained in the PS and BQ.

The use of Provisional Items in the BQ should be avoided as far as possible. They should not be included if it is impossible for the tenderer to provide a realistic tender price for the work, taking into account its provisional nature and the manner in which the works may be described. If the requirement for the work is very remote, issuing variations during the contract is generally more advisable than trying to cover the work by inclusion of Provisional Items.

7.4.2 Provisional Quantities under a Lump Sum Contract with Firm BQ

Any item or part of work which cannot be accurately measured is covered by a provisional quantity or sum and measured as executed on completion of the item or part of work i.e. the value of these item(s) or part(s) of work(s) in the Bills is/are deducted from the Contract Sum and the value of the works executed is added. For details, refer to Paragraph 10 (Amendment No. 7/2009).

7.5 PROVISIONAL SUM/CONTINGENCY SUM/PRIME COST SUM

Provisional Sum means a sum provided for work(s) or expenditure which has not been quantified or detailed at the time the tender documents are issued. Contingency Sum means the sum provided for work(s) or expenditure which cannot be foreseen at the time the tender documents are issued. Prime Cost Sum means the sum provided for works to be executed or for materials or services to be supplied by a Nominated Sub-contractor, after deducting any trade or other discount. However, according to GCC Clause 1(1), both Provisional Sum and Contingency Sum may include provision for works to be executed or for materials or services to be supplied by a Nominated Sub-contractor.

Provisional Sums for specific purposes should be included in the relevant bills of the BQ.

Under the GCC for Term Contracts (2002 Edition), Contingency Sum may also be specified in a works order in term contracts for work or services or expenditure which cannot be foreseen at the time such works order is issued.
7.6 SECTIONS SUBJECT TO EXCISION (Ref.: LWBTC No. 6/89)

‘Sections Subject to Excision’ is required on occasions where it is necessary to let contracts prior to confirmation that all the works can proceed. For example, where there are land clearance problems, or where a decision has yet to be reached on the inclusion of a footbridge in a roadworks contract. In such circumstances it is obviously beneficial to have these works included as part of the competitive tender, but also equally important to make it clear to the tenderers that these works may not be required.

Where work is to be included in a tender, but the implementation of that work has not been decided upon by the Employer, then such work may be incorporated as a Section Subject to Excision. Consequently, the items for such works should comprise a separate bill within the BQ, which should be clearly designated ‘Section Subject to Excision’, and the standard Special Condition of Contract for ‘Section Subject to Excision’ as given in WBTC No. 18/2000 shall be included in the Contract.

Also the following information must be included in the Appendix to the Form of Tender:

(a) the period of time within which the Engineer may instruct the Contractor to proceed with the work contained within the Section Subject to Excision. This period commences from the date for commencement notified by the Engineer in accordance with Clause 47 of the General Conditions of Contract for Civil Engineering Works.

(b) the time for completion of the Section Subject to Excision, and

(c) the liquidated damages for the Section Subject to Excision.

As the Contractor must allow for the Section Subject to Excision in his programme, it must be taken into account when assessing the time for completion stated in the Contract. (Amendment No. 2/2008)

However, if the work contained in the ‘Sections Subject to Excision’ is not ordered, any preliminaries and overhead costs attributable to those Sections which may be covered elsewhere in the Contract would still be payable to the Contractor. The effect of including ‘Sections Subject to Excision’ and the probability of its incorporation in the Works should therefore be carefully considered before it is included in the tender documents. Preliminary items in respect of the ‘Sections Subject to Excision’, where these can be identified, should be included in a separate bill of the BQ designated ‘Section Subject to Excision’.

The inclusion of ‘Sections Subject to Excision’ in tender documents requires the approval of an officer at D2 rank or above. (Amendment No. 3/2009)

7.7 SITE CLEANLINESS AND TIDINESS

In order to enhance site cleanliness and tidiness, payment provision shall be incorporated into all works contracts including term contracts and design and build contracts.
The item on site cleanliness for works contracts that are BQ based are to be marked ‘Quantity Provisional’ to cater for Contractors over-running the time for completion of Contracts. Payment will continue to be made (if justified) throughout the construction period even if the Contractor is in culpable delay. The purpose of continuing the payment is to ensure that the Contractor shall continue the cleaning and tidying up of the Site irrespective of the work progress.

Sample BQ, method of measurement and guidelines for preparing the section on site cleanliness are given in WBTC No. 6/2002 and ETWB TCW No. 6/2002A.

7.8 SITE SAFETY AND ENVIRONMENTAL MANAGEMENT

7.8.1 Pay for Safety and Environment Scheme (PFSES)

With the promulgation of ETWB TCW No. 19/2005, all appropriate tenders included in the Pay for Safety and Environment Scheme (PFSES) shall include a separate “Site Safety and Environmental Management” section in the BQ. A number of sample BQ and guidelines for preparing the “Site Safety and Environmental Management” Section of BQ are given in ETWB TCW No. 19/2005, the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, and SDEV’s memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007. Please also see Sub-section 9.15.

7.8.2 Site Safety Cycle (SSC)

Payment for Site Safety Cycle (SSC) shall be made under the PFSES by including appropriate sections in the Method of Measurement and appropriate items in the BQ. The main item to be included for payment is collectively referred to as ‘Pre-work Activities’ which comprise the following activities on one day:

(i) Pre-work Exercise and Safety (PES) meetings;

(ii) Hazard Identification Activity (HIA) meetings; and

(iii) Pre-work Safety Checks.

Another payment item under the SSC is the provision of ‘Safety Bulletin Board’.


7.8.3 Management of Contaminated Soil

Tender documents should indicate restrictions, if any, on disposal of contaminated soil
from a project based on the agreed arrangements with EPD where appropriate (See Paragraph 1.4.2(e) of Chapter 1). Tenderers should be reminded that permission for disposal of contaminated soil at landfills needs to be obtained from EPD prior to the delivery of the contaminated soil to landfills.

In case the treatment or disposal arrangement of contaminated soil is subject to further assessment during contract stage, appropriate contract provisions should be provided to draw the tenderers attention and to allow for the possible variances in handling of contaminated soil.

7.8.4 Welfare Facilities for Workers

To take care of the needs and welfare of workers and to promote site cleanliness and hygiene, the Contractor is required to provide storage compartments, drinking water facilities, toilet facilities, hand-wash facilities and rubbish bins. Showering facilities may also be required depending on the number of workers on site. These provisions shall be included in the Preliminary Items ‘Temporary Accommodation for the Contractor’ or ‘Contractor’s Site Accommodation in the Preliminaries’ as appropriate by incorporating the sample Particular Preamble stipulated in ETWB TCW No. 30/2002.

7.9 TRIP TICKET SYSTEM

Sample Particular Preamble is provided in ETWB TCW No. 31/2004 for the requirement of Site Management Plan for Trip Ticket System.

7.10 PRESERVATION AND PROTECTION OF PRESERVED TREES & OLD & VALUABLE TREES

Related sample Particular Preamble and sample BQ for preservation and protection of preserved trees and old and valuable trees can be found in the Cyber Manual for Greening which is posted on the government intranet, the ‘Central Cyber Government Office’ (CCGO) portal (http://portal.ccco.hksarg/index.jsp) under the heading ‘Other Useful Information (http://etwbwb.host.ccco.hksarg/). See also ETWB TCW Nos. 11/2004, 29/2004 and 3/2006.

7.11 MEASUREMENT PROCEDURES

The project engineer should open a measurement file before any taking-off commences and issue instructions to his staff regarding the method of measurement to be adopted and any other guidance he considers necessary for the preparation of the BQ.

Standard forms for taking-off, abstracting and billing are included in Chapter 9 (Measurement Procedure), and should be used. All taking-off and abstract sheets should be signed and dated by the officer preparing them and inserted into the measurement file.

The project engineer should arrange to have the taking-off sheets, abstract sheets and the bills checked to ensure correctness in all respects. Checked documents should be dated and signed by the officer who carries out the checks.

7.12 PAY FOR MONITORING PAYMENT OF WAGES
Reference should be made to Paragraph 9.11 of this Chapter for sample Preambles and BQ for implementing “Pay for Monitoring Payment of Wages”. (Amendment No. 5/2008)
8. DRAWINGS

8.1 DRAWINGS INCLUDED WITH TENDER DOCUMENTS

These should be listed in the PS and should include sufficient drawings to enable the tenderers to price the tender properly. Amongst these should be a general layout plan, general arrangement drawings, typical structural details and any other drawings required for providing tenderers with a good perspective of the extent and nature of the work.

8.2 DRAWINGS NOT INCLUDED WITH TENDER DOCUMENTS

It is not uncommon that drawings giving site investigation information, utilities drawings and reinforcement details drawings are not included with the tender documents. In that case, they should be listed in the PS and should be made available for inspection by tenderers during the tender period. These drawings, when forming part of the Contract, should be issued to the Contractor at the commencement of the Contract. Standard drawings, if applicable to the Contract, should be listed (specifying the applicable version) in the PS but may be excluded from the tender documents and the subsequent Contract documents if they are available in the department’s website. Otherwise, they should be made available for inspection by tenderers during the tender period, and, if necessary, be issued to the Contractor at the commencement of the Contract.

8.3 DRAWINGS NOT FORMING PART OF THE CONTRACT

Drawings giving information only, including site investigation plans and existing utilities plans, do not form part of the Contract and should be stated as such so as to avoid possible future claims. A note should also be added on the drawings to disclaim responsibility for the accuracy or sufficiency of the information given. They should be made available for inspection by the tenderers during the tender period.


If tender/contract drawings are available in electronic form, a tenderer/contractor may ask the Engineer designate/Engineer for the supply of additional copies of such tender/contract drawings in electronic form for the purpose of preparing/administrating his tender/contract. The charges for supplying electronic drawings are announced by DEVB periodically. The current charges as announced via SDEV’s memo ref. (02263-01-2) in DEVB(W) 511/70/02 dated 23.7.2009 are as follows:

(a) Handling Charge - $36 per drawing

(b) Material Charge

<table>
<thead>
<tr>
<th>Material</th>
<th>Unit Charge (HK$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) 1.44MB Floppy Disc</td>
<td>$0.8</td>
</tr>
<tr>
<td>(ii) 700MB CD-ROM</td>
<td>$1</td>
</tr>
<tr>
<td>(iii) 4.7GB DVD+/-R</td>
<td>$2</td>
</tr>
</tbody>
</table>
The electronic drawings should only include the data files. They should not include any executable programmes.

Before electronic drawings are issued, the tenderers/contractors should be asked to confirm their acceptance of the following terms of use on electronic drawings.

(a) When electronic drawings are issued, the Engineer designate or the Engineer should advise the tenderer/contractor in writing that while every care has been taken to check the integrity of the electronic drawings, no guarantee can be given that the electronic drawings are free from computer viruses and that neither he nor the Employer will be responsible for any direct or consequential damage or losses resulting from any computer viruses that may be contained in the electronic drawings.

(b) The tenderer/contractor should also be advised that electronic drawings are issued only for the convenience of the tenderer/contractor and they do not form part of the tender/contract documents. There may be a loss of fidelity when the drawings are displayed on the tenderers/contractors system because the preservation of fidelity will depend on proper system settings. If there are discrepancies between the electronic drawings and the tender/contract drawings in hard copy format, the latter should prevail. The Employer and the Engineer or the Engineer designate will not accept any liability arising from any discrepancies between the electronic drawings and the tender/contract drawings.

Furthermore, if the electronic drawings contain digital map data supplied by the Lands Department, the Engineer designate or the Engineer shall require the tenderer or, as the case may be, the contractor to provide a duly signed undertaking in the form set out in Appendix 5.7 before these electronic drawings are issued.

To assure authenticity, the Engineer designate or the Engineer shall digitally sign electronic drawings with the digital certificates issued by Certification Authorities approved by the Office of the Government Chief Information Officer (OGCIO) under the Electronic Transactions Ordinance (Cap. 553).

If the tenderer/contractor has provided an undertaking on the use of Government digital map data, the Engineer designate or the Engineer shall check that the tenderer/contractor has executed and returned the "Confirmation by contractor on cessation of the use of Government digital map data" set out in Appendix 5.10 on the tenderer submitting its tender or the contractor having completed the relevant work.

(Amendment No. 1/2008 & 7/2009)
9.  SPECIAL TOPICS

9.1  MULTI-CONTRACT AND SINGLE CONTRACT ARRANGEMENTS

Where the required financial and manpower resources are available, the contracts of a multi-contract project are normally carried out in parallel to enable the completion of the project in the shortest possible time.

Some of the issues that need to be considered and provided for in a multi-contract project would include:

(a) Site access,
(b) Facilities (provided by the Contractor) for other contractors,
(c) Works areas,
(d) Staged possession and handing over of site, and
(e) Consequence of delay in any one of the contracts on other contracts.

Suitable provisions should be made in the constituent contracts to cover these and other relevant issues. Such provisions should be made in the SCC, PS and Drawings, where appropriate.

For projects (i) involving sequential handling-over of the project site among contractors of concurrent contracts and/or (ii) in which the work progress of one contractor is dependent on that of another contractor in the same project, the compatibility of the multi-contract arrangement with the preferred contract forms of the project should be carefully assessed. For instance, before adopting the arrangement of implementing a conventional contract for civil works and a design-and-build contract for E&M works at the same time, the pros and cons of such arrangement should be thoroughly compared with that of combining the civil and the E&M works into a single contract.

For projects involving substantial underground works, and hence with a relatively high degree of uncertainty, consideration should be given to reducing risks by carrying out works at different locations under separate contracts to be undertaken by different contractors. However, before deciding on adopting this approach, its benefits would have to be balanced against possible demerits such as the reduction in economy of scale and the need for greater management effort to deal with contract interface problems.

For time-critical projects, whilst it may be desirable to adopt advance contracts to capture programming benefits, demerits of such arrangement such as introduction of additional contract interfaces should be carefully assessed (also see Paragraph 9.19 on time-critical projects).

It is important that all the merits and demerits of using multi-contract arrangement in a project should be thoroughly assessed before deciding on the most appropriate number and form of contracts in a project.
For multi-contract projects, those parts of tender documents delineating the split of the works, particularly the drawings and bills of quantities, should be carefully checked to ensure consistency and that there is no omission or duplication of works at the interface.

9.2 COMPLETION IN SECTIONS

For contracts to be completed in Sections, the tender documents, i.e. the Form of Tender, SCC, PS and Drawings, where appropriate, should explicitly define the extent of the various Sections and their respective time for completion. Separate amounts of liquidated damages and minimum amounts of liquidated damages, if any, should be set for each Section of the Works in the Appendix to the Form of Tender.

Each Section should preferably be a self-contained package of work. Great care should be taken in defining the extent of each Section to avoid any possibility of ambiguity. There should be no overlapping between Sections and all the Sections should add up to be the Works.

9.3 CONTRACTOR’S DESIGNS AND ALTERNATIVE DESIGNS

9.3.1 Pre-contract Stage (Ref.: ETWB TCW No. 25/2004, SDEV’s memo ref. (01TAM-01-7) in DEVB(W) 536/70/03 Pt. 2 dated 7.1.2009 and SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009) (Amendment No. 11/2009)

Departments may, subject to the approval of an officer at D2 rank or above, require tenderers to submit complete tenders incorporating their own proposals for the design of part of the Works which is not covered by the Engineer's design, in the following cases:

(a) Where such part of the Works is in a specialist or developing field;

(b) Where such part of the Works includes materials and construction methods, the design of which requires the specialist experience of contractors or suppliers;

(c) Exceptionally, where the detailed design of such part of the project is insufficiently advanced and the completion of the project is urgent;

(d) For piling works where several solutions are available to implement the Works; and

(e) For works of a limited lifespan, e.g. a temporary footbridge within a larger project.

Where there is a potential for better value for money, departments are required to critically consider the option of inviting tenderers of works contracts to submit alternative design during tendering in accordance with ETWB TCW No. 25/2004. In such circumstances, departments may, subject to the approval of an officer at D2 rank or above, invite tenderers to submit tenders incorporating their own alternative designs for a certain part of the Works notwithstanding that a design for that part of the Works has been provided by the Engineer. Departments shall specify in the tender documents
that part of the Works for which alternative designs are invited. Departments are required to properly document the justifications for not inviting tenderers to submit alternative designs for future reference and auditing purposes.

In requiring or inviting tenderers to submit tenders based on their own designs for part of the Works, departments should take note of the following guidelines:

(a) The tender documents shall contain specific and complete instructions to tenderers including a complete set of design criteria, outline drawings, survey plans and any requirements pertaining to that part of the Works for which tenderer’s design proposals are required or alternative design proposals are invited (in a PS Clause);

(b) Where applicable, a clear indication to tenderers of materials and methods of construction which would not be considered shall be given in the tender documents; and

(c) A reasonable tender period and validity period shall be allowed, consideration being given to the time required to formulate and prepare a design in sufficient detail and for a reasonable assessment to be made during the tender assessment period.

Where alternative designs for certain part of the Works are invited, tenderers may elect to submit a tender conforming with the Engineer’s design and/or in accordance with the invitation an alternative tender incorporating the tenderer’s alternative design for that part of the Works (hereinafter refer to conforming tender and alternative tender respectively). It is not necessary that an alternative tender must be accompanied by a conforming tender. Where there is no invitation for alternative tender or design, alternative tenders or designs shall not be considered.

The contractual provisions to be incorporated into the tender documents are given in ETWB TCW No. 25/2004 and SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009.

9.3.2 Contract Stage (Ref.: ETWB TCW No. 25/2004 and SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009)

In respect of alternative design (or Cost Savings Design) at contract stage, the contractual provisions to be incorporated into the tender documents are also given in ETWB TCW No. 25/2004 and SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009.

9.4 CONSTRUCTION RELATED INSURANCE

(a) ETWB TCW No. 6/2005 sets out guidelines on the application of a systematic risk management (SRM) process in public works projects. All public works programme projects with cost estimates in excess of $200M will be required to go through a SRM process promulgated under the subject circular. The risk management process comprises a systematic approach to risk planning, identification, assessment and treatment. One of the treatment options
available is to transfer certain risks to insurers through proper contract
documentation.

(b) For public works programme projects with cost estimates below $200M,
ETWB TCW No. 6/2005 does not apply. However, for the purpose of
assessing whether insurance is required for the respective contracts under that
particular public works programme project, departments should adopt a similar
approach to risk assessment and treatment set out under ETWB TCW No.
6/2005 to reach a decision on the matter.

c) The result of the risk-based assessment on insurance procurement should be
properly documented and endorsed by an officer at D2 rank or above.

d) If the result of the SRM process dictates that insurance procurement is the
proper treatment of the identified risks, two options exist on the procurement
of construction insurance viz: -
(1) Owner Controlled Insurance Programme (OCIP)
(2) Contractor Controlled Insurance Programme (CCIP)

e) Coverage for the contract works (Care of the Works) or for liability emanating
therefrom (Third Party Liability) should be procured in the joint-names of the
Owner (i.e. Government/Works Department), the Contractors (including co-
and sub-contractors) and their servants or agents in any tier and/or consultants
for their site activities only. The determination of the amount of insurance
coverage should follow the quantitative assessment methods outlined in the
SRM procedures. This can be procured by either OCIP or CCIP. If the
requirement for insurance is specified, the contract should state clearly by way
of inclusion of suitable special conditions, what insurance is required and who
is responsible to arrange the insurance. In cases where the nature and extent
of the risks identified in the SRM process which require insurance are routine
and are considered insignificant, the procurement of insurance should be left
with the Contractor on a self-arranged basis and the contract makes no mention
of the requirement for insurance. The Employer, in this event, relies on the
indemnity clauses under the contract for protection.

(f) For contract specified insurance, strategies have been developed on how
insurances are to be procured for the following categories of contracts: -

I – Major projects which are significant and are multi-contract, multi-discipline
in nature and involve interfacing and interdependencies or large and complex
difficult contracts.

II – Minor Works or small value contracts and Term Maintenance contracts.

III – All other contracts.

A determination of which category the contract in question falls should be
made.

g) Procurement of insurances should be considered on the following basis for
each category: -
Category I – Consideration should be given to procurement on an OCIP basis. The insurance clauses within the contract conditions for the contract works and third party liability coverage should state that the Employer will procure the insurance. These clauses are contract-specific and the project department should seek LAD(Works)/DEVB’s assistance in drafting these provisions. The procurement may be taken to cover a number of concurrent or inter-related contracts.

The engagement of a specialist construction insurance adviser is recommended in the structuring of the programme. The insurance adviser shall have a sound understanding of construction risk, SRM and shall familiarise themselves with the specific risk profile of the project at hand.

Departments may consider the inclusion of the service of an insurance adviser as part of the main consultancy. The insurance adviser can advise on the coverage, policy wording and the method of procurement either by OCIP or CCIP. The service of the insurance adviser can be retained up to the tender stage of the construction contract or continued throughout the construction stage depending on the actual requirements. If CCIP is adopted and specified, the standard policy as described in Appendix B of ETWB TCW No. 7/2005, suitably modified and extended may be considered together with the special contract clause in Appendix A of ETWB TCW No. 7/2005.

Category II – The insurance clauses within the contract conditions should state that the contract works insurance should be procured by the contractor together with a primary HK$10M limit of indemnity for third party liability insurance i.e. a CCIP arrangement for the primary layer of liability. This limit should be for any one occurrence.

Above the HK$10M limit of indemnity for third party liability, project departments should arrange an excess liability policy for all minor works and term contracts within the department for HK$XM (exact sum determined via the SRM process) any one occurrence in excess of the contractor’s primary HK$10M any one occurrence policy, providing a total limit of liability of HK$(10 + X)M any one occurrence. The arrangement will effectively be a multi-layer placement with a combination of a CCIP placement for the primary layer and an OCIP placement for the secondary layer. Again, the engagement of a specialist construction insurance adviser is recommended in the structuring of the OCIP placement for the secondary layer. Multi-layer insurance placement may also be suitable for Category I projects subject to the result of the SRM taking into consideration the recommendation of the insurance adviser and having regard to the prevailing market conditions.

Category III – The insurance clauses within the contract conditions should state what insurance(s) the contractor is required to procure, i.e. the contract works insurance, or the third party liability insurance, or both. This is a traditional approach and the placement is solely on the basis of a CCIP arrangement. Standard contract provisions for use in term contracts (primary layer) and capital works contracts and a standard policy are available for a CCIP placement and these are given in Appendix A and Appendix B of ETWB
TCW No. 7/2005. Risk assessment may show that additional coverage or different policy wordings to those contained in the standard policy are required and in such case, the department may look for the advice of an insurance adviser, either employed independently or under the main consultancy as suggested above.

(h) Other key factors to consider in procuring construction related insurance should refer to ETWB TCW No. 7/2005.

(i) Professional Indemnity Insurance (PII)
For works contracts involving contractors’ designs or independent checking of contractors’ designs including design and build contracts, a risk management approach shall be adopted in assessing whether PII is required to be procured, and if required, the amount of cover required so as to associate the PII requirements with the anticipated risk exposure. In respect of contractors’ design and alternative design invited during the pre-contract stage, DEVB TCW No. 9/2007 promulgated the revised requirements of PII to be taken out by the relevant parties including consultants, contractors, their designers and independent checking engineers. In line with the changes brought about by DEVB TCW No. 9/2007, SDEV via his memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009 made amendment to the contractual provisions in respect of PII requirements for alternative design (or Cost Savings Design) at contract stage given in ETWB TCW No. 25/2004, and for consistency between the related SCCs made minor amendment to DEVB TCW No. 9/2007.

The amendments to these TCWs are summarized as follows:

**ETWB TCW No. 25/2004**

1. SCC(B), SCC(D) and SCC(F) at Appendix C are to be replaced by the revised SCC(B), SCC(D) and SCC(F) respectively.
2. SCC(B) and SCC(D) at Appendix E are to be replaced by the revised SCC(B) and SCC(D) respectively.

**DEVB TCW No. 9/2007**

3. SCC(A) at Appendix E is to be replaced by the revised SCC(A).

( Amendment No. 11/2009)

For works within or adjacent to the Kowloon-Canton Railway (Hong Kong) Section, Tsim Sha Tsui Extension, Ma On Shan Rail and Lok Ma Chau Spur Line, consideration, in conjunction with the Railway Protection and Land Survey Manager of MTR Corporation Limited (subject to confirmation from DEVB and MTRCL), shall be taken for providing third party insurance in the Contract (See ETWB TCW No. 2/2005 and DEVB’s emails dated 3.9.2007 and 25.9.2007).

Where insurance against damage to the Works or third party risks is required under the Contract, separate items should be provided in the BQ for the Contractor to price the cost of such insurance pursuant to Standard Method of Measurement for Civil Engineering Works (1992 Edition). Where PII is required to be procured, a separate item should be provided in the BQ for the Contractor to price the cost of such insurance pursuant to DEVB TCW No. 9/2007.
9.5 CONTRACTOR’S SUPERINTENDENCE

The requirement for the Contractor to be represented at all times on the Site by a competent and authorized English speaking agent is stipulated in GCC Clause 17. The Engineer’s authority to withdraw his approval of the Contractor’s agent, thus causing this agent to be removed from the Site, is also stated in GCC Clause 17. See also the GS and the Guidance Notes on the GS.

The qualifications of the Contractor’s surveyor responsible for the setting out of the Works are not particularly specified either in the GCC or the GS. However, it may be inferred from GCC Clauses 18 and 19 that he should be skilled and experienced. It should be noted that any person employed by the Contractor who is considered incompetent may be objected to by the Engineer, and thus removed from the Works, in accordance with GCC Clause 18.

9.6 CONTRACT TRANSPORT

(Ref. D of Audit’s memo ref. (1) in UI/GLD/GEN/0-1 dated 9.8.2004, Value for money audit: Management of the government vehicle fleet)

Contract transport refers to land or marine transport provided for use by the Engineer (and his staff) and the Employer (and his employees) under the Contract. See LWBTC No. 11/84 and the GS for more details.

Contract transport should only be included under the Contract where it has been established that such transportation is essential to the supervisory staff for the adequate and proper supervision of the Works and for the discharge of other related duties. Critical examination for justifications to provide contract transport shall be made with due regard to meeting the operational need. The possibility of shared use of contract transport with other relevant on-going contracts shall also be taken into account in the critical examination. In particular, the adequacy of public transport for accessing the site direct shall be assessed in determination of the quantity of contract transport. In making such determination, the project office should not take into account the need to provide contract transport to serve the site staff to and from the site if the site is adequately served by public transport. The prior approval of an officer at D2 rank (D3 for HyD according to HyD’s internal procedures) or above is required for the provision of contract transport.

The specification should be less restrictive so that there may be scope for savings. Paragraph 7.1 of the LWBTC No. 11/84 states that a new motor vehicle will not always be required; however, where a used motor vehicle will suffice, it is suggested that it should not be more than 2 years old when first brought to Site.

9.7 MATERIALS TESTING ARRANGEMENT

9.7.1 General Considerations

All materials compliance testing required by the Contract or by the Engineer must be done through Public Works Laboratories (PWL), except Chief Geotechnical Engineer/Standards and Testing, GEO (CGE/S&T) advises that the required tests cannot be undertaken by PWL. He would also advise on whether an additional Regional Laboratory should be established to meet the testing demand. On such occasion, the project office should liaise with CGE/S&T
regarding the preparation of detailed layout plans, equipment lists and other contract requirements for incorporation into suitable works contracts.

CGE/S&T should be consulted at an early stage in project planning regarding the testing demand for testing services. In order to facilitate CGE/S&T to provide advice, the project office should supply full details of the anticipated testing required, including information on quantities and the programme. If CGE/S&T considers that certain tests cannot be undertaken by PWL, then such tests have to be performed by an independent laboratory (i.e. with no affiliation as a legal entity to the Contractor and its sub-contractors) subject to approval by the Engineer. Test results obtained from a laboratory other than PWL should be checked by periodic verification using another independent laboratory to conduct identical tests on items selected from the same samples, or as advised by CGE/S&T.

Due to potential conflict of interest, only in very exceptional circumstances may compliance testing by the Contractor be specified and this should be provided through the provision of suitable PS clauses in the contract documents. CGE/S&T should be consulted in this regard. Where the cost of testing is not otherwise catered for in the Contract, then consideration should be given to including a separate item in the BQ.

See also WBTC No. 14/2000.

9.7.2 Provision of Testing Equipment

Testing equipment for use on sites can be provided either:

(a) On loan from the PWL (or from the Employer), or

(b) By making appropriate provision in the contract documents.

The list of equipment required for a particular contract should be forwarded at contract design stage to CGE/S&T who will decide whether:

(a) All (or a part) of the testing equipment can be supplied on loan from the Public Works Laboratories, or

(b) All (or a part) of the testing equipment should be supplied by the Contractor and remain his property on completion of the works, or

(c) All (or a part) of the testing equipment should be supplied by the Contractor and become the property of Government on completion of the works.

Provision of testing equipment on loan from the PWL will be recommended if stocks are available. Provision of testing equipment by the Contractor which is to become the property of the Employer on completion of the Works will generally be recommended if the testing equipment is likely to be useful to the Employer and is in good condition at the end of the Contract. In each case CGE/S&T will seek approval from the Director of Government Logistics for any testing equipment acquired in this way, and will arrange for the testing equipment to be taken on charge at an appropriate time. The provision in the Contract for the maintenance and taking over of the testing equipment should be agreed with CGE/S&T.

Additional or replacement of testing equipment may be ordered through a variation order
during the Contract. The same procedures for the provision of testing equipment as described above should be followed.

9.8 SUPPLY OF MATERIALS BY GOVERNMENT

The Contractor should normally obtain all materials necessary for use in the Works from his own sources except for:

(a) Materials specially pre-ordered by the Government under a separate contract,

(b) Materials provided from the Government stock,

(c) Materials produced by the Correctional Services Department, e.g. precast concrete products, retro-reflective traffic signs, metal road dividing railings, and traffic signposts. (See FC No. 3/97)

Before making provision in a Contract for certain materials to be supplied by Government, confirmation must be obtained from the relevant authority of the availability of the particular materials within the required time period. In the case of pre-ordered materials under another contract, the delivery date of the materials must be known in advance.

9.9 SUB-CONTRACTS FOR SPECIALIST WORKS

(a) General

Very often the Engineer may wish to retain control over which sub-contractor will carry out certain specialized work under the main contract. This may be achieved by writing into the main contract one of the following two alternatives:

(i) The specialized work shall be carried out by a Nominated Sub-contractor (GCC Clauses 65 to 70), or

(ii) If the Contractor is not included in the List of Approved Suppliers of Materials and Specialist Contractors for Public Works or the List of Approved Contractor for Public Works, then the Contractor shall enter into written sub-contracts with the approved listed contractors in the relevant Groups, Category and Class for the execution of the respective part of the Works.

(b) Nominated Sub-contracts

The employment of Nominated Sub-contractors on civil engineering works is not encouraged, because of the potential contractual problems. However, when highly specialized work constitutes a significant part of the project and the co-ordination of separate contracts would pose severe difficulties, it may be preferable to use the system of Nominated Sub-contracts. When this is proposed the approval of the relevant Chief Engineer (or higher) responsible for the administration of the particular contract should be obtained.
Documents for Nominated Sub-contracts should be prepared following the guidelines set out in Sections 2 to 8 of this chapter using a separate set of Conditions of Tender, Articles of Agreement and Conditions of Sub-contract.

(c) **Sub-contracts with Specialist Contractors on the Approved List**

This method is commonly used in requiring the employment of specialist contractors for works such as piling, bridge bearings, permanent prestressed ground anchors, landscaping, planting, supply and installation of machinery for sewage treatment works and asbestos abatement works. WBTC No. 25/94 introduces the Standard Form of Domestic Sub-contract for specialist works (1994 Edition). The form has been drafted to suit the GCC for Building Works only and may not suit the GCC for Civil Engineering Works. Advice should be sought from Contract Advisers if it is proposed to incorporate the form into an engineering contract.

(d) **Sub-contracts with Contractors on the Approved List in the Waterworks category**

See WBTC No. 29/93 for details.

(e) **Sub-contracts with Contractors on the Specialist Contractors List of Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing**

See WBTC No. 17/96 for details.

### 9.10 DISPOSAL OF EXCAVATED MATERIALS

If excavated materials are to be disposed of off Site, the specifying of particular disposal areas in the Contract should be made. Reference should be made to paragraph 4.1.3 of Chapter 4 of the PAH, WBTC Nos. 2/93, 2/93B, 16/96, 4/98, 4/98A, ETWB TCW Nos. 34/2002, 31/2004 and 19/2005 (Amendment No. 2/2008), the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, SDEV’s memos ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007 and ref. (01N5V-01-2) in DEVB(W) 810/83/09 dated 24.12.2007. The project engineer should estimate the timing and the quantities of excavated materials (the secretary of the Marine Fill Committee and the Public Fill Committee should be kept fully informed of anticipated volumes of excess fill in accordance with WBTC No. 12/2000) and confirm with the managing office of the disposal areas as to their availability. The PS should require the Contractor to dispose of excavated materials at the specific locations and make provision for checking that he complies with this requirement. The relevant BQ items should be provided accordingly. This procedure should also be followed when it is considered desirable for the Contractor to dispose of excavated materials at a specific location irrespective of the quantities of excavated materials.

The Construction Waste Disposal Charging Scheme came into operation on 1 December 2005. A standard Note to Tenderers is given in SETW’s memo ref. (00W45-01-9) in ETWB...
9.11 CONTRACT MEASURES TO PREVENT NON-PAYMENT OF WAGES (Ref.: SDEV’s memo ref. (01TAM-01-7) in DEVB(W) 510/17/01 dated 17.7.2008 (Amendment No. 5/2008 & 3/2009) and SDEV’s memo ref. (023Q5-01-7) in DEVB(W) 510/17/02 dated 23.11.2009 Amendment No. 3/2010)

DEVB promulgated a set of contract measures to prevent non-payment of wages in its memo dated 17 July 2008. These contract measures should be applicable to all works contracts except maintenance contracts and E&M supply and installation contracts. DEVB also issued a memo dated 23 November 2009 concerning the provision of Labour Relations Officer (LRO) under in-house contracts. In consideration of the unique function of the LRO in the execution of the works, SDEV has reviewed the possible differences in the remuneration packages of LROs between those employed by contractors under in-house contracts and those employed by consultants as Resident Site Staff and the time requirement for the provision of LRO after commencement of the contract. SDEV has decided that appropriate provisions should be made to (i) unify the remuneration of the LROs to be deployed for in-house and consultant administered contracts, and (ii) stipulate the time-frame under which LROs should be provided.

The provisions of aforesaid contract measures to prevent non-payment of wages, including the remuneration of the LRO for in-house contracts, consist of the NTT, SCC, PS, Amended MM and Sample BQ. These provisions are set out at Appendix 5.14 (for consultant administrated contracts) and Appendix 5.15 (for in-house contracts) and they should be incorporated in contract documents. A specimen employment contract with a personal data collection statement at Appendix 5.16 and a standard insurance policy for the self-employed at Appendix 5.17 should also be appended to the SCC of each contract. To suit specific needs, project officers, with the agreement of an officer at D2 rank or above, may modify the relevant provisions subject to clearance with the Legal Advisory Division (Works) and Works Policies and Infrastructural Projects Division of DEVB.

As the site staff including Labour Relation Officers (LRO) would have access to personal data when monitoring payment of wages and Mandatory Provident Fund (MPF) contributions, they should be required to handle the data in compliance with the Personal Data (Privacy) Ordinance (PDPO) and the relevant Data Protection Principles. They should observe and follow the principles and guidelines on complying with the PDPO set out under DEVB WB Internal Circular No. 9/2007 at Appendix 5.18.

9.12 SITE CRUSHERS (Ref.: WBTC No. 11/2002)

9.12.1 Policy for Setting up Site Crushers

The hard inert C&D material, such as concrete and broken rock including rock excavated from works projects, can be recycled into aggregates for reuse in construction works. In order to reduce the pressure on the demand for public filling and landfill capacity, it is essential that the reusable portion of the inert C&D material be recycled and put into good use. For projects requiring excavation in rock or processing of hard inert C&D material, the project office should consider setting up site crushers where it is technically feasible and environmentally acceptable. This Section sets out the necessary procedures and requirement for setting up site crushers in
Government projects.

9.12.2 Procedures

At the planning stage of a project that includes the establishment of a site crusher, the project office should advise the Secretary of the Public Fill Committee (PFC) and seek approval in principle from the Director of Civil Engineering and Development (DCED). Approval from the Director of Environmental Protection (DEP) is also required for installation and operation of a site crusher in respect of the environmental requirements. In addition, the setting up of site crushers may be classified as a "designated" project under Schedule 2, G.5 of the Environmental Impact Assessment Ordinance. Where appropriate, DEP should be consulted on the environmental requirements for setting up a site crusher.

9.12.3 Crushed Rock and Recycled Products Produced by Site Crushers for Project Use

DCED should be informed in advance if a site crusher is to be included for use in a Government project to process hard inert C&D material including rock, which are generated from or imported to the site for use solely in the works. No royalty will be required by the Government in respect of the operation of a site crusher as described in this clause, provided its installation is permitted in the lease conditions.

9.12.4 Regulating Conditions

In every project where a site crusher is to be included, the following special conditions, to be provided by DCED, shall be included in the tender documents:

(a) The permitted uses, and royalty rate if sales are permitted;

(b) If rock and hard inert C&D material may be imported to the site;

(c) The permitted duration for the operation of the site crusher and its regular inspection by the Mines Division, CEDD;

(d) The submission for approval of the details of the crushing plant and its dust control systems; and

(e) The submission of monthly returns of production and declaration on sales, if permitted.

If a site crusher is included in the Contract, the Pneumoconiosis Compensation Fund Board should be informed of the details. If approval has not been obtained to use a site crusher in a contract, a clause prohibiting the use of a site crusher should be included in the PS.

(Amendment No. 3/2009)

9.13 RESOLUTION OF DISPUTES BY MEDIATION/ARBITRATION
GCC Clause 86 (For term contract, GCC Clause 89) sets out the framework of dispute resolution procedures. In summary, a dispute may go through 3 distinct stages: a decision of the Engineer, mediation and arbitration.

Where the Engineer makes a decision on the dispute, if either the Government or the Contractor is dissatisfied with such decision, either the Employer or the Contractor may, within 28 days after receiving the decision, request the matter be referred to mediation in accordance with the Government of HKSAR Construction Mediation Rules. Detailed guidelines are given in WBTC No. 4/99 and ETWB TCW No. 4/99A. Pursuant to WBTC No. 4/99, in all cases the merits of the dispute should be given careful consideration before deciding whether to agree to or to refuse mediation. Nonetheless, it is the Government’s policy that mediation should be implemented whenever is possible that a construction dispute may be resolved speedily and at less cost to the Government should the dispute escalate to formal arbitration or litigation.

If the matter cannot be resolved by mediation, or if either the Employer or the Contractor does not wish the matter to be referred to mediation, then either party may require the matter to be referred to arbitration. A SCC as given in the Library of Standard Special Conditions of Contract should be incorporated in the contract documents stating that place of arbitration shall be in Hong Kong.

