CHAPTER 5

CONTRACT DOCUMENTS

The parts of the PAH shown in blue and bold should only be updated by Works Branch of Development Bureau.

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<th>Rev</th>
<th>Issue Date</th>
<th>Amendment Incorporated</th>
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<tr>
<td>First Issue</td>
<td>December 2016</td>
<td>NA</td>
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SYNOPSIS

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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<tr>
<td>AAR</td>
<td>Alkali-Aggregate Reaction</td>
</tr>
<tr>
<td>BQ</td>
<td>Bills of Quantities</td>
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<tr>
<td>CCC</td>
<td>Conditions of Contract Committee</td>
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<tr>
<td>CCGO</td>
<td>Central Cyber Government Office</td>
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<tr>
<td>CCIP</td>
<td>Contractor Controlled Insurance Programme</td>
</tr>
<tr>
<td>CEDD</td>
<td>Civil Engineering and Development Department</td>
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<tr>
<td>CPFS</td>
<td>Contract Price Fluctuation System</td>
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<tr>
<td>C&amp;D</td>
<td>Construction and Demolition</td>
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<tr>
<td>DCED</td>
<td>Director of Civil Engineering and Development</td>
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<tr>
<td>DEVB</td>
<td>Development Bureau</td>
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<tr>
<td>DEVB TCW No.</td>
<td>DEVB Technical Circular (Works) No.</td>
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<tr>
<td>DLO</td>
<td>District Lands Office</td>
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<tr>
<td>DRA</td>
<td>Dispute Resolution Adviser</td>
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<tr>
<td>EDP</td>
<td>Electronic Dissemination Package</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<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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<tr>
<td>ER</td>
<td>Employer's Requirements</td>
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<tr>
<td>ETWB</td>
<td>Environment, Transport and Works Bureau</td>
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<tr>
<td>ETWB TCW No.</td>
<td>ETWB Technical Circular (Works) No.</td>
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<td>FoT</td>
<td>Form of Tender</td>
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<tr>
<td>FC No.</td>
<td>Financial Circular No.</td>
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<tr>
<td>GCC</td>
<td>General Conditions of Contract for Civil Engineering Works (1999 Edition)</td>
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<tr>
<td>CGE/S&amp;T</td>
<td>Chief Geotechnical Engineer/Standards and Testing</td>
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<tr>
<td>GCT</td>
<td>General Conditions of Tender</td>
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<td>GEO</td>
<td>Geotechnical Engineering Office</td>
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<td>HATS</td>
<td>Harbour Area Treatment Scheme</td>
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<td>HIA</td>
<td>Hazard Identification Activity</td>
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<tr>
<td>Abbreviation</td>
<td>Term</td>
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<td>HyD</td>
<td>Highways Department</td>
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<td>LAD(Works)/DEVB</td>
<td>Legal Advisory Division (Works) of Development Bureau</td>
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<td>LandsD</td>
<td>Lands Department</td>
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<td>LD’s</td>
<td>Liquidated Damages</td>
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<td>LWBTC No.</td>
<td>Lands and Works Branch Technical Circular No.</td>
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<td>MM</td>
<td>Method of Measurement</td>
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<td>NTT</td>
<td>Notes to Tenderers</td>
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<td>OCIP</td>
<td>Owner Controlled Insurance Programme</td>
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<td>OGCIO</td>
<td>Office of the Government Chief Information Officer</td>
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<td>PAH</td>
<td>Project Administration Handbook for Civil Engineering Works</td>
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<tr>
<td>PES</td>
<td>Pre-work Exercise and Safety</td>
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<td>PFC</td>
<td>Public Fill Committee</td>
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<tr>
<td>PPF</td>
<td>Price Fluctuation Factor</td>
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<tr>
<td>PFSES</td>
<td>Pay for Safety and Environment Scheme</td>
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<td>PFSS</td>
<td>Pay for Safety Scheme</td>
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<tr>
<td>PII</td>
<td>Professional Indemnity Insurance</td>
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<td>PRC