In end 2004, DEVB (the then ETWB) introduced the trial use of Voluntary Adjudication (VA) in public works contracts and extension of the use of Dispute Resolution Advisers (DRA) in civil engineering contracts. Since then pilot contracts were selected to try out these two alternative dispute resolution measures. The intention was to provide a wide range of conflict avoidance and dispute resolution mechanisms in as much a flexible measures as possible in addressing cases of dispute according to their various circumstances and requirements. A full set of VA and DRA documents is attached in SETW’s memo ref (00E1C-0103) in ETWB(W) 506/00/01 dated 1.11.2004.

9.14 COMPUTER FACILITIES FOR WORKS CONTRACTS

Contract provisions for specifying and paying for contract computer facilities are given in ETWB TCW No. 12/2004. The cost of the contract computer facilities should not exceed 1% of the estimated contract sum and should comply with the prevailing Departmental Technical Specification (both Hardware Specification and Software Specification). The proposal should be approved by an officer at D1 rank or above. The project office shall further seek the endorsement of the Departmental Computer Services Unit if the proposal includes any one or all of the items described in paragraph 10 of the ETWB TCW No. 12/2004.

9.15 SITE SAFETY AND ENVIRONMENTAL MANAGEMENT

The contractual provisions contained in Chapter 3 of the Construction Site Safety Manual shall apply to all works contracts and term contracts, undertaken by contractors on the List of Approved Contractors for Public Works or those on the List of Approved Suppliers of
Materials and Specialist Contractors for Public Works, and design and build contracts. However, owing to their small size and/or nature, some contracts may warrant changes to the contractual provisions. Each works department is the best judge of its own situation and needs. Project engineers shall seek advice from their Departmental Safety and Environmental Adviser and the agreement of the appropriate (D2 rank or above) officer for such changes.

A Safety Plan shall be a mandatory requirement for the following contracts:

(i) Works contracts, undertaken by contractors on the List of Approved Contractors for Public Works or those on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works, with contract period longer than 6 months and estimated contract sums of $20M and above;

(ii) Term contracts, undertaken by contractors on the List of Approved Contractors for Public Works or those on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works, with total estimated expenditure of $50M and above; and

(iii) Design and build contracts with estimated contract sums of $20M and above.

For works contracts and design and build contracts with estimated contract sums of less than $20M and term contracts with total estimated expenditure of less than $50M, the criterion to decide whether safety plans are required or not is whether dangerous situations are anticipated by virtue of the site location or the operation involved in the construction work within the scope of the contract. Departmental Safety and Environmental Advisers should be consulted for advice on specific requirements.

All works contracts that are Bills of Quantities based and term contracts that are Schedule of Rates based, shall incorporate the relevant parts of Pay for Safety and Environment Scheme (PFSES) as provided in ETWB TCW No. 19/2005.

ETWB TCW No. 19/2005 sets out the policy and procedures requiring contractors to prepare an Environmental Management Plan and adopt unified standards on environmental nuisance abatement measures on sites, and expands the "pay for safety and environment scheme" to cover environmental nuisance.

However, interim guidance notes on the ETWB TCW No. 19/2005 regarding the administration of "Environmental Management on Construction Sites" were issued via SETW’s memo ref. (014G7-01-1) in ETWB(W)517/91/01 dated 19.6.2006. The guidance notes provide the following features:

(a) The environmental management procedures and the "pay for safety and environment scheme" are to be implemented in capital works contracts, but not term contracts which will be dealt with separately due to their unique nature; and

(b) in order to promote the use of quality powered mechanical equipment (QPME) plant, contractors using such plant in large public works contracts (i.e. those with contract sum ≥$200M) will be entitled to an extra payment as an incentive under the "pay for safety and environment scheme".
To encourage owners of dump trucks serving public works contracts to install mechanical truck covers, DEVB issued a set of sample SCC, PS, MM and BQ for inclusion under the "pay for safety and environment scheme" (PFSES) in capital works contracts and the "pay for safety scheme" (PFSS) in term contracts in its memos ref. (01KKA-01-8) in DEVB(W)810/83/09 dated 11.10.2007 and ref. (01N5V-01-2) in DEVB(W)810/83/09 dated 24.12.2007. The sample contract provisions should be incorporated in the PFSES or PFSS for public works contracts tendered from 1.11.2007 to 31.10.2010.

All capital works contracts including design and build contracts that are included in PFSES, the contractual provisions on Site Safety Cycle given in ETWB TCW No. 30/2002 shall be incorporated into the contract documents.

9.16 SECTIONAL COMMENCEMENT OF THE WORKS (Ref.: WBTC No. 12/93)

9.16.1 General

The GCC defines “Section” as “a part of the Works for which a separate time for completion is identified in the Contract”. GCC Clause 47 (Commencement of the Works) does not refer to a separate date for commencement of a Section.

There are occasions when it is necessary to stipulate in the Contract commencement of a part of the Works designated as a Section in the Contract at a later date than the date for commencement notified by the Engineer in accordance with GCC Clause 47. This shall be referred to as “sectional commencement”.

9.16.2 Procedures

Where sectional commencement is required, the SCC for ‘Sectional commencement’ as given in WBTC No. 18/2000 shall be included in the contract documents. Any requirement for phased possession of any Portion of the Site by the Contractor shall be prescribed in the contract documents taking into account the different dates for commencement of the Sections as stated or referred to in the Contract.

It will not be necessary to invoke the said contractual arrangement in the following circumstances where delayed commencement of part(s) (whether designated as Section(s) or not) of the Works can be achieved by using the existing provisions in the GCC or the library of SCC. For example :-

(a) where only phased possession of Portion(s) of the Site by the Contractor is required the necessary contractual arrangement is stipulated in GCC Clause 48; or

(b) where a Section of the Works Subject to Excision is required in accordance with Section 7.6 of this chapter, the necessary contractual arrangement is already catered for by the SCC for ‘Section Subject to Excision’ as given in WBTC No. 18/2000.

It is important to check whether or not the other contract documents contain any cross reference(s) to GCC Clause 47 and if so, consider whether or not such
9.17 ENVIRONMENTAL PERMIT

Departments shall observe the guidelines and procedures set out in ETWB TCW Nos. 13/2003 and 13/2003A for obtaining an environmental permit (EP) for Government projects and proposals. Depending on the nature of project and the recommendations in the EIA reports, project proponent may choose to apply for a single EP for a project or separate EPs for various stages of a project, such as construction, operation and decommissioning. To maintain overall programme control and continuity, it is recommended that the project proponent shall apply for the necessary EPs before the commencement of project construction and hold the EPs throughout the construction period. Such arrangement will ensure that the EP is in place immediately after the award of the contract and hence the Contractor can rely on the EP issued to the project proponent to commence works on the site without the need to apply for a further EP. Department should ensure that sufficient time is allowed for the completion of the EIA process before the issue of tender documents.

The standard clause in Paragraph 1.6.5, Appendix A of ETWB TCW No. 13/2003 shall be included in the Particular Specification for works contracts where EP has been obtained by the proponent for the works to safeguard against any unnecessary claims for extension of time and additional costs from the Contractor due to application for a further EP or any subsequent variation to the conditions of EP.

To ensure that the contractor has the full knowledge of the conditions of the EP, a copy of the EP issued to the proponent shall be included in the Particular Specification to form part of the tender documents and hence the contract. As part of the standard conditions of the EP, the Contractor shall display the EP at the site throughout the construction period. The proponent shall notify the Contractor any subsequent change or variation to the conditions of EP.

Where the requirements in ETWB TCW No. 13/2003 cannot be complied with, the department responsible should:

(a) take action to critically review the results and assess the implications of the EIA study (including the latest environment control conditions) as soon as it is available; and

(b) if the tender documents have already been handed out, take action to immediately inform all tenderers of the findings of the EIA study, so that they could take the EIA findings into account before submitting their bids (SETW’s memo ref. ETWB(B) 1552/662/CL SF(1) dated 3.12.2003 refers).


Circumstances may arise where it is desirable to fix the completion date (e.g. to tie in with the opening of a school term) and hence the Contractor’s right to extensions of time for inclement weather is deleted. Heads of departments may approve the deletion of GCC Clause 50(1)(b)(i), (ii) and/or (iia), and submit details to the SDEV for
endorsement. Tenders must not be invited until this endorsement has been received. The SCC on ‘deletion of extensions of time for inclement weather’ in the Library of standard SCC under WBTC No. 18/2000 shall be used as appropriate. Other than for exceptional circumstances, a reasonable allowance for inclement weather shall be included in the time for completion. What is reasonable will largely depend upon the nature of the Works. In deciding whether or not to delete sub-clause (b)(ii) and/or (iia), the risk of injury and/or damage to property must be considered. (Amendment No. 3/2008)

Nevertheless, it should be noted that where the provision for extensions of time due to inclement weather is deleted, Contractor’s entitlement to extensions of time in respect of inclement weather which occurs after the expiry of the time originally prescribed in the Contract for completion of the Works, but before the period of culpable delay, is not deleted.

9.19 TIME-CRITICAL PROJECTS
(See SETW’s memo ref. ETWB (W) 1552/662/CL SF(1) dated 3.12.2003)

The time required for completion of time-critical projects should be critically assessed prior to the invitation of tenders so as to ensure that sufficient time is allowed for completion of the works. Furthermore, the implications and potential cost of including or deleting those contract provisions (such as provisions for granting extension of time for inclement weather) which could adversely affect the completion date of the works as stated in the contract documents so as to avoid the need for negotiating a supplementary agreement with the Contractor.

For time-critical projects with multiple works contracts, sufficient float time should be allowed between the works contracts so as to minimize the risk of the knock-on effect of delay in one contract on other contract(s).

If the projects require input from users on their design requirements, the departments should:

(a) Always require users to finalise their design requirements before an agreed cut-off date so as to avoid any design changes at a later stage; and

(b) Obtain the users’ explicit agreement to essential design requirements prior to the letting of contracts so as to avoid delays and contractual claims arising from changes in users’ requirements.

9.20 CONTRACTS AFFECTED BY CONDITIONS OF LAND GRANT
(See SETW’s memo ref. ETWB(W) 1552/662/CL SF(1) dated 3.12.2003)

Issues relating to any conditions of a land grant, which could have an effect on the works of the contracts, should be resolved with the Director of Lands before letting of the contracts. Departments should take prompt action to assess the implications of such conditions before a land grant is finalized.

9.21 CONTRACTUAL PROVISIONS TO REDUCE THE RISK OF CONTRACT FORFEITURE
(See SETW’s memo ref. ETWB(CR)(W) 1-150/4 Pt.2 dated 27.4.2004)
For time critical contracts and/or large-scale contracts, and where the contract conditions impose a substantially higher degree of risk than normal on the Contractor, implement measures (such as the use of parent company guarantee and performance bond) should be considered to minimize the risk of contract forfeiture. The contract conditions for the provision of parent company guarantee and performance bond to ensure the required contract instruments are submitted by the Contractor within the stipulated time limits should be strictly implemented (see WBTC Nos. 10/97 & 10/97A).

For large-scale works projects, the contract payment schedules should be critically devised to ensure that progress payments are made, as far as possible, in line with the actual progress of works.

9.22 RESTRICTED-HOUR LOCATIONS
(Ref. See SETW’s memo ref. (008BT-01) in ETWB(W) 830/31/01 dated 12 July 2004, Audit Recommendations on Public Works Contracts)

Some works under a works contract are to be carried out within the restricted hours. Experience has shown that during the construction stage, additional locations of the site were required for works to be carried out under restricted hours and have led to claims. Therefore, the department concerned should, with a view to minimizing claims for EOT and prolongation cost arising from works carried out within the restricted hours:

(a) Strengthen consultation with the Transport Department/Hong Kong Police Force to ensure that all locations, which require works to be carried out within the restricted hours, are identified before tendering; and

(b) Consider improving the contractual provisions of main-laying contracts such as by incorporating provisional items so as to allow for addition of more restricted-hour locations subsequently found necessary.

9.23 ADDITIONAL WORKS AREA AND EXTENSION OF WORKS AREA
(Ref. Lands Department’s memo ref. (3) in LD TI 10/04/03 dated 16.6.2004, Provision of Land for Works Area)

The project office which requests works areas should note that any request for additional works area after award of a contract will be subject to payment of rent by the Contractor and any request for extension of works area should be provided with justifications, or DLO may charge a rental or may refuse the request.

9.24 TUNNEL WORKS

For contracts involving tunnel works, the project office shall include suitable clauses in the PS and, in the case of design and build contracts, the Employer’s Requirements (ER) to enable effective implementation of the ETWB TCW No. 15/2005. Where the GEO raises major geotechnical concerns on the public safety aspects of the geotechnical design or the related PS or the ER clauses, the project office must resolve such concerns before tenders are invited.
9.25 PERMITS FOR EXCAVATION WORKS UNDER LAND (MISCELLANEOUS PROVISIONS) ORDINANCE CAP.28

Standard Notes to Tenderers, Special Conditions of Contract, Particular Specification and amendment to the Form of Tender for incorporation into civil engineering works contracts are given in SETW’s memo ref. ETWB (W) 249/38/02[TC13/2001] dated 29.3.2004.

9.26 MEASURES TO PREVENT ILLEGAL EXTRACTION OR IMPORTATION OF BOULDERS/COBBLES/PEBBLES

For future public-works projects, if the design requires large quantities of natural boulders/cobbles/pebbles that are not readily available in the market, the project office should consider stipulating in the contract documents clauses requiring the Contractor to submit documentary proof that extraction or production of these materials by the material suppliers will not cause unacceptable environmental impacts (such as reports from independent environmental consultants) and also proof of the legality of the source of materials. For natural boulders/cobbles/pebbles that are to be obtained outside Hong Kong, the Contract should require the Contractor to submit export permits from the relevant authorities. These permits should have been verified by notary(ies) public of the originating place(s), where applicable, in order to demonstrate that such materials are supplied legally and without causing unacceptable environmental impacts to its source. The Engineer should be empowered to seek further information from the Contractor in case he has any doubt.

The Contractor shall not be allowed to deliver natural boulders/cobbles/pebbles to site before submission of the above-mentioned proof to the Engineer for his agreement. The Engineer for the Contract and the Contractor should also enhance their site supervision respectively to avoid the taking of risk by the Contractor or the Sub-contractors to deliver these materials to site prior to approval.

9.27 ADOPTION OF NON-CONTRACTUAL PARTNERING IN PUBLIC WORKS CONTRACTS

The project offices and consultants should refer to the “Practice Note on Adoption of Non-contractual Partnering in Public Works Contracts” (included in Appendix 5.28) promulgated by DEVB in delivering public works contracts. The Practice Note sets out the guidelines for selection of contracts for adoption of non-contractual partnering and its implementation. Reference documents for the implementation of the non-contractual partnering that are provided include “Good Practices for Implementation of Non-contractual Partnering”; “Typical Partnering Charter”; “Standard notes for tenderers to communicate Government’s intent to partner/ Standard letter to the Contractor to communicate Government’s intent to partner and to invite him to participate in project partnering”; “Form of Tender” and “Client’s Brief to Service Providers for Designing and Facilitation Partnering Workshops and Related Services”.

(Amendment No. 5/2009)

9.28 CONTROL OF OFF-SITE FABRICATION OF CONSTRUCTION COMPONENTS

(Ref: SETW’s memo ref. (018RD-01-1) in ETWB (W) 925/50/01 dated 13 October
If the works under the Contract or any alternative design proposed by the Contractor involve fabrication of construction components outside Hong Kong, the project office should either arrange for the resident site staff of in-house projects or consultant-managed projects to supervise and inspect the works in the fabrication area or require the Contractor to employ an independent inspection agent (IIA)\(^\#\) to control the quality of the components fabricated in the fabrication area. In this situation, the project office should determine the most appropriate site supervision requirements, inspection arrangement and warranty from the manufacturer, and should stipulate them in the contract documents. If an IIA is employed by the Contractor to supervise and inspect the works in the fabrication area, the project office should require the IIA and his staff assigned for the supervision and inspection, and, where practicable, the IIA’s staff assigned for the supervision and inspection.

If an IIA is required under the Contract, apart from the qualification requirements of the IIA and, where practicable, the IIA’s staff assigned for the supervision and inspection, the project office shall also stipulate in the contract documents the following requirements:

(i) the qualifications of the IIA and the IIA’s staff shall be submitted to the Engineer for approval;

\(^\#\) Note: project office is to decide the scope and extent of the IIA services

(ii) the Contractor shall require the IIA and his staff to submit declaration of no conflict of interest with the supplier/manufacturer/Contractor to the Employer upon employment of the IIA. The Contractor shall also ensure that the IIA and his staff declare any conflict of interest with the supplier/manufacturer/Contractor to the Employer via the Engineer as soon as such a conflict comes to the knowledge of the IIA, his staff or the Contractor. In the event that such conflict or potential conflict between the supplier/manufacturer/Contractor arises, the Contractor shall forthwith take such reasonable measures as are necessary to mitigate as far as possible or remove the conflict or potential conflict so disclosed;

(iii) the Contractor shall require the IIA to submit to the Engineer for approval a site supervision and inspection plan for the fabrication works as well as any subsequent changes, and to certify compliance with the site supervision and inspection plan;

(iv) the Contractor shall caution the IIA and his staff not to accept lavish entertainment during supervision and inspection;

(v) the Contractor shall not allow the IIA and his staff to accept any advantage from suppliers, manufacturers and/or objects of supervision/inspection;

(vi) the Contractor shall require the IIA to submit to the Contractor and the Engineer simultaneously site records and reports on any non-compliance with the Contract’s requirements;

(vii) the Contractor shall require the IIA to submit periodic statistical returns (e.g. returns on the number and periods of supervision and inspections conducted by the IIA and his staff and the works covered in these supervision and inspections)
(viii) the Contractor shall require the IIA to certify to the Employer that the fabrication works have been constructed in accordance with the Contract’s requirements.

Notwithstanding the above requirements stipulated, the employment of the IIA shall not relieve the Contractor of any duties or liabilities under the Contract. Guidelines to assist project offices in controlling the quality of fabrication of construction components outside Hong Kong are given in Paragraph 21.21 of PAH Chapter 7.

9.29 SAFETY PRECAUTIONARY MEASURES RELATING TO EXTRACTION OF SAND FROM SEABED WITH POTENTIAL PRESENCE OF UNEXPLODED ORDNANCE

For any contracts involving extraction of sand from the seabed with potential presence of unexploded ordnance, the project office shall pay due regard to the “Guidance Note on Incidents Involving Explosive Ordnance During Marine Dredging” issued widely to all dredging contractors in the construction industry and updated by the Marine Fill Committee from time to time (whose terms of reference are stated in WBTC No. 12/2000). The Note is available for reference on the CEDD website (http://www.cedd.gov.hk under Public Services/Management of Marine Fill and Marine Disposa of Dredged / Excavated Sediment/Marine Fill). The project office should consider the nature of the works and specify the necessary precautionary measures in the contract documents to minimize the risk associated with ordnance. For example, these measures to be specified may include the use of filtering devices during the suction or pumping of sand for the screening out of unexploded ordnance items exceeding 150mm.

9.30 DRAINAGE IMPACT ASSESSMENT PROCESS FOR PUBLIC SECTOR PROJECTS

The project proponent shall observe the guidelines and procedures set out in ETWB TCW No. 2/2006 for Government projects and proposals. Depending on the nature of project and the recommendations in the Drainage Impact Assessment reports, the project proponent shall incorporate into the tender documents all the specific requirements of the temporary mitigation measures, and the monitoring and audit requirements.

9.31 ENGAGEMENT OF SUB-CONTRACTORS REGISTERED FROM VOLUNTARY SUB-CONTRACTOR REGISTRATION SCHEME (Ref: ETWB TCW No. 13/2004)

All capital works and maintenance works contracts shall require the contractor to employ all sub-contractors (whether nominated, specialist or domestic) registered from the respective trades available under the Primary Register of the Voluntary Sub-contractor Registration Scheme (VSRS). The NTT and SCC as given in Appendix 5.6 shall be included in tenders for all capital and maintenance works contracts. The above requirements apply to Nominated Sub-contractors, Specialist Sub-contractors and sub-contractors for specialist works referred to in SCC on “Sub-contracting”, as well as their further sub-contractors.

(Amendment No. 3/2009)
9.32 CONTRACT MEASURES TO LIMIT THE NUMBER OF TIERS OF SUB-CONTRACTING (Ref.: SDEV's memo ref. (01TC9-01-5) in DEVB(W) 510/17/01 dated 17.7.2008 & SDEV's memo ref. (01VP5-01-4) in DEVB(W) 510/17/01 dated 11.11.2008)

DEVB has promulgated that the contract measures at Appendix 5.19 for limiting the number of tiers of sub-contracting is to be applied to all public works contracts (other than maintenance contracts). The SCC clause at Appendix 5.19 sets as default the limitation to two tiers of sub-contracting for all parts of works and for all trades. Where high-risk operations including demolition work, scaffolding work and working in confined spaces are involved, sub-contracting of trades is limited to one tier with up to two tiers of sub-contracting for parts of works. For works requiring entry of human beings into confined space that form part of a drainage or sewerage system, only one tier of sub-contracting is allowed in total. A diagram illustrating the intended limitation on sub-contracting is at Appendix 5.20 for reference.

Subject to the agreement from Works Branch of DEVB, project officers may impose the restriction on other high-risk operations relevant to the nature of the contracts. Project officers shall provide justifications including past accident records involving such high-risk operations and obtaining prior endorsement of an officer at D2 rank or above in Works Departments.

The Engineer for the contract may, subject to no objection from the Employer (who should be an officer at D2 rank or above in Works Departments), permit the contractor to introduce an extra tier of sub-contracting for a part of the Works or a Relevant Portion in case there is a genuine practical need for the extra tier of sub-contracting. Works Departments shall keep a record of such approvals and notify Works Branch of DEVB at 6-month intervals if permission is granted under this provision. The need for the Engineer for the contract to obtain no objection from the Employer is a constraint on the power of the Engineer rendering the action of the Engineer being subject to the Employer’s right of objection or direction.

In accordance with Clause 2(1)(b) of GCC, the particulars of any such constraint on the Engineer imposed under the terms of his appointment by the Employer has to be set out in the Appendix to Form of Tender. In this regard, project offices including consultants should include the constraint clause at Appendix 5.21 in the Appendix to Form of Tender when the SCC clause at Appendix 5.19 for limiting the number of tiers of sub-contracting is incorporated.

(Amendment No. 5/2008 & 3/2009)

9.33 ENHANCEMENT MEASURES FOR SUB-CONTRACTOR MANAGEMENT PLAN (SMP) (Ref.: ETWB TCW No. 47/2002)

Sub-contracting is a common practice in the construction industry. If properly managed by contractors, it will facilitate the execution of works in a cost-effective manner with efficient use of resources. However, in the absence of proper management, uncontrolled sub-contracting could have adverse impact on the progress and quality of works.

To augment the existing provisions prohibiting contractors from sub-contracting the whole of the contracted works, special conditions are introduced in public works contracts to enhance the management of sub-contractors by contractors.

A tenderer is required to submit with his tender a proposed outline SMP to show
how he is going to manage his sub-contractors. The guidelines on scope and contents of the SMP given at appendix to the SCC for Management of Sub-contractors (Appendix 5.23) should be attached to the tender document to facilitate the tenderer to prepare his SMP.

The following requirements should be specified in the form of a SCC:

(a) The contractor will be required to ensure that his sub-contractors will not further sub-contract the whole of the works sub-contracted to them.

(b) The contractor will be required to employ his own staff to manage and supervise his sub-contractors.

To obtain a full picture of the contractor's sub-contracting arrangement, the term 'sub-contractor' described in this Paragraph means all types of sub-contractor including without limitation Nominated Sub-contractor and Specialist Sub-contractor. Nevertheless, the requirements stipulated in WBTC No. 25/94 and other technical circulars for domestic sub-contractors and nominated sub-contractors should still be followed.

These following contractual provisions should be included in tenders for all capital and maintenance works contracts:

(a) NTT for Payment for Sub-contractor Management Plan (Appendix 5.22);

(b) SCC for Management of Sub-contractors (Appendix 5.23);

(c) SCC for Payment for Sub-contractor Management Plan (Appendix 5.24);

(d) PS for Management of Sub-contractors (Appendix 5.25);

(e) Method of Measurement for Payment for Sub-contractor Management Plan (Appendix 5.26); and

(f) Sample BQ for Payment for Sub-contractor Management Plan (Appendix 5.27)

9.34 CONTRACT MEASURES FOR IMPLEMENTATION OF EMERGENCY COMMAND SYSTEM

In August 2008, DEVB introduced the Emergency Command System (ECS) to deal with exceptional emergency incidents. To facilitate the implementation of the ECS, a set of contract measures was promulgated for incorporation into maintenance/term contracts. Please refer to Chapter 8 Paragraph 5.7 for the details of the ECS and the contract provisions.

9.35 INDEPENDENT CHECKING OF THE DESIGN, ERECTION, USE AND REMOVAL OF TEMPORARY WORKS (Ref.: WBTC No. 3/97)
A Special Condition of Tender (SCT 3 promulgated under ETWB TCW No. 26/2004), Special Condition of Contract (SCC 26 promulgated under WBTC No. 18/2000), and a Particular Specification (PS) item (see Appendix 5.11) have been prepared to enable officers responsible for preparing tender documents to require the Contractor to provide for independent checking of the design, erection, use and removal of selected Temporary Works.

SCC 26 promulgated under WBTC No. 18/2000 clarifies the Engineers' duty. The Engineer is required to examine the Contractor's design details concerning the design, erection, use and removal of the Temporary Works and shall satisfy himself that it contains no obvious deficiency and that the independent checking engineer has carried out his duties with reasonable skill and care in certifying that the Temporary Works have been properly and safely designed. The responsibility for the Temporary Works remains with the Contractor but no work shall be commenced until the Engineer has issued his consent in writing upon making such verification.

Under the revised SCC, the Contractor is additionally required to provide to the Engineer certified method statements in connection with the erection, use and removal of the designed Temporary Works.

The decision to incorporate any of the above documents i.e. SCT 3 promulgated under ETWB TCW No. 26/2004, SCC 26 promulgated under WBTC No. 18/2000 and the PS item (Appendix 5.11) in tender documents is a matter for the professional judgement of the Engineer and it is recognised that the type and complexity of Temporary Works to be used by the Contractor cannot always be accurately foreseen at the design stage. The following guidelines may be of assistance at tender documentation stage:

(i) The above documents shall only be used where the design of the Temporary Works is the responsibility of the Contractor, and not the Engineer.

(ii) Where no part of the Temporary Works is assessed as requiring the particular submission of drawings or calculations or design checking, none of the above documents need to be included in the tender documents. During construction the Engineer will be able to call for details under Clauses 7 and 16 of the General Conditions of Contract (GCC), but will have to pay for any additional independent checking, being beyond the scope of merely providing details.

(iii) If the project designer wishes to examine tenderers' proposals for undertaking more complex or extensive Temporary Works at tender assessment stage, then use of SCT 3 promulgated under ETWB TCW No. 26/2004 may be considered together with SCC 26 promulgated under WBTC No. 18/2000. During construction, the Engineer will be able to call for more details under GCC 7 and 16.

(iv) Use of the SCC 26 promulgated under WBTC No. 18/2000 and/or the PS item (Appendix 5.11) should be considered if it is thought likely the Temporary Works will be extremely complex or innovative, or the potential consequence of any failure is likely to be severe.

(v) Temporary cut or filled slopes and excavations and access platforms may require method statements. These can be called for under GCC 16.
(vi) It is matter of judgement for the Engineer as when to require certificates for the erection, use or removal of Temporary Works.

Many failures of Temporary Works have been the result of insufficient consideration of ground conditions. The design of Temporary Works must take this into account.

SCT 3 promulgated under ETWB TCW No. 26/2004 may be used independently of the PS item (Appendix 5.11) and SCC 26 promulgated under WBTC No. 18/2000.

In respect to Temporary Works generally, designers may find the following publications useful:

(i) Technical Report TRSC 4, issued by the Concrete Society and the Institution of Structural Engineers; provides useful guidance where Temporary Works are classified as falsework.

(ii) BS5975:1982 (Code of Practice for Falsework).

(iii) Appendix B in the Structures Design Manual for Highways and Railways for the design of protective measures for Temporary Works.

Should the Engineer be dissatisfied with the independent checking engineer, the Engineer, having given reasonable notice of dissatisfaction, may order the dismissal and replacement of the independent checking engineer by the Contractor.

Sub-clause (5) of GCC 7 affords basic protection to the Engineer from taking over responsibility for the Contractor's design of Temporary Works. Sub-clause (5) of SCC 26 promulgated under ETWB TCW No. 26/2004 limits the involvement of the Engineer to seeing that the required certificates are in place and examining the design of the Temporary Works for obvious defects.

In addition, GCC 54(2)(d) gives the Engineer the right and the power to suspend any work discovered by the Engineer to be dangerous or potentially dangerous and the Engineer must do so. Sub-clauses (2) and (4) of GCC 7 further underline this power.

For Contractor designed Temporary Works that do not involve an independent checking engineer, the Engineer can similarly make use of the GCC clauses referred to in the above 2 paragraphs, without taking up any of the design responsibility. The duty to suspend also applies.

(Amendment No. 7/2009)

9.36 QUALITY MANAGEMENT SYSTEM CERTIFICATION OF CONTRACTORS FOR PUBLIC WORKS ADMINISTERED BY THE WORKS GROUP OF DEPARTMENTS (Ref.: SDEV’s memo ref. (025B1) in DEVB(W) 520/83/01 dated 26.1.2010)

WBTC No. 13/2001 promulgated, among others, requirements for contractors to obtain certification of their quality management systems to the ISO 9001:2000 standard. Following the publication of ISO 9001:2008 standard on 15.11.2008, any existing certificates issued to ISO 9001:2000 standard will not be valid two years after the publication of this new standard, i.e. by 15.11.2010. Since ISO 9001:2000 and ISO 9001:2008 are acceptable before 15.11.2010 and only ISO 9001:2008 will be accepted on or
after that date, the new contract provisions as set out in SDEV’s memo ref. (025B1) in DEBV(W)520/83/01 dated 26.1.2010 should be incorporated into tender documents for contracts. The relevant provisions are at Appendix 5.29 and summarized below:

(a) a SCT requiring the contractor to have obtained the Certification (replacing Appendix E of WBTC No. 13/2001 updated by SCT6-ISO9000 of ETWB TCW No. 26/2004)

(b) a SCC requiring the contractor to have obtained ISO 9000 certification (replacing Appendix F of WBTC No. 13/2001)

(c) a SCC where the main contractor is required to enter into written sub-contracts with the contractors on the categories and/or groups of the Lists shown in Appendix C of WBTC No. 13/2001 (replacing Appendix G of WBTC No. 13/2001)

(d) a SCT in respect of design and build contracts (replacing Appendix I of ETWB TCW No. 13/2001A)

(Amendment No. 7/2010)

9.37 USE OF RECYCLED AGGREGATES IN CONCRETE PRODUCTION AND IN ROAD SUB-BASE CONSTRUCTION (Ref.: WBTC No. 12/2002)

WBTC No. 12/2002 promulgates the particular specifications to facilitate the use of recycled aggregates in concrete production and construction of road sub-base in PWP projects.

The hard inert C&D materials, such as broken rock and concrete, can be recycled into aggregates for reuse in construction works. In order to reduce the pressure on the demand for public filling and landfill capacity, it is essential that the reusable portion of C&D materials be recycled and put into good use. WBTC No. 12/2002 promulgates the particular specifications to facilitate the use of recycled aggregates in Grade 20 prescribed mix and Grade 25-35 designed mix concrete, and in road sub-base construction. The relevant particular specifications were developed by Standing Committee on Concrete Technology and Highways Department, based on internationally recognized standards and results of laboratory tests carried out locally. The particular specifications for prescribed mix concrete with 100% recycled coarse aggregate and for designed mix concrete with 20% recycled coarse aggregate are given in Appendix 5.30. The relevant specifications for recycled sub-base materials are given in GS Clauses 9.03, 9.13, 9.32 and 9.47.

Recycled aggregates are also suitable for use in earthworks, drainage and marine works. The relevant specifications have been incorporated in the provisions in Sections 5, 6 and 21 of the GS. The use of recycled aggregates as sub-base materials for footpaths is being examined and if found feasible, a separate particular specification will be issued in due course.

The project department should consider using recycled aggregates in lieu of virgin materials wherever possible in the planning and design of a project, in accordance with the specifications stated in this paragraph. Where necessary, provisions should be included in the contract to cater for unforeseen problems, such as an unexpected shortage of supply of recycled aggregates.

(Amendment No. 10/2010)
10. LUMP SUM CONTRACTS WITH FIRM BILLS OF QUANTITIES
(Ref. WBTC Nos. 17/95 and 17/95A)

The Works Group Directors Meeting of September 1992 had decided that, wherever it is appropriate and feasible, civil engineering works contracts shall be tendered lump sum, rather than the usual remeasurement basis.

A lump sum contract means a contract where the quantities are substantially measured firm and the final price to be paid is ascertained by adding to/deducting from the contractor’s accepted tender price the value of variations and other specified items (e.g. provisional quantities and contingency items).

It is also customary for contracts for plant and equipment and for small construction works to be awarded as lump sum based on specifications and drawings (rather than quantities). This is outside the scope of this Handbook.

Traditionally all civil engineering works are contracted on an estimated quantities and remeasurement basis. Certain individual items are measured and priced lump sum, but overwhelmingly the tendered rates are treated as a preliminary schedule of rates.

Good financial management demands as much certainty as possible over the final cost of a contract. A “lump sum” approach will increase that certainty compared to total remeasurement.

With increasing pressure on the time of engineers both pre and post contract (e.g. the introduction of “Estimating using Risk Analysis” (ERA), more thorough programme planning and reporting, site safety management) it is necessary to find ways of saving time elsewhere in the project development process.

For remeasurement contracts under the civil engineering General Conditions of Contract the whole of the Works is measured more than once i.e. quantities are estimated at the pre-tender stage, followed by interim/final accurate measurement as work proceeds.

It is also noted that in many cases the design of the Works is well advanced at tender stage and that substantial parts of the Works are unlikely to change in quantity between tender and final account (unless there is an error in the measurement or a variation to the design is necessary).

In the circumstances described in above paragraph, time and effort can be saved if such contracts are awarded lump sum, thereby eliminating the need for total post contract remeasurement. It is recognised that more pre-tender effort is necessary to produce an advanced detailed design and accurate quantities for the tender, which requires tight management control to avoid delay in the start on site for contracts now in the detailed design stage.

Before any tender document is finalised, the project engineer shall aim to ensure that the design is sufficiently completed so that there is no necessity for substantial post contract design changes/additional information. Whenever a
substantial part of the Works is unlikely to change, the contract shall be prepared and awarded on the basis of lump sum (plus/minus variation etc.).

For the purposes of the above paragraph, “substantial” is defined as when the value of the firm quantities exceeds 80% of the estimated value of the Works (not including Provisional, Contingency and Prime Cost Sums). Unless such circumstances exist, the tender shall not be called until the design work is so developed and finalised and the quantities that accurately represent that work are included in the Bills of Quantities. The quantities for those parts of the Works that cannot be fully designed shall be described as “provisional” and be remeasured in the usual way, as explained more fully in the attached Practice Note at Appendix 5.12.

Contracts that fit the above paragraph situation but have to be “fast-tracked” for policy reasons, or the nature of the works/site precludes the design from reaching the required standard, can revert to remeasurement. Authority to “fast-track” is held by the Head of Department, whose written agreement shall be sought. Where given, the agreement to “fast track” or any other reason for not using lump sum, shall be attached to the tender report.

The then Secretary for Works had directed that the responsibility for providing the quantities shall remain with Government. The quantities shall be measured in accordance with the appropriate SMM as required by GCC Clause 59, some requirements of which may not be appropriate for lump sum and shall be amended in accordance with Appendix 5.13.

It is recognised that the change to quantities provided in accordance with the above paragraph has staffing implications and an appropriate lead-time for a substantial change-over to lump sum is necessary.

Whenever the lump sum approach is used, an additional Note for Tenderers (see Standard Note to Tender (g) promulgated under ETWB TCW No. 26/2004) and a SCC (see standard SCC 21 promulgated under WBTC No. 18/2000) and the standard amendments to the SMM (at Appendix 5.13) shall be included in the Contract.
11. MISCELLANEOUS

11.1 CONTRACT NUMBER

Contract numbers will be allocated by the headquarters of the office managing the Contract, notwithstanding that funds for the contract may be under the control of another office. For CEDD, each development office allocates its own contract numbers.

11.2 NOTES TO TENDERERS

Information that is relevant to the submission of tenders and contract award, but not considered to be part of the tender documents, should be provided in the form of Notes to Tenderers (NTT). There should be a remark on the Notes that they do not form part of the Contract. The Notes should be bound separately from the tender documents and issued to tenderers at the same time as tender documents.

Commonly used clauses to be included in the NTT for works contracts other than design and build contracts are given in ETWB TCW No. 26/2004. The project office may use the clauses promulgated under ETWB TCW No. 26/2004 selectively since not every item of the provisions is applicable to a particular contract. For the checklist for tenders deposited in the Government Secretariat Tender Box as referred to in NTT (d) of ETWB TCW No. 26/2004, please refer to Appendix 5.8.

The Notes to Tenderers promulgated under ETWB TCW No. 26/2004 has been uploaded to the DEVB website under standard contract documents in the publications section and they will be updated from time to time when new technical circulars are promulgated which may affect the library content.


11.3 BINDING OF TENDER DOCUMENTS

The tender documents should be bound together into booklets with a front cover sheet showing the title and number of the contract and listing the documents contained therein. The documents will be in accordance with the list in the Conditions of Tender except that the GCC, Nominated Sub-contract Conditions, the GS, the SMM, the Construction Site Safety Manual (Chapter 3), the Hong Kong International Arbitration Centre Domestic Arbitration Rules need not be bound in where standard forms/documents are used. All pages of the tender documents should be numbered.

Tender drawings may be bound together in a separate folder, in which case the folder should have a cover sheet listing the tender drawings (see also Chapter 6).
11.4 ELECTRONIC DISSEMINATION OF TENDER DOCUMENTS

The electronic version of tender documents for works contracts should be disseminated in the form of “Electronic Dissemination Package” (EDP) in accordance with the manner and format contained in Section 3 of the Dissemination Procedures at Appendix 1 to ETWB TCW No. 11/2005.

11.5 REPRESENTATIONS AT PRE-CONTRACT STAGE

Departments should always practise with great care when issuing information to any prospective contractor in the pre-contract stage. It should be borne in mind that such information, if issued, could amount to a pre-contract representation or even become a term of the contract thereby causing significant contractual implications if the information turns out to be incorrect. Whilst it is prudent to seek legal advice whenever doubts arise, project offices shall also follow the guidelines stated below: (see SDEV’s memo ref. 01QXA-01-12 in DEVB(W) 546/70/02 dated 23 April 2008)

(a) Tendering stage

Departments shall set out detailed requirements of the contract in the tender documents. Departments may also spell out particular circumstances and/or constraints for the carrying out of the works in the tender documents with a view to clearly delineating the obligations of the contractor. Normally, all such information will eventually form part of the contract.

The principle remains that any information included in the tender documents shall be checked as fully as possible to ensure its correctness.

There may also be circumstances where information is purposely supplied to prospective tenderers for their reference only and shall not form part of the contract. Site investigation information normally falls into this category. To this end, a standard General Condition of Tender serving as a disclaimer for the supply of site investigation information to tenderers has been developed and this shall be incorporated as part of the tender documents.

Similar to the position in relation to prequalification as given in Paragraph 4.3 of Chapter 6, the issue of other side information, which goes beyond the above, to prospective tenderers is rarely necessary or appropriate. Project offices should be conscious of the potentially major contractual implications that might result from incorrect information issued and allegedly having been relied upon by the contractor. There is also the risk that the originally correct information could become incorrect with the lapse of time or changes in circumstances after the information is issued.

Where the circumstances genuinely require the issue of specific side information to prospective tenderers, consent from the relevant officer at D2 rank or above shall be obtained. Before incorporating such information as part of the tender documents, the department shall also consult LAD(W) with regard to drafting any Special Condition of Tender and/or Special Condition of Contract which may be necessary having regard to the nature of the information and/or particular circumstances of the
procurement so as to safeguard the Government’s interest.

(b) Subsequent doubt over the truthfulness of any information issued under (a) above

Where a piece of information has been issued under (a) above but its truthfulness is subsequently found to be questionable due to change in circumstances or other reason(s), LAD(W) should be consulted as to the appropriate action to be taken (e.g. withdrawal of the information with or without extension of the date set for submission of prequalification applications/tender closing date or cancellation of the prequalification exercise/tender exercise) notwithstanding that a disclaimer may have already been incorporated in the prequalification document and/or the tender documents.

Note 1: Under the common law and the Misrepresentation Ordinance (Cap. 284), a misrepresentation is a representation which does not accord with the true facts. The representee who has entered into a contract in reliance on such representation may sue for rescission (i.e. cancellation and putting the parties back to where they were before the contract was made) and/or damages. Where a misrepresentation has become a term of the contract, there is a right to terminate the contract (if the term is in the nature of a condition) and sue for damages for breach of contract as well as a right to sue for rescission (see section 2 of the Misrepresentation Ordinance).

Note 2: The standard General Conditions of Tender contains an express reference to General Conditions of Contract Clause 13 with regard to inspection of the Site.

11.6 DECLARATION AND UNDERTAKINGS BY OFFICERS INVOLVED IN PREPARING TENDER DOCUMENTATION INCLUDING TENDER SPECIFICATIONS

As required under Clause 186 of the Stores and Procurement Regulations (SPR), all officers involved in preparing tender documentation including tender specifications must declare whether they have any actual, potential or perceived conflict of interest at the start of deliberation or as soon as they become aware of a potential conflict. Reference should be made to the memo ref. (10) in FT 93/88 from the Secretary for Financial Services and the Treasury (Treasury Branch) dated 19.12.2007 (ref. http://fb.host.ccgo.hksarg/spr/memos.htm).

The specimen Declaration and Undertaking attached to the memo from the Secretary for Financial Services and the Treasury (Treasury Branch) dated 19.12.2007 shall be used for the declaration. All declarations should be kept in file for record.
## 12. REFERENCES

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FC No. 3/97 Correctional Services Industries
FC No. 2/2003 Initiating Works-related Tendering and Consultant Selection Procedures before Funding is Secured

Chapters 3 and 12 of the Construction Site Safety Manual

Contractor Management Handbook

S for W’s memo ref. WB(W) 209/32/110 Pt. 12 dated 9.1.2001
S for W’s memo ref. WB(W) 209/32/110 dated 23.3.2001
S for W’s memo ref. WB(W) 272/31/02D dated 4.4.2002
S for W’s memo ref WB(W) 250/32/72A dated 12.6.2002
SETW’s memo ref. ETWB(W) 211/32/01 dated 5.8.2002
SETW’s memo ref. ETWB(W) 1552/662/CL SF(1) dated 3.12.2003
SETW’s memo ref. ETWB(W) 249/38/02 [TC 13/2001] dated 29.3.2004
SETW’s memo ref. ETWB(CR)(W) 1-150/4 Pt.2 dated 27.4.2004
SETW’s memo ref. (008BT-01) in ETWB(W) 830/31/01 dated 12.7.2004
SETW’s memo ref. (00E1C-01-3) in ETWB(W) 506/00/01 dated 1.11.2004
SETW’s memo (00NKG-01-2) in ETWB(W) 926/50/01 dated 27.5.2005
SETW’s memo ref (00W45-01-9) in ETWB(W) 810/72/01 dated 21.11.2005
SETW’s memo ref (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006
SETW’s memo ref. (014DQ-01-8) in ETWB(W)L/M(4)505/91/01 dated 29.8.2006
SETW’s memo ref. (018RD-01-1) in ETWB (W) 925/50/01 dated 13.10.2006
SDEV’s memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007
SDEV’s memo ref. (01M97-01-4) in DEVB(PS) 105/64/1 dated 17.12.2007
SDEV’s memo ref. (01N5V-01-2) in DEVB(W) 810/83/09 dated 24.12.2007
SDEV’s memo ref. 01QXA-01-12 in DEVB(W) 546/70/02 dated 23.4. 2008
SDEV’s memo ref. (01TAM-01-7) in DEVB(W) 510/17/01 dated 17.7.2008

SDEV’s memo ref. (01TC9-01-5) in DEVB(W) 510/17/01 dated 17.7.2008

SDEV’s memo ref. DEVB(PS) 107/3 dated 18.7.2008

SDEV’s memo ref. (02263-01-2) in DEVB(W) 511/70/02 dated 23.7.2009 (Amendment No. 1/2008 & 8/2009)

SDEV’s memo ref. (01VP5-01-4) in DEVB(W) 510/17/01 dated 11.11.2008 (Amendment No. 5/2008)


SDEV’s memo ref. (01TAM-01-7) in DEVB(W) 536/70/03 Pt.2 dated 7.1.2009 (Amendment No. 3/2009)

Lands Department’s memo ref. (3) in LD TI 10/04/03 dated 16.6.2004

D of Audit’s memo ref. (1) in UI/GLD/GEN/0-1 dated 9.8.2004

SFST’s memo ref. (51) in FT 8/86 Pt. 2 dated 17.12.2007

Memo from Chairman, Public Works Tender Board, ref. (61) in PW/TB/GEN/06 dated 8.1.2008

DEVB’s emails dated 3.9.2007 and 25.9.2007

SDEV’s memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009 (Amendment No. 11/2009)

SDEV’s memo ref. (023Q5-01-7) in DEVB(W) 510/17/02 dated 23.11.2009 (Amendment No. 3/2010)

Audit Commission - Audit Report No. 53 Ch. 3 (http://www.aud.gov.hk/pdf_e/e53ch03.pdf) (Amendment No. 3/2010)

SDEV’s memo ref. (025B1) in DEVB(W) 520/83/01 dated 26.1.2010 (Amendment No. 7/2010)
APPENDIX 5.1 FORM OF TENDER

(Applicable to capital works contracts other than design and build contracts)

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

........................................ DEPARTMENT

CONTRACT NO. .................

(Title of Contract)

FORM OF TENDER

NOTES:

(1) The Appendix forms part of the Contract.

(2) If the tenderer is a sole proprietorship or a partnership, the name(s) and residential address(es) of the sole proprietor or all the partners shall be given in the spaces provided below.

(3) In all cases, the tenderer must give the number and the expiry date of the business registration certificate here:

Number :

Expiry Date :

\[ ^1 \] To: The Chairman,
Central Tender Board,
Central Government Offices (East Wing),
Hong Kong.

Having inspected the Site, examined the Drawings, General Conditions of Contract and Special Conditions of Contract (hereinafter referred to as “the said Conditions”), Specification and Bills of Quantities for the execution of the Works as defined in the Contract, I/we offer to construct, complete and maintain the whole of the said Works in conformity with the said Conditions, Drawings, Specification and Bills of Quantities for the sum of Dollars .................................................................................. ($...........) or such sum as may be ascertained in accordance with the said Conditions, Drawings, Specification and Bills of Quantities.
4. If my/our Tender is accepted I/we will when required,

#(a) deposit with the Director of Accounting Services, the Government of the Hong Kong Special Administrative Region, as security for the due performance of the Contract a sum of $......

#(b) with the approval of the Employer obtain the guarantee of a Bank or Insurance Company [to be approved by the Employer] to be jointly and severally bound with me/us in a sum of $... for the due performance of the Contract under the terms of a Bond in accordance with the said Conditions.

3. I/We agree to abide by this Tender for the period of 590 days from the date of expiry fixed for receiving the same and it shall remain binding upon me/us and may be accepted at any time before the expiration of that period.

4. Unless and until the Articles of Agreement is prepared and executed this Tender together with the written acceptance thereof by the Employer subject to the provisions of clause 3 hereof shall constitute a binding Contract between us.

5. I/We understand that the Employer reserves the right to negotiate with any tenderer about the term of the offer and is not bound to accept any tender irrespective of whether the tender is the lowest offer or, where the assessment of the tenders is based on a marking scheme or formula approach, the tender is with the highest overall mark.

NOTES:

1. Where the tenders are to be submitted to a tender board other than the Central Tender Board, type in the name and the address of the tender board in lieu of that of the Central Tender Board.

2. All references to Bills of Quantities may need to be suitably adjusted where some other forms are used.

3. Replace “and Bills of Quantities” with “, Bills of Quantities and the technical resources and technical proposals submitted in accordance with Clause 4(1)(d) of the General Conditions of Tender” when the tender adopts a marking scheme for use in tender evaluation.

4. This item may be deleted if a security is not required.

5. Normally 90 days.

# Tenderer to delete either clause 2(a) or 2(b)
FORM OF TENDER – P. 3

Name ...........................................................................................................................................

Signature .....................................................................................................................................

in the capacity of ........................................................................................................................

duly authorized to sign tenders for and on behalf of + .........................................................

Trading in Hong Kong under the style of @ ...........................................................................

Registered address of firm ........................................................................................................

Date .............................................................................................................................................

Name of Witness ....................................................................................................................... 

Signature of Witness ............................................................................................................... 

Occupation ............................................................................................................................... 

Address of Witness ...................................................................................................................

FORM OF TENDER – P. 4

Name(s) of the sole proprietor/partners

Residential address(es) of the sole proprietor/partners

+ In the case of a limited company, insert the name of the company.

@ In the case of a sole proprietorship, a partnership or an unincorporated joint venture, the name(s) of the sole proprietor, all the partners or all the participants in the unincorporated joint venture must be inserted above and name of the firm inserted at @.

(The lines below may be deleted if a security is not required)

To be inserted by the Engineer before the signing of the Articles of Agreement:

Security Deposit (if any) Receipt No. ……………………………………………………………………………………………

Amount ………………………………………………………………………………………………………………………………………

Date ………………………………………………………………………………………………………………………………………
APPENDIX TO FORM OF TENDER

General Conditions of Contract for Civil Engineering Works (1999 Edition)

Clause No.

1(1) Maintenance Period ...... months
* [Maintenance Period for the Works, except Establishment Works and aftercare to existing trees (Section xx)] ...... months
Maintenance Period for Establishment Works ...... months
1 [Maintenance Period for preservation and protection to existing trees (Section xx) ...... months]

2(1)(b) Actions of the Engineer subject to the Employer’s right of objection and direction

The Engineer is required under the terms of his appointment by the Employer to obtain confirmation of no objection from the Employer and, in the event of an objection, to act in accordance with the Employer’s direction before ordering any variation to the Works or taking any other action (including without limitation making an order under General Conditions of Contract Clause 54) which may commit the Employer to additional expenditure under the Contract, other than in respect of claims, of a value estimated to exceed HK$300,000. This requirement shall not be applicable where the variation order or other action is considered by the Engineer to be essential on grounds of safety or other emergency in circumstances when it is impracticable to refer the matter to the Employer beforehand.

The Engineer may, subject to any prior contrary instructions given by the Employer to the Engineer, order variation to the Works in accordance with the provisions of the Contract or take any other action (including without limitation making an order under General Conditions of Contract Clause 54) which may commit the Employer to additional expenditure under the Contract, other than in respect of claims, without the need to obtain confirmation of no objection from the Employer if the value of such order or commitment is estimated not to exceed HK$300,000.

*12 Amount of bond or cash security (if required) $ ...............  

47 Time after acceptance of Tender within which the date for commencement of the Works shall occur .......... days  

49 Time for completion of the *Works/Section ........ .......... days  

52 2 Liquidated damages  

[For use where the Works are not divided into Section]
For the Works

HK$[\ldots \ast (Y_1 + \ldots + Y_n) + \ldots \ldots] \text{\textsuperscript{3}} \text{per day}

[For use where the Works are divided into Sections]

Section A

HK$[\ldots \ast Y_1 + \ldots + Y_n + \ldots \ast Y_2 + \ldots] \text{\textsuperscript{3}} \text{per day}

Section B

HK$[\ldots \ast Y_1 + \ldots + Y_n + \ldots \ast Y_3 + \ldots] \text{\textsuperscript{3}} \text{per day}

\text{C}

In the above summary statement of liquidated damages:

\( Y_1 = \) Total sum of Bill No. 1 in the Bills of Quantities

\( Y_2 = \) Total sum of Bill No. 2 in the Bills of Quantities

\( Y_3 = \) Total sum of Bill No. 3 in the Bills of Quantities

\( Y_n = \) The value of the Adjustment Item

(Note: items which do not attract LD’s, such as the safety related items, should be taken out)

79(1) Percentage of certified value retained \text{\ldots per cent}

79(1) Limit of Retention Money

\text{\$ \ldots\ldOTS:

* Delete or modify as appropriate

\footnote{Use when a separate Section of the Works (Section xx) is given for preservation and protection}
to existing trees. The scope of Section xx is described in the Particular Specification.

2 Refer to ETWB TCW No. 4/2003 for guidance to include appropriate provisions in the Appendix to the Form of Tender where there is no minimum LD’s and where there is minimum LD’s

3 Choose from either (a) or (b) below an appropriate footnote depending on whether or not there is minimum LD’s for the Works/Sections and, where the works involve excavation requiring the application of excavation permits, add footnote (c):

(a) Where there is no minimum LD’s

“The value of the formula within the square brackets shall be taken as zero for the purpose of computation of the daily rate of liquidated damages if and when the sum is worked out to be a negative value by substituting Y1, …Yn with its corresponding value in the priced Bills of Quantities.”

(b) Where there is minimum LD’s

“The value of the formula within the square brackets shall be taken as HK$ [the minimum amount of LD’s for the Works or, as the case may be, the relevant Section] per day for the purpose of computation of the daily rate of liquidated damages if and when the sum is worked out to be less than HK$ [the minimum amount of LD’s for the Works or, as the case may be, the relevant Section] per day by substituting each of Y1, …Yn with its corresponding value in the priced Bills of Quantities.”

(c) Where application of excavation permit is required

“In computing the above liquidated damages, the Employer has not taken into account the Employer’s liability for fees including economic cost under the Land (Miscellaneous Provisions) Ordinance, Cap. 28 ("the Ordinance") for any extension in respect of a permit referred to in Sections 10A(3) and 10D(4) of the Ordinance.”

4 Separate sum shall be applied to each tree if more than one Old and Valuable Tree is involved. The sum for each Old and Valuable Tree shall be the genuine pre-tender estimate of that particular tree.

5 The Period for Aftercare to Old and Valuable Trees together with its subsequent Maintenance Period should preferably end on the same date as the Maintenance Period for the Works, or if there is more than one Maintenance Period, on the same date as the last Maintenance Period.
APPENDIX 5.2 GUIDELINES FOR COMPLETING THE FORM OF TENDER

(1) **Maintenance Period for the Works**

The Maintenance Periods for the Works and for Establishment Works are normally 12 months and 1 month respectively but may vary depending on the type of work. If separate Sections of Works are provided for preservation and protection of existing trees, and where required, the registered Old and Valuable Trees, the Maintenance Periods are to be determined by the project office and would usually be 1 month.

(2) **Actions of the Engineer subject to the Employer’s right of objection and direction**

Clause 2 of the GCC 1999 Edition provides that the Employer may impose constraints on the powers of the Engineer. According to existing policy, the Engineer shall obtain the agreement of the Employer before ordering variation in excess of $300,000. The Engineer may however commit expenditure other than in respect of claims if such commitment is less than $300,000. This provision shall be set out in the Appendix to the Form of Tender.

(3) **Amount of bond or cash security**

This provision is not usually required for typical works contracts but shall be included where the circumstances as stated in Para. 2 of WBTC No. 10/97 warrant. If bond or cash security is required, refer to Appendix A of WBTC No. 10/97 for such amount (rounded off to the nearest $1000) with respect to the estimated contract value. Appendix B of WBTC No. 10/97A gives the standard form of performance bond to be incorporated in the tender documents if required.

(4) **Time after acceptance of Tender within which the date for commencement of the Works shall occur**

Enter a specific number of days, generally between 7 and 42 days unless there are reasons for specifying a different period.

(5) **Time for completion of the Works/Sections**

This should be based on a realistic estimate of the normal period required for construction of the Works or Section of the Works (including ‘Section subject to Excision’), having regard to the date when completion of the project is required, particularly with respect to the programme of other related projects.

In assessing the contract period before proceeding to tender, no allowance need be made for the effects of inclement weather unless it is intended to delete the inclement weather sub-clause. (Ref.: WBTC No. 8/92) (Amendment No. 3/2008 & 3/2009)

Establishment Works normally forms a ‘Section of Works’ of its own. However, if it is not desirable to do so, the clause may be suitably modified or described to make clear the respective time for completion of ‘Works except Establishment Works’ and ‘Establishment Works’.
(6) **Liquidated damages**

See ETWB TCW No. 4/2003 for detailed guidelines on liquidated damages. The liquidated damages for ‘Section subject to Excision’ shall also be included.

(7) **Percentage of certified value retained**

Refer to Appendix A of WBTC No. 10/97 for the rate of retention with respect to the estimated contract value. Whenever practicable, the percentage used for the calculation of Retention Money for Nominated Sub-contracts is to be the same as that used for the main contract.

(8) **Limit of Retention Money**

Refer to Appendix A of WBTC No. 10/97 for the limit of Retention Money (rounded off to the nearest $1000) with respect to the estimated contract value.

(9) **Minimum amount of interim certificate**

According to LWBTC No. 7/87, the minimum amount of interim certificate for contracts with an estimated contract sum of $2,000,000 or more is to be:

<table>
<thead>
<tr>
<th>Estimated Contract Sum</th>
<th>Minimum amount of interim certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2 M up to and including $5M</td>
<td>$70,000</td>
</tr>
<tr>
<td>over $5M up to and including $10M</td>
<td>$110,000</td>
</tr>
<tr>
<td>over $10M up to and including $25M</td>
<td>$160,000</td>
</tr>
<tr>
<td>over $25M up to and including $50M</td>
<td>$250,000</td>
</tr>
<tr>
<td>over $50M up to and including $100M</td>
<td>$350,000</td>
</tr>
<tr>
<td>over $100M up to and including $250M</td>
<td>$500,000</td>
</tr>
<tr>
<td>over $250M</td>
<td>$750,000</td>
</tr>
</tbody>
</table>

For contracts with an estimated contract sum of less than $2,000,000, the minimum amount of interim certificate should be:

\[
\text{Minimum amount of interim certificate} = \frac{\text{Estimated Contract Sum}}{\text{Period for completion in months}} \times F
\]

where F is a factor normally ranging between 0.6 and 0.8 and shall be decided by the officer preparing the tender documents to suit the type and timing of the proposed work. However, the minimum amount shall not exceed $50,000.

(10) **Minimum amount of third party insurance [if required]**

The minimum amount of third party insurance should normally be assessed following a risk based approach given in ETWB TCW No. 7/2005. For works project with a cost estimate in excess of $200M, a systematic risk management (SRM) promulgated in
ETWB TCW No. 6/2005 shall be adopted. For works project at a cost less than $200M, works departments should adopt an approach of risk assessment similar to the SRM.

(11) **Works involving preservation and protection of existing trees and Old and Valuable Trees**

The guidelines regarding the preservation and protection of existing trees, and where required, the protection and maintenance of registered Old and Valuable Trees can be found in ETWB TCW No. 29/2004 and the Cyber Green Manual promulgated in ETWB TCW No. 11/2004.
APPENDIX 5.3  SCHEDULE OF PROPORTIONS

[Extracted from Appendix B1 to ETWB TCW No. 21/2003]

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

........................ DEPARTMENT

CONTRACT NO. ......................

(Title of Contract)

Schedule of Proportions to be used in
Calculating the PRICE FLUCTUATION FACTOR (PFF)

This Schedule must be completed in accordance with the Notes overleaf and submitted with the Tender.

<table>
<thead>
<tr>
<th>Item of Labour and Selected Materials applicable to this Contract</th>
<th>Percentage of “Effective Value” of the Works</th>
<th>Calculated Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LIMITS Max.</td>
<td>Min.</td>
</tr>
<tr>
<td></td>
<td>(Column No.)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Limits</th>
<th>Tender</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite labour for civil engineering contracts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bitumen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel fuel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel reinforcement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galvanised mild steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portland cement (ordinary)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timber formwork</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other costs not subject to adjustment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Signature: _______________________________________________________
Name of tenderer: _______________________________________________
Company: _______________________________________________________
Date: _________________________________________________________
Notes:

(*) Column (3) to be filled in by the tenderer in whole number within the limits set in columns (1) and (2)

(†) Column (4) to be completed by the Engineer Designate prior to executing the Articles of Agreement.
APPENDIX 5.4 GUIDELINES FOR PREPARING THE SCHEDULE OF PROPORTIONS

[Extracted from ETWB TCW No. 21/2003]

1. **Limits to be used on Schedule of Proportions**

   The limits set in columns (1) and (2) of the Schedule of Proportions are to suit the type of proposed contract, e.g. for a labour intensive contract the limits set for Labour will be high. It is necessary to ensure that wide gaps between minimum and maximum levels are not unintentionally provided. As a general check on the reasonableness of the range of maximum and minimum percentages to be used it is suggested that, as a general rule, the total of column (1) should not be less than 135 or more than 145 and that the total of column (2) should not be less than 60 or more than 70.

2. **Use of more than one Schedule of Proportions**

   The Director of Audit has recommended that in order to reduce the possibility of speculation by contractors, the use of more than one Schedule of Proportions should be considered, especially for contracts with two or more diverse elements where a single Schedule of Proportions may not produce an equitable method of reimbursement of price fluctuations. An example of the use of two Schedules of Proportions would be the case of site formation works which would be followed by building works. In view of the diverse nature of the two types of work, two schedules of proportions should be considered. Another example would be a road construction contract with extensive earthworks and bridgework but where bituminous pavement works would not be carried out until the last few months of the contract period. In this case the bituminous pavement works would be billed alone in one section of the BQ and a separate Schedule of Proportions provided.

   Where the use of more than one Schedule of Proportions is warranted, it will be necessary to ensure that the schedules apply to specified bills of the BQ and that appropriate Special Conditions of Contract and Special Conditions of Tender are provided.
APPENDIX 5.5   FORMAT OF THE GRAND SUMMARY TO THE BILLS OF QUANTITIES

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

.................................................. DEPARTMENT

CONTRACT NO. ..............

(Title of Contract)

BILLS OF QUANTITIES

GRAND SUMMARY

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Bill No.</th>
<th>Description</th>
<th>HK$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Preliminaries</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>..</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>..</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Site Safety and Environmental Management+</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>Daywork</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>Prime Cost and Provisional Sums</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contingency Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grand Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjustment Item</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Addition/*Deduction</td>
<td></td>
</tr>
</tbody>
</table>

Tender Sum

Signature of person authorized to sign on behalf of tenderer: ........................................

Name of tenderer: ..........................................................

Date: .................................................................

* delete where inappropriate
+ the Bill on Site Safety and Environmental Management is to be provided for all appropriate tenders required under WBTC Nos. 32/99, 30/2000, ETWB TCW No. 19/2005 and the Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts promulgated under SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, and SDEV’s memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007
The following Note to Tenderers and Special Condition of Contract shall be included in tenders for all capital and maintenance works contracts:

Notes to Tenderers:

“Tenderers’ attention is drawn to the Special Condition of Contract [x] requiring the engagement of sub-contractors who are registered under the respective trades available in the Primary Register of the Voluntary Sub-contractor Registration Scheme.”

Special Condition of Contract

I) “SCC[x] - Engagement of sub-contractors who are registered under the respective trades available in the Primary Register of the Voluntary Sub-contractor Registration Scheme:

General Conditions of Contract Clause 4 is amended by adding the following:

(8)(a) Where the Contractor is to [sub-contract/sub-let] part of the Works execution of which involves trades available under the Primary Register of the Voluntary Sub-contractors Registration Scheme, the Contractor shall engage, for the purposes of execution of such part of the Works, sub-contractors as stated in the Contractor’s latest updated submission of the Sub-contractor Management Plan and who have completed their registration under the relevant trades available in such Primary Register before the commencement of the works under the relevant sub-contracts. Provided that the Contractor shall not engage a sub-contractor who is suspended or in the process of an appeal against his suspension from registration under such Primary Register unless the suspension is lifted before the commencement of the works under the relevant sub-contracts. The foregoing shall also apply to the Contractor’s engagement of [Nominated Sub-contractors], [Specialist Sub-contractors] and [sub-contractors for specialist works referred to in Special Condition of Contract Clause [ ]].

(b) The Contractor shall ensure that where any part of the part of the Works sub-contracted to :-

(i) a sub-contractor engaged under sub-clause 8(a) of this Clause;

(ii) a Nominated Sub-contractor;

(iii) a Specialist Sub-contractor; or

(iv) a sub-contractor for specialist works referred to in Special Condition of Contract Clause [ ].
execution of which involves trades available under the Primary Register of the Voluntary Sub-contractor Registration Scheme is further sub-contracted (irrespective of any tier), sub-contractors (irrespective of any tier) as stated in the Contractor's latest updated submission of the Sub-contractor Management Plan and who have completed their registration under the relevant trades available in such Primary Register before the commencement of the works under the relevant further sub-contracts are engaged for the purposes of execution of such part of the part of the Works. The Contractor shall also ensure that a sub-contractor (irrespective of any tier) who is suspended or in the process of an appeal against his suspension from registration under such Primary Register shall not be engaged for the aforesaid further sub-contracting (irrespective of any tier) unless the suspension is lifted before the commencement of the works under the relevant further sub-contracts.

(c) For the purposes of this sub-clause, “Voluntary Sub-contractors Registration Scheme” and “Primary Register of the Voluntary Sub-contractors Registration Scheme” respectively means the Voluntary Sub-contractors Registration Scheme and the Primary Register of the Voluntary Sub-contractor Registration Scheme as referred to in Environment, Transport and Works Bureau Technical Circular (Works) No. 13/2004.”

Notes:

1. Use “sub-contract” or “sub-let” as appropriate depending on the type of GCC’s used in individual contract.

2. Use as appropriate depending on the type of GCC’s used in individual contract.

3. Use when the standard SCC in WBTC No. 25/94 (entitled “Standard Form of Domestic Sub-contract for specialist works”) is used in individual contract.

4. Insert the number of the SCC in the individual contract which has used the standard SCC for sub-contracting in Secretary for Works’ memo WB(W) 209/32/110 (entitled “Library of Special Conditions of Contract Clause 14 - Sub-contracting”) dated 23.3.2001.

5. Use when standard SCC on sub-contracting in Secretary for Works’ memo WB(W)209/32/110 (entitled “Library of Special Conditions of Contract Clause 14 - Sub-contracting”) dated 23.3.2001 is used in individual contract.
APPENDIX 5.7  UNDERTAKINGS BY CONTRACTOR ON THE USE OF GOVERNMENT DIGITAL MAP DATA (Ref.: WBTC No. 7/2000)  (Amendment No. 7/2009)

(Please complete in Block Letters)

To: ________________________________

(Name of the Engineer/Engineer designate*)

In consideration of the Government of the Hong Kong Special Administrative Region ("Government") supplying additional copies of tender/contract* drawings in electronic form to us, we, ______________________________ agree to abide by the following conditions in the use of Government digital map data ("the data") supplied by the Land Information Centre which may be contained in the drawings provided by the Engineer/Engineer designate* (for preparation of a tender)* for Contract No. ___________ with ___________ concerning ___________.

(Name of contractor in full)

((Name of Government Department in full)

>Title of the Contract)

(i) The data shall only be used in our computer systems or visual terminals assigned (for tendering)* for the above Contract.

(ii) The data shall not be used for any purposes other than (tendering for)* the above Contract.

(iii) The data shall not be distributed in part or in whole and in whatever forms and media to a third party.

(iv) The data stored in our computer systems and storage media shall all be destroyed immediately after the completion of the tender/work for the above Contract and we undertake to advise in writing within seven days of so destroying the data by completing the standard form "Confirmation by contractor on cessation of the use of Government digital map data" and submit it to the Engineer/Engineer designate*.

2. We understand that our employees must observe and abide by the above conditions. If any of our employees are proved to have breached any of the above conditions, we undertake to compensate the Government for any loss or damage that the Government has suffered as a result of the said breach.

Signed for and on behalf of the contractor

Signature ________________________________

Name ________________________________

Designation ________________________________

Tel. No. ________________________________

Fax No. ________________________________

Date ________________________________

Company Address ________________________________

*delete where inappropriate
APPENDIX 5.8  CHECK-LIST FOR TENDERS DEPOSITED IN THE  
*GOVERNMENT SECRETARIAT TENDER BOX /  
*PUBLIC WORKS TENDER BOX

1. Before the tender is sealed and delivered to the *Government Secretariat Tender Box /  
*Public Works Tender Box, please check the following:

(a) The tender has been properly signed and the signature witnessed.

(b) All the documents issued with or requested in the tender such as acknowledgements of receipt of corrigenda or addenda, are properly completed and attached to the tender.

(c) For remeasurement contracts, copies of the Bills of Quantities and the Schedule of Proportions are attached to the tender. The *Central Tender Board / *Public Works Tender Board will make copies of the Bills of Quantities and Schedule of Proportions on behalf of tenderers who have failed to submit copies of such documents and a charge of *$6.51/*$13\textsuperscript{2} or such amount as advised by the *Secretary for Financial Services and the Treasury / *Chairman of the Public Works Tender Board periodically will be levied for each page so copied.

(d) The envelope or cover holding the tender does not bear the name of the tenderer but the tender reference or contract number and the closing date should be shown on the cover.

2. Tenderers should also note the following:

(a) Unless otherwise indicated, plans and drawings issued with the tender documents shall not be returned and deposited in the *Government Secretariat Tender Box / *Public Works Tender Box, such drawings are to be returned to the issuing office after submission of the tender.

(b) Samples, if called for, should be submitted separately to the issuing office inviting the tenders with the tender reference or contract number indicated clearly on the cover, and should not be deposited in the *Government Secretariat Tender Box / *Public Works Tender Box.

(c) Tenders that are bulky should be wrapped properly with strong paper which is unlikely to break when the tender is being deposited in the Tender Box. Tenders with a size exceeding 0.1m\textsuperscript{2} and a thickness of more than 30cm should be separated into smaller parcels, each parcel to be properly labelled.

(d) For tender submission in electronic format, the tender opening team will make copies of the required documents on behalf of tenderers who have failed to submit the required duplicate in electronic format. The tenderer may be asked to bear the cost of making the duplicate at a charge of $36\textsuperscript{3} per electronic file and a material charge of $1\textsuperscript{3} per CD-ROM, or such amount as advised by the *Secretary for Financial Services and the Treasury / *Chairman of the Public Works Tender Board periodically will be levied for each duplicate so made.  

* (Amendment No. 8/2009)
3. Please allow adequate time for your tender to be delivered to the *Government Secretariat Tender Box / *Public Works Tender Box. The Tender Box is closed on the tender closing day, which will be a Friday, as soon as the 12:00 noon time signal is broadcast by a local radio channel and the staff of the *Central Tender Board / *Public Works Tender Board are under strict instruction not to accept tenders that are delivered after the closing time. However, if a rainstorm black warning or typhoon signal No. 8 or above is hoisted between 9 a.m. and 12 noon on the tender closing day, the tender closing time will be extended to 12 noon on the first working day of the following week. An announcement of the extension of the tender closing time will be made through the radio (by the Financial Services and the Treasury Bureau) immediately after 9 a.m. or immediately after the signal/warning has been hoisted. In order to ensure that your tender is deposited in the Tender Box well before the closing time, you should as far as possible arrange for the tender to be deposited before the closing date.

Tenderers may rest assured that no person is allowed access to the tenders that have been deposited in the *Government Secretariat Tender Box / *Public Works Tender Box until after the closing time when they will be removed by authorized personnel.

Notes:

* Delete as appropriate.

1. For tenders opened by CTB. See memo from Secretary for Financial Services and the Treasury (Treasury Branch) ref. (51) in FT 8/86 Pt. 2 dated 17.12.2007.

2. For tenders opened by PWTB. See memo from Chairman, Public Works Tender Board ref. (61) in PW/TB/GEN/06 dated 8.1.2008 [mistyped as 8.1.2007].

3. See SDEV’s memo ref. (02263-01-2) in DEVB(W) 511/70/02 dated 23.7.2009 (Amendment No. 8/2009).
1. Alkali Silica Reaction (ASR) can cause concrete to expand and crack. ASR can occur if the aggregate in the concrete is reactive and if unfavorable factors such as high active alkali content of the concrete mix are present. As an interim measure to control ASR, the alkali content of concrete had been limited to 3 kg/m³.

2. The Standing Committee on Concrete Technology (SCCT) and its Sub-committees have conducted further studies on ASR in order to establish a more comprehensive ASR control framework for use in Hong Kong. Details and bases of the framework are given at Appendix H “Alkaline Aggregate Reaction Control Framework for Hong Kong” of GEO Report No. 167, which is posted on the CEDD website (http://www.cedd.gov.hk/eng/publications/geo_reports/index.htm).

3. The new control framework, as detailed in Section H.2 of Appendix H of GEO Report No. 167, categorizes concrete structures into three classes. The majority of concrete structures in Hong Kong are “Class 2” structures based on the framework. Most of the concrete for these structures are made of granite aggregates that are readily available to Hong Kong. In Appendix H.2.4 ‘Design Requirements”, preventive measures are prescribed for control of ASR according to the category of structures. It should be noted that “Class 2 structures” constructed with reactive aggregates should be monitored for not less than 15 years and that clients should be made well aware of this obligation.

4. In the General Specification for Civil Engineering Works (2006 Edition), with the issue of Amendment No. 2/2008 (June 2008), Clause 16.08 (4) requires that aggregates shall be inert to alkali-silica reaction (ASR) unless a control framework installed to guard against occurrence of ASR in concrete structures.

5. The particular specification given at Annex 1 should normally be adopted for concrete mix in public works contracts (including term contracts). The particular specification given at Appendix A of WBTC No. 5/94 shall no longer be used. Where control measures less or more stringent than those specified at Annex 1 are to be used in accordance with the control framework, an alternative set of particular specification should be worked out for inclusion in the contract document.
### Measures to Prevent ASR in Concrete

**1.01** (1) Measures to prevent the occurrence of alkali-silica reaction (ASR) in concrete structures shall be the control of reactive alkali content of the concrete using the framework as depicted in Sections H2.4 and H3.3 of Appendix H of GEO Report No. 167 entitled “The 2004 Review on Prevention of Alkali Silica Reaction in Concrete”. Alternative measures may be submitted to the Engineer for approval. The Engineer is not obliged to accept any alternative measures, especially if a measure could limit the performance or use of the structure, or necessitate follow-up actions such as monitoring.

(2) The reactive alkali content of concrete expressed as the equivalent oxide (Na$_2$O) content per cubic metre of concrete shall be obtained in accordance with clauses 1.02 and 1.03.

### Equivalent sodium Oxide (Na$_2$O) content

**1.02** (1) The equivalent sodium oxide (Na$_2$O) content of the concrete shall be calculated from the following expression:

$$\text{Equivalent Na}_2\text{O} = A + B + C$$

Where $A$ is the sum of the acid-soluble alkalis (expressed as equivalent Na$_2$O) of cement, admixtures and water.

$B$ is equal to $1/6$ the total alkalis of PFA (expressed as equivalent Na$_2$O).

$C$ is equal to 0.76 times the chloride ion (Cl$^-$) of the aggregate.

(2) The acid-soluble alkali content of the cement shall be determined in accordance with BS EN 196-21:1992 and shall be taken as the average of the latest 25 daily determinations of equivalent sodium oxide plus twice the standard deviation of the results.

(3) The acid-soluble alkali content of admixtures shall be determined in accordance with BS1881: Part 124:1988.
(4) The acid-soluble alkali content of water shall be determined in accordance with BS EN1008: 2002.

(5) The total alkali content of the pulverized-fuel ash shall be determined in accordance with BS EN 196-21:1992 and shall be taken as the average of 25 weekly determinations plus twice the standard deviation of the results.

(6) The equivalent sodium oxide content of the coarse and fine aggregates shall be calculated from the quantity of chloride ion present which shall be measured in accordance with BS812-117:1988.

**Submission**

1.03 (1) The following particulars of the proposed concrete mix shall be submitted to the Engineer:

   (a) HOKLAS endorsed test certificates not older than 6 months giving the results of tests required in Items 1.02 (2) to (6).

   (b) Calculation of the reactive alkali of the proposed mix.

   (c) A system to control the active alkali content in the concrete and evidence that the control system is covered by the QSPSC certification of the concrete production plant.

(2) Within five working days of any instance of the active alkali content in the concrete supplied having been found to have exceeded, the calculation shall be submitted to the Engineer together with supporting HOKLAS endorsed test certificates.

(3) The HOKLAS endorsed test certificates giving the results of tests required in Items 1.02 (2) to (6) shall be submitted at quarterly intervals unless agreed otherwise by the Engineer. The certificates shall be accompanied by any necessary calculations to demonstrate that the mix continues to comply with the limit on reactive alkali content.
APPENDIX 5.10 CONFORMATION BY CONTRACTOR ON CESSATION OF THE USE OF GOVERNMENT DIGITAL MAP DATA (Ref.: WBTC No. 7/2000) (Amendment No. 5/2008 & 7/2009)

(Please complete in Block Letters)

To: ____________________________________________

(Name of the Engineer/Engineer designate*)

This is to advise that we, ____________________________________________, have ceased using the Government digital map data ("the data") from the electronic drawings provided by the Engineer/Engineer designate* with effect from ____________________ (for preparation of a tender)* for the Contract No. ____________

with ____________________________________________

(Name of Government Department in full)

__________________________________________________

(Date)

(Title of Project/Study)

We confirm that we are no longer in possession of the data or any part thereof in any media or in any form and that the data has been permanently erased and/or duly destroyed from our computer systems.

Signed for and on behalf of the contractor

______________________________
Signature

______________________________
Name

______________________________
Designation

______________________________
Tel. No.

______________________________
Fax No.

______________________________
Date

______________________________
Company Address

Company Chop

* delete where inappropriate
APPENDIX 5.11  PARTICULAR SPECIFICATION FOR INDEPENDENT CHECKING OF THE DESIGN, ERECTION, USE AND REMOVAL OF TEMPORARY WORKS (Ref.: WBTC No. 3/97) (Amendment No. 5/2008 & 7/2009)

Particular Specification

(1) Pursuant to SCC Clause _____, the design of the following Temporary Works shall be certified by the independent checking engineer -

(a) .................................................

(b) .................................................

(c) .................................................

(2) In addition, method statements certified by the independent checking engineer shall be provided for the erection, use and removal of the following Temporary Works -

(a) .................................................

(b) .................................................

(c) .................................................

(3) Any Temporary Works erected in close proximity to traffic shall be protected against impact from vehicles by suitably designed protective measures. The Contractor shall design such protective measures with regard to the conditions prevailing on the Site and the effect of any such impact. Such protective measures are to be designed as part of the Temporary Works and included in any requirement for independent checking.
APPENDIX 5.12  PRACTICE NOTE FOR THE USE OF LUMP SUM BILLS OF QUANTITIES CONTRACTS FOR CIVIL ENGINEERING WORKS (Ref.: WBTC No. 17/95) (Amendment No. 5/2008 & 7/2009)

1. For pure lump sum contracts the Contractor undertakes to carry out a defined amount of work in return for an agreed price. Once the work is done, the price is paid.

2. In our contracts the price is usually paid in stages, which may be subject to a price fluctuation clause. When it is not, it is described as a "fixed price" contract. The price is also adjusted for the effect of any variation ordered to the design of the Works and for adjustments for the Contingency Sum, any Provisional Sum, Prime Cost Sum etc. as stated in the Contract and for any error discovered in the quantities (if included).

3. It is clear that when we use the term "lump sum" we do not mean it strictly in the way it is used in para. 1. When we let a contract based on Bills of Quantities we further complicate the issue, because it is almost certain that when we go to tender not every detail of the design will be finalised and these unfinalised details cannot be measured accurately (referred to as "firm" quantities/items). The term "lump sum" is therefore a convenient way to differentiate this approach from total remeasurement (and other contracts).

4. Lump sum contracts with Bills of Quantities are priced on the basis of the drawings and specification, reduced by means of a standard method of measurement to a list of items which describe and measure the work included on the drawings and in the specification. Any item or section of work which cannot be accurately measured is covered by a provisional quantity or sum and measured as executed on completion of the item or section of work i.e. the value of the provisional item(s) or section(s) of work in the Bills is/are deducted from the Contract Sum and the value of the work executed is added.

5. The "details" referred in para 3 can be substantial. For example, in the building industry the whole of the substructure and much of the external works may be described as provisional and are remeasured as done. This does not prevent the contract from being described and treated as lump sum of a substantial part of the Works can be measured accurately for inclusion in the Bills.

6. The provisional quantities are included in the Bills wherever it is appropriate and sensible to do so. Individual items to be remeasured can be mixed in with the "firm" items, or a whole section can be shown separately and described as provisional. It is very important to clearly differentiate items of work that are not measured firm, by marking each item (or group of items) "provisional" and explaining the process of adjustment elsewhere in the Contract. (e.g. in the Preliminaries/Preambles).
7. **General Conditions of Contract (GCC) Clause 5 - Documents mutually explanatory, takes on more importance in lump sum contracts.** The agreement is that the work to be done is accurately reflected in the Bills. Any failure to do so places an obligation on the Engineer to put it right. (See the reference in sub-clause (4) proviso (a) to GCC Clause 59, which is replaced by the standard SCC 21 promulgated under WBTC No. 18/2000 and para 10(a) following.) Any other discrepancy between the various contract documents must be sorted out as though it were a variation. It is for the Contractor to prove that a discrepancy or an error in measurement exists.

8. **Lump sum contracts often result in a heavier use of GCC Clause 60 - Variations.** The provisional quantities are dealt with in the same way as estimated quantities in remeasurement contracts. The proviso to GCC Clause 61(1) i.e. the valuing of the "knock-on" effect of varied work on the unvaried, also takes on more importance in lump sum contracts. It is therefore very important to make sure that the design of the parts of the works measured as firm will not be subject to variations or lack detail that can produce an extension of time and disruption/prolongation claims.

9. **The measure and value of each variation ordered is collected together into a "bill of variations" the net total of which is added to or omitted from the Contract Sum (together with the effect of any remeasured items or sections, the Contingency Sum adjustment etc.).** The measure and value must be completed by the Engineer (but not necessarily agreed with the Contractor) within the contractually stated period. [See the standard SCC 21 promulgated under WBTC No. 18/2000 covering GCC Clause 59(7)].

10. **Most of the changes to the General Conditions of Contract introduced by the Special Conditions of Contract, bring the Civil Engineering version into line with the Building version, generally using the same wording.** There are exceptions viz -

(a) **Clause 50(1)(b)(v) -** Whilst the wording is changed, the purpose remains the same i.e. an extension of time is only considered if the increase in quantity is produced by other than an error in or omission of firm quantities (e.g. provisional quantities are under-estimated) because the work shown on the Drawings and/or in the Specification does not change, and therefore there is no reason why the time for completion should change. With provisional quantities the work can increase and therefore such increases should be considered for an extension of time. If the work shown on the Drawings and/or in Specification changes, this is a variation. (See Annex 1 examples).

(b) **Clause 59(3) -** the words "work required by the (Engineer) to be carried out" do not appear in the SCC. This reflects differing procedures between the civil engineering and building approaches. (For the latter, Clause 5 would be operated by the Contractor.) This difference does not change the outcome, items of work shown on the Drawings or described in the Specification which are required to be measured under the rules of the SMM must be so measured.
(c) Clause 59(4)(a) - includes an additional final sentence, again in order to assist the Engineer.

(d) Clause 59(6)(b) and (c) and (7) - describe the procedures applicable to civil engineering, but require the Engineer to complete (but not necessarily agree with the contractor) the final measure and valuation in respect of work required to be measured under Clause 59(3), within a 30-day period commencing on the date of issue of the maintenance certificate.

11. GCC Clause 79(1) - Interim payments, are treated differently for lump sum contracts. No accurate measure of the work done at the applicable date is carried out. For interim payments the Engineer estimates the amount of work done (if possible in agreement with the Contractor) and values it. The Engineer also estimates the financial effect of all work done that has been varied under GCC Clause 60, though the Engineer should measure variations as soon as practicable in order to make a full and proper adjustment at the appropriate time i.e. when the varied work is executed/omitted. An estimate is not an inspired guess, it is a professional assessment.
Annex 1 to Appendix 5.12

Examples of assessments under GCC Clause 50(1)(b)(v)

Scenario One: The drawings show an assumed rockhead level based on which the provisional quantity of rock excavation is determined in the Bills of Quantity.

**Situation 1**
- Quantity based on assumed information in the drawing: 1000 units
- Provisional quantity listed in the Bills of Quantity: 200 units
- Actual quantity remeasured on site: 1000 units

**Intension**
Total change in quantity is 800 (1000 - 200) units. No Extension of Time shall be provided due to this change.

**Situation 2**
- Quantity based on assumed information in the drawing: 1000 units
- Provisional quantity listed in the Bills of Quantity: 1000 units
- Actual quantity remeasured on site: 2000 units

**Intension**
Total change in quantity is 1000 (2000 - 1000) units. Extension of Time for this change shall be provided.

**Situation 3**
- Quantity based on assumed information in the drawing: 1000 units
- Provisional quantity listed in the Bills of Quantity: 200 units
- Actual quantity remeasured on site: 2000 units

**Intension**
Total change in quantity is 1800 (2000 - 200) units. No extension of Time for the change from 200 to 1000. Extension of Time shall be provided for the change from 1000 to 2000.

Scenario Two: Specifications requires the formation for pavement and structures shall be compacted at completion. An item in the Bills of Quantity shall be provided according to the Standard Method of Measurement.

**Situation 1**
- Quantity implied from the Contract: 1000 units
- Quantity omitted in the Bills of Quantity
- Actual quantity remeasured on site: 1000 units

**Intension**
No Extension of Time shall be provided.

**Situation 2**
- Quantity implied from the Contract: 1000 units
- Quantity described as firm quantity in the B of Q: 200 units
- Errors discovered in the firm quantity: 800 units
Intension: No Extension of Time shall be provided.

**Situation 3**
Quantity implied from the Specifications: 1000 units
Quantity described as provisional quantity in the B of Q: 200 units
Actual quantity remeasured on site: 1000 units

Intension: No Extension of Time shall be provided.

**Scenario Three**
Specification requires width of road reinstatement shall be the trench width plus minimum 300 mm or the full lane width as directed by the Engineer.

**Situation 1**
Quantity implied from the Specification: unclear but minimum 1000 units
Provisional quantity listed in the B of Q: 200 units
Actual quantity remeasured on site: 1000 units

Intension: No Extension of Time.

**Situation 2**
Quantity implied from the Specification: unclear but minimum 1000 units
Provisional quantity listed in the B of Q: 1000 units
Actual quantity remeasured on site: 2000 units

Intension: Extension of Time shall be provided for the change in quantity of 1000 units (2000 - 1000).

**Situation 3**
Quantity implied from the Specification: Unclear but minimum 1000 units
Provisional quantity listed in the B of Q: 200 units
Actual quantity remeasured on site: 2000 units

Intension: No Extension of Time for the change in quantity from 200 units to 1000 units. Extension of Time shall be provided for the change from 1000 units to 2000 units.
Para. 1(a) of Part I of the SMM shall be replaced by:

"Bills of Quantities" means a list of items giving brief identifying descriptions and the quantities measured in accordance with this document in respect of the work to be performed.

Para. 1(c) of Part I of the SMM shall be deleted.

Para. 1 of Part II of the SMM shall be replaced by the following:

"The Bills of Quantities are intended in the first instance to give information upon which tenders can be obtained. The quantities in the Bills of Quantities are firm except where described as provisional. When a contract has been entered into, measurement and valuation of the work required to be measured under the Contract performed shall be carried out by reference to the priced Bills of Quantities in the manner stated in the Contract."

Para. 3 of Part III (Rules of Preparing Bills of Quantities) of the SMM shall be replaced by:

Quantities 3(a) Unless required otherwise by the nature of the work or directed otherwise by a measurement rule in the Method of Measurement, the quantities shall accurately represent the work to be executed and shall be regarded as firm. Where quantities cannot be accurately measured, the respective item in the Bills of Quantities shall be marked as "provisional".

(b) The quantities shall be computed net from the Drawings or Specification, unless otherwise stated in the Contract, and no allowance shall be made for bulking, shrinkage or waste. Quantities may be rounded up or down where appropriate. Fractional quantities are not generally necessary but, where required, should not be given to more than one place of decimals.
Notes to Tenderers

NTT# : Employing Site Personnel for the Contract and Payment of Site Personnel’s Wages

Tenderers’ attention is drawn to Special Conditions of Contract Clause [zz] requiring all Site Personnel engaged in the Contract to be employed under written employment contracts with either the Contractor or his sub-contractors (irrespective of the tiers) including Specialist Sub-contractors and Nominated Sub-contractors. Self-employed persons shall be subject to other requirements of the contract. Tenderers’ attention is also drawn to the new requirement and arrangement on Payment of Site Personnel’s Wages set out in Particular Specification Section [X]. In the event the Contractor or his sub-contractors including Specialist Sub-contractors and Nominated Sub-contractors fail to pay wages to their Site Personnel, the Employer may pay any wages in arrears to the Site Personnel and recover the same from any monies due to the Contractor under the Contract.

NTT## : Reimbursement of mandatory provident fund (MPF) contribution

The Tenderers’ attention is drawn to Special Conditions of Contract Clause [xx] on the arrangements in the reimbursement of the Contractor’s and sub-contractor’s contribution to MPF.

NTT### : Regulating Actions on Poor Records of Non-payment of Wages to Site Workers by Contractors

Tenderers’ attention is drawn to the new regulating actions introduced in the Contractors’ Management Handbook (CMH) on poor records of non-payment of wages to site workers by contractors. These are repeated here for ease of reference:-

“CMH Section 5.1.3 – Circumstances which may lead to the taking of regulation actions, include, but are not limited to: -

Add (xviii) – poor records on non-payment of workers’ wages, including those of his sub-contractors. A “non-payment of workers’ wages” record is defined as a claim filed in the office of the Labour Department and proof thereof is furnished to the satisfaction of the Commissioner for Labour, in which the Contractor or any of his sub-contractors, irrespective of tiers, is liable.

CMH Section 5.2.3(c) – Circumstances warranting mandatory suspension from tendering in all categories (A time limit for review to be set in all cases but should not be longer than six months):-

Add (vii) – poor records on non-payment of workers’ wages, including those of his sub-contractors. A “non-payment of workers’ wages” record is defined as a claim filed in the office of the Labour Department and proof thereof is furnished to the satisfaction of the Commissioner for Labour, in which the Contractor, or any of his
Special Conditions of Contract

SCC[xx] : Reimbursement of Contractor’s Contribution to the Mandatory Provident Fund for his Site Personnel

(1) Subject to sub-clause (2) of this Clause, the Engineer shall ascertain and certify for payment in accordance with General Conditions of Contract Clause 79, the amount of the Contractor’s mandatory contribution under the Mandatory Provident Fund Schemes Ordinance (Cap. 485), including contribution by sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, to the employer’s mandatory provident fund for the Site Personnel under this Contract, based on the designated bank’s transaction records as specified in Particular Specification Section X.

(2) The Employer shall not be liable to reimburse the Contractor, or sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, any amount of the contribution to the employer’s mandatory provident fund for the Site Personnel under the Contract other than the amount certified by the Engineer pursuant to sub-clause (1) of this Clause. For the avoidance of doubt, the Employer shall not be liable to pay the Contractor any of the part of Contractor’s contribution, including contribution by sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, to the employer’s mandatory provident fund for any Site Personnel under the Contract which exceeds the Provisional Sum for mandatory provident fund contributions allowed for in the Contract.

(3) Notwithstanding General Conditions of Contract Clause 68, the Contractor and his sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors are not entitled to any profit and administration cost including overheads cost, whether on or off the Site, for the reimbursement made under this Clause.

(4) For the purposes of this clause, “bank” shall be an authorized institution within the meaning of Section 2 of the Banking Ordinance (Cap 155).
SCC[yv] : Definition and Interpretation

General Conditions of Contract Clause 1(1) is amended by adding the definition of:

“Site Personnel” - “Site Personnel” means all workers and staff employed by the Contractor or his sub-contractor of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, except self-employed workers, engaged for the execution of the Works on Site.

“Labour Relations Officer” - “Labour Relations Officer” means any person, or persons appointed from time to time by the Engineer and notified in writing to the Contractor to perform the duties specified in the Contract.”

SCC[zz] : Payment of Wages of Site Personnel

(1) Subject to those Casual Workers referred to in Clause Z.1 (1) of Particular Specification "Section Z" on "Causal Workers", all Site Personnel shall be engaged in accordance with Clauses X.2 to X.5 of Particular Specification “Section X” on “Payment of Wages of Site Personnel”. Such Site Personnel shall be engaged with a written employment contract with their respective employers who shall either be the Contractor or any of his sub-contractors [of all tiers including Specialist Sub-contractors and Nominated Sub-contractors,] as submitted in the Sub-contractors’ Management Plan required under SCC Clause [??] of these Special Conditions of Contract. The terms of the employment contract shall be not less favourable to the terms provided in the Specimen Employment Contract at Appendix [#] to these Special Conditions of Contract as far as the Site Personnel are concerned. Payment of wages shall be made at least once per month. Employment contracts which stipulate a payment cycle in less frequent than once per month will not be permitted under this Contract.

(2) The Contractor shall ensure that all workers who are self-employed persons engaged to work on the Site shall each be covered by a personal accident insurance plan with a minimum coverage of HK$1,000,000 by either extending the Contractor’s Employee Compensation Insurance policy or his third party liability and all risks insurance policy. Alternatively the Contractor shall arrange a separate personal accident insurance plan for all self-employed workers for a minimum cover of HK$1,000,000 in the form specified in Appendix [##] to these Special Conditions of Contract and shall maintain such policy for the duration of the self-employed workers being engaged in the Contract. The Contractor shall produce evidence of such insurance before the self-employed workers are issued a smart-card as described in Particular Specification “Section X” on “Payment of Wages of Site Personnel”. The Contractor shall inform the Engineer immediately when the insurance policy of a self-employed worker has expired together with evidence showing its renewal as appropriate.

(3) Lorry drivers engaged for the Works (excluding those lorry drivers engaged by suppliers to deliver material to the Site) may elect to be a Site Personnel or a self-employed person.
(4) The Contractor shall provide and maintain an attendance recording system comprising smart-card cum biometric authentication to record and verify the information of all Site Personnel entering and leaving the Site in accordance with Particular Specification “Section X” on “Payment of Wages of Site Personnel”.

(5) Within 14 days of the commencement of the Contract, the Contractor shall make necessary arrangements with a bank to implement the arrangement on payment of wages to Site Personnel in accordance with Particular Specification “Section X” on “Payment of Wages of Site Personnel”. The Contractor shall submit a written declaration that all Site Personnel’s wages payable have been paid when the Contractor submits the transaction records to the Engineer. Site Personnel who are not able to open a personal bank account in Hong Kong shall be paid by personal cheques in accordance with Particular Specification “Section X”.

(6) Pursuant to General Conditions of Contract Clause 4(3), failure to comply with Section X of the Particular Specification by any of the sub-contractors [(irrespective of tiers) including Specialist Sub-contractors and Nominated Sub-contractors] may render the removal of the sub-contractor from the Site and/or the Works.

(7) (a) Without prejudice to any of the provision under General Conditions of Contract Clause 40 and in the event of default being made in the payment of any wages of any Site Personnel employed by any of the sub-contractors in and for carrying out this Contract and if a claim therefore is filed in the office of the Labour Department and proof thereof (including, where the claim is disputed by the Contractor or by any of the responsible sub-contractors, as the case may be, or it is found necessary by the Commissioner for Labour, proof of final determination of the claim by an award or order of the Labour Tribunal or as the case may be the Minor Employment Claims Adjudication Board or a judgment of the District Court or, where the matter is subsequently further disputed by way of appeal, by a judgment of the Court of First Instance or the Court of Appeal) is furnished to the satisfaction of the Commissioner for Labour; provided that the subject incident of default in payment of wages is reported to the Labour Relations Officer within 7 working days (Sundays and public holidays excluded) of the final due date for payment as prescribed under section 23 of the Employment Ordinance (Cap 57), the Employer may, after the Contractor or the sub-contractor, as the case may be, who is in default of paying any wages to the Site Personnel, make payment of such wages or claim for wages on behalf of the Contractor or the subcontractor to the Site Personnel and any sums so paid shall be recoverable by the Employer as a debt from the Contractor.

(b) For the avoidance of doubt, Site Personnel employed by the Contractor are not subject to the reporting requirement to the Labour Relations Officer under sub-clause 7(a) of this Clause.

(c) For the further avoidance of doubt, where any self-employed worker is found by the Labour Tribunal or as the case may be the Minor Employment Claims Adjudication Board or a judgment of the District Court or, where
the matter is subsequently further disputed by way of appeal, by a judgment of the Court of First Instance or the Court of Appeal to be an employee instead of a self-employed worker, sub-clause 7(a) of this clause shall apply to that self-employed worker provided that the subject incident of default in payment of wages is similarly reported to the Labour Relations Officer within 7 working days (Sundays and public holidays excluded) of the final date for payment under section 23 of the Employment Ordinance (Cap 57).

(8) For the purpose of this Clause, "sub-contractors" means sub-contractors, irrespective of tiers, including Specialist Sub-contractors and Nominated Sub-contractors.
SCC[X] : Contractor’s Management Team

(1) Without prejudice to the generality of General Conditions of Contract Clause 17, the Contractor shall provide a team of suitably qualified and experienced staff to manage and supervise the Contract throughout the execution of the Works. All members of staff on the management/site supervision team (refer to as the Team in this Clause) must be under the direct employment of the Contractor. The Team shall comprise sufficient number of suitably qualified and experienced staff in the following disciplines* :-

(State minimum qualification requirements in the Particular Specification for each discipline if considered necessary.)

(a) Project Manager;
(b) Site agent in accordance with General Conditions of Contract Clause 17;
(c) Site Engineers;
(d) Topographic Surveyors;
(e) Quantity Surveyors;
(f) Site Superintendent; and
(g) Site Foremen.

(2) Members of staff on the Team are prohibited to be given a sub-contract to any part of the Works or to have a vested interest in any of the sub-contractors irrespective of tiers including Specialist Sub-contractors and Nominated Sub-contractors under this Contract.

(3) Within 14 days of the commencement of the Contract, the Contractor shall submit to the Engineer a list of staff with all necessary details which comprised the Team referred to in sub-clause (1) of this Clause. The Contractor shall provide documentary proof on the employment status of the staff on the Team, such as employment contracts, tax returns, payment of salaries and the like upon request by the Engineer. The employment terms for the staff on the Team shall include a “consent to disclosure” clause in accordance with the data protection principles set out under the Personal Data (Privacy) Ordinance (Cap. 484).

(4) If any member of staff on the team refuses to give consent to the disclosure of the required information pursuant to this Clause or pursuant to Particular Specification Section [x], and if such a disclosure without consent from the subject staff is in breach of the Personal Data (Privacy) Ordinance (Cap. 486), the Contractor shall make a formal declaration to the effect that such a staff is indeed under the direct employment of the Contractor. The declaration shall be signed by a person authorized to sign tenders on behalf of the Contractor.

(5) With the exception of the Project Manager, all members of staff in the Team shall be full time# on Site during site working hours.

(6) The Contractor shall inform the Engineer forthwith of any changes made to any of the staff on the Team.

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* Add/delete discipline as appropriate
# Consider whether some of the staff may only be needed part time, such as surveyors.
SCC[V] : Sub-contract conditions

(1) Without prejudice to the generality of General Conditions of Contract Clause 4, the Contractor shall ensure that the following provisions of this Contract shall be similarly and appropriately included into each and every sub-contract of all tiers including Specialist Sub-contracts and Nominated Sub-contracts for the carrying out of the Works under this Contract and the Contractor shall be responsible for the observance of these provisions by all sub-contractors (irrespective of any tier), including Specialist Sub-contractors and Nominated Sub-contractors employed in the carrying out of the Works :

(1) General Conditions of Contract Clause 40
(2) ) - List out all relevant SCCs, PS, etc.
(3) )
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.
.

(2) Upon request by the Engineer, the Contractor shall provide copies of the relevant sub-contracts with the sub-contract provisions referred to in sub-clause (1) of this Clause to the Engineer for his record and to provide the original documents of the relevant sub-contracts for inspection by the Engineer.

(3) The Contractor shall comply with and shall ensure that all sub-contractors (irrespective of any tier) shall comply with the provisions of this Clause; and shall, if necessary, within reasonable time enter into a supplemental agreement with his sub-contractor to ensure that the sub-contract complies with the requirements in sub-clause (1) of this Clause and to ensure that his sub-contractor will do the same in the lower tier sub-contracts.

(4) If the Contractor or any of the sub-contractors (irrespective of any tier) fails to comply with the provisions of this Clause, the Engineer shall, without prejudice to any other rights and remedies, have full power to order the removal of the sub-contractor from the Site and/or the Works.
Particular Specification

SECTION X

PAYMENT OF WAGES OF THE SITE PERSONNEL

GENERAL

General

X.1 (1) The Contractor shall ensure prompt payment of full wages to all the Site Personnel employed by him and shall use all reasonable endeavours to have his sub-contractors of all tiers to effect prompt payment of wages to all the Site Personnel employed by them for the execution of the Works in accordance with the Employment Ordinance.

(2) The Contractor shall include provisions in the contracts with his sub-contractors requiring the implementation of the system of payment of wages to the Site Personnel under the provisions of Section X of this Particular Specification.

(3) For the purposes of Section X of this Particular Specification, “bank” shall be an authorized institution within the meaning of Section 2 of the Banking Ordinance (Cap 155).

EMPLOYMENT OF THE SITE PERSONNEL

Written employment agreements

X.2 (1) Unless written employment contracts are already in place, the Contractor and his sub-contractors of all tiers shall [have] enter into written employment contracts with all the Site Personnel under their respective employments. The terms of the employment contract shall not be less favourable to the terms provided in the specimen employment contract given in Appendix [#] to the Special Conditions of Contract (SCC). The Contractor shall provide copies of the executed employment contracts to the Engineer for records. The Contractor shall not allow any Site Personnel without a properly executed written employment contract to work on the Site.

(2) A certified true copy of the written employment contract of each Site Personnel shall be kept on the Site and shall be made available to the Engineer or the Engineer’s Representative for inspection if so requested.
by the Engineer or the Engineer’s Representative.

(3) Any Site Personnel without a proper written employment contract with either the Contractor or his sub-contractor shall not be permitted or caused to be permitted to enter to or remain in the Site.

**Personal Accident Insurance of self-employed workers**

X.3 (1) In accordance with SCC[zz], the Contractor shall ensure that self-employed workers working on the Site shall each be covered by a personal accident insurance at a minimum coverage of HK$1,000,000. The Contractor shall not allow any self-employed worker without a valid personal accident insurance to work on the Site.

(2) The Contractor shall keep a certified true copy of the personal accident insurance of each self-employed worker on Site and shall be made available to the Engineer or the Engineer’s Representative for inspection if so requested by the Engineer or the Engineer’s Representative.

(3) Any self-employed workers without a proper personal accident insurance shall not be permitted or caused to be permitted to enter to or remain in the Site.

**Lorry Drivers**

X.4 (1) Lorry drivers shall either be an employee with a written employment contract with the Contractor or his sub-contractors, or a self-employed person with a personal accident insurance cover of not less than HK$1,000,000 for the execution of the Works.

**Payment of wages by designated bank accounts or personal cheques**

X.5 (1) Subject to sub-clause (3) of this Clause, the Contractor shall within 7 days from the commencement of the Contract submit to the Engineer the name of the designated bank and all related arrangement details for payment of wages to all the Site Personnel.

(2) The Contractor shall require all the Site Personnel to open a wage payment account in the designated bank or in any other bank of their choice.

(3) Subject to evidence produced to the satisfaction of the Engineer, Site Personnel not able to open a personal bank account with any bank in Hong Kong shall have their wages paid by personal cash cheques with the subject Site Personnel specified as payee and the cheques shall be immediately due on presentation. Payment of mandatory provident fund (“MPF”) contributions for the subject Site Personnel shall be made by bank transfers in accordance with Particular
Specification X.7 and X.8. Copies of the following documents shall be submitted to the Engineer for records:

(i) signed acknowledgement receipt of payment from the subject Site Personnel;

(ii) the cheque; and

(iii) the receipt of withdrawal to the Site Personnel issued by the bank.

The above copies of the documents shall be submitted as soon as they are available and in any event no later than 7 days from the date when payment is due for the subject Site Personnel.
SMART-CARD RECORDS

The Contractor shall provide and operate an attendance recording system comprising smart-card cum biometric authentication (hereinafter refer to as “the system”) to record and verify the information of all the Site Personnel entering and leaving the Site. The system shall be in operation within 1 month from the commencement of the Contract. Prior to the operation of the system, the Contractor shall use log books to record the time of entry and departure of all Site Personnel and self-employed workers in and out of the Site. Temporary cards for identification shall be used by all Site Personnel prior to the availability of the system. All temporary cards shall contain the information set out in sub-clause (4) of this Clause. Once the system is in operation, no persons are allowed to work on the Site without a smart-card. All visitors shall be issued a visitor card for identification.

The Contractor shall engage a specialist provider to design, provide and train his personnel to operate the system. The Contractor shall within 7 days of commencement of the Contract, submit to the Engineer the details of the system and the name and details of the specialist provider for the Engineer’s approval.

The system shall adopt a non-contact type card (the “smart-card”) complying with ISO 14443 with sufficient memory to store data as required in this PS Clause. The chip inside the smart-card shall comply with ISO 14443A. The biometric authentication shall utilize field-proven hand geometry technology that maps and verifies the size and shape of a person’s hand in less than one second or other biometric authentication technology with equivalent performance. The smart-card shall be compatible with the registration cards issued by the Registrar of Construction Workers appointed under the Construction Workers Registration Ordinance (Cap. 583) to registered construction workers. The system’s card readers shall be compatible with the smart-card and shall be complete with a security access module (SAM) for cryptographic security slot. The SAM will be provided by the Construction Workers Registration Authority.

The smart-card shall have the following information of the Site Personnel printed in durable print on its face:

(a) Name of worker in Chinese and English;
(b) Name of employer in Chinese and English;
(c) Trade;
(d) Photograph of worker;
(e) Contract No. and Contract Title;
(f) Expiry date; and
(g) Other information agreed by the Engineer.

(5) The smart-card shall contain sufficient encrypted information for identification of the card holder and access to the master data bank of the system.

(6) The Contractor is responsible for the issue of the smart-cards to each Site Personnel and self-employed worker and for registering their details to the system.

(7) If a Site Personnel or self-employed worker is issued a registration card by the Registrar of the Construction Workers pursuant to the Construction Workers Registration Ordinance (Cap. 583) the card so issued is permitted to be used in lieu of the smart-card required under this Section.

(8) The Contractor shall install sufficient number of the system’s card readers at convenient locations with shelters within the Site to facilitate day-to-day recording. The exact locations shall be submitted for agreement by the Engineer. The readers shall be connected to a secured computer so that the Site Personnel can record their signing in and out of the Site. Separate smart-card readers with clear labels indicating “IN” and “OUT” shall be provided for the purpose. Alternatively the system may assign the time of recording as “IN” and “OUT” automatically. The secured computer shall be loaded with appropriate software for recording the data retrieved from the system and the time of signing in and out of each worker. The Contractor shall provide X number of portable pocket personal computer, which can be synchronized with the master system data bank and is capable of recording, verifying and updating the information of the Site Personnel and self-employed workers for the use of the Engineer. The Contractor’s portable pocket personal computer shall be approved by the Engineer and the equipment shall be securely kept by a designated staff. The Contractor shall provide a full time staff to man the operation of the system’s readers at each of the locations.

# Normally one for the ER and one for the LRO, a total of two
The system’s card readers, once commissioned, shall be in operation at all times and shall be replaced in the first instance in the event of breakdowns, repairs or regular maintenance. The Contractor may, subject to the approval of the Engineer, dismantle and remove all system card readers installed on Site two months following the issue of the last certificate of completion under GCC Clause 53. The system card readers once dismantled under this sub-clause shall be removed off Site and shall become the Contractor’s property.

PAYMENT OF WAGES

Schedule of Wages and MPF Contributions

X.7 (1) The Contractor shall compile daily records of the Site Personnel working on the Site based on the data collected by the smart-card system. The Contractor shall verify the data of all the Site Personnel employed or engaged by him. The Contractor shall prepare separate daily records for each sub-contractor and distribute to these sub-contractors the records of the Site Personnel employed or engaged by them for verification. A copy of all the verified data and records shall be submitted to the Engineer on a daily basis.

(2) The Contractor shall prepare a schedule of wages of all the Site Personnel employed or engaged by him and the corresponding mandatory provident fund (“MPF”) contributions based on the verified data from the smart-card system. A copy of such schedule shall be submitted to the Engineer for each payment cycle.

(3) The Contractor shall require his sub-contractors, of all tiers, to prepare the respective schedules of wages of the Site Personnel employed or engaged by them and the corresponding MPF contributions based on the verified data from the smart-card system. A copy of these schedules shall be made available to the Engineer for each payment cycle.

Payment of Wages and MPF Contributions

X.8 (1) In accordance with the scheduled payment date stated in the employment contract, the Contractor shall ensure that sufficient funds have been reserved in the designated bank account for the payment of all wages and MPF contributions as given on the verified schedules for the subject payment cycle and shall promptly instruct the designated bank to effect the payment to the respective wage payment accounts and the respective MPF contribution accounts of all his Site Personnel. The Contractor shall forward a certified true copy of the records of transactions to the Engineer.
(2) The Contractor shall ensure that his sub-contractors, of all tiers, has sufficient funds available in the designated bank account for the payment of the wages and MPF contributions to their respective Site Personnel as given on the verified schedule on the scheduled payment date stated in the employment contracts for the subject payment cycle and to ensure that his sub-contractors shall promptly instruct the designated bank to effect the payment to the wage payment accounts and the MPF contribution accounts of their respective Site Personnel. The Contractor shall ensure that certified true copies of the records of transactions are made available to the Engineer.

(3) A flow chart illustrating the payment arrangements is appended to this Particular Specification.

MONITORING OF PAYMENT OF WAGES

Contractor’s Labour Officer

(1) Within 7 days of the commencement of the Contract, the Contractor shall nominate a staff responsible full time on-site for monitoring the payment of wages and MPF contributions to all the Site Personnel for the approval of the Engineer. The nominated staff when approved shall provide all necessary assistance to the Labour Relations Officer in the monitoring process and in the handling of complaints on arrears of wages and MPF contributions raised by any Site Personnel. The staff nominated by the Contractor shall be referred as the Contractor’s Labour Officer.

(2) The Contractor’s Labour Officer shall be a suitably qualified person with the following minimum qualifications:

(a) attaining five subjects at grade ‘E’ or above in the Hong Kong Certificate of Education Examination (HKCEE) (including Chinese, English (Syllabus B) and Mathematics) or equivalent; and

(b) full-time working experience on personnel management or human resources related duties and good job records; and

(c) good command of both oral and written English and Chinese; and

(d) good computer knowledge preferably with past experience on the operation of a computerized smart-card system; and
(e) preferably have completed a post secondary certificate programme on human resources or personnel management.

(3) The Engineer shall have the power to withdraw his approval of the Contractor’s Labour Officer at any time. If such approval shall be withdrawn the Contractor shall, after receiving notice in writing of such withdrawal, remove the Contractor's Labour Officer from the Site forthwith and shall replace him by another Contractor's Labour Officer approved by the Engineer.

Labour Relations Officer

(1) The Contractor shall afford all necessary assistance to the Labour Relations Officer in connection with the discharge of his duties which shall include but not necessarily limited to the following:

(i) to act as a one-point contact for the Site Personnel on Site on any enquiries in relation to employment matters;

(ii) to conduct briefing sessions to inform and to educate the Site Personnel the benefits of the wage payment control measures being implemented under the Contract, in particular, the workers’ obligations to report wage arrears;

(iii) to conduct regular site visits to promote the monitoring system and to establish contacts with Site Personnel to obtain feedback;

(iv) to monitor payment of wages and MPF contributions to assess whether they are made timely by the Contractors and all sub-contractors;

(v) to oversee the setting up and maintenance of a record system on employment contracts, workers attendance, re-deployment, and wage payments;

(vi) to undertake regular physical checks to verify the accuracy and reliability of the records and to identify irregularities, if any, for early intervention;

(vii) to establish a simple and user-friendly complaint system, including the operation of a telephone hotline to receive enquiries from Site Personnel on employment matters and to receive reports on wage defaults;

(viii) to alert the Engineer’s Representative of anomalies and to refer the same to the Contractor for investigation and appropriate follow-up actions; and

(ix) to report to the Engineer’s Representative and the
Labour Department complaints on wage arrears as soon as they are received and to provide necessary assistance to Labour Department to facilitate investigation and/or dispute resolution where appropriate.

(x) to carry out random attendance checks, and to record and report the findings to the Engineer’s Representative.

(2) The Labour Relations Officer shall have the authority to check and verify the proper operation of the smart-card system; the records of the system and the records of transactions of payment of the wages and MPF contributions. The Contractor shall provide copies of daily records and transaction records to and assist the Labour Relations Officer in the preparation of the monthly report on payment of the wages and MPF contributions and the smart-card records to the Engineer based on the daily records and transaction records submitted by the Contractor.

(3) The Contractor shall display necessary information on the contact details of the Labour Relations Officer by erecting notices on the Site at prominent locations.

(4) The Contractor shall establish and maintain a separate telephone line in the Engineer’s site office to be used as a hotline for Site Personnel to report matters of wage disputes to the Labour Relations Officer.

Providing Access and Assistance to Visitors from established labour unions etc

(1) Notwithstanding any other provisions under the contract, from time to time representatives from established local labour unions and contractors associations may visit the Site to make propaganda for the wage payment arrangement and monitoring process for wage payment under this Contract to the Site Personnel. These representatives may interview the Contractor’s Labour Officer and the Labour Relations Officer to ascertain whether there are any difficulties with the monitoring process and offer their assistance where necessary.

(2) Upon notification from the Engineer, the Contractor shall provide access and all necessary assistance to these representatives visiting the Site for the said purposes.

(3) The Contractor shall ensure that his Contractor’s All Risk and Third Party Liability insurance policies are extended to cover these visitors.
CASUAL WORKERS

Casual workers Z.1  
(1) “Casual Workers” are those Site Personnel who are expected to work on Site no more than an aggregated total of 7 working days throughout the duration of the Contract period. The provisions under PS X.2, PS X.5, PS X.7 and PS X.8 shall not apply to Casual Workers. Casual Workers are required to be issued a temporary smart-card and follow the attendance recording system in accordance with PS X.6. Casual Workers will be subject to the full provisions of Section X of this Particular Specification if they are required to work on site in excess of an aggregated total of 7 working days throughout the duration of the Contract period.

(2) Wages for the Casual Workers are to be paid daily by personal cash cheques with the subject Casual Worker specified as payee and the cheques shall be immediately due on presentation. The subject Casual Worker shall be required to sign a receipt of acknowledgement of each payment.

(3) Copies of the following documents shall be submitted to the Engineer for records:
   (i) signed acknowledgement receipt of payment from the subject Casual Worker;
   (ii) the cheque; and
   (iii) the receipt of withdrawal to the Casual Worker issued by the bank.

Copies of (i) and (ii) above shall be submitted the day immediately following the subject payday referred to in sub-clause (2) of this Clause. Copies of (iii) above shall be submitted as soon as they are available and in any event no later than 7 days from the subject payday referred to in sub-clause (2) of this Clause.

(4) The 7-day restriction under sub-clause (1) of this Clause may be extended subject to prior approval in writing from the Engineer if the Engineer is satisfied that there are reasonable grounds for not complying with the full requirements under Section X of this Particular Specification for the subject Casual Worker.
Particular Preamble to amend the Standard Method of Measurement to Introduce the “Pay for Monitoring Payment of Wages”

Section (XX) – Monitoring Payment of Wages

IMPLEMENTATION OF MONITORING PAYMENT OF WAGES

MONITORING PAYMENT OF WAGES

Units

xx.01 The units of measurement shall be:

(i) establishing monitoring system for payment of wages .............................................. Item.
(ii) operating monitoring system for payment of wages ............................................... month.
(iii) providing Contractor’s Labour Officer...........month.

Measurement

xx.02 The items for “operating monitoring system for payment of wages” shall be measured commencing from the date of approval by the Engineer/Supervising Officer/Maintenance Surveyor* of completion of establishment of monitoring system for payment of wages and the item for “providing Contractor’s Labour Officer” shall commence from the date the Contractor’s Labour Officer provided by the Contractor is approved by the Engineer and reports duty on Site. These items shall not be measured:

(i) where the Works are not divided into Sections, between

(a) the end of the prescribed time or extended time for completion of the Works/Works except Establishment Works and Aftercare to Old and Valuable Trees due to extension of time which has been granted by the Engineer to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50; and
(b) the date of completion of the Works/Works except Establishment Works and Aftercare to Old and Valuable Trees certified by the Engineer in accordance with GCC Clause 53.

For the purpose of calculating the extended time for completion of the Works due to extension of time granted by the Engineer under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, the periods of extended time for completion granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50 shall be summed and added to the end of the prescribed time for completion of the Works;
(ii) where the Works are divided into Sections, between

(a) the end of the prescribed time or extended time for completion of the Section of the Works (excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees) due to extension of time which has been granted by the Engineer to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, which happens to be the latest in time (for the purpose of calculating the extended time for completion of each Section of the Works due to extension of time granted by the Engineer under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, the periods of extended time for completion granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50 for that Section of the Works shall be summed and added to the end of the prescribed time for completion of that Section of the Works); and

(b) the date of completion of whichever Section of the Works (excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees) certified by the Engineer in accordance with GCC Clause 53 which happens to be the latest in time;

(iii) after the expiry of the Maintenance Period (or where there is more than one such Maintenance Period, after the expiry of the last Maintenance Period other than the Maintenance Periods for Establishment Works and Aftercare for Old and Valuable Trees) where services are required as a consequence of the default of the Contractor.

xx.03 No measurement and no payment shall be made for the item “operating monitoring system for payment of wages” for the period during which there is any incident of breakdowns, repairs or maintenance without proper replacement in place at the first instance or for the period where there is any incident of non compliance with respect to the submission of documents and records in accordance with Particular Specification Section X and payment for the item shall therefore be measured on a pro rata basis.

Itemisation xx.04 Separate items shall be provided for the monitoring system for payment of wages in accordance with General Principles paragraphs 3 and 4 and the following:
<table>
<thead>
<tr>
<th>Group</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 1.</td>
<td>establishing monitoring system for payment of wages</td>
</tr>
<tr>
<td></td>
<td>2. operating monitoring system for payment of wages</td>
</tr>
<tr>
<td></td>
<td>3. providing Contractor’s Labour Officer</td>
</tr>
</tbody>
</table>

**Establishing Monitoring System for Payment of Wages**

xx.05 The item for “establishing monitoring system for payment of wages” shall, in accordance with General Preambles paragraph 2, also include:

(a) preparation of the monitoring system for payment of wages to the satisfaction of the Engineer / Supervising Officer / Maintenance Surveyor*;

(b) setting up the monitoring system for payment of wages and any modifications thereof;

(c) provision for collection and maintenance records of payment of wages to Site Personnel;

(d) opening of accounts in designated bank for relevant parties as required in Particular Specification clauses X.5 (1) to (2);

(e) nomination of a Contractor’s Labour Officer as required in Particular Specification clause Y.1;

(f) setting up the attendance recording system for accurate attendance records of Site Personnel and any modifications thereof;

(g) issuing smart-cards to Site Personnel and self-employed workers and temporary cards to visitors;

(h) insurance for the self-employed workers;

(i) establishing a hotline in the Engineer’s site office to receive enquiries from [workers] [Site Personnel] on employment matters; and

(j) advising Site Personnel of the monitoring system and the procedures for reporting wages arrears.

**Operating Monitoring System for Payment of Wages**

xx.06 The item for the “operating monitoring system for payment of wages” is given a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the rates inserted elsewhere in the Bills of Quantities. In addition, the item shall, in accordance with General Preambles paragraph 2, also be deemed to include:
**Item Coverage**

(a) operating and maintaining the attendance recording system to obtain accurate attendance records of Site Personnel;

(b) controlling the issue of smart cards to Site Personnel;

(c) reviewing, updating and revising the monitoring system for payment of wages taking into account the comments made by the Engineer / Supervising Officer / Maintenance Surveyor* or any other parties;

(d) implementing measures to ensure that payments of wages to Site Personnel are made against the attendance records of the attendance recording system;

(e) compiling, submitting and maintaining records of payment of wages and other monetary benefits to Site Personnel;

(f) observing all statutory and contractual obligations in ensuring proper payment of wages and other monetary benefits to Site Personnel, and any other related obligations, liabilities, risks and profit;

(g) providing all necessary assistance to the Labour Relations Officer in the discharge of his duties, functions and responsibilities;

(h) maintaining a hotline in the Engineer’s site office to receive enquiries from [Site Personnel] on employment matters;

(i) maintaining insurance for the self-employed workers; and

(j) providing access and assistance to visitors as required under Particular Specification Y.3 including the necessary insurance coverage.

* Delete as appropriate
Providing Contractor’s Labour Officer

The item for the “Providing Contractor’s Labour Officer” shall, in accordance with General Preambles paragraph 2, include the costs and expenses of providing a Contractor’s Labour Officer and supporting staff inclusive and without limitation to the following:

**Item Coverage**

(a) basic salary;
(b) gratuity;
(c) overtime payment;
(d) sundry allowance;
(e) housing allowance;
(f) travel allowance;
(g) leave allowance;
(h) education allowance;
(i) medical allowance;
(j) dental allowance;
(k) bonus;
(l) contribution to a registered mandatory provident fund scheme;
(m) all necessary levies, e.g. Construction Industry Training Authority;
(n) insurances; and
(o) fringe benefits.
Sample bills of Quantities for Capital Works Contracts
For Implementing the Monitoring Payment of Wages

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate ($)</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishing monitoring system for payment of wages</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2#</td>
<td>Operating monitoring system for payment of wages</td>
<td>??</td>
<td>Month</td>
<td>Insert rate appropriate for the contract and work out the extension</td>
<td>Extension*</td>
</tr>
<tr>
<td>3</td>
<td>Providing Contractor’s Labour Officer</td>
<td>??</td>
<td>Month</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# The rate for item 2 is fixed and should not be adjusted upwards or downwards irrespective of the Final Contract Sum.

* To be added to the tender sum.
Provisional Sum for MPF contributions by the Contractor and his sub-contractors of all tiers

(I) For Building/Civil Engineering Contracts - Provisional Sum

<table>
<thead>
<tr>
<th>Provide for the following sum to be expended wholly or in part as certified by the Engineer in accordance with SCC[xx] or wholly deducted from the Contract Sum if not required:</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursement of Contractor’s and his sub-contractors’ (of all tiers) the amount of employer’s contributions to the Mandatory Provident Fund for their respective Site Personnel.</td>
<td>[3.5% of the total of all the tendered Bill and the amount is to be inserted to the Grand Summary Page only] Please see Grand Summary Page</td>
</tr>
</tbody>
</table>

Note:

1. The exact percentage can be adjusted to suit the specific nature of the contract provided that the percentage used is supported by calculations.

2. The tendered Bill total is used and not the estimated contract sum as this maintains competition in pricing. Please ensure that an item is added to the BQ summary page to ensure that this will be inserted by the Tenderer. See sample attached.
### GRAND SUMMARY

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Bill No.</th>
<th>Description</th>
<th>HK$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Preliminaries</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>..</td>
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<td>..</td>
<td>Site Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Daywork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Prime Cost and Provisional Sums (excluding the sum allowed for MPF reimbursement)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Contingency Sum**

**Total of the above**

Add 3.5% # of the Total above as a provisional sum for reimbursement of MPF.

**Adjustment Item**

*Addition/Deduction*

**Tender Sum**

Signature of person authorized to sign on behalf of tenderer: ..............................................

Name of tenderer: ..............................................................

Date: ..........................................................................................

---

# Exact percentage to be decided by the project office

* Delete where inappropriate
This page should only be updated by Works Branch of Development Bureau.

Workers Payment Arrangements

HKSAR Government (Employer)

Pay-in/Acknowledgement slips

Contract works payment

Main Contractor
(Distribute smart card data records to respective subcontractors)

Pay-in slip

Designated Bank

Written acknowledge of payment

Worker salary + MPF contribution (Employer/Employee)

Insert sufficient funds

Contract works payment

Smart card data on workers records

Auto-pay as per file data

Workers Salary

Pay-in/Acknowledgement slips to Main Contractor

Pay-in/Acknowledgement slips

Sub-contractor (2)

Contract works payment

Smart card data on workers records

Sub-contractor (1)

Same procedure as Main Contractor

Sub-subcontractor

Same procedure as Main Contractor and Subcontractor

Same procedure as Main Contractor

Employer MPF

Employee MPF
NOTES TO TENDERERS

NTT# : Employing Site Personnel for the Contract and Payment of Site Personnel’s Wages

Tenderers’ attention is drawn to Special Conditions of Contract Clause [zz] requiring all Site Personnel engaged in the Contract to be employed under written employment contracts with either the Contractor or his sub-contractors (irrespective of the tiers) including Specialist Sub-contractors and Nominated Sub-contractors. Self-employed persons shall be subject to other requirements of the contract. Tenderers’ attention is also drawn to the new requirement and arrangement on Payment of Site Personnel’s Wages set out in Particular Specification Section [X]. In the event the Contractor or his sub-contractors including Specialist Sub-contractors and Nominated Sub-contractors fail to pay wages to their Site Personnel, the Employer may pay any wages in arrears to the Site Personnel and recover the same from any monies due to the Contractor under the Contract.

NTT## : Reimbursement of mandatory provident fund (MPF) contribution

The Tenderers’ attention is drawn to Special Conditions of Contract Clause [xx] on the arrangements in the reimbursement of the Contractor’s and sub-contractor’s contribution to MPF.

NTT### : Regulating Actions on Poor Records of Non-payment of Wages to Site Workers by Contractors

Tenderers’ attention is drawn to the new regulating actions introduced in the Contractors’ Management Handbook (CMH) on poor records of non-payment of wages to site workers by contractors. These are repeated here for ease of reference:-

“CMH Section 5.1.3 – Circumstances which may lead to the taking of regulation actions, include, but are not limited to: -

Add (xviii) – poor records on non-payment of workers’ wages, including those of his sub-contractors. A “non-payment of workers’ wages” record is defined as a claim filed in the office of the Labour Department and proof thereof is furnished to the satisfaction of the Commissioner for Labour, in which the Contractor or any of his sub-contractors, irrespective of tiers, is liable.

CMH Section 5.2.3(c) – Circumstances warranting mandatory suspension from tendering in all categories (A time limit for review to be set in all cases but should not be longer than six months):-

Add (vii) – poor records on non-payment of workers’ wages, including those of his sub-contractors. A “non-payment of workers’ wages” record is defined as a claim filed in the office of the Labour Department and proof thereof is furnished to the
satisfaction of the Commissioner for Labour, in which the Contractor, or any of his
sub-contractors, irrespective of tiers, is liable.

NTT#### : Reimbursement of actual payment made by the Contractor to Labour
Relations Officer

The Tenderers’ attention is drawn to Special Conditions of Contract Clause [vv] on
reimbursement of the Contractor’s actual payment made to Labour Relations Officers
employed for the Contract. The Contractor shall also be paid a percentage fee of the
actual payment made by the Contractor to Labour Relations Officer employed for the
Contract as the Contractor’s administration and overhead cost incurred for providing
Labour Relations Officers. The percentage is as indicated in the Price Schedule for
arriving at the provisional sum for Contractor’s administration and overhead cost for
providing Labour Relations Officers.

Special Conditions of Contract

SCC[vv] : Reimbursement of Contractor’s actual payment made to Labour Relations
Officers employed for the Contract

1) The Contractor shall comply with the requirements and procedures set out in
Particular Specification Section X for the employment and administration of
Labour Relations Officers (LRO).

2) The Engineer/Architect* shall ascertain and certify for payment in accordance
with General Conditions of Contract Clause 79, the amount of actual payment
made by the Contractor and of the Contractor’s administration and overhead
cost in providing LRO referred to in sub-clause (6) of SCC[zz]. For the
avoidance of doubt, the actual payment includes the salary, overtime allowance,
end-of-contract gratuity, medical and dental care expenses for LRO and the
advertisement costs incurred in the recruitment of LRO. For the further
avoidance of doubt, any reimbursement of Contractor’s contributions to the
mandatory provident fund for LRO shall be made in accordance with SCC[xx].
Other costs or expenses, including but not limiting to those for recruitment,
employment, arranging for temporary or permanent replacement, training and
employees’ compensation insurance, and profits and overheads shall be covered
by the Contractor’s administration and overhead cost which is determined in
accordance with sub-clause (4)..

3) The Contractor shall be reimbursed with the actual payment made to LRO. The
rules on “accountability” set under this sub-clause (3) must be satisfied before
any salary and other direct payments related to LRO invoiced by the Contractor
is reimbursable:-

(i) the amount in respect of salary, end-of-contract gratuity and overtime
payment shall have been paid by the Contractor to the LRO and as
evidenced by receipts from the LRO;
(ii) actual expenses incurred, if any, for advertising the recruitment of LRO in
any local press shall be evidenced by relevant receipts; and
(iii) LRO, or the Contractor shall be additionally accountable for the amount
invoiced in respect of reimbursement of medical and dental care, i.e. only if it is actually spent by the LRO or settled by the Contractor, as the case may be, on the respective purposes, within the approved employment terms, and as evidenced by receipts from the respective service providers who provide service to the LRO.

(4) For the purposes of this Clause, the “Contractor’s administration and overhead cost” refers to a percentage fee of the amount of actual payment made by the Contractor and reimbursed by the Employer in providing LRO. The percentage is as indicated in the Price Schedule - Provisional Sum for arriving at the provisional sum for the Contractor’s administration and overhead cost for providing Labour Relations Officers.

*Delete as appropriate.

SCC[xx] : Reimbursement of Contractor’s Contribution to the Mandatory Provident Fund for his Site Personnel

(1) Subject to sub-clause (2) of this Clause, the Engineer shall ascertain and certify for payment in accordance with General Conditions of Contract Clause 79, the amount of the Contractor’s mandatory contribution under the Mandatory Provident Fund Schemes Ordinance (Cap. 485), including contribution by sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, to the employer’s mandatory provident fund for the Site Personnel under this Contract, based on the designated bank’s transaction records as specified in Particular Specification Section X.

(2) The Employer shall not be liable to reimburse the Contractor, or sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, any amount of the contribution to the employer’s mandatory provident fund for the Site Personnel under the Contract other than the amount certified by the Engineer pursuant to sub-clause (1) of this Clause. For the avoidance of doubt, the Employer shall not be liable to pay the Contractor any of the part of Contractor’s contribution, including contribution by sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, to the employer’s mandatory provident fund for any Site Personnel under the Contract which exceeds the Provisional Sum for mandatory provident fund contributions allowed for in the Contract.

(3) Notwithstanding General Conditions of Contract Clause 68, the Contractor and his sub-contractors of all tiers including Specialist Sub-contractors and Nominated Sub-contractors are not entitled to any profit and administration cost including overheads cost, whether on or off the Site, for the reimbursement made under this Clause.

(4) For the purposes of this clause, “bank” shall be an authorized institution within the meaning of Section 2 of the Banking Ordinance (Cap 155).
General Conditions of Contract Clause 1(1) is amended by adding the definition of:

“Site Personnel” - “Site Personnel” means all workers and staff employed by the Contractor or his sub-contractor of all tiers including Specialist Sub-contractors and Nominated Sub-contractors, except self-employed workers, engaged for the execution of the Works on Site.
SCC[zz] : Payment of Wages of Site Personnel

(1) Subject to those Casual Workers referred to in Clause Z.1 (1) of Particular Specification "Section Z" on "Causal Workers", all Site Personnel shall be engaged in accordance with Clauses X.2 to X.5 of Particular Specification “Section X” on “Payment of Wages of Site Personnel”. Such Site Personnel shall be engaged with a written employment contract with their respective employers who shall either be the Contractor or any of his sub-contractors [of all tiers including Specialist Sub-contractors and Nominated Sub-contractors,] as submitted in the Sub-contractors’ Management Plan required under SCC Clause [??] of these Special Conditions of Contract. The terms of the employment contract shall be not less favorable to the terms provided in the Specimen Employment Contract at Appendix [#] to these Special Conditions of Contract as far as the Site Personnel are concerned. Payment of wages shall be made at least once per month. Employment contracts which stipulate a payment cycle in less frequent than once per month will not be permitted under this Contract.

(2) The Contractor shall ensure that all workers who are self-employed persons engaged to work on the Site shall each be covered by a personal accident insurance plan with a minimum coverage of HK$1,000,000 by either extending the Contractor’s Employee Compensation Insurance policy or his third party liability and all risks insurance policy. Alternatively the Contractor shall arrange a separate personal accident insurance plan for all self employed workers for a minimum cover of HK$1,000,000 in the form specified in Appendix [##] to these Special Conditions of Contract and shall maintain such policy for the duration of the self-employed workers being engaged in the Contract. The Contractor shall produce evidence of such insurance before the self-employed workers are issued a smart card as described in Particular Specification “Section X” on “Payment of Wages of Site Personnel”. The Contractor shall inform the Engineer immediately when the insurance policy of a self-employed worker has expired together with evidence showing its renewal as appropriate.

(3) Lorry drivers engaged for the Works (excluding those lorry drivers engaged by suppliers to deliver material to the Site) may elect to be a Site Personnel or a self-employed person.

(4) The Contractor shall provide and maintain an attendance recording system comprising smart-card cum biometric authentication to record and verify the information of all Site Personnel entering and leaving the Site in accordance with Particular Specification “Section X” on “Payment of Wages of Site Personnel”.

(5) Within 14 days of the commencement of the Contract, the Contractor shall make necessary arrangements with a bank to implement the arrangement on payment of wages to Site Personnel in accordance with Particular Specification “Section X” on “Payment of Wages of Site Personnel”. The Contractor shall submit a written declaration that all Site Personnel’s wages payable have been paid when the Contractor submits the transaction records to the Engineer. Site Personnel who are not able to open a personal bank account in Hong Kong shall be paid by personal cheques in accordance with Particular Specification “Section X”.

(6) The Contractor shall provide suitably qualified staff to act as Labour Relations
Officers referred to in Section [X] of the Particular Specification to monitor payment of wages.

(7) Pursuant to General Conditions of Contract Clause 4(3), failure to comply with Section X of the Particular Specification by any of the sub-contractors [(irrespective of tiers) including Specialist Sub-contractors and Nominated Sub-contractors] may render the removal of the sub-contractor from the Site and/or the Works.

(8)(a) Without prejudice to any of the provision under General Conditions of Contract Clause 40 and in the event of default being made in the payment of any wages of any Site Personnel employed by any of the sub-contractors in and for carrying out this Contract and if a claim thereof is filed in the office of the Labour Department and proof thereof (including, where the claim is disputed by the Contractor or by any of the responsible sub-contractors, as the case may be, or it is found necessary by the Commissioner for Labour, proof of final determination of the claim by an award or order of the Labour Tribunal or as the case may be the Minor Employment Claims Adjudication Board or a judgment of the District Court or, where the matter is subsequently further disputed by way of appeal, by a judgment of the Court of First Instance or the Court of Appeal) is furnished to the satisfaction of the Commissioner for Labour; provided that the subject incident of default in payment of wages is reported to the Labour Relations Officer within 7 working days (Sundays and public holidays excluded) of the final due date for payment as prescribed under section 23 of the Employment Ordinance (Cap 57), the Employer may, after the Contractor or the sub-contractor, as the case may be, who is in default of paying any wages to the Site Personnel, make payment of such wages or claim for wages on behalf of the Contractor or the subcontractor to the Site Personnel and any sums so paid shall be recoverable by the Employer as a debt from the Contractor.

(b) For the avoidance of doubt, Site Personnel employed by the Contractor are not subject to the reporting requirement to the Labour Relations Officer under sub-clause 8(a) of this Clause.

(c) For the further avoidance of doubt, where any self-employed worker is found by the Labour Tribunal or as the case may be the Minor Employment Claims Adjudication Board or a judgment of the District Court or, where the matter is subsequently further disputed by way of appeal, by a judgment of the Court of First Instance or the Court of Appeal to be an employee instead of a self-employed worker, sub-clause 8(a) of this clause shall apply to that self-employed worker provided that the subject incident of default in payment of wages is similarly reported to the Labour Relations Officer within 7 working days (Sundays and public holidays excluded) of the final date for payment under section 23 of the Employment Ordinance (Cap 57).

(9) For the purpose of this Clause, "sub-contractors" means sub-contractors, irrespective of tiers, including Specialist Sub-contractors and Nominated Sub-contractors.
SCC[X]: Contractor's Management Team

(1) Without prejudice to the generality of General Conditions of Contract Clause 17, the Contractor shall provide a team of suitably qualified and experienced staff to manage and supervise the Contract throughout the execution of the Works. All members of staff on the management/site supervision team (refer to as the Team in this Clause) must be under the direct employment of the Contractor. The Team shall comprise sufficient number of suitably qualified and experienced staff in the following disciplines*:

(State minimum qualification requirements in the Particular Specification for each discipline if considered necessary.)

(a) Project Manager;
(b) Site agent in accordance with General Conditions of Contract Clause 17;
(c) Site Engineers;
(d) Topographic Surveyors;
(e) Quantity Surveyors;
(f) Site Superintendent; and
(g) Site Foremen.

(2) Members of staff on the Team are prohibited to be given a sub-contract to any part of the Works or to have a vested interest in any of the sub-contractors irrespective of tiers including Specialist Sub-contractors and Nominated Sub-contractors under this Contract.

(3) Within 14 days of the commencement of the Contract, the Contractor shall submit to the Engineer a list of staff with all necessary details which comprised the Team referred to in sub-clause (1) of this Clause. The Contractor shall provide documentary proof on the employment status of the staff on the Team, such as employment contracts, tax returns, payment of salaries and the like upon request by the Engineer. The employment terms for the staff on the Team shall include a “consent to disclosure” clause in accordance with the data protection principles set out under the Personal Data (Privacy) Ordinance (Cap. 484).

(4) If any member of staff on the team refuses to give consent to the disclosure of the required information pursuant to this Clause or pursuant to Particular Specification Section [x], and if such a disclosure without consent from the subject staff is in breach of the Personal Data (Privacy) Ordinance (Cap. 486), the Contractor shall make a formal declaration to the effect that such a staff is indeed under the direct employment of the Contractor. The declaration shall be signed by a person authorized to sign tenders on behalf of the Contractor.

(5) With the exception of the Project Manager, all members of staff in the Team shall be full time# on Site during site working hours.
(6) The Contractor shall inform the Engineer forthwith of any changes made to any of the staff on the Team.

* Add/delete discipline as appropriate

# Consider whether some of the staff may only be needed part time, such as surveyors.
(1) Without prejudice to the generality of General Conditions of Contract Clause 4, the Contractor shall ensure that the following provisions of this Contract shall be similarly and appropriately included into each and every sub-contract of all tiers including Specialist Sub-contracts and Nominated Sub-contracts for the carrying out of the Works under this Contract and the Contractor shall be responsible for the observance of these provisions by all sub-contractors (irrespective of any tier), including Specialist Sub-contractors and Nominated Sub-contractors employed in the carrying out of the Works:

(1) General Conditions of Contract Clause 40
(2) List out all relevant SCCs, PS, etc.
(3) 
(4) If the Contractor or any of the sub-contractors (irrespective of any tier) fails to comply with the provisions of this Clause, the Engineer shall, without prejudice to any other rights and remedies, have full power to order the removal of the sub-contractor from the Site and/or the Works.

(2) Upon request by the Engineer, the Contractor shall provide copies of the relevant sub-contracts with the sub-contract provisions referred to in sub-clauses (1) and (2) of this Clause to the Engineer for his record and to provide the original documents of the relevant sub-contracts for inspection by the Engineer.

(3) The Contractor shall comply with and shall ensure that all sub-contractors (irrespective of any tier) shall comply with the provisions of this clause; and shall, if necessary, within reasonable time enter into a supplemental agreement with his sub-contractor to ensure that the sub-contract complies with the requirements in sub-clauses (1) and (2) of this Clause and to ensure that his sub-contractor will do the same in the lower tier sub-contracts.
PAYMENT OF WAGES OF THE SITE PERSONNEL

GENERAL

General X.1 (1) The Contractor shall ensure prompt payment of full wages to all the Site Personnel employed by him and shall use all reasonable endeavours to have his sub-contractors of all tiers to effect prompt payment of wages to all the Site Personnel employed by them for the execution of the Works in accordance with the Employment Ordinance.

(2) The Contractor shall include provisions in the contracts with his sub-contractors requiring the implementation of the system of payment of wages to the Site Personnel under the provisions of Section X of this Particular Specification.

(3) For the purposes of Section X of this Particular Specification, “bank” shall be an authorized institution within the meaning of Section 2 of the Banking Ordinance (Cap 155).

EMPLOYMENT OF THE SITE PERSONNEL

Written employment agreements X.2 (1) Unless written employment contracts are already in place, the Contractor and his sub-contractors of all tiers shall [have] enter into written employment contracts with all the Site Personnel under their respective employments. The terms of the employment contract shall not be less favourable to the terms provided in the specimen employment contract given in Appendix [#] to the Special Conditions of Contract (SCC). The Contractor shall provide copies of the executed employment contracts to the Engineer for records. The Contractor shall not allow any Site Personnel without a properly executed written employment contract to work on the Site.

(2) A certified true copy of the written employment contract of each Site Personnel shall be kept on the Site and shall be made available to the Engineer or the Engineer’s Representative for inspection if so requested by the Engineer or the Engineer’s Representative.

(3) Any Site Personnel without a proper written employment contract with either the Contractor or his
sub-contractor shall not be permitted or caused to be permitted to enter to or remain in the Site.

**Personal Accident Insurance of self-employed workers**

X.3 (1) In accordance with SCC[zz], the Contractor shall ensure that self-employed workers working on the Site shall each be covered by a personal accident insurance at a minimum coverage of HK$1,000,000. The Contractor shall not allow any self-employed worker without a valid personal accident insurance to work on the Site.

(2) The Contractor shall keep a certified true copy of the personal accident insurance of each self-employed worker on Site and shall be made available to the Engineer or the Engineer’s Representative for inspection if so requested by the Engineer or the Engineer’s Representative.

(3) Any self-employed workers without a proper personal accident insurance shall not be permitted or caused to be permitted to enter to or remain in the Site.

**Lorry Drivers**

X.4 (1) Lorry drivers shall either be an employee with a written employment contract with the Contractor or his sub-contractors or a self-employed person with a personal accident insurance cover of not less than HK$1,000,000 for the execution of the Works.

**Payment of wages by designated bank accounts or personal cheques**

X.5 (1) Subject to sub-clause (3) of this Clause, the Contractor shall within 7 days from the commencement of the Contract submit to the Engineer the name of the designated bank and all related arrangement details for payment of wages to all the Site Personnel.

(2) The Contractor shall require all the Site Personnel to open a wage payment account in the designated bank or in any other bank of their choice.

(3) Subject to evidence produced to the satisfaction of the Engineer, Site Personnel not able to open a personal bank account with any bank in Hong Kong shall have their wages paid by personal cash cheques with the subject Site Personnel specified as payee and the cheques shall be immediately due on presentation. Payment of mandatory provident fund (“MPF”) contributions for the subject Site Personnel shall be made by bank transfers in accordance with Particular Specification X.7 and X.8. Copies of the following documents shall be submitted to the Engineer for records:

(i) signed acknowledgement of receipt of payment
from the subject Site Personnel;
(ii) the cheque; and
(iii) the receipt of withdrawal to the Site Personnel issued by the bank.

The above copies of the documents shall be submitted as soon as they are available and in any event no later than 7 days from the date when payment is due for the subject Site Personnel.

SMART-CARD RECORDS

(1) The Contractor shall provide and operate an attendance recording system comprising smart-card cum biometric authentication (hereinafter refer to as “the system”) to record and verify the information of all the Site Personnel entering and leaving the Site. The system shall be in operation within 1 month from the commencement of the Contract. Prior to the operation of the system, the Contractor shall use log books to record the time of entry and departure of all Site Personnel and self-employed workers in and out of the Site. Temporary cards for identification shall be used by all Site Personnel prior to the availability of the system. All temporary cards shall contain the information set out in sub-clause (4) of this Clause. Once the system is in operation, no persons are allowed to work on the Site without a smart-card. All visitors shall be issued a visitor card for identification.

(2) The Contractor shall engage a specialist provider to design, provide and train his personnel to operate the system. The Contractor shall within 7 days of commencement of the Contract, submit to the Engineer the details of the system and the name and details of the specialist provider for the Engineer’s approval.

(3) The system shall adopt a non-contact type card (the “smart-card”) complying with ISO 14443 with sufficient memory to store data as required in this PS Clause. The chip inside the smart-card shall comply with ISO 14443A. The biometric authentication shall utilize field-proven hand geometry technology that maps and verifies the size and shape of a person’s hand in less than one second or other biometric authentication technology with equivalent performance. The smart-card shall be compatible with the registration cards issued by the Registrar of Construction Workers appointed under the Construction Workers Registration Ordinance (Cap. 583) to registered construction workers. The system’s card readers shall be
compatible with the smart-card and shall be complete with a security access module (SAM) for cryptographic security slot. The SAM will be provided by the Construction Workers Registration Authority.

(4) The smart-card shall have the following information of the Site Personnel printed in durable print on its face:
(a) Name of worker in Chinese and English;
(b) Name of employer in Chinese and English;
(c) Trade;
(d) Photograph of worker;
(e) Contract No. and Contract Title;
(f) Expiry date; and
(g) Other information agreed by the Engineer.

(5) The smart-card shall contain sufficient encrypted information for identification of the card holder and access to the master data bank of the system.

(6) The Contractor is responsible for the issue of the smart-cards to each Site Personnel and self employed worker and for registering their details to the system.

(7) If a Site Personnel or self employed worker is issued a registration card by the Registrar of the Construction Workers pursuant to the Construction Workers Registration Ordinance (Cap. 583) the card so issued is permitted to be used in lieu of the smart-card required under this Section.

(8) The Contractor shall install sufficient number of the system’s card readers at convenient locations with shelters within the Site to facilitate day-to-day recording. The exact locations shall be submitted for agreement by the Engineer. The readers shall be connected to a secured computer so that the Site Personnel can record their signing in and out of the Site. Separate smart card readers with clear labels indicating “IN” and “OUT” shall be provided for the purpose. Alternatively the system may assign the time of recording as “IN” and “OUT” automatically. The secured computer shall be loaded with appropriate software for recording the data retrieved from the system and the time of signing in and out of each worker. The Contractor shall provide X number of

* Normally one for the ER and one for the LRO, a total of two
portable pocket personal computer, which can be synchronized with the master system data bank and is capable of recording, verifying and updating the information of the Site Personnel and self employed workers for the use of the Engineer. The Contractor's portable pocket personal computer shall be approved by the Engineer and the equipment shall be securely kept by a designated staff. The Contractor shall provide a full time staff to man the operation of the system’s readers at each of the locations.

(9) The system’s card readers, once commissioned, shall be in operation at all times and shall be replaced in the first instance in the event of breakdowns, repairs or regular maintenance. The Contractor may, subject to the approval of the Engineer, dismantle and remove all system card readers installed on Site two months following the issue of the last certificate of completion under GCC Clause 53. The system card readers once dismantled under this sub-clause shall be removed off Site and shall become the Contractor’s property.

PAYMENT OF WAGES

Schedule of Wages and MPF Contributions

(1) The Contractor shall compile daily records of the Site Personnel working on the Site based on the data collected by the smart-card system. The Contractor shall verify the data of all the Site Personnel employed or engaged by him. The Contractor shall prepare separate daily records for each sub-contractor and distribute to these sub-contractors the records of the Site Personnel employed or engaged by them for verification. A copy of all the verified data and records shall be submitted to the Engineer on a daily basis.

(2) The Contractor shall prepare a schedule of wages of all the Site Personnel employed or engaged by him and the corresponding mandatory provident fund (“MPF”) contributions based on the verified data from the smart-card system. A copy of such schedule shall be submitted to the Engineer for each payment cycle.

(3) The Contractor shall require his sub-contractors, of all tiers, to prepare the respective schedules of wages of the Site Personnel employed or engaged by them and the corresponding MPF contributions based on the verified data from the smart-card system. A copy of these schedules shall be made available to the Engineer for each payment cycle.
Payment of Wages and MPF Contributions

X.8 (1) In accordance with the scheduled payment date stated in the employment contract, the Contractor shall ensure that sufficient funds have been reserved in the designated bank account for the payment of all wages and MPF contributions as given on the verified schedules for the subject payment cycle and shall promptly instruct the designated bank to effect the payment to the respective wage payment accounts and the respective MPF contribution accounts of all his Site Personnel. The Contractor shall forward a certified true copy of the records of transactions to the Engineer.

(2) The Contractor shall ensure that his sub-contractors, of all tiers, have sufficient funds available in the designated bank account for the payment of the wages and MPF contributions to their respective Site Personnel as given on the verified schedule on the scheduled payment date stated in the employment contracts for the subject payment cycle and to ensure that his sub-contractors shall promptly instruct the designated bank to effect the payment to the wage payment accounts and the MPF contribution accounts of their respective Site Personnel. The Contractor shall ensure that certified true copies of the records of transactions are made available to the Engineer.

(3) A flow chart illustrating the payment arrangements is appended to this Particular Specification.

MONITORING OF PAYMENT OF WAGES

Contractor’s Labour Officer

Y.1 (1) Within 7 days of the commencement of the Contract, the Contractor shall nominate a staff responsible for full time on-site monitoring the payment of wages and MPF contributions to all the Site Personnel for the approval of the Engineer. The nominated staff when approved shall provide all necessary assistance to the Labour Relations Officer in the monitoring process and in the handling of complaints on arrears of wages and MPF contributions raised by any Site Personnel. The staff nominated by the Contractor shall be referred as the Contractor’s Labour Officer.

(2) The Contractor’s Labour Officer shall be a suitably qualified person with the following minimum qualifications:

(a) attaining five subjects at grade ‘E’ or above in the
Hong Kong Certificate of Education Examination (HKCEE) (including Chinese, English (Syllabus B) and Mathematics) or equivalent; and

(b) full-time working experience on personnel management or human resources related duties and good job records; and

(c) good command of both oral and written English and Chinese; and

(d) good computer knowledge preferably with past experience on the operation of a computerized smart-card system; and

(e) preferably have completed a post secondary certificate programme on human resources or personnel management.

(3) The Engineer shall have the power to withdraw his approval of the Contractor’s Labour Officer at any time. If such approval shall be withdrawn the Contractor shall, after receiving notice in writing of such withdrawal, remove the Contractor’s Labour Officer from the Site forthwith and shall replace him by another Contractor’s Labour Officer approved by the Engineer.

**Labour Relations Officer**

(1) The Contractor shall provide a suitably qualified staff, or a number of such staff pursuant to sub-clause (6) of this Clause, approved by the Engineer to be responsible for the monitoring of the payment of wages and MPF contributions of all the Site Personnel and handling of complaints on wages arrears raised by the Site Personnel. This staff will be referred to as the “Labour Relations Officer”. The Contractor shall strictly follow the requirements and procedures set out in Appendix [] for the employment of the Labour Relations Officer. The Labour Relations Officer shall work independent of the Contractor or subcontractors. The Labour Relations Officer shall be accommodated in the Engineer Representative’s office on the Site and shall work under the direct instructions and supervision of the Engineer or his representative. The Labour Relations Officer shall report directly to the Engineer’s Representative. The Contractor shall not terminate the service of the approved Labour Relations Officer without the agreement from the Engineer. The Labour Relations Officer shall be required to have the minimum qualifications stated in Clause Y.1(2) of this Particular Specification.
(2) Within 14 days of commencement of the Contract, or, as the case may be, within 14 days after being notified by the Engineer of his disapproval of employment of any person as LRO under Clause Y.2(3) below, the Contractor shall submit for approval of the Engineer the name and particulars of the person they intend to employ as the LRO together with the proposed terms of employment. The Contractor shall furnish further information within 7 days pertinent to the employment of such person if required by the Engineer.

(3) The Engineer shall have the authority at any time to disapprove the employment of any person who is to be employed, or who has already been employed by the Contractor as the LRO if, in the opinion of the Engineer, the person

(i) does not meet the minimum qualification and/or experience requirements stipulated in this Contract; or

(ii) misconducts himself/herself or is incompetent or negligent in the performance of his/her duties; or

(iii) whose employment is otherwise considered by the Engineer to be undesirable.

The Engineer shall state the reasons for the disapproval but the Contractor shall not disclose these to any person unless with the prior written approval of the Engineer.

(4) In the event of the Engineer exercising disapproval under Clause Y.2(3), the person, if not already employed, shall not be employed, and that person, if already employed, shall have his/her employment as LRO curtailed by the Contractor.

(5) The responsibilities of the Contractor in connection with the LRO shall not be affected irrespective of whether or not the Engineer disapproves employment of any person as LRO under Clause Y.2(3). However the Employer will bear the cost incurred by the Contractor as a result of the disapproval, if the Engineer exercising disapproval under Clause Y.2(3) does not result from the default of the Contractor in fulfilling its duties under this Contract.

(6) The Contractor shall afford all necessary assistance to the Labour Relations Officer in connection with the discharge of his duties which shall include but not necessarily limited to the following:

(i) to act as a one-point contact for the Site Personnel
on Site on any enquiries in relation to employment matters;

(ii) to conduct briefing sessions to inform and to educate the Site Personnel the benefits of the wage payment control measures being implemented under the Contract, in particular the workers’ obligations to report wage arrears;

(iii) to conduct regular site visits to promote the monitoring system and to establish contacts with Site Personnel to obtain feedback;

(iv) to monitor payment of wages and MPF contributions to assess whether they are made timely by the Contractors and all subcontractors.

(v) to oversee the setting up and maintenance of a record system on employment contracts, workers attendance, re-deployment, and wage payments.

(vi) to undertake regular physical checks to verify the accuracy and reliability of the records and to identify irregularities, if any, for early intervention.

(vii) to establish a simple and user-friendly complaint system, including the operation of a telephone hotline to receive enquiries from Site Personnel on employment matters and to receive reports on wage defaults.

(viii) to alert the Engineer’s Representative of anomalies and to refer the same to the Contractor for investigation and appropriate follow-up actions.

(ix) to refer report to the Engineer’s Representative and the Labour Department complaints on wage arrears as soon as they are received and to provide necessary assistance to Labour Department to facilitate investigation and/or dispute resolution where appropriate.

(x) to carry out random attendance checks, and to record and report the findings to the Engineer’s Representative.

(7) The Labour Relations Officer shall have the authority to check and verify the proper operation of the smart-card system; the records of the system and the records of transactions of payment of the wages and MPF contributions. The Contractor shall provide copies of daily records and transaction records to and assist the Labour Relations Officer in the preparation of the monthly report on payment of the wages and MPF contributions and the smart-card records to the
Engineer based on the daily records and transaction records submitted by the Contractor.

(8) The Contractor shall display necessary information on the contact details of the Labour Relations Officer by erecting notices on the Site at prominent locations.

(9) The Contractor shall establish and maintain a separate telephone line in the Engineer’s site office to be used as a hotline for Site Personnel to report matters of wage disputes to the Labour Relations Officer.

(10) The Contractor may be required to provide more than one Labour Relations Officer upon written instruction from the Engineer.

(11) The Engineer shall have the authority to order the removal and replacement of the Labour Relations Officer.

Providing Access and Assistance to Visitors

Y.3 (1) Notwithstanding any other provisions under the contract, from time to time representatives from established local labour unions and contractors associations may visit the Site to make propaganda for the wage payment arrangement and monitoring process for wage payment under this Contract to the Site Personnel. These representatives may interview the Contractor’s Labour Officer and the Labour Relations Officer to ascertain whether there are any difficulties with the monitoring process and offer their assistance where necessary.

(2) Upon notification from the Engineer, the Contractor shall provide access and all necessary assistance to these representatives visiting the Site for the said purposes.

(3) The Contractor shall ensure that his Contractor’s All Risk and Third Party Liability insurance policies are extended to cover these visitors.

CASUAL WORKERS

Z.1 (1) “Casual Workers” are those Site Personnel who are expected to work on Site no more than an aggregated total of 7 working days throughout the duration of the Contract period. The provisions under PS X.2, PS X.5, PS X.7 and PS X.8 shall not apply to Casual Workers. Casual Workers are required to be issued a temporary smart-card and follow the attendance recording system in accordance with PS X.6. Casual Workers will be subject to the full provisions of Section X of this
Particular Specification if they are required to work on site in excess of an aggregated total of 7 working days throughout the duration of the Contract period.

(2) Wages for the Casual Workers are to be paid daily by personal cash cheques with the subject Casual Worker specified as payee and the cheques shall be immediately due on presentation. The subject Casual Worker shall be required to sign a receipt of acknowledgement of each payment.

(3) Copies of the following documents shall be submitted to the Engineer for records:

   (i) signed acknowledgement of receipt of payment from the subject Casual Worker;

   (ii) the cheque; and

   (iii) the receipt of withdrawal to the Casual Worker issued by the bank.

Copies of (i) and (ii) above shall be submitted the day immediately following the subject payday referred to in sub-clause (2) of this Clause. Copies of (iii) above shall be submitted as soon as they are available and in any event no later than 7 days from the subject payday referred to in sub-clause (2) of this Clause.

(4) The 7-day restriction under sub-clause (1) of this Clause may be extended subject to prior approval in writing from the Engineer if the Engineer is satisfied that there are reasonable grounds for not complying with the full requirements under Section X of this Particular Specification for the subject Casual Worker.
Appendix [] on the employment of Labour Relations Officer

1. The Contractor shall make their own arrangement to employ person to fill the post on the Labour Relations Officer (LRO) who meets the minimum qualification and experience requirements and are competent to carry out the respective duties stipulated in the Contract. The Contractor shall when entering into employment contract with the LRO incorporate in such employment contract the requirements on ethical commitments in SCC[?] and on confidentiality of information in SCC[??]; and provisions set out in paragraphs 4, 5 and 6 of this Appendix. It is the Contractor’s responsibility to verify the qualifications of individual candidates to ascertain if they meet, or their qualifications are equivalent to, the required qualifications for the appointment. Any cost incurred in the process of such verification should be borne by the Contractor.

2. The Contractor shall at no additional cost to the Employer make proper arrangements when LRO is on leave, including sick leave or vacation leave, or for any reasons absent from duties, to ensure that his/her duty is in no way affected by such leave. Notwithstanding the foregoing, if the LRO is on maternity leave or prolonged sick leave, with agreement between the Engineer and the Contractor, a temporary staff with equivalent qualifications and experience could be employed to take up the duties of the LRO for the period concerned. The Contractor shall be reimbursed the cost for employing such temporary staff in the same manner as for the LRO.

3. The employment terms of LRO shall not exceed those stipulated in the ANNEX. The Contractor shall seek the Engineer’s approval on the salary, end-of-contract gratuity, annual rate of vacation leave, working period, overtime allowance, medical and dental care allowance and all other fringe benefits before entering or renewing or extending employment contract with the LRO. Any such confirmation by the Engineer shall take precedence over any other figure, rate or adjustment method specified in the relevant clauses of the Contract.

4. The LRO shall not be entitled to end-of-contract gratuity if he fails to complete the contract.

5. The Engineer shall have the authority to adjust the salary, end-of-contract gratuity, annual rate of vacation leave, working period, overtime allowance, medical and dental care allowance and all other fringe benefits by making reference to the prevailing Government practices in respect of employment of staff.

6. The salary of the LRO shall be adjusted in line with adjustment in the Government pay scales, which can be upwards or downwards. In case the adjustment is announced in the middle of a financial year, and the adjustment is applied with retrospective effect from the beginning of the financial year, the same shall be applied to determine the reimbursement for the salary of LRO. The Contractor is advised to include in the LRO’s employment contracts express provisions for such adjustments. If there is downward adjustment in the Government pay scales

# SCCs required under ETWB TCW No. 3/2004 “Ethical Commitment by Consultants and Contractors”
applied with retrospective effect thus resulting in excess reimbursement to the Contractor, then the excess shall be recovered as a debt from the Contractor through deduction from subsequent reimbursement, or where it is not sufficient for the purpose of such deduction, from monies due to the Contractor under this Contract or any other contracts between the Employer and the Contractor.

7. “New recruits of LRO” are those who are not serving LROs. The starting salary of new recruits of LRO shall normally be the minimum salary point of the pay scale as shown in the ANNEX. Subject to agreement of the Employer, incremental credit for experience (ICE) may be granted for new recruits of LRO. “Serving LROs” means those who are being employed by contractors in serving as LROs under public works contracts which are managed by works departments, or those who change employment with a break in service not exceeding a consecutive period of 12 months immediately before the follow-on employment as LROs by the contractors. For the avoidance of doubt, a LRO employed by contractors under public works contracts not being paid under this direct reimbursement system is not classified as a serving LRO.

8. Entry pay of a serving LRO shall be the salary point of the last month of his most recent employment as LRO by contractors under public works contracts which are managed by works departments.
# Employment Terms of Labour Relations Officer
(Direct employed by Contractor)

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<thead>
<tr>
<th>Aspects</th>
<th>Terms</th>
</tr>
</thead>
</table>
| 1. Salary                        | (i) Pay scale: MPS 3 (minimum) – MPS 15 (maximum); subject to agreement of the Employer that incremental credit for relevant experience may be granted.  
(ii) One incremental point for one complete year of services |
| 2. Working Periods               | (i) Working days in a week – 5 1/2 days  
(ii) Hours of duty in a week – 44 hours gross (i.e. including lunch break)  
(iii) Normal hours of attendance:  
  Mon-Fri: 9:00-17:00  
  Saturday: 9:00-13:00  
(iv) Leave on General Holiday |
| 3. End-of-contract gratuity and Mandatory Provident Fund (“MPF”) | (i) End-of-contract gratuity – 5% of basic salary  
(ii) Employer’s contribution to MPF – 5% of basic salary |
| 4. Hourly rate of overtime allowance | (i) Basic salary for the month divided by 140 for the first 150 hours of overtime for a calendar month (however, the hourly rate in respect of first four hours overtime in any week for which an allowance may be claimed is 1/210 of the basic salary of the month); and  
(ii) Basic salary for the month divided by 210 for his/her overtime exceeding 150 hours for the calendar month. |
| 5. Reimbursement of Medical and Dental Care (including dependent family members i.e. spouse and children) | Not exceeding $15,000 per calendar year |
| 6. Vacation Leave                | (i) MPS3 - 13: Not exceeding 14 days per year  
(ii) MPS14 - 15: Not exceeding 18 days per year |
| 7. Requirement of Sick Leave Certificate(s) | Any sick leave in excess of one day shall be endorsed by a medical certificate signed by a registered medical practitioner, a registered dentist or a registered Chinese medicine practitioner. |
Particular Preamble to amend the Standard Method of Measurement to Introduce the “Pay for Monitoring Payment of Wages”

Section (XX) – Monitoring Payment of Wages

IMPLEMENTATION OF MONITORING PAYMENT OF WAGES

MONITORING PAYMENT OF WAGES

Units

xx.01 The units of measurement shall be:

(i) establishing monitoring system for payment of wages ........................................... item.

(ii) operating monitoring system for payment of wages ............................................. month.

(iii) providing Contractor’s Labour Officer ....... month.

Measurement

xx.02 The items for “operating monitoring system for payment of wages” shall be measured commencing from the date of approval by the Engineer/Supervising Officer/Maintenance Surveyor* of completion of establishment of monitoring system for payment of wages and the item for “providing Contractor’s Labour Officer” shall commence from the date the Contractor’s Labour Officer provided by the Contractor is approved by the Engineer and reports duty on Site. These items shall not be measured:

(i) where the Works are not divided into Sections, between

(a) the end of the prescribed time or extended time for completion of the Works/Works except Establishment Works and Aftercare to Old and Valuable Trees due to extension of time which has been granted by the Engineer to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50; and

(b) the date of completion of the Works/Works except Establishment Works and Aftercare to Old and Valuable Trees certified by the Engineer in accordance with GCC Clause 53.

For the purpose of calculating the extended time for completion of the Works due to extension of time granted by the Engineer under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, the periods of extended time for completion
granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50 shall be summed and added to the end of the prescribed time for completion of the Works;

(ii) where the Works are divided into Sections, between

(a) the end of the prescribed time or extended time for completion of the Section of the Works **(excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees)** due to extension of time which has been granted by the Engineer to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, which happens to be the latest in time (for the purpose of calculating the extended time for completion of each Section of the Works due to extension of time granted by the Engineer under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50, the periods of extended time for completion granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 50 for that Section of the Works shall be summed and added to the end of the prescribed time for completion of that Section of the Works); and

(b) the date of completion of whichever Section of the Works **(excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees)** certified by the Engineer in accordance with GCC Clause 53 which happens to be the latest in time;

(iii) after the expiry of the Maintenance Period (or where there is more than one such Maintenance Period, after the expiry of the last Maintenance Period **other than the Maintenance Periods for Establishment Works and Aftercare for Old and Valuable Trees**) where services are required as a consequence of the default of the Contractor.

**xx.03** No measurement and no payment shall be made for the item “operating monitoring system for payment of wages” for the period during which there is any incident of breakdowns, repairs or maintenance without proper replacement in place at the first instance or for the period where there is any incident of non compliance with respect to the submission of documents and records in accordance with Particular Specification Section X and payment for the item shall therefore be measured on a pro rata basis.
Separate items shall be provided for the monitoring system for payment of wages in accordance with General Principles paragraphs 3 and 4 and the following:

### Group Feature

| I   | 1. establishing monitoring system for payment of wages  
|     | 2. operating monitoring system for payment of wages  
|     | 3. providing Contractor’s Labour Officer |

#### Establishing Monitoring System for Payment of Wages

The item for “establishing monitoring system for payment of wages” shall, in accordance with General Preambles paragraph 2, also include:

(a) preparation of the monitoring system for payment of wages to the satisfaction of the Engineer / Supervising Officer / Maintenance Surveyor;

(b) setting up the monitoring system for payment of wages and any modifications thereof;

(c) provision for collection and maintenance records of payment of wages to Site Personnel;

(d) opening of accounts in designated bank for relevant parties as required in Particular Specification clauses X.5 (1) to (2);

(e) nomination of a Contractor’s Labour Officer as required in Particular Specification clause Y.1;

(f) setting up the attendance recording system for accurate attendance records of Site Personnel and any modifications thereof;

(g) issuing smart-cards to Site Personnel and self-employed workers and temporary cards to visitors;

(h) insurance for the self-employed workers;

(i) establishing a hotline in the Engineer’s site office to receive enquiries from [workers] [Site Personnel] on employment matters; and

(j) advising Site Personnel of the monitoring system and the procedures for reporting wages arrears.

#### Operating Monitoring System for Payment of Wages

The item for the “operating monitoring system for payment of wages” is given a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have
been included in the rates inserted elsewhere in the Bills of Quantities. In addition, the item shall, in accordance with General Preambles paragraph 2, also be deemed to include:

**Item Coverage**

(a) operating and maintaining the attendance recording system to obtain accurate attendance records of Site Personnel;

(b) controlling the issue of smart cards to Site Personnel;

(c) reviewing, updating and revising the monitoring system for payment of wages taking into account the comments made by the Engineer / Supervising Officer / Maintenance Surveyor* or any other parties;

(d) implementing measures to ensure that payments of wages to Site Personnel are consistent with the records of the attendance recording system;

(e) compiling, submitting and maintaining records of payment of wages and other monetary benefits;

(f) observing all statutory and contractual obligations in ensuring proper payment of wages and other monetary benefits to Site Personnel, and any other related obligations, liabilities, risks and profit;

(g) providing all necessary assistance to the Labour Relations Officer in the discharge of his duties, functions and responsibilities;

(h) maintaining a hotline in the Engineer’s site office;

(i) maintaining insurance for the self employed workers; and

(j) providing access and assistance to visitors as required under Particular Specification Y.3 including the necessary insurance coverage.

**Providing Contractor’s Labour Officer**

The items for “Providing Contractor’s Labour Officer” shall, in accordance with General Preambles paragraph 2, include the costs and expenses of providing the Officer and supporting staff inclusive and without limitation to the following:

**Item Coverage**

The costs and expenses of providing the Officer and supporting staff inclusive without limitation to the following:

(a) basic salary;

(b) gratuity;

(c) overtime payment;

(d) sundry allowance;
(c) housing allowance;
(f) travel allowance;
(g) leave allowance;
(h) education allowance;
(i) medical allowance;
(j) dental allowance;
(k) bonus;
(l) contribution to the Mandatory Provident Fund;
(m) all necessary levies, e.g. Construction Industry Training authority;
(n) insurances; and
(o) fringe benefits.

* Delete as appropriate.
Sample bills of Quantities for Capital Works Contracts
For Implementing the Monitoring Payment of Wages

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate ($)</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishing monitoring system for payment of wages</td>
<td>1</td>
<td>Item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2#</td>
<td>Operating monitoring system for payment of wages</td>
<td>??</td>
<td>Month</td>
<td>Insert rate appropriate for the contract and work out the extension</td>
<td>Extension*</td>
</tr>
<tr>
<td>3</td>
<td>Providing Contractor’s Labour Officer</td>
<td>??</td>
<td>Month</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# The rate for item 2 is fixed and should not be adjusted upwards or downwards irrespective of the Final Contract Sum.

* To be added to the tender sum.
Provisional Sum for MPF contributions by the Contractor and his sub-contractors of all tiers

(I) For Building/Civil Engineering Contracts - Provisional Sum

<table>
<thead>
<tr>
<th>Provide for the following sum to be expended wholly or in part as certified by the Engineer in accordance with SCC[xx] or wholly deducted from the Contract Sum if not required:</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursement of Contractor’s and his sub-contractors’ (of all tiers) the amount of employer’s contributions to the Mandatory Provident Fund for their respective Site Personnel.</td>
<td>[3.5% of the total of all the tendered Bill and the amount is to be inserted to the Grand Summary Page only] Please see Grand Summary Page</td>
</tr>
</tbody>
</table>

Note:

1. The exact percentage can be adjusted to suit the specific nature of the contract provided that the percentage used is supported by calculations.

2. The tendered Bill total is used and not the estimated contract sum as this maintains competition in pricing. Please ensure that an item is added to the BQ summary page to ensure that this will be inserted by the Tenderer. See sample attached.
Provisional Sum for Reimbursement of Contractor’s actual payment made to Labour Relations Officers employed for the Contract and Contractor’s administration and overhead cost for providing Labour Relations Officers

(I) For Building/Civil Engineering Contracts - Provisional Sum

<table>
<thead>
<tr>
<th>Description</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide for the following sums to be expended wholly or in part as certified by the Engineer in accordance with SCC[vv] or wholly deducted from the Contract Sum if not required:</td>
<td></td>
</tr>
<tr>
<td>(i) Reimbursement of Contractor’s actual payment made to Labour Relations Officers employed for the Contract.</td>
<td>X</td>
</tr>
<tr>
<td>(ii) Reimbursement of Contractor’s administration and overhead cost @ Y% of the amount of Provisional Sum for (i)</td>
<td>Z</td>
</tr>
</tbody>
</table>

Y = _____ (to be completed by tenderer)

HK$_____ (Sum of X and Z)

[To be inserted to Grand Summary Page]

Note:-

1. The Provisional Sum, X, shall be estimated by Works Departments with the following formula:-

\[
X = \left[ \text{Current monthly salary at MPS 15 x 1.05 + $15000/12} \right] \\
\times \text{No. of LRO employment man-months x 1.5}
\]
<table>
<thead>
<tr>
<th>Page No.</th>
<th>Bill No.</th>
<th>Description</th>
<th>HK$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preliminaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>..</td>
<td></td>
<td></td>
</tr>
<tr>
<td>..</td>
<td>..</td>
<td></td>
<td></td>
</tr>
<tr>
<td>..</td>
<td>Site Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Daywork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>Prime Cost and Provisional Sums (excluding the sum allowed for reimbursement of Contractor’s actual payment made to Labour Relations Officers employed for the Contract and Contractor’s administration and overhead cost for providing Labour Relations Officers, and the sum allowed for MPF reimbursement)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contingency Sum

Total of the above

Add 3.5%# of the Total above as a provisional sum for reimbursement of MPF.

Add the provisional sum allowed for reimbursement of Contractor’s actual payment made to Labour Relations Officers employed for the Contract and Contractor’s administration and overhead cost for providing Labour Relations Officers.

Adjustment Item

*Addition/Deduction

Tender Sum

Signature of person authorized to sign on behalf of tenderer: ..............................................

Name of tenderer: .................................................................

Date: ......................................................................................

---

# Exact percentage to be decided by the project office.

* Delete where inappropriate.
This page should only be updated by Works Branch of Development Bureau.

**Workers Payment Arrangements**

- **HKSAR Government (Employer)**
  - Pay-in/Acknowledgement slips
  - Contract works payment

- **Main Contractor**
  - (Distribute smart card data records to respective subcontractors)
  - Pay-in slips
  - Written acknowledgement of payment
  - Auto-pay as per file data

- **Designated Bank**
  - Pay-in/Acknowledgement slips
  - Worker salary + MPF contribution (Employee/Employee)
  - Insert sufficient funds
  - Contract works payment
  - Smart card data on workers records

- **Workers Salary**
  - Pay-in/Acknowledgement slips to Main Contractor

- **Employer MPF**
  - Pay-in/Acknowledgement slips
  - Contract works payment
  - Smart card data on workers records

- **Employee MPF**
  - Pay-in/Acknowledgement slips

- **Sub-contractor (2)**
  - Same procedure as Main Contractor

- **Sub-contractor (1)**
  - Same procedure as Main Contractor

**Chart to be appended to the PS**
Specimen Employment Contract (DRAFT)

Please complete the contract properly before providing photocopies for execution by the Employer and the Employee.

Please put a ✓ in the appropriate box.

* (Please delete as appropriate.)

** (If the Employee is required to work at the construction site of the Main Contractor who hires his Employer, details about the Main Contractor must be provided in the supplementary notes.)

Simplified Employment Contract (No: )

This contract of employment is entered into between ____________________________

(hereinafter referred to as ‘Employer’) ____________________________

(address and telephone number of the Employer) and * Mr / Mrs / Ms ____________________________

(hereinafter referred to as ‘Employee’) on ____________________________ (Please enter the date)

[on] [with] the terms and conditions of employment set out below:

1. Commencement of Employment Effective from ________________ (Please enter the date)

2. Probation Period □ No / □ Yes ____________________________ * day(s) / month(s)

3. Position Employed ____________________________ 4. Place of Work** ____________________________

5. Working Hours From ________ hours to ________ hours ( ______ days per week)

6. Wages

Basic wages $ ____________________________ per * day / month / job

□ Other allowance(s) ____________________________

(details of criteria and calculation of payment, if any)

Overtime pay □ At the rate of $ ____________________________ * per hour / day / job

□ At the rate according to * 1 / 1.5 / 2 times of normal wages

Payment of wages □ Every day
☐ Every month on the ________________ day of the month

☐ Twice monthly on the ________________ day and ____________ day of the month

7. Termination of Employment Contract

☐ A notice period of ____________ * day(s) / month(s) or an equivalent amount of wages in lieu of the notice period.

☐ During the probation period of ____________ * day(s) / month(s), no notice or wages in lieu of notice are required whereas a notice period of ____________ * day(s) / month(s) or an equivalent amount of wages for the notice period is to be given after the first month.

8. Annuity

☐ No ☐ Yes: (i) An amount equal to ____________ month’s/months’ * basic / normal wages upon completion of each * calendar / lunar year.

   (ii) Payment is to be made on ________________.

9. Mandatory Provident Fund Scheme

According to the Mandatory Provident Fund Schemes Ordinance (the Ordinance), the employers are to make arrangement for employees aged between 18 and 65 to join a registered Mandatory Provident Fund Scheme (the Scheme) and to pay the employer’s contribution from the employer’s own funds to the Scheme. As required under the Ordinance, an Employer shall make employer’s contributions timely to the Scheme for his employee’s benefit. When the employee has been enrolled in the Scheme, the employer may deduct the employee’s mandatory contribution amount from the employee’s income.

10. Autopay

Payment of wages, annuity, if any, and mandatory contributions to the Scheme are to be made via autopay through the Employer’s designated bank. The Employee may open an account with the Employer’s designated bank or any other bank for the purpose of this [autopay] [Clause].

11. Holidays and Leave

Under the Employment Ordinance and the Employees’ Compensation Ordinance, the Employee, if eligible, is entitled to statutory holidays, paid annual leave, sickness allowance, maternity leave, rest days etc and other rights or protection.

12. Work Arrangements during Typhoon and Rainstorm

The Employee *is / is not required to work when typhoon signal no.8 or above is issued. The wage rate is calculated as: ________________.

The Employee is required to resume duty if the typhoon signal no.8 is cancelled not less than ___ hours before end of working hours.

The Employee *is / is not required to work when black rainstorm warning is issued. The wage rate is calculated as: ________________.

The Employee is required to resume duty if the black rainstorm warning is cancelled not less than ___ hours before end of working hours.
For guidance concerning other arrangements, please refer to the ‘Code of Practice in Times of Typhoons and Rainstorms’ issued by the Labour Department.

13. Others

In the event of wage arrears, the Employee is required to notify and report to the Labour Relations Officer on site within 7 working days (excluding Sundays and public holidays) upon the incidence to safeguard his interests.

This contract in duplicate consists of 2 pages. The Employer and the Employee hereby declare that they understand thoroughly the above provisions and further agree to sign to abide by such provisions. Both Employer and the Employee shall each retain a copy of this contract for future reference.

Chop of the Company (if applicable)

Signature of Employee

Signature of Employer or Employer’s Representative

*Name/Position held

Name

HKID No

Date

Correspondence

Address

Telephone No

HKID No

Date

Correspondence

Address

Telephone No
Supplementary Notes
Information of Main Contractor

Name and address of Main Contractor (Please fill in information of the Main Contractor if the Employee is required to work at the construction site of the Main Contractor who hires his Employer):

(i) ________________________________________________________________

Project name and site: ________________________________________________

Project Commencement Date and Project number (if any): __________________

(ii) ________________________________________________________________

Project name and site: ________________________________________________

Project Commencement Date and Project number (if any): __________________

(iii) ________________________________________________________________

Project name and site: ________________________________________________

Project Commencement Date and Project number (if any): __________________

Personal Data Collection Statement

I, (__________________), the above-named Employee hereby declare that I consent to the collection and disclosure of my personal data as per this Employment Contract (No.______):

I understand that my personal data, including the information shown in this Employment Contract, my site attendance records, my wage payment records and records showing Mandatory Provident Fund contribution relating to this Employment Contract, will be used for the following purposes:-

(a) regulating fair terms of employment;

(b) monitoring and controlling payment of wages;

(c) recording and verifying Employee’s attendance records;

(d) providing proper record for compensation for employment-related injury;

(e) ensuring regular Mandatory Provident Fund contribution;

(f) providing proper record for compensation for termination of this Employment Contract;

(g) maintaining proper Employee’s employment records and
(h) compiling wages statistics and labour costs indices.

For the above purposes, I consent that my personal data (including any subsequently corrected data on this Employment Contract) may be disclosed to the following parties:-

(i) Labour Relations Officer(s) on the construction site;

(ii) personnel in relevant Government Bureaux/Departments handling matters in relation to the above purposes but not limiting to Labour Department, Immigration Department, Census and Statistics Department;

(iii) Mandatory Provident Fund Schemes Authority;

(iv) the smart-card supplier and the officers in operation of the smart-card system for maintaining an attendance recording system on site;

(v) the Employer of the Project;

(vi) the Engineer appointed by the Employer of the Project and the Engineer’s Representatives and

(vii) the Main Contractor and the major sub-contractors of the Project.

In addition, I understand and consent that my personal biometric data (e.g. palm size and shape) may be collected by the site attendance recording system for the purpose of construction site access control. For that purpose, this personal biometric data may be disclosed to the smart-card supplier and the officers in operation of the smart-card system.

I also understand that my failure to provide the aforementioned personal data (including personal biometric data) to be used for the stated purposes may result in my employee’s rights under this Employment Contract or any future employment disputes with the Employer not being protected and my access to the construction site may be denied.

Signature of Employee : __________________________
Name of Employee : _________________________
Hong Kong Identity Card Number : ______________________
Date : __________________________

Enquiries
Under the Personal Data (Privacy) Ordinance, Employees can demand, access or correct the personal information provided to the Employer. Employees can contact ________________________________
__________________________________________________________________________________
(Name and Address)
APPENDIX 5.17   STANDARD INSURANCE POLICY FOR THE
SELF-EMPLOYED (Amendment No. 5/2008 & 3/2009)

Appendix [##] to Special Conditions of Contract

Policy Number : 

Class of Insurance : PERSONAL ACCIDENT

The Insured : 

Period of Insurance : From To

Insured Person/Life Insured : 

Profession/Occupation : 

Class : 

Designated Beneficiary : 

Premium : 

(This Policy is subject to a minimum premium of HKD400)

Geographical Limits : Hong Kong Special Administrative Region

TABLE OF BENEFITS (PART 1)

BODILY INJURY caused by violent accidental external and visible means which injury shall within 12 calendar months of its happening solely and independently of any other cause result in:

A. Death of Insured Person HK$1,000,000.00

B. Permanent Disablement not followed within 12 calendar months of bodily injury by death of the insured Person. (The percentages as stated in Table of Benefits (part 2) of HK$1,000,000.00

C. Temporary Total Disablement preventing the Insured Person from attending to or following his usual profession or occupation. Compensation for such disablement at the rate of not covered per week

D. Medical Expenses reasonably and necessarily incurred by the Insured Person subject to a limit in respect of Any One Accident of not covered

This Policy is subject to Clause(s) attached hereto: PA14(a), PA14(b), PA15

Remark: -

Signed at Hong Kong on

For and on behalf of
PA14(A) - TERRORISM EXCLUSION CLAUSE FOR CONTAMINATION AND EXPLOSIVES

It is agreed that, regardless of any contributory causes, this insurance does not cover any loss, damage, cost or expense directly or indirectly arising out of

a) biological or chemical contamination
b) missiles, bombs, grenades, explosives

due to any act of terrorism.

For the purpose of this endorsement an act of terrorism means an act, including but not limited to the use of force or violence and/or the threat thereof, of any person or group(s) of persons, whether acting alone or on behalf of or in connection with any organization(s) or government(s), committed for political, religious, ideological, or ethnic purposes or reasons including the intention to influence any government and/or to put the public, or any section of the public, in fear.

For the purpose of a) "contamination" means the contamination, poisoning, or prevention and/or limitation of the use of objects due to the effects of chemical and/or biological substances.

If the Company alleges that by reason of this exclusion, any loss, damage, cost or expense is not covered by this insurance the burden of proving the contrary shall be upon the Insured.

PA14(b) - WAR AND TERRORISM EXCLUSION

Notwithstanding any provision to the contrary, within this insurance or any endorsement thereto it is agreed that this insurance excludes loss, damage, cost or expense of whatsoever name directly or indirectly caused by, resulting from or in connection with any of the following regardless of any other cause or event contributing
concurrently or in any other sequence to the loss;

(1) war, invasion, acts of foreign enemies, hostilities or warlike operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, civil commotion assuming the proportions of or amounting to an uprising, military or usurped power; or

(2) any act of terrorism.

For the purpose of this endorsement an act of terrorism means an act, including but not limited to the use of force or violence and/or the threat thereof, of any person or group(s) of persons, whether acting alone or on behalf of or in connection with any organization(s) or government(s), committed for political, religious, ideological or similar purposes including the intention to influence any government and/or to put the public, or any section of the public, in fear.

This endorsement also exclude loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any action taken in controlling, preventing, suppressing or in any way relating to (1) and/or (2) above.

If the Company alleges that by reason of this exclusion, any loss, damage, cost or expense is not covered by this insurance the burden of proving the contrary, shall be upon the Insured.

In the event any portion of this endorsement is found to be invalid or unenforceable, the remainder shall remain in full force and effect.

PA15 - MEMORANDUM
It is hereby noted and agreed that this policy does not pay compensation for the Insured person or life insured works in a non XYZ Company or non XYZ Company construction site(s).

(Other Clause(s) please refer to Policy for details.)
<table>
<thead>
<tr>
<th>Description of Disablement</th>
<th>Percentage of the Sum Specified in Benefit B of Table of Benefits (Part 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of two limbs</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of both hands, or of all fingers and both thumbs</td>
<td>100%</td>
</tr>
<tr>
<td>Total loss of sight of both eyes</td>
<td>100%</td>
</tr>
<tr>
<td>Total paralysis</td>
<td>100%</td>
</tr>
<tr>
<td>Injuries resulting in being permanently bedridden</td>
<td>100%</td>
</tr>
<tr>
<td>Any other injury causing permanent total disablement</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of arm at shoulder</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of arm between shoulder and elbow</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of arm at elbow</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of arm between elbow and wrist</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of hand at wrist</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of leg - at hip</td>
<td>100%</td>
</tr>
<tr>
<td>Lost of leg - between knee and hip</td>
<td>100%</td>
</tr>
<tr>
<td>Lost of leg - below knee</td>
<td>100%</td>
</tr>
<tr>
<td>Eye: Loss of - whole eye</td>
<td>100%</td>
</tr>
<tr>
<td>Eye: Loss of - sight of</td>
<td>100%</td>
</tr>
<tr>
<td>Eye: Loss of - lens of</td>
<td>100%</td>
</tr>
<tr>
<td>Loss of four fingers and thumb of one hand</td>
<td>50%</td>
</tr>
<tr>
<td>Loss of four fingers</td>
<td>40%</td>
</tr>
<tr>
<td>Loss of thumb - both phalanges</td>
<td>25%</td>
</tr>
<tr>
<td>Loss of thumb - one phalanx</td>
<td>10%</td>
</tr>
<tr>
<td>Loss of index finger - three phalanges</td>
<td>10%</td>
</tr>
<tr>
<td>Loss of index finger - two phalanges</td>
<td>8%</td>
</tr>
<tr>
<td>Loss of index finger - one phalanx</td>
<td>4%</td>
</tr>
<tr>
<td>Loss of middle finger - three phalanges</td>
<td>6%</td>
</tr>
<tr>
<td>Loss of middle finger - two phalanges</td>
<td>4%</td>
</tr>
<tr>
<td>Loss of middle finger - one phalanx</td>
<td>2%</td>
</tr>
<tr>
<td>Loss of ring finger - three phalanges</td>
<td>5%</td>
</tr>
<tr>
<td>Loss of ring finger - two phalanges</td>
<td>4%</td>
</tr>
<tr>
<td>Loss of ring finger - one phalanx</td>
<td>2%</td>
</tr>
<tr>
<td>Loss of little finger - three phalanges</td>
<td>4%</td>
</tr>
<tr>
<td>Loss of little finger - two phalanges</td>
<td>3%</td>
</tr>
<tr>
<td>Loss of little finger - one phalanx</td>
<td>2%</td>
</tr>
<tr>
<td>Loss of metacarpals - first or second (additional)</td>
<td>3%</td>
</tr>
<tr>
<td>Loss of metacarpals - third, fourth or fifth (additional)</td>
<td>2%</td>
</tr>
<tr>
<td>Loss of toes - all</td>
<td>15%</td>
</tr>
<tr>
<td>Loss of toes - great, both phalanges</td>
<td>5%</td>
</tr>
<tr>
<td>Loss of toes - great, one phalanx</td>
<td>2%</td>
</tr>
<tr>
<td>Loss of toes - other than great, if more than one toe</td>
<td>1%</td>
</tr>
<tr>
<td>Loss of toes - lost, each</td>
<td>75%</td>
</tr>
<tr>
<td>Loss of hearing - both ears</td>
<td>15%</td>
</tr>
<tr>
<td>Loss of hearing - one ear</td>
<td></td>
</tr>
</tbody>
</table>
PERSONAL ACCIDENT POLICY

WHEREAS the Insured described in the Schedule hereto following the profession or occupation stated in the Schedule being desirous of insuring in the manner hereinafter mentioned with XYZ COMPANY. (hereinafter called “the Company”) has made a proposal and signed a declaration dated as stated in the Schedule which proposal and declaration it is agreed shall be the basis of the contract for the Insurance hereby intended to be made and incorporated herein and has paid to the Company the Premium stated in the Schedule as a consideration for the Insurance for the period stated therein.

NOW THIS POLICY OF INSURANCE WITNESSETH that if during the Period of Insurance the Insured Person shall sustain bodily injury caused by violent accidental external and visible means which injury shall be solely and independently of any other cause result in the Insured Person’s death or disablement as hereinafter defined or necessitate medical expenses as hereinafter defined the Company will subject to the terms provisos exclusions and conditions of and endorsed on this Policy (which terms provisos exclusions and conditions shall so far as the nature of them respectively will permit be deemed conditions precedent to the right to recover under this Policy) pay to the Insured or in the event of death to the Insured’s legal personal representatives the sum or sums of money specified in the Tables of Benefits.

DEFINITIONS

(a) “Benefits” means the items of payments and their respective amounts/limits specified in the Schedule as applicable to each Insured Person for Insurance under this Policy.

(b) “Insured” means the person so specified in the Schedule in whose name and for whose benefit the Policy is issued.

(c) “Insured Person” means the person so specified in the Schedule against whose accidental bodily injury the Company subject to the terms and conditions of this Policy pays the specified Benefits to the Insured.

(d) “Medical Expenses” means the cost of medical surgical or other remedial attention treatment or appliances given or prescribed by a qualified registered medical practitioner and all hospital nursing home and ambulance charges.
PROVISOS

(a) Compensation under Benefit A shall not be payable in addition to Benefit B if caused by the same accident of bodily injury except that if a payment has been made under any part of Benefit B and death subsequently occurs solely caused by and within 12 calendar months of said bodily injury and where the compensation payable for Benefit A is greater than has been paid under Benefit B, the Company shall pay the difference.

(b) Permanent total loss of use of member shall be treated as loss of member.

(c) (i) No amount shall be payable for any specific part of Benefit B where a greater amount is payable for another part of Benefit B which includes the specific part.

(ii) Where any permanent disablement is not as specified in Benefit B Scale, the Company shall adopt a percentage of Permanent Disablement, which in the sole opinion of its medical advisers is not inconsistent with the provisions of Benefit B Scale and without regard to the Insured Person's profession or occupation.

(iii) The aggregate of all Permanent Disablement percentages payable in respect of any one accident of bodily injury shall not exceed 100%.

(iv) No payment shall be made under Benefit B unless satisfactory proof is provided to the Company that the disablement of the Insured Person has continued for a period of 12 consecutive calendar months after the date of bodily injury and will in all probability continue for the remainder of the Insured Person’s life.

(d) (i) Compensation under Benefit C shall not be payable for any period of time subsequent to the death of the Insured Person or subsequent to the Company’s written notification to the Insured that compensation becomes payable under my part of Benefit B. Where the Insured and the Company cannot immediately agree the amount of compensation payable under Benefit B, payment of Benefit C shall nevertheless cease from the date of such notification.

(ii) Compensation under Benefit C shall not be payable for a longer period than 104 weeks in respect of any one injury calculated from the date the Insured was first examined by a duly qualified Medical Practitioner.

(e) Compensation under Benefit D shall not be payable if the Insured Person is entitled to indemnity under any other insurance policy or from any other source provided that the Company shall not be relieved of its liability, under Benefit D so far as concerns any excess beyond the amount payable under such other insurance or indemnity.

(f) If the Insured Person is missing for not less than 12 consecutive months and sufficient evidence is provided to the Company that the Insured Person can reasonably be presumed to have sustained accidental bodily injury resulting in death, Benefit A shall become payable, provided that if the Insured Person is subsequently found to be living, such Benefit A payment shall be forthwith refunded to the Company.
CONDITION

(a) This Policy and the Schedule shall be read together and any word or expression to which a specific meaning has been attached in any part of the Policy or of the Schedule shall bear such meaning wherever it may appear.

(b) No alteration of this Policy will be held valid unless the same is signed or initialed by an authorized Official or Agent of the Company.

(c) Written notice shall be given to the Company, without unnecessary delay but in any event within three weeks of the occurrence of the injury, in respect of which a claim is to be made.

(d) All certificates information and evidence required by the Company shall be furnished at the expense of the Insured or the Insured’s legal personal representatives and shall be in such form and of such nature as the Company may prescribe. The Insured as often as required shall submit to medical examination on behalf of the Company as its own expense in respect of any alleged bodily injury. The Company shall in the event of the death of the Insured be entitled to have a post mortem examination at its own expense. The Insured shall as soon as possible after the occurrence of any injury obtain and follow the advice of a duly qualified medical practitioner and the Company shall not be liable for any consequences arising by reason of the Insured’s failure to obtain or follow such advice and use such appliances or remedies as may be prescribed.

(e) The Insured shall give notice in writing to the Company of any change in the Insured’s address or profession or occupation or of the effecting of other insurances except Coupon against accident disease or sickness and on tendering any premium for the renewal of this Policy shall give notice in writing to the Company of any sickness disease physical defect or infirmity with which the Insured has become affected or of which the Insured has become aware since the payment of the preceding premium.

(f) Any fraud, mis-statement, or concealment either in the proposal on which this insurance is based or in relation to any other matter affecting this insurance or in connection with the making of any claim hereunder shall render this Policy null and void and all claims hereunder shall be forfeited.

(g) The Company shall not be bound to accept any renewal of this Policy or to send any notice of the renewal premium becoming due. The Policy shall not be renewable after the period of Insurance during which the Insured attains the age of sixty-five years. The Company may at any time give notice to the Insured to terminate this Policy forthwith without prejudice to the rights of the Insured in respect of prior injury provided that the Company return to the Insured the then last premium paid by the Insured less a pro rata part thereof for the period of the year for which the Policy has been in force. Notice to be given by the Company may be given personally to the Insured in writing or sent by registered post addressed to the Insured at the Insured’s last address known to the Company and any such notice shall be deemed to have been received by the Insured at the time when the same would be delivered in the ordinary course of post. By like notice
to the Company the Insured may at any time cancel this policy in which case the Company will retain the customary short period rate for the time the Policy has been in force.

(h) All difference arising out of this Policy shall be referred to the decision of an Arbitrator to appointed in writing by the parties in difference of if they cannot agree upon a single Arbitrator to the decision of two Arbitrators one to be appointed in writing by each of the parties within one calendar month after having been required in writing so to do by either of the parties or in case the Arbitrators do not agree of an Umpire appointed in writing by the Arbitrators before entering upon the reference. The Umpire shall sit with the Arbitrators and preside at their meetings and the making of an Award shall be a condition precedent to any right of action against the Company. The Company shall disclaim liability to the Insured for any claim hereunder and such claim shall not within twelve calendar months from the date of such disclaimer have been referred to arbitration under the provisions herein contained then the claim shall for all purposes be deemed to have been abandoned and shall not thereafter be recoverable hereunder.

(i) This Policy is subject to the jurisdiction of Hong Kong Special Administrative Region and is to be construed according to the laws of Hong Kong Special Administrative Region.

IMPORTANT NOTICE: According to Insurance Policy conditions, the Insured must immediately notify the Company of any change in the Insured person's employment, occupation, duties or other pursuits which may result in an increased likelihood of being involved in an accident.

EXCLUSION

This Policy does not pay compensation for:-

(a) INJURY or consequences thereof occasioned by or happening through:-

(i) war, invasion, act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, military or usurped power, riots, strikes, military or popular rising,

(ii) nuclear weapons material, ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, and for the purpose of this Exclusion (a)(ii) combustion shall include any self-sustaining process of nuclear fission,

(iii) suicide or attempted suicide, the Insured Person’s own criminal act, intended self-injury, willful exposure to needless peril except in an attempt to save human life, pregnancy or childbirth, venereal disease, insanity or Acquired Immune Deficiency Syndrome (AIDS) or AIDS Related Complex (ARC),

(iv) the Insured Person is under the influence of intoxicating alcohol or drugs (unless taken according to proper medical prescription and direction and not for treatment of drug addiction),
(v) acts of terrorism committed by a person or persons acting on behalf of or in connection with any organization. For the purpose of this Exclusion, “terrorism” means the use of violence for political ends and includes any use of violence for the purpose of putting the public or any section of the public in fear.

(b) INJURY caused by the Insured Person engaging in or practicing for:

(i) parachuting,
(ii) hang gliding,
(iii) hunting,
(iv) ice hockey,
(v) poloplaying,
(iv) winter sports,
(vii) any kind of race (other than on foot or swimming) or trial of speed or reliability,
(viii) potholing, mountaineering or rock climbing necessitating the use of guides or ropes,
(ix) underwater activities necessitating the use of compressed air or gas,
(x) motor cycling (as driver or passenger),
(xi) sports in a professional capacity.

(c) INJURY caused by the Insured Person engaging in service or duty with the Police or any armed force or Fire Service of any country.

(d) INJURY occurring whilst the Insured Person is traveling in an aircraft.
Compliance with the 
Personal Data (Privacy) Ordinance

(This circular should be read by all staff of Works Branch, 
DEVB and re-circulated for 
staff’s information at half-yearly intervals)

This circular serves to remind staff of the need to handle personal data in compliance with the Personal Data (Privacy) Ordinance and the relevant Data Protection Principles. It supercedes the Environment, Transport and Works Bureau, Works Branch Internal Circular No. 6/2005.

General

2. The Personal Data (Privacy) Ordinance (PDPO) protects the privacy interests of individuals in relation to personal data. It covers any data relating directly or indirectly to a living individual (data subject) and applies to any person, organization or government department that controls the collection, holding, processing or use of personal data (data user).

3. The PDPO requires data users to comply with the six Data Protection Principles, which allow data subjects to have certain rights, including the right to be informed of whether a data user holds their personal data, to be supplied with a copy of such data and to request correction of any data they consider to be inaccurate.
Privacy Policy

4. A statement of WB’s policy and practices in relation to data privacy, showing the main types of personal data held and main purposes for which they are used, is at Annex. If there are any changes to the “Types of Personal Data Held” or “Main Purposes of Keeping Personal Data”, please inform the Personal Data Controlling Officer (paragraph 9 refers) in writing.

Practices on Handling Personal Data

5. When handling personal data, colleagues should bear in mind that the interests of the individuals who are the subject of the data should be a primary concern. We should take special care to safeguard against unauthorized use or disclosure (deliberate or accidental) of personal data. Colleagues should undertake to –

(a) collect, when necessary, adequate but not excessive personal data relating to the functions or activities of WB;

(b) provide a Personal Information Collection Statement on each means of collection, covering the following –

♦ purposes for which the data are to be used;
♦ whether it is obligatory or voluntary for individuals to supply the data and, if obligatory, the consequences of not doing so;
♦ classes of person to whom the data may be transferred;
♦ rights of individuals to request access and correction of the personal data; and
♦ name and address of the colleague to whom personal data access and correction requests may be made;

(c) restrict the use (including disclosure and transfer) of personal data to the purposes for which they were to be used at the time of collection. Personal data may be used for other purposes only if the individual concerned voluntarily gives express consent;

(d) take all reasonably practicable steps to ensure that the personal data collected/held are accurate having regard to the purpose for which they are to be used, and are updated on a regular basis where appropriate;
(e) regularly review the retention periods for different types of personal data. Personal data must not be kept longer than necessary for the fulfillment of the purposes. Where it is considered useful or necessary to retain records, for example, for statistical or precedent purposes, consideration should be given to erasing any information which directly or indirectly identifies an individual or from which the identity of an individual can be deduced; and

(f) take all reasonably practicable steps to restrict access to and processing of personal data on a “need-to-know” and “need-to-use” basis and to ensure that personal data are protected against unauthorized or accidental access, disclosure, processing, erasure or other use.

Access to or Correction of Personal Data

6. The PDPO provides for an individual making a data access request –

(a) to be informed whether the data user holds personal data of which the individual is the data subject;

(b) if the data user holds such data, to be supplied by the data user with a copy of such data.

7. The PDPO also provides for an individual to request correction of any personal data of which the individual has been provided with a copy after making a data access request and if the individual considers that the data to be inaccurate.

8. A data access request or a data correction request must be complied with within 40 days of receiving the request.

Personal Data Controlling Officer/Personal Data Privacy Officer

9. The Chief Executive Officer (Works) Administration [CEO(W)A] is the Personal Data Controlling Officer as well as the Personal Data Privacy Officer, responsible for monitoring and ensuring compliance with the provisions of the PDPO in respect of all personal data held by WB. The Senior Executive Officer (Works) Personnel [SEO(W)P] is responsible for all employment-related data access and correction requests while the Senior Executive Officer (Works) General [SEO(W)G] is responsible for access/correction requests of other personal data held by the WB.
Employment-related Data

10. Besides access to or correction of routine human resource management function, all requests should be made in writing as required at paragraph 11(a). For example, officers can still make oral enquiries about their leave balances and particulars. We will not treat these routine requests as data access/correction requests under the Ordinance and will continue to deal with them as usual. However, such requests will be handled with all necessary care, including establishing the identity of the requestors, to avoid unauthorized disclosure or amendment of colleagues’ personal data. Colleagues who wish to make a request for access to or correction of employment-related personal data are welcome to contact SEO(W)P at 2848 6134.

11. If a request is made by members of the public, colleagues should undertake to –

(a) advise a requestor to make the data access request on the Data Access Request Form (PCO Form No. OPS 003), which is obtainable from the General Unit or could be downloaded from the website of the Privacy Commissioner’s Office (PCO) at http://www.pco.org.hk; and submit the request to the Personal Data Controlling Officer, DEVB, 10/F, Murray Building, Garden Road, Hong Kong;

(b) forward any data access/correction request, when received, immediately to the General Unit on 10/F for processing. The data access/correction requests from members of the public will be centrally handled by SEO(W)G, in consultation with the unit heads who hold the personal data of the concerned individual.

Reference materials

12. The six Data Protection Principles, relevant advice given by the Secretary for Home Affairs and other reference materials issued by the PCO, are available from the DEVB Bulletin Board.

Charges

13. We will make a charge to cover the cost of photocopying personal data requested under the Ordinance at the standard rate prescribed by the Director of Accounting Services. The Finance Section is responsible for the issue of demand notes for the payment.
Enquiries

14. For enquiries on the Circular, please contact CEO(W)A, the Personal Data Controlling Officer, at 2848 2132.

(Patrick Lau)
Principal Executive Officer (Works)
Statement of Privacy Policy,
Types and Main Purposes of Keeping Personal Data Held
in the Works Branch, DEVB

Privacy Policy

The protection of privacy in relation to personal data is the concern of every member of staff in the Works Branch, DEVB. We respect personal data and are committed to fully implementing and complying with the data protection principles and all relevant provisions of the Personal Data (Privacy) Ordinance.

Types and Purposes of keeping the Personal Data held

Works Branch, DEVB holds the following types of personal data –

(1) **Employment related Personal Data** – personal data held on serving officers and former employees include personal and family particulars, education and qualifications, employment history, salary and allowances, terms and conditions of service, housing, medical records, leave and passages, training, investments, outside employment, appraisal reports, promotion board assessments, conduct and discipline, and retirement and pension. Recruitment and appointment data are also held on applicants for appointment and seeking temporary employment.

[Purpose: for a range of employment-related purposes, including appointments, integrity checking, posting and transfers, grant of allowances and employment benefits, offer/renewal/extension of agreement, incremental credit, training and career development, revision of terms of conditions of service, promotion, discipline, continuation in or removal from office, pensions and provision of testimonials.]

(2) **Members of Boards, Committees and Tribunals** – these personal data include the personal particulars of candidates nominated for appointment/re-appointment to the various committees, boards and tribunals provided by the nominating parties and candidates, and assessments on the suitability of the candidates for appointment/re-appointment (including personal information, past performance as a board/committee/tribunal member, attendance rate, relevant experience and expertise).
[Purpose: for activities relating to the appointment of members to various boards and committees, and to facilitate communication between members and the secretariat.]

(3) Appeal Boards or Tribunals – personal data held include name, address and contact number of appellants, authorized representatives, witnesses of various appeal boards or tribunals.

[Purpose: to facilitate the appeal proceedings.]

(4) Contractors – personal data held include personal particulars or curricula vitae (CV) of key personnel or technical staff employed by contractors.

[Purpose: to facilitate the consideration of contractors for inclusion in the List of Approved Contractors for Public Works and the List of Approved Suppliers of Materials and Specialist Contracts for Public Works.]

(5) Consultants – these personal data include personal particulars and CV of individual consultants providing services to WB.

[Purpose: to facilitate the award of consultancies.]

(6) Registered Safety Officers employed under public works contracts – data held in WB include name and letter of registration issued by the Labour Department.

[Purpose: to prevent registered safety officers from being employed full-time in more than one contracts or part-time in more than 3 contracts, which would affect their level and qualify of services.]

(7) Construction Workers claiming token allowances for attending Safety Certificate for Specified Trade Workers Course – data held in WB include name, trade and serial number of the Specified Trade Safety Certificate issued by CITA.

[Purpose: to prevent over-payment to contractors under the contract for attending the safety course.]

(8) Other records – including administration records and personal particulars of members of the public who make requests under the Code on Access to Information and the Personal Data (Privacy) Ordinance or make enquiries or complaints, or put forward their views and comments, to WB.

[Purpose: for various purposes which vary according to the nature of the record, such as dealing with enquiries or complaints or collecting views and comments from members of the public.]

Works Branch
Development Bureau
August 2007
NTT# : Limiting the Tiers of Sub-contracting

The Tenderers’ attention is drawn to the provisions under Special Conditions of Contract Clause [X] which impose certain restrictions on sub-contracting.

Special Condition of Contract

SCC [X] – Limiting the Tiers of Sub-contracting

(1) For the purpose of this Clause, the first tier of sub-contracting means the contracts between the Contractor and his sub-contractors. The second tier means the sub-contracts between any of the sub-contractors of the first tier and his sub-contractors. The foregoing shall apply with necessary modifications to subsequent tiers of sub-contracting.

(2) Notwithstanding General Conditions of Contract Clause 4 on sub-contracting a part of the Works and subject to sub-clauses (3) to (5) of this Clause and compliance with other provisions of the Contract, the sub-contracting of a part of the Works by the Contractor shall be limited to two tiers of sub-contracting.

(3) Where any part of the Works has been sub-contracted out under sub-clause (2) of this Clause, the sub-contractor of the first or the second tier of sub-contracting (as the case may be) may, subject to sub-clause (4) of this Clause and compliance with other provisions of the Contract, engage in two additional tiers of sub-contracting with respect to a Relevant Portion of such part of the Works, except (i) where the Relevant Portion involves work or services to be carried out in any confined space, or (ii) where the Relevant Portion involves demolition or scaffolding work [or ]*. For situations as stated in (i) or (ii), sub-contracting of the Relevant Portion by the sub-contractor of the first or the second tier (as the case may be) shall be limited to one additional tier of sub-contracting.

(4) Notwithstanding sub-clauses (2) and (3) of this Clause, sub-contracting of any part of the Works requiring entry of human beings into confined space that form part of a sewerage or drainage system shall be limited to the first tier of sub-contracting and further sub-contracting by the first tier sub-contractor shall not be permitted.

(5) (a) Notwithstanding sub-clauses (3) and (4) of this Clause, the Engineer may upon request by the Contractor permit the Contractor to introduce an extra tier of sub-contracting for a part of the Works or a Relevant Portion which has been sub-contracted out in accordance with the provisions of the Contract (including without limitation on the foregoing provisions).

(b) The Engineer shall not be obliged to consider a request for an extra tier of sub-contracting unless the request is made in writing to the Engineer at least 14 days before the sub-contractor of the relevant tier of sub-contracting enters into any sub-contract for the extra tier of
sub-contracting and the request is accompanied by an explanation with supporting evidence on the need for the extra tier of sub-contracting.

(c) A request which has been made in strict compliance with paragraph (b) above is taken to have been permitted by the Engineer if it is not expressly rejected by the Engineer in writing within 14 days from the date of receipt by the Engineer of the request from the Contractor.

(6) The Contractor shall comply with and shall ensure that all sub-contractors (irrespective of any tier) shall comply with the provisions of this Clause, General Conditions of Contract Clause 4 and other relevant provisions of the Contract ("Sub-contractor Provisions"). If the Contractor or any of the sub-contractors (irrespective of any tier) fails to comply with the Sub-contractor Provisions, the Engineer shall, without prejudice to any other rights and remedies, have full power to order the removal of any sub-contractor which has been engaged in contravention of any of the Sub-contractor Provisions from the Site and/or the Works.

(7) In this Clause, unless the context otherwise requires -

"confined space" has the same meaning as that adopted in the Factories and Industrial Undertakings (Confined Spaces) Regulation (Cap. 59AE);

"Relevant Portion" means a portion of any part of the Works which has been sub-contracted out to a sub-contractor of the first or the second tier of sub-contracting under sub-clause (2) of this Clause, and such portion comprises only work or services falling within the description of one or more of the “Construction Trades” which are listed under the trade classification of the Voluntary Sub-contractor Registration Scheme;

"Voluntary Sub-contractor Registration Scheme" means the Voluntary Sub-contractor Registration Scheme as referred to in Environment, Transport and Works Bureau Technical Circular (Works) No. 13/2004.

* Subject to the approval of Works Branch of the Development Bureau, project officers may insert other high-risk operations appropriate to the nature of the Contract.*
APPENDIX 5.20  ILLUSTRATION DIAGRAM ON MAXIMUM NUMBER OF TIERS OF SUB-CONTRACTING ALLOWED
(Shall not be attached in contract documents) (Amendment No. 5/2008 & 3/2009)

This page should only be updated by Works Branch of Development Bureau.

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Main Contractor

1st tier Sub-contractors

2nd tier Sub-contractors

First tier Sub-contractors for any part of the Works requiring entry of human beings into confined space that form part of a sewerage or drainage system

1st tier Sub-contractors

2nd tier Sub-contractors

Construction Trades under VSRS involving demolition, scaffolding work or working in confined spaces or other high-risk operations (subject to the agreement from DEVIB) as specified by the project officer

Construction Trades under VSRS

Notes:

1. Details of “Voluntary Sub-contractor Registration Scheme” (VSRS) are given in ETWB TC(W) No. 13/2004.
2. Where the main contractor is to sub-let part of the Works to the 1st or 2nd tier sub-contractors involving trades available under the Primary Register of the VSRS, the sub-contractors shall be registered under the relevant trades in the Primary Register of the VSRS.
3. An extra tier of sub-contracting for a part of the Works or a Relevant Portion may be allowed subject to the approval of the Engineer.
Appendix to Form of Tender

Clause No. 2(1)(b) Action of the Engineer subject to the Employer’s right of objection and direction.
The Engineer is required under the terms of his appointment* by the Employer to obtain confirmation of no objection from the Employer and, in the event of an objection, to act in accordance with the Employer’s direction before permitting the Contractor to introduce an extra tier of sub-contracting in accordance with sub-clause (5) of SCC[X#].

* Where the Engineer is a consultant, works department should take steps to ensure that the constraint is stipulated in the relevant consultancy agreement.

# To insert relevant clause number for the SCC clause on Limiting the Tiers of Sub-contracting.
Notes to Tenderers

NTT# : Payment for Sub-contractor Management Plan

Tenderers’ attention is drawn to GCT 20, Special Conditions of Contract Clauses [x] and [xx] and Particular Specification Section [x] requiring the submission and quarterly updating of the Sub-contractor Management Plan (SMP) in the form and contents as prescribed in the Contract. Tenderers’ attention is also drawn to the requirement to monitor and ensure the implementation of and the compliance with the SMP.

Separate items are stipulated in the Bills of Quantities/ Schedule of Rates for the provision of, implementation of and compliance with the SMP.
Special Conditions of Contract

SCC[x]: Management of Sub-contractors

General Conditions of Contract Clause 4 is amended by adding the following:

(7)^a Notwithstanding the foregoing sub-clauses of this Clause, the Contractor shall within 30 days of the Employer's letter of acceptance of the Tender submit a Sub-contractor Management Plan (SMP) to the Engineer/Supervising Officer* (E/SO*) for information and comments, if any.

(b) The Contractor shall then submit quarterly the updated SMP till the issuance of the certificate of completion or where there is more than one such certificate, the issuance of the last certificate of completion to the E/SO* for information and comments, if any. Should there be any major changes in the Contractor's sub-contracting arrangement during the period before the next quarterly reporting, the Contractor should notify immediately such changes to the E/SO* in writing. The quarterly updated SMP required under this paragraph (b) shall be submitted within one month from each quarterly period. For the avoidance of doubt, the first quarterly period shall commence from the date of submission of the SMP by the Contractor pursuant to paragraph (a) of this sub-clause. Any interim notification of changes by the Contractor shall not affect his obligation to submit the quarterly updated SMP. In case there is no change to the previous SMP, the Contractor shall declare such status in writing instead of submitting the same SMP again.

(c) The SMP submitted under paragraphs (a) and (b) of this sub-clause shall contain detailed information as required by the Guidelines on Scope and Contents of the Sub-contractor Management Plan at Appendix [x] to these Special Conditions of Contract.

(d) The E/SO* may upon receipt of the SMP comment on the SMP and notify the Contractor of such comments in writing. If the E/SO* is of the opinion that the SMP submitted under paragraphs (a) and (b) of this sub-clause does not meet the requirements of the Contract, the E/SO* may, by written notice, require the Contractor to revise or update the SMP and the Contractor shall comply with that requirement within 14 days of the date of the notice. No approval of the SMP is required from the E/SO*. 
(e) Subject to the provisions of other Special Conditions of Contract stating to the contrary, the Contractor shall ensure that his sub-contractors shall not sub-contract the whole of the works sub-contracted to them.

(f) The Contractor shall employ his own staff to manage and supervise his sub-contractors.

(g) For the purpose of this clause and the Guidelines on Scope and Contents of the Sub-contractor Management Plan at Appendix [x] to these Special Conditions of Contract, the term 'sub-contractor' means all types of sub-contractor including without limitation Nominated Sub-contractor and Specialist Sub-contractor.

(h) The Contractor shall, upon written request by the E/SO* (which may be issued by the E/SO* from time to time or at any time), produce to the E/SO* documentary proof to demonstrate to the satisfaction of the E/SO* that the Contractor has complied with all the provisions in the latest SMP submitted under paragraphs (a) and (b) of this sub-clause. Such documentary proof includes, but is not limited to, documents of sub-contracts, reports from sub-contractors on their further sub-contracting arrangement and daily attendance records of site workers. For the purpose of determining the extent of documentary proof, the E/SO* shall made reference to the Guidelines on documentary proof to demonstrate the compliance of the provisions in the SMP at Appendix [y] to these Special Conditions of Contract. The E/SO* may make as many separate written requests as he thinks fit. The provisions of this sub-clause shall be without prejudice to sub-clause (5/7*) of this Clause.

* Delete as appropriate [The numbering of the sub-clause may vary depending on individual contract. The sub-clause intended to be referred to is the sub-clause of GCC Clause 4 which states the duty of the Contractor if so required to furnish full particulars of any sub-contractor employed on the Works.]

^ The numbering of this added sub-clause may vary depending on the type of GCCs used and whether there is other SCC in the contract which also amend GCC Clause 4.
Appendix [x] to SCC[x]

Guidelines on Scope and Contents of Sub-contractor Management Plan to be Specified in the General Conditions of Tender/Special Conditions of Contract

i) Scope of the part or parts of the Works to be sub-contracted including the form and extent of sub-contracting arrangement such as labour only, labour and plant, labour and material, plant only, lump sum or any other combination of types. Proof of ownership of construction plant and material should be addressed. The scope of the part or parts of the Works to be sub-contracted shall comply with the contractual provisions (including without limitation Special Conditions of Contract Clause [ ] on Limiting the Tiers of Sub-contracting).

ii) Details of sub-contracts (irrespective of tiers) including the names of sub-contractors, proposed form of sub-contracts and the programme of the sub-contracted works.

iii) The Contractor’s approach to demand/ensure his sub-contractors to a) abstain from sub-contracting the whole of the works sub-contracted to them, and b) report upwards their sub-contracting arrangement and any subsequent changes with written declarations of no “hidden” sub-contracts for any part of the works sub-contracted to him.

iv) The Contractor’s proposed measures for supervision of the Works and monitoring of the performance of sub-contractors, particularly the aspects of the works programming, quality and safety of the Works and environmental protection.

v) Criteria for selection of sub-contractors.

vi) The Contractor’s approach to ensure all his sub-contractors (irrespective of tiers) to adopt written contracts in their sub-contracting and that all the sub-contracts complied with the requirements as stipulated in the Contract (including without limitation Special Conditions of Contract Clause [ ] on Sub-contract conditions).

vii) Details of the Contractor’s Management Team, as required in the Contract (i.e. the SCC for Contractor’s Management Team), employed on direct supervision and management of sub-contractors. An organization chart showing the responsibilities of the Contractor’s direct staff in supervision and management of his sub-contractors should be submitted.

viii) Declaration that members of staff on the Contractor’s Management Team are prohibited from being given a sub-contract to any part of the Works or having a vested interest in any of the sub-contractors irrespective of tiers.

ix) The Contractor’s proposed measures to ensure the compliance with the implementation of the system of payment of wages to the Site Personnel as stipulated in the Contract (including without limitation Special Conditions of Contract Clause [ ] on Payment of Wages of Site Personnel) The Contractor’s proposed measures for ensuring timely payments to sub-contractors and payments by sub-contractors to sub-contractors of lower tiers.
NB. The above items are not exhaustive. The Contractor can add any other items, which he considers pertinent to the proper management of his sub-contractors.
Guidelines on Scope and Contents of Sub-contractor Management Plan to be Specified in the General Conditions of Tender/Special Conditions of Contract

i) Scope of the part or parts of the Works to be sub-contracted including the form and extent of sub-contracting arrangement such as labour only, labour and plant, labour and material, plant only, lump sum or any other combination of types. Proof of ownership of construction plant and material should be addressed.

ii) Arrangement for each sub-contract including the names of sub-contractors known to the Contractor, proposed form of sub-contracts and the programme.

iii) Criteria for selection of sub-contractors.

iv) Details of the Contractor's own staff employed for direct supervision and management of his sub-contractors. An organization chart showing the responsibilities of the contractor's direct staff in supervision and management of his sub-contractors should be submitted.

v) The Contractor's approach to demand/ensure his sub-contractors to a) abstain from sub-contracting the whole of the works sub-contracted to them, and b) submit written declarations of no "hidden" sub-contracting of works.

vi) The Contractor’s approach to encourage his sub-contractors to adopt written contracts in their sub-contracting.

vii) The Contractor's proposed measures to demand his sub-contractors to report upwards their sub-contracting arrangements and any subsequent changes.

viii) The Contractor's proposed measures for monitoring and assessing the works programme, quality, safety and environmental performance of his sub-contractors.

ix) The Contractor's proposed measures for ensuring timely payment to the downstream sub-contractors after his payment to his sub-contractors.

x) The Contractor's approach for monitoring early industrial dispute problems.

xi) The Contractor's approach for handling complaints from workers on site regarding wages arrears disputes and co-ordinate with Labour Department for earlier action. Contractors are required to keep the Engineer/Supervising Officer’s site representatives informed of the latest situation.

xii) The Contractor's proposed measures for maintaining updated daily attendance records of all workers on site.

xiii) The Contractor's proposed measures for site security and workers' daily access control if applicable.

NB. The above items are not exhaustive. The Contractor can add any other issues, which he considers pertinent to the proper management of his sub-contractors.
Guidelines on documentary proof to demonstrate the compliance of the provisions in the SMP

i) E/SO should base on their professional judgment in selecting samples of sub-contract document/report for documentary proof.

ii) Documentary proof should be limited to relevant information for the demonstration of the compliance of the provisions in the submitted SMP i.e. information as stipulated in the Guidelines on Scope and Contents of the Sub-contractor Management Plan at Appendix [x] to these Special Conditions of Contract.

iii) Documentary proof should exclude sensitive commercial information such as price, payment conditions, bills of quantity etc.
Special Conditions of Contract

**SCC\[xx\] : Payment for Sub-contractor Management Plan**

The Contractor shall be entitled to the sums set out in the Sub-contractor Management Plan section of the Bills of Quantities/Schedule of Rates provided that the Contractor has complied with the requirements specified in the Contract.
SECTION X

Management of Sub-contractors

GENERAL

General

X.1 (1) The Contractor shall ensure the submission and quarterly updating of the Sub-contractor Management Plan (SMP) in the form and contents as prescribed in the Contract.

(2) The Contractor shall monitor and ensure the implementation of and the compliance with the SMP.

SUB-CONTRACTOR MANAGEMENT PLAN (SMP)

SMP

X.2 (1) The Contractor shall, in accordance with SCC [x], prepare and submit to the Engineer/Supervising Officer* (E/SO*) 2 copies of the Sub-contractor Management Plan signed by the Site Agent. The SMP shall contain detailed information as required by the Guideline on Scope and Contents of the Sub-contractor Management Plan at Appendix [x] to the SCC [x].

Quarterly updated SMP

X.3 (1) The Contractor shall, in accordance with SCC [x], submit to the Engineer/Supervising Officer* (E/SO*) 2 copies of the quarterly updated Sub-contractor Management Plan signed by the Site Agent. The quarterly updated SMP shall contain the updated detailed information as required by the Guideline on Scope and Contents of the Sub-contractor Management Plan at Appendix [x] to the SCC [x].

(2) If there is no change to the previous SMP, the Contractor shall, in accordance with SCC [x], declare such status in writing instead of submitting the same SMP again. The declaration shall be signed by the Site Agent and for the purpose of this Particular Specification, the declaration shall be considered as a quarterly updating of the SMP.

* Delete as appropriate
Section (XX) – Sub-contractor Management Plan (SMP)

IMPLEMENTATION OF SUB-CONTRACTOR MANAGEMENT PLAN

Preambles xx.01 Not used.

xx.02 The pre-fixed rates appearing in the items under this Section XX shall be deemed to have allowed for the value of work in connection with meeting all contractual obligations regarding the Sub-contractors Management Plan in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the rates inserted elsewhere in the Bills of Quantities.

Sub-contractor Management plan

Units xx.03 The units of measurement shall be:

(i) complete Sub-contractor Management Plan
.......................... item.
(ii) quarterly updating of Sub-contractor Management Plan
.......................... number.

Measurement xx.04 The item for “complete Sub-contractor Management Plan” shall be measured when the SMP has been submitted, the content is in order and the E/SO* is satisfied that it has been completed and it meets all requirements of the Contract at the time of its completion.

xx.05 The item for “quarterly updating of Sub-contractor Management Plan” shall be measured when the quarterly updated SMP has been submitted, the content is in order and the E/SO* is satisfied that the SMP has been completed and meets all requirements of the Contract at the time of its completion. The declaration referred to in P.S. X.3(2) shall be considered as quarterly updating of the SMP. No measurement shall be made for Contractor’s interim notification of major changes of sub-contractor management.
Itemisation

xx.06 Separate items shall be provided for Sub-contractor Management Plan in accordance with General Principles paragraphs 3 and 4 and the following:

<table>
<thead>
<tr>
<th>Group</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1. Complete Sub-contractor Management Plan</td>
</tr>
<tr>
<td></td>
<td>2. Quarterly updating of Sub-contractor Management Plan</td>
</tr>
</tbody>
</table>

**Complete Sub-contractor Management Plan**

xx.08 The item for “complete Sub-contractor Management Plan” shall, in accordance with General Preambles paragraph 2, also include:

**Item Coverage**

(a) develop and complete the Sub-contractor Management Plan incorporating the details required by the Contract; and

(b) submit the required copies of the SMP to the E/SO*.

**Quarterly updating of Sub-contractor Management Plan**

xx.09 The item for the “quarterly updating of Sub-contractor Management Plan” shall, in accordance with General Preambles paragraph 2, also include:

**Item Coverage**

(a) reviewing, updating and revising Sub-contractor Management Plan taking into account the changes in the Contractor’s sub-contracting arrangement during the period and/or comments made by the E/SO*; and

(b) submit the required copies of the quarterly updated SMP to the E/SO*.

* Delete as appropriate
### APPENDIX 5.27  SAMPLE BILLS OF QUANTITIES FOR PAYMENT FOR SUB-CONTRACTOR MANAGEMENT PLAN

( Amendment No. 6/2009)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate $</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Complete Sub-contractor Management Plan</td>
<td>-</td>
<td>Item</td>
<td>10,000*</td>
<td>10,000*</td>
</tr>
<tr>
<td>B.</td>
<td>Quarterly Updating of Sub-contractor Management Plan</td>
<td>??</td>
<td>nr</td>
<td>1,000*</td>
<td></td>
</tr>
</tbody>
</table>

Notes:-

(1)* The rate for item A and B are fixed according to the following table
(2) nr: number
(3) ??: quantity to be inserted

<table>
<thead>
<tr>
<th>Contract Values ($)</th>
<th>Fixed Rates ($) for the following BQ items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Civil Engineering</td>
</tr>
<tr>
<td></td>
<td>Complete SMP (one off)</td>
</tr>
<tr>
<td>Less than 20M</td>
<td>4,800</td>
</tr>
<tr>
<td>Between 20M and 50M</td>
<td>10,000</td>
</tr>
<tr>
<td>More than 50M</td>
<td>15,000</td>
</tr>
</tbody>
</table>
Introduction

Partnering is a project delivery technique based on cooperative working practices, which can be taken as a journey of improvement with non-contractual partnering being the first step on this journey. This Practice Note promulgates the guidelines and good practices for implementation of non-contractual partnering in public works contracts.

Background

2. In Hong Kong, the Hospital Authority and MTR Corporation Limited (MTRCL) were probably the first clients to embrace the concept of partnering. Partnering was first used in hospital projects in the mid 1990’s with some notable success. Partnering was also adopted by the MTRCL in its Tseng Kwan O Extension project, which opened ahead of schedule with construction cost substantially below budget. MTRCL has attributed such success to the use of project partnering.

3. The Environment, Transport and Works Bureau (ETWB) has been actively promoting the adoption of partnering in public works contracts in recent years, and introduced partnering on a non-contractual basis in public works contracts in 1997. Since then, non-contractual partnering has been used in more than 30 public works contracts. The wider use of partnering in construction industry was also recommended in the Construct for Excellence report published by the Construction Industry Review Committee (2001).

4. The ETWB also arranged a forum in November 2004, which was attended by representatives from all works departments and the Independent Commission Against Corruption (ICAC). The purpose of the forum was to share experience and information about what was going well and what needed to be improved. The good practices identified during the forum are summarized in Annex A as a reference guide.

Guidelines for selection of contracts for adoption of non-contractual partnering

5. In order to promote the wider use of the partnering approach in public works, the following criteria should be adopted as far as possible:

   i) For building and civil engineering capital works contracts with contract sum equal or greater than $100M; or

   ii) For E&M contracts with contract sum equal of greater than $20M; or

   iii) For other contracts such as maintenance term contracts, an officer at D2 or above rank considers that the nature and complexity of the works warrant the incorporation of non-contractual partnering.
The above requirements under (i) and (ii) may be waived for a particular contract with the approval of an officer at D2 or above rank.

Implementation

Project Charter

6. Non-contractual partnering involves establishing a Partnering Charter after the contract is awarded. The Partnering Charter is a statement of general principles agreed among the stakeholders (e.g. Employer, Consultant and Contractor) and is non-binding, while the underlying contract establishes the legal relationship between the parties. A typical Partnering Charter is given in Annex B.

7. The Partnering Charter is drawn up at the beginning of the contract during the start-up partnering workshop. Subsequent partnering meetings are held at various stages to review performance of each project according to the established objectives. The partnering meetings are also used as the means to achieve better project value through mutual recognition and development of improvement opportunities, enhance effectiveness by preventing unnecessary cost and time escalations, and identify opportunities for simplifying procedures and potential savings in time or costs, etc. An independent professional facilitator is usually engaged jointly by the project office and contractor to help plan the partnering workshops and provide facilitation services.

Start-up workshop

8. To fully utilize the start-up workshop for each contract, the project office should invite staff who may not be involved in the project but are interested in non-contractual partnering to attend the workshop as observers. This will provide additional training opportunities for staff, especially frontline staff. Also, in order to “attract” other key stakeholders (e.g. EPD, TD, Police, subcontractors, etc) to join the workshop to establish an informal communication channel at an early stage, representatives from these parties should be invited to attend the relevant part of the workshop instead of sitting through it, which usually lasts for a full day.

Sample Documents

9. Where a contract is selected for adoption of non-contractual partnering, the project department should include a note in the Notes for Tenderers in the tender documents indicating the Government’s intention to adopt non-contractual partnering. After contract award, the project department should ask the contractor in writing whether he is willing to adopt non-contractual post-award partnering and share equally the costs associated with the partnering workshops including the services of an independent professional facilitator. The standard note for inclusion in the Notes for Tenderers and sample letter to the contractor are given in Annex C.

10. A sample Form of Tender and Brief for appointing the facilitator are given in Annexes D and E respectively. The experience and qualification requirements for the facilitators are set out in paragraph 22 of the sample Brief. The quality of the
facilitator has an important bearing on the outcome of non-contractual partnering. Therefore, the facilitator should be appointed on the basis of his technical and fee proposals, and where appropriate, a two-envelope approach should be adopted in his selection.

Appointment of Facilitator

11. Currently, with the agreement of the contractor, each contract will appoint a facilitator by letting a small consultancy assignment. For a department with many contracts adopting non-contractual partnering, some administrative time and resources may be saved if the department elects to let a term consultancy to provide facilitating services for say up to 3 contracts over a given period of time. However, before adopting this non-mandatory approach, the department should first consider its limitations, such as the administrative and funding arrangements for the term consultancy, the potential complications due to project slippage or cancellation, and the implications in case the contractor refuses to work with the term consultancy consultant, etc. If this approach is adopted, references to the "Contractor" in the brief in Annex E for appointment of facilitator should be removed. Also, the standard notes for tenderers and sample letter to the contractor in Annex C should be amended accordingly. Furthermore, the Engineer for a contract covered by the scope of the term consultancy should record his justifications in file if he elects NOT to use the term consultancy.

Monitoring

12. In addition to provision of partnering workshops/meetings, project departments should set up individual project management teams to drive, manage and monitor the actual process. In addition, ETWB has set up a steering group comprising representatives from works departments as well as the ICAC, to promote the wider use of partnering in public works contracts, to oversee the implementation as well as to determine policy and strategic directions.

Promote Awareness

13. To promote the awareness of non-contractual partnering, departments may consider identifying a pool of experienced staff, so that any “new comers” could contact them for help/advice if necessary. The contractor should be encouraged to do likewise.

Environment, Transport and Works Bureau
June 2006 (Revised)
GOOD PRACTICES FOR IMPLEMENTATION OF
NON-CONTRACTUAL PARTNERING

ETWB arranged a forum in November 2004 for Works Department staff members who were working on non-contractual partnering projects. The purpose of the workshop was to share experience and information about what was going well and what needed to be improved. The following is a summary of good practices identified. In addition, some basic principles in contract administration from the standpoint of corruption prevention are reiterated in Enclosure I.

1. Common goals

Partnering enables project team members to share views about their own organisation’s objectives and to establish a set of mutual objectives that all can aim for. At first this might seem difficult to achieve as team members often assume that they have incompatible objectives (i.e. RSS team want quality but the contractor wants profit) but this is rarely the case and any differences can normally be talked through to achieve a ‘partnering charter’ with objectives acceptable to all parties.

Establishing common goals begins at the start-up workshop and continues throughout the project. It is important to establish common goals for key issues affecting the projects such as major delaying events. Common goals should also be revisited and adjusted as necessary at review workshops.

Example: CEDD’s T3 project in Shatin is being built in a densely populated area, both the project team and contractor are constantly facing challenges from external influences. As each new issue arises the project team from CEDD, the contractor and the RSS team discuss and agree a common approach.

2. Involvement of senior management

One of the major benefits of partnering is the opportunity for senior management of the key parties (e.g. D1 or above officer) to get together to discuss and resolve key issues jointly, through the Champion or Steering Group meetings. Such meetings also provide an informal forum for senior management to share perceptions of how things are going and to listen to the views of junior staff. This
helps senior staff to be better informed and provide support to the project staff in overcoming key issues.

*Example*: Open discussions at the Regular Champion Group meetings for the Central Reclamation Phase III project has helped senior management from CEDD, the contractor and RSS team to develop a relationship of cooperation, which was particularly important in dealing with the situation surrounding the judicial review process.

3. Culture of sharing and trust

No one party can succeed in delivering a project alone; often the teams are only as strong as the weakest link, which for example can be a key subcontractor. Establishing cooperation and trust amongst the parties provides the basis for a successful outcome. But this is often difficult to achieve if we have a culture of mistrust and selfish behaviour within the industry.

How can we build trust within a hard contractual relationship? The starting point is to think of how you can help the other team members achieve the mutual objectives rather than to think about how they should help you achieve your own objectives. There are plenty of ways to do this within the bounds of the contract and Government procedures, but it does need a change of attitude. By taking the first step to help others you will set an example and begin to establish a culture of sharing and trust, which will have significant benefits for the project and those involved.

Once you have taken the lead in role modelling this behaviour, be prepared to be assertive with those who remain selfish. Partnering has to be win/win.

*Example*: Getting an early mutual agreement for alternative designs proposed by the contractor gives a strong signal of the willingness to help the other side succeed. For Route 9 (formerly Route 5) in Tsuen Wan, the project team from CEDD was able to agree with the contractor the principles of the major Supplementary Agreement on his proposed alternative designs within 3 months of the start of the project.

4. Prompt problem solving and decision making

Compared to other industries, decision-making and problem solving in construction is relatively slow. The root cause is that team members often focus
on achieving decisions for the benefit of their own organisation or on allocating blame for problems on others. Joint problem solving is therefore a key to getting the best solutions, since no one party normally has all the information or the best ideas. A suggested approach to problem solving is illustrated in Enclosure II. Efficiency is also dependent upon employing good people and then giving them the freedom and authority to make decisions in the best interest of the project. Monitoring of the project performance can be done by taking a more holistic view and measuring trends against overall objectives.

Example: The Route 8 (Shatin Heights Tunnels and Approaches) project team reviewed progress of the project at Steering Group meetings using Key Performance Indicators, which provided an objective measure of performance against the mutual objectives. The review meetings also enabled the project team to focus on key issues affecting objectives and trends.

5. Streamlining procedures

There are many procedures to be followed in delivering a project. Some procedures have obvious purpose and benefit for a given project whilst others may not. Streamlining procedures is about removing activities that do not add value to the end result of the project, which we are all trying to achieve. Through cooperation, establishing trust and common objectives the parties can remove unnecessary procedures and duplication of effort. But this needs to start at the top and be undertaken as a joint improvement actions.

Example: Environmental constraints for construction of Tung Chung Road Improvement make it difficult for the contractor to carry out the construction works using conventional approaches. To assist the contractor to overcome the difficulty, the project team from HyD has worked hard to smooth out the processes required to enable the contractor to gain access, obtain storage areas and modify designs to suit the emerging situation.

6. Sharing pain and sharing gain

Projects rarely go exactly as planned throughout project delivery. Therefore, success in partnering depends a great deal upon how the team face up to the opportunities and threats along the journey together. To encourage the contractor to come forward with cost-saving alternative methods or ideas that do not detract
from the overall objectives or contractual obligations, such savings are shared equally between the Government and contractor [see ETWB TCW No. 25/2004]. Although getting the savings is not easy, they are still there for the teams that are prepared to look for them and work together to achieve them.

Sharing pain is more difficult under the conventional contractual arrangements. Nevertheless, supporting each other in difficult circumstances in whatever way is possible is a good investment in the relationship and will be returned when circumstances reverse.

**Example:** Replacement of the deodorisation equipment at To Kwa Wan and Kwun Tong Primary Sewage Treatment plants whilst keeping the plant running was a challenge that could only be met through teamwork. The teams from EMSD and the contractor treated each other as equals while facing the problem together. Both teams openly discussed issues on a regular basis and supported each other as new problems arose.

[Notes: ETWB has identified a public works project for the trial adoption of contractual partnering based on the New Engineering Contract, which permits the cost of risk to be shared between the Employer and the contractor.]

7. Involvement of more stakeholders

For many projects, the non-contractual partnering relationship typically involves the employer, main contractor and principle consultant. This can bring about significant benefit. However, greater benefits may be realised by including other major stakeholders such as key subcontractors, user groups and other Government departments that can have a significant impact on the project outcome. If these stakeholders understand better the needs and objectives of the main project team by joining the partnership, they are more likely to help to find solutions to problems that satisfy the needs of all parties.

**Example:** Tai O Harbour and Development project team invited EPD, the environmental consultant and the independent environmental checking consultant along to the start-up workshop. This has greatly enhanced the relationship between the parties in dealing with subsequent environmental issues.
General Principles for Contract Administration for Corruption Prevention

The following general principles in contract administration should be adopted for prevention of potential corruption:

a. Fairness and openness.

b. The terms and conditions of the contract should remain in full force unless varied by way of a supplementary agreement. The arrangement for controlling the issue of supplementary agreements is given in SPR Appendix 5(b).

c. Quality control of the works on site, and checks-and-balances should not be relaxed

d. Granting of extension of time applications and claim assessment etc should follow existing approval procedures and properly documented

e. The non-contractual partnering arrangement should not be used as an excuse for accepting advantage or inappropriate entertainments offered by contractors. Further guidelines are given in the circulars: CSBC No. 15/2002 on "Acceptance of advantages offered to an officer in his private capacity"; CSBC No. 16/2002 on "Advantages / entertainment offered to an officer in his official capacity and gifts and donations to a department for the benefit of staff"; and ETWB Internal Circular No. 5/2003 on "What to do if you are offered a bribe".

In addition, project departments should consider inviting the ICAC to participate in the start-up workshop for contracts where non-contractual partnering is adopted.
Communication and Problem Solving in Partnering

90% of disagreements are caused by misunderstandings. To avoid this and improve problem solving, the following general approach may be considered:

- **CLARIFY UNDERSTANDING**
  Ask others how they see the issue and the reasoning behind the position they are taking. Listen carefully.

- **DEFINE PROBLEM**
  Do this jointly, and try to get to the root causes. The real problem is often different from our first assumptions.

- **AGREE DECISION LEVEL + TIME**
  Who should solve the problem and when an answer is needed. Try to choose the lowest capable level.

- **CREATE OPTIONS**
  There is rarely one solution, seek ideas from your partners.

- **PROPOSE BEST OPTION FOR THE PROJECT**
  Keep in mind the mutual objectives. Options chosen to best meet these objectives will produce win/win outcomes over the course of the project.

- **AGREED within TIME**
  YES

- **NOT AGREED within TIME**
  RAISE TO NEXT MANAGEMENT LEVEL

**Notes:**

Any understanding or agreement reached between the senior management of the key parties should be brought promptly to the attention of the relevant frontline staff.
TYPICAL PARTNERING CHARTER

Contract No. + Contract Title
Main Participants - Employer/Main Contractor/Consultants

VISION STATEMENT
A simple statement of what the team aspires to.

MUTUAL OBJECTIVES
- This is a detailed set of objectives that can be used as a basis for performance measurement.
- Generally they cover hard objectives such as time, cost, quality, safety and environmental outcomes.
- Usually there are about 6 key objectives.

VALUES & BEHAVIOURS (Optional)
- These set out how the team would expect to work together and can be used as a basis for monitoring development of the relationship and how the team adopting partnering behaviours.
- Generally they cover soft issues such as cooperation, trust, openness, support, joint problem solving, etc.
- Usually there are about 6-8 key values and behaviours noted.

Though not essential it is often good to include a team photo or logos of the companies involved.

Signatures: All key members of the team (normally those present at the start-up partnering workshop) sign the charter.
(1) Standard notes for tenderers to communicate Government’s intent to partner

NOTES FOR TENDERERS
(These notes will NOT form part of the Contract)

Partnering

Tenderers' attention is drawn to the Employer's intention to adopt non-binding post-award project partnering with participation of all stakeholders of the project. If the non-binding post-award project partnering is implemented, the costs associated with the partnering workshops including the services of an independent professional facilitator are to be shared equally between the Employer and the successful tenderer.

(2) Standard letter to the Contractor to communicate Government’s intent to partner and to invite him to participate in project partnering

Adoption of Project Partnering

Please be informed of the Employer's intention to adopt non-binding post-award project partnering with participation of all stakeholders of the project. If the non-binding post-award project partnering is implemented, the costs associated with the partnering workshops including the services of an independent professional facilitator are to be shared equally between the Employer and the Contractor. As this initiative is to be implemented on a purely voluntary basis, please advise in writing your agreement or otherwise to the undersigned by [Date].
FORM OF TENDER

NOTES:

If a tender is being made by a partnership or an unincorporated body, the name(s) and residential address(es) of all partners should be given in the spaces provided below.

In all cases, the tenderer must insert below the number and date of the business registration certificate:

Number _______________________________ Date ______________________

To: Employer’s Representative  Contractor’s Representative

Name: Name:
Post: Post:
Department: Company:
Address: Address:

1. Having inspected the Client’s Brief to Service Providers for Designing and Facilitating Partnering Workshops and Related Services (hereinafter referred to as “the Brief”), I/we offer to deliver and complete the assignment required under the Brief commencing from a date to be notified by the Client, in conformity with the Brief and for such rates that I/we have quoted in this Form of Tender.

2. I/We agree to abide by this Tender for a period of 3 months from the date fixed for receiving the same and it shall remain binding upon me/us and may be accepted at any time before the expiry of that period.

3. I/We understand that the acceptance of this Tender by the Client shall constitute a binding contract between us. The technical information attached to the Tender, with details of the qualifications and relevant experience of the Lead Facilitator and the Co-facilitator, shall be used for the purpose of assessing the Service Provider’s competence in satisfactorily completing the assignment.

4. I/We understand that the Client is not bound to accept the lowest or any tender it may receive.

5. I/We understand that the Client reserves the right to negotiate with any tenderer about the terms of the offer.
6. I/We quote the following rates for completing the assignment as described in the Brief:

<table>
<thead>
<tr>
<th>Item No</th>
<th>Description of Service</th>
<th>Estimated Quantity</th>
<th>Rate  (HK$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Start-up Workshop</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design and facilitate a one-day start-up workshop</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Follow-up Workshops</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Design and facilitate a half-day follow-up workshop (0.5 day)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Venue for Workshops</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Provide venue for a one-day workshop for /20/ participants</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Extra over Item 3 for each additional participant</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Partnering and Introductory Meetings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Attend and facilitate a partnering meeting (average 0.5 day per meeting)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Design and facilitate an introductory meeting (0.5 day) for an average of /30/ participants</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

(Note: The estimated quantities for individual items and the number of participants for Items 3 and 6 are to be assessed by the Employer and the Contractor and adjusted accordingly prior to inviting tender.)

7. I/We understand that the rates quoted above shall be valid throughout the contract period from xxx to yyy [to be specified by the project office], and my/our remuneration will be determined by the services to be instructed by the Client and actually carried out.

8. I/We will provide ________________________________ as the Lead Facilitator and ________________________________ as the Co-facilitator for the workshops and meetings.

Signed by the Tenderer with Company Chop ________________________________

Name of Tenderer ________________________________

Date ________________________________

Registered Address of Company ________________________________

Place of Business Registration ________________________________
THE CLIENT AND THEIR REPRESENTATIVES

1. The Client requesting the Tender and technical information for designing and facilitating partnering workshops and the provision of related services are the Employer and the Contractor for the following Government works contract:

   Contract No:
   Contract Title:
   Employer:
   Contractor:
   Commencement Date:
   Contract Period:

2. The Employer’s Representative for this assignment is ___________ or such other person as may be appointed from time to time by the Employer and notified to the Contractor and the Service Provider in writing.

3. The Contractor’s Representative for this assignment is ___________ or such other person as may be appointed from time to time by the Contractor and notified to the Employer and the Service Provider in writing.

4. The Service Provider is the person, firm or company whose tender for this assignment has been accepted by the Client.

BACKGROUND AND OBJECTIVES OF THE ASSIGNMENT

5. The Client is determined to foster a partnering spirit for the project team which includes the staff of the Employer, Contractor, consultants, sub-contractors and suppliers involved in the Government works contract through partnering workshops and meetings. The partnering workshops and meetings are intended to achieve enhanced mutual understanding, effective communication and co-operation, and to enhance project value through the involvement and commitment of all parties concerned.

6. The workshops and meetings are to be designed to facilitate participants to understand better project objectives; focus on creative co-operation; avoid adversarial confrontation; build working relationships based on mutual respect, trust and integrity; establish a more dynamic project organizational structure and clear line of communication; and develop a formal problem solving and dispute avoidance mechanism. The workshops and meetings will also be used as the means to achieve better project value through mutual recognition and development of improvement opportunities; enhance effectiveness by preventing unnecessary cost and time escalations, delays, or unresolved issues or problems; reduce the project time and improve quality; clarify common objectives; clarify project requirements; and identify opportunities for simplifying procedures and potential savings in
SERVICES TO BE PROVIDED BY THE SERVICE PROVIDER

Start-up Workshop

7. The Service Provider will initially be required to design and facilitate the start-up workshop, to be held in __________. The Service Provider shall use facilitation skills and all other necessary techniques to achieve the objectives of the assignment, and to ensure full commitment of all participants. Upon completion of the start-up workshop, the Service Provider shall provide a full report on all points agreed during the workshop with a follow-up action plan and post-workshop evaluation system. The Service Provider shall also prepare 3 copies of the project charter (with photo frames provided) to be signed up by the participants.

8. The Service Provider shall facilitate participants to develop an evaluation mechanism for regular monitoring and evaluating the mutual project objectives, improvement initiatives and partnering relationships. Such mechanism shall record the project team’s assessed performance for the Government works contract to encourage continuous improvement.

9. The Service Provider must perform the work with the degree of skill and care required by good and sound professional procedures and currently available standards. He shall take all necessary steps to rectify any part of his work that does not meet professional standards and/or the Client’s requirements.

10. The start-up workshop shall be designed and conducted by the Lead Facilitator and the Co-facilitator using the most up-to-date partnering methodologies worldwide. The Lead Facilitator is the person named in the Form of Tender to be the Lead Facilitator for this assignment. The Co-facilitator is the person named in the Form of Tender to be the Co-facilitator for this assignment. The facilitators shall conduct the workshop in a structured manner using a participatory and collaborative approach. The outcome of the workshop shall be action-oriented. At least one of the facilitators shall be Cantonese-speaking, otherwise the Service Provider may need to provide translation service at his own expenses.

11. The rate quoted for designing and facilitating the start-up workshop shall cover the services of the two facilitators for the workshop and the pre-workshop discussions and meetings, secretarial service at the workshop, preparation of the full report and the project charter, and the supply of worksheets, workbooks, relevant references and literature and other workshop material necessary for the effective delivery of the workshop.

12. The Service Provider shall be required to provide the venue for the workshop. The rate quoted for providing the venue for a one-day workshop shall cover the rent and other charges for the venue, lunch and coffee breaks and the provision of necessary audio and visual equipment and stationery such as paper, pencils, transparencies, markers, flip charts, TV, LCD projector, overhead projector, etc. The duration for the start-up workshop shall be from 9:00 a.m. to 6:00 p.m. (inclusive of 1 hour lunch break).

13. The facilitators for the workshop shall meet with key project team members in order to identify major concerns and risks involved with key stakeholders before the workshop. During such meetings, the facilitators shall clarify all pre-workshop concerns and issues and prepare all parties for the workshop. The Client shall forward relevant details of the
workshop, e.g. names of participants, scope and progress of the Government works contract, etc. to the Service Provider before the workshop.

14. Participants will mainly be key members of the project team including staff of the Employer, Contractor, consultants, sub-contractors and suppliers. The Service Provider shall prepare and agree the scope, format, structure, agenda, contents and handout with the Client prior to the workshop. The Service Provider shall provide each of the participants with a copy of the agenda and handout at the commencement of the workshop. The Service Provider shall also prepare and supply sufficient worksheets, workbooks, relevant references and literatures and workshop equipment and stationery, etc. as necessary for effective delivery of the workshop. The facilitators shall arrange for their own computer and printer for the workshop.

15. Within seven days from the workshop completion date, the Service Provider shall furnish to the Client four (4) copies of the post-completion report (in both hard copy and electronic format) for the workshop containing the information as mentioned in clause 7 of this Brief. In addition, the post-completion report shall evaluate the effectiveness of the workshop and make recommendations for future action. It shall also contain the salient points of the discussions, findings and conclusions made during the workshop.

Follow-up Workshops, Partnering Meetings and Introductory Meetings

16. In addition to designing and facilitating the start-up workshop, the Service Provider may be required to design and facilitate follow-up workshops and partnering meetings for the project team, and introductory meetings for other staff members of the Client. However, the services for follow-up workshops, partnering meetings and introductory meetings may only be required when instructed by the Client, and the Service Provider shall have no claims against the Client should these workshops and meetings are not required for any reasons.

17. The rate quoted for designing and facilitating the follow-up workshops shall cover the services of the two facilitators (i.e. the Lead Facilitator and the Co-facilitator) for the workshops and the pre-workshop discussions and meetings, secretarial service at the workshops, preparation of the workshop reports, and the supply of worksheets, workbooks, relevant references and literature and other workshop material necessary for the effective delivery of the workshops.

18. The rate quoted for attending and facilitating partnering meetings shall cover the service of either the Lead Facilitator or the Co-facilitator for the meeting with an evaluation of the effectiveness of the meeting and a recommendation for future action, as well as the secretarial service for the partnering meetings.

19. The rate quoted for designing and facilitating introductory meetings shall cover the service of a speaker (who shall be the Lead Facilitator for the workshops) for the meeting and necessary pre-meetings with key members of the Client, and the supply of worksheets, workbooks, relevant references and literature and other material necessary for the effective delivery of the meetings, as well as the secretarial service for the meetings and preparation of any reports as requested by the Client.

20. The venue for the follow-up workshops, partnering meetings and introductory meetings will be approved by the Client.
SPECIALIST AND SUPPORTING SERVICES

21. The Service Provider shall provide all specialist and non-specialist services deemed necessary for the satisfactory completion of the assignment.

22. Facilitators for the workshops shall be highly trained in facilitation techniques. The Lead Facilitator shall have at least 3 years of practical relevant experience in conducting partnering workshops. Both facilitators should preferably have undergone training in group psychology and group dynamics, and have experience in facilitating partnering workshops for organizations in Hong Kong.

REMUNERATION AND PAYMENT TERMS

23. The Service Provider shall be remunerated for the services provided in accordance with the rates quoted in the Form of Tender. Payment to the Service Provider shall be made after satisfactory completion of each service including submission of the report to the reasonable satisfaction of the Client. The rates quoted in the Form of Tender shall be all inclusive rates. They shall also cover all profits, insurance, travelling, accommodation, food, subsistence allowance, price fluctuation and other expenses (e.g. royalties for use of copyright or patented material etc.) necessary and required for the assignment.

24. The Employer and the Contractor shall each be liable for half of the remuneration properly due to the Service Provider for the services provided by the Service Provider.

25. For each payment for services provided, the Service Provider shall separately invoice the Employer and the Contractor for half of the remuneration quoted in the Form of Tender. The invoices to the Employer or the Contractor shall be certified by the Employer’s Representative or as the case may be the Contractor’s Representative within 7 calendar days if the services are considered satisfactorily completed, and be settled by the Employer or as the case may be the Contractor within another 21 calendar days.

COPYRIGHT

26. Subject to Clause 27, the copyright and all other intellectual property rights in the reports, minutes, documents or other materials prepared produced or created at the workshops and meetings or otherwise prepared produced or created by the Service Provider for the assignment shall vest in the Employer and the Contractor jointly immediately upon their coming into existence. Upon completion of the services, the Service Provider shall deliver to the Employer and the Contractor all copies of such reports, minutes, documents or other materials.

27. The Service Provider shall draw to the attention of the Client those workshop materials that are under licence or in respect of which there is a pre-existing copyright or patent or any other restriction whatsoever affecting the use of the same and procure, at its sole costs and expense, the grant of irrevocable, royalty-free, worldwide sub-licensable licences for the benefits of the Client its authorized users assigns and successors by the relevant third parties in respect of such materials rights for all purposes contemplated by the assignment.
28. The Service Provider shall at its own costs and expense do and execute any further things and documents (or procure that the same be done or executed) as may be required by the Employer and/or the Contractor to give full effect to Clauses 26 and 27 and shall provide all such documents and materials to the Employer and/or the Contractor within 14 days of the date of the written request of the Employer and/or the Contractor or such longer period as may be agreed by the Employer and/or the Contractor in writing.

29. The Service Provider warrants that:

   a) it has full right capacity power and authority to enter into this contract including without limitation the grant of the rights referred to in Clause 26 upon the terms and conditions of this contract;

   b) the exercise of any rights granted under this contract by the Employer and the Contractor and their authorized users assigns and successors will not infringe any intellectual property rights of any persons; and

   c) in respect of any third party materials used which will be incorporated as part of the workshop materials, the Service Provider has or shall have a valid and continuing licence under which it is entitled to use and sub-license the relevant materials for the Employer and the Contractor and their authorized users assigns and successors to use such materials for all (or any one or more) of the purposes contemplated by this contract.

The Service Provider shall indemnify and keep the Employer and the Contractor fully and effectively indemnified against all actions, costs, claims, demands, damages, expenses and liabilities of whatsoever nature for the infringement of any copyright or other intellectual property rights of any third party arising out of or in connection with the use and/or possession of any of the materials supplied by the Service Provider. The provisions of this clause shall survive the termination of this contract (howsoever occasioned) and shall continue in full force and effect notwithstanding such termination.

CONFIDENTIALITY

30. The Service Provider shall treat all information (including without limitation any personal data as defined in the Personal Data (Privacy) Ordinance, Cap.486) provided by the Client to the Service Provider for this assignment as confidential and shall not disclose or divulge it to any person (except to its own employees on a need to know basis) without the Client’s prior written consent. Provided that this clause shall not extend to any information which was rightfully in the possession of the Service Provider prior to the commencement of this assignment or which is already in the public knowledge otherwise than as a result of a breach of this clause.

31. The Service Provider shall take all appropriate measures to ensure security of such information and shall in all respects comply with the provisions of the Personal Data (Privacy) Ordinance, Cap. 486.

32. The Service Provider shall indemnify and keep the Client fully and effectively indemnified against all actions, costs, claims, demands, damages, expenses and liabilities of whatsoever nature arising from or incurred by reason of any actions and/or claims made
in respect of

a) any breach of confidence by the Service Provider or any of its employees or agents; and

b) any breach of the provisions of the Personal Data (Privacy) Ordinance, Cap. 486 which would not have arisen but for the negligence or omission of the Service Provider.

33. The provisions of Clauses 30, 31 and 32 shall survive the termination of this contract (howsoever occasioned) and shall continue in full force and effect notwithstanding such termination.

CANCELLATION OF WORKSHOPS OR MEETINGS

34. The Client shall have the right to cancel a workshop or a meeting by giving 7 days written notice. In the event that a typhoon warning signal number 8 or above or black rainstorm warning signal is hoisted on the date of a workshop or a meeting, the workshop or meeting will automatically be cancelled. If a workshop or a meeting is cancelled under the above conditions or any other unforeseeable conditions not due to the Service Provider’s own fault, the Service Provider will be reimbursed for the actual expenses incurred, such as non-refundable deposit paid for the venue, and the Service Provider shall have no other claims against the Client.

DECLARATION OF INTEREST

35. The Service Provider shall declare any involvement or interest which he considers to be in real or apparent conflict with the duties to be performed for the assignment.

OTHER TERMS

36. The tenderer for the assignment shall submit with his tender a technical information for the purpose of assessing the tenderer’s competence in satisfactorily completing the assignment.

37. Upon acceptance of a tender by the Client, the Client shall confirm this to the successful tenderer in writing. The Acceptance Letter, this Brief and the Form of Tender shall be construed as a binding contract valid for the whole contract period of the Government works contract. The Client shall confirm the preferred date of a workshop or a meeting to the Service Provider in writing. Any failure of the Service Provider to provide the service after the above written confirmation may render him liable for the damages incurred by the Client in this connection.

38. The Client shall have the right to withhold payment in whole or in part should the Service Provider fail to meet the requisite professional standards and the Client’s requirements.

39. Once the Service Provider’s tender has been accepted by the Client, the Lead Facilitator and the Co-facilitator shall not be changed without the prior written approval from the Client.
ENQUIRIES FOR CLARIFICATION AND DETAILS

40. Please contact the Employer’s Representative or the Contractor’s Representative at the following addresses and contact numbers:

<table>
<thead>
<tr>
<th>Employer’s Representative</th>
<th>Contractor’s Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Name:</td>
</tr>
<tr>
<td>Address:</td>
<td>Address:</td>
</tr>
<tr>
<td>Tel No:</td>
<td>Tel No:</td>
</tr>
<tr>
<td>Fax No:</td>
<td>Fax No:</td>
</tr>
<tr>
<td>E-mail:</td>
<td>E-mail:</td>
</tr>
</tbody>
</table>
Revised Appendix E

Special Condition of Tender to be incorporated into tender documents for contracts requiring the contractor to have obtained the Certification

(1) The tenderer shall, upon written request by the 1st Architect/Engineer designate issued in accordance with General Conditions of Tender Clause 25, submit to the 1st Architect/Engineer/designate:

EITHER

(a) a copy of his ISO 9001:2000 certificate or ISO 9001:2008 certificate acceptable to the Employer showing the scope of certification and a statement either:

(i) confirming that there is no area/aspects in the Contract which his quality system specifically excludes; or

(ii) disclosing the areas/aspects in the Contract which his quality system specifically excludes.

OR

(b) where the tenderer due to circumstances beyond his control has not obtained ISO 9001:2000 or ISO 9001:2008 certification:

(i) a copy of the confirmation from a certification body acceptable to the Employer, stating that a full review of the Quality Manual of the tenderer's Hong Kong office has been carried out in Hong Kong and such Quality Manual has been found to be in conformity with the requirements of the ISO 9001:2000 or ISO 9001:2008 standard; and

(ii) an undertaking that within three months of the acceptance of tender, he would book with the certification body the date of audit for the ISO 9001:2000 or ISO 9001:2008 certification; with detailed documented quality system procedures ready at the time of booking.

(2) Where the tenderer is a joint venture, he shall, upon written request by the 1st Architect/Engineer designate issued in accordance with General Conditions of Tender Clause 25, submit to the 1st Architect/Engineer designate:

(a) a statement declaring that he shall implement the quality system of one of his participants or shareholders and specifying which one;
(b) a copy of the written notification to the certification body of the specified participant or shareholder that the joint venture shall implement the quality system of the specified participant or shareholder and the written agreement of all participants or, as the case may be, shareholders of the joint venture that the activities of the joint venture shall be subject to the surveillance of the certification body; and

(c)(i) a copy of his specified participant or shareholder's ISO 9001:2000 or ISO 9001:2008 certificate acceptable to the Employer showing the scope of certification and a statement either:

(A) confirming that there is no area/aspect in the Contract which the specified participant or shareholder's quality system specifically excludes; or

(B) disclosing the areas/aspects in the Contract which the specified participant or shareholder's quality system specifically excludes.

OR

(ii) where the specified participant or shareholder due to circumstances beyond his control has not obtained the ISO 9001:2000 or ISO 9001:2008 certification:

(A) a copy of the confirmation from a certification body acceptable to the Employer, stating that a full review of the Quality Manual of the specified participant or shareholder's Hong Kong office has been carried out in Hong Kong and such Quality Manual has been found to be in conformity with the requirements of ISO 9001:2000 or ISO 9001:2008 standard; and

(B) an undertaking that within three months of the acceptance of tender, the specified participant or shareholder would book with the certification body the date of audit for the ISO 9001:2000 or ISO 9001:2008 certification; with detailed documented quality system procedures ready at the time of booking.

(3) The submission under sub-clause (2)(a) of this Special Conditions of Tender, if applicable, shall form part of the Contract.

# For use before 15 November 2010
1 Delete as appropriate.
Special Condition of Contract to be incorporated into tender documents for contracts requiring the contractor to have obtained ISO 9000 certification

SCC - ISO 9000 Certification for the Contractor

(1) Within three months of the acceptance of the Tender, the Contractor shall book with a certification body acceptable to the Employer the date of audit for the ISO 9001:2000\(^{b}\) or ISO 9001:2008 certification; with detailed documented quality system procedures ready at the time of booking. If the Contractor is a joint venture, the date of audit for the ISO 9001:2000\(^{b}\) or ISO 9001:2008 certification shall mean that of the specified participant or shareholder in the statement submitted in accordance with SCT [ § ]\(^{1}\).

(2) Notwithstanding any other provisions in the Contract, compliance with sub-clause (1) of this Clause shall be a condition precedent to the Contractor's entitlement to any payment or any further payment as the case may be under the Contract.

(3) Sub-clauses (1) and (2) of this Clause are not applicable if the Contractor or, where the Contractor is a joint venture, its specified participant or shareholder has already obtained the ISO 9001:2000\(^{b}\) or ISO 9001:2008 certification on or before the date of acceptance of the Tender.

\(^{b}\) For use before 15 November 2010

\(^{1}\) Insert the clause number of the SCT dealing with ISO 9000 Certification for the Contractor.
Special Condition of Contract to be incorporated into tender documents for contracts where the main contractor is required to enter into written sub-contracts with the contractors on the categories and/or groups of the Lists shown in Appendix C

**SCC – ISO 9000 Certification for Sub-contractor**

General Conditions of Contract Clause 4 is amended by adding the following:

(7) The approved listed contractor to be engaged in accordance with sub-clause (6) of this Clause for [specify the relevant categories and/or groups of works]:

shall either:

(a) have obtained an ISO 9001:2000 or ISO 9001:2008 certificate acceptable to the Employer with the scope of certification acceptable to the Architect/Engineer; or

(b) (i) have obtained a confirmation from a certification body acceptable to the Employer, stating that a full review of the Quality Manual of its Hong Kong office has been carried out in Hong Kong and such Quality Manual has been found to be in conformity with ISO 9000 the requirements of the ISO 9001:2000 or ISO 9001:2008; and

(ii) submit an undertaking to the Engineer that within three months of the execution of the sub-contract, it would book with the certification body the date of audit ISO 9001:2000 or ISO 9001:2008 certification; with detailed documented quality system procedures ready at the time of booking.

(8) (a) If the works specified in sub-clause (7) of this Clause are to be carried out by the Contractor itself, in which case the Contractor must be listed in the relevant category and/or group, it shall within three months of the acceptance of Tender, book with a certification body acceptable to the Employer the date of audit for the ISO 9001:2000 or ISO 9001:2008 certification, with detailed documented quality system procedures ready at the time of booking. If the respective works are to be carried out through a sub-contract by an approved listed contractor, then the Contractor shall procure that the approved listed contractor shall carry out such booking within three months of execution of the sub-contract.

(b) Notwithstanding any other provisions in the Contract, compliance with sub-clause (8)(a) of this Clause shall be a condition precedent to the Contractor’s entitlement to any payment, or any further payment, as the case may be, for the works specified in sub-clause (7) of this Clause under the Contract.

(c) Sub-clauses (8)(a) and (8)(b) of this Clause are not applicable if the Contractor has already obtained ISO 9001:2000 or ISO 9001:2008 certification on or before the acceptance of the Tender or, as the case may be, the approved listed contractor has already obtained the ISO 9001:2000 or ISO 9001:2008 certification on or before the date of execution of the sub-contract.

# For use before 15 November 2010
Special Condition of Tender to be incorporated into tender documents of design and build contracts

SCT - Contractors under suspension

(a) If the tenderer or, if the tenderer is a partnership or an unincorporated or incorporated joint venture, any participant of the partnership or unincorporated joint venture or shareholder of the incorporated joint venture is under suspension from tendering for *any of* all of the following category [or categories] of public works, his tender will not be considered unless the suspension is lifted by the relevant works department or the Development Bureau by the date set for the close of tender, or if this has been extended, the extended date.

[list the category or categories of public works]

Provided that the tender will still be considered if the suspension is due solely to the failure of the tenderer to obtain ISO 9001:2000# or ISO 9001:2008 certification.

(b) If the tenderer or, if the tenderer is a partnership or an unincorporated or incorporated joint venture, any participant of the partnership or unincorporated joint venture or shareholder of the incorporated joint venture is under voluntary suspension from tendering for *any of* all of the following category [or categories] of public works at the date of tender invitation but who subsequently revokes the voluntary suspension without agreement in writing from either the relevant works department or the Development Bureau, its tender will not be considered.

[list the category or categories of public works]

Provided that the tender will still be considered if the voluntary suspension is undertaken by the tenderer due solely to its failure to obtain the ISO 9001:2000# or 9001:2008 certification.

* Delete whichever is inappropriate

# For use before 15 November 2010
Particular Specification for Prescribed Mix Concrete with 100% Recycled Coarse Aggregate

Scope
This Particular Specification is only applicable to concrete of 20 MPa grade strength.

Application
Concrete with 100% recycled coarse aggregate shall only be used in benches, stools, planter walls, concrete mass walls and other minor concrete structures where specifically permitted in the contract.

General Requirements
Concrete shall comply with Section 16 of GS and the additional requirements given below. In case of discrepancies, the requirements in this Particular Specification shall take precedence.

Recycled Coarse Aggregates
Recycled Coarse Aggregate shall be produced by crushing old concrete and shall meet the requirements in Table 1.

Fine Aggregates
Fine aggregate shall be within the limits of grading M in BS 882.

Recycled Coarse Aggregate shall not be used.

Grading
The grading of the coarse aggregates shall comply with the limits of Table 3 of BS 882:1992 for single-sized 20 mm and 10 mm aggregates.

Mix Proportions
Concrete shall be mixed in the following proportions:
Ordinary Portland Cement : 100 Kg
Fine Aggregate : 180 Kg
20 mm Coarse Aggregate : 180 Kg
10 mm Coarse Aggregate : 90 Kg

Workability
Recycled coarse aggregates have to be thoroughly wetted before being used.

The concrete shall have a slump of 75 mm when it is ready to be compacted to its final position.

Test Cubes
4 concrete cubes shall be made on each concreting day, 2 for crushing tests at 7 days and another 2 at 28 days.

Minimum
The minimum concrete cube strength shall be 14 MPa and 20 MPa at 7
Strength and 28 days respectively.

Trials Laboratory trials shall be conducted to confirm that the strength requirement can be met before the prescribed mix is used in the works. The 28 day strength of each of the 3 cubes in the trial shall not be less than 26 MPa.

Table 1

<table>
<thead>
<tr>
<th>Mandatory Requirements</th>
<th>Limits</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum dry particle density (kg/m³)</td>
<td>2000</td>
<td>BS 812: Part 2</td>
</tr>
<tr>
<td>Max. water absorption</td>
<td>10 %</td>
<td>BS 812: Part 2</td>
</tr>
<tr>
<td>Max. content of wood and other material less dense than water</td>
<td>0.5 %</td>
<td>Manual sorting in accordance with BRE Digest 433</td>
</tr>
<tr>
<td>Max. content of other foreign materials (e.g. metals, plastics, clay lumps, asphalt and tar, glass etc)</td>
<td>1 %</td>
<td></td>
</tr>
<tr>
<td>Max. fines</td>
<td>4 % - Note 1</td>
<td>BS 812: Section 103.1</td>
</tr>
<tr>
<td>Max. content of sand (&lt;4mm) (% m/m)</td>
<td>5 %</td>
<td>BS 812: Section 103.1</td>
</tr>
<tr>
<td>Max. content of sulphate (%m/m)</td>
<td>1%</td>
<td>BS 812: Part 118</td>
</tr>
<tr>
<td>Flakiness index</td>
<td>40 % - Note 2</td>
<td>BS 812: Section 105.1</td>
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<tr>
<td>10% fines test</td>
<td>100 kN - Note 3</td>
<td>BS 812: Part 111</td>
</tr>
<tr>
<td>Grading</td>
<td>Table 3 of BS 882:1992</td>
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</tr>
<tr>
<td>Maximum Chloride content</td>
<td>Table 7 of BS 882 – 0.05% by mass of chloride ion of combined aggregate – Note 4</td>
<td></td>
</tr>
</tbody>
</table>

Note 1 Filler (<0.063mm) should be less than 2% in the RILEM Specification. BS 882 says that fines passing 75µm sieve shall not exceed 4%. The latter requirement is easier to satisfy.
Note 2  Clause 16.08 (3) of the General Specification for Civil Engineering Works (GS) states that flakiness shall not exceed 35% whereas BS 882 states that it shall not exceed 40% for crushed rock or crushed gravel.

Note 3  Clause 16.08(3) of GS states that the 10% fines value shall be at least 100kN. BS 882 states that the 10% fines value to be 50kN for concrete not subjected to wearing. BRE Digest 433 states that 70kN is achievable in recycled aggregate derived from brickwork, and 100kN for those derived from crushed concrete. In recent tests carried out on recycled aggregates derived from old concrete, 100kN can be satisfied.

Note 4  BRE Digest 433 recommends to determine acid soluble chloride rather than water soluble chloride.

**Particular Specification for Designed Mix Concrete with 20% Recycled Coarse Aggregate**

**Scope**  This Particular Specification is only applicable to designed mix concrete of 25-35 MPa grade strength.

**Application**  Concrete with 20% recycled coarse aggregates is for general application except in water retaining structures or otherwise precluded in the contract.

**Cementitious Material**  Only ordinary Portland Cement to BS 12 shall be used.

**Coarse Aggregates**  Coarse aggregates shall consist of 80% natural rock aggregates as defined in Cl. 16.08(3) of GS and 20% recycled coarse aggregates.

- Recycled Coarse Aggregates shall be produced by crushing old concrete and shall meet the requirements in Table 1.
- Tests on recycled aggregates from a particular source shall be carried out at weekly intervals to check compliance with Table 1.

**Fine Aggregates**  Fine aggregates shall be as defined in Cl.16.08(2) of GS.

- Fine aggregates recycled from old concrete shall not be used.

**Grading**  The grading of the coarse aggregates shall comply with the limits of Table 3 of BS 882:1992 for single-sized 20 mm and 10 mm aggregates.

**Workability**  *Recycled coarse aggregates have to be thoroughly wetted before being used.*

- The concrete shall have a minimum slump of 75 mm when it is ready to be compacted to its final position.
Laboratory mix trials and plant trials

Before any concrete is produced for use in the works, laboratory trials and plant trials must be performed in accordance with Cl. 16.25 and Cl. 16.24 of GS respectively.

Compliance Criteria

Compliance criteria shall be as in Cl. 16.27 and Cl. 16.26 of GS respectively if 150 mm cubes are used.

If 100 mm cubes are used, the modified compliance criteria will apply.

Concrete batching

Recycled aggregates have to be stored in separate stockpiles or silos to prevent inadvertent mixing with natural aggregates.

A separate compartment must be provided for recycled aggregates in the batching plant.

Table 1

<table>
<thead>
<tr>
<th>Mandatory Requirements</th>
<th>Limits</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum dry particle density (kg/m³)</td>
<td>2000</td>
<td>BS 812: Part 2</td>
</tr>
<tr>
<td>Max. water absorption</td>
<td>10 %</td>
<td>BS 812: Part 2</td>
</tr>
<tr>
<td>Max. content of wood and other material less dense than water</td>
<td>0.5 %</td>
<td>Manual sorting in accordance with BRE Digest 433</td>
</tr>
<tr>
<td>Max. content of other foreign materials (e.g. metals, plastics, clay lumps, asphalt and tar, glass etc)</td>
<td>1 %</td>
<td></td>
</tr>
<tr>
<td>Max. fines</td>
<td>4 % - Note 1</td>
<td>BS 812: Section 103.1</td>
</tr>
<tr>
<td>Max. content of sand (&lt;4mm) ( % m/m)</td>
<td>5 %</td>
<td>BS 812: Section 103.1</td>
</tr>
<tr>
<td>Max content of sulphate (%m/m)</td>
<td>1%</td>
<td>BS 812: Part 118</td>
</tr>
<tr>
<td>Flakiness index</td>
<td>40 % - Note 2</td>
<td>BS 812: Section 105.1</td>
</tr>
<tr>
<td>10% fines test</td>
<td>100 kN - Note 3</td>
<td>BS 812: Part 111</td>
</tr>
<tr>
<td>Grading</td>
<td>Table 3 of BS 882:1992</td>
<td></td>
</tr>
<tr>
<td>Maximum Chloride content</td>
<td>Table 7 of BS 882 – 0.05% by mass of</td>
<td></td>
</tr>
</tbody>
</table>
chloride ion of combined aggregate – Note 4

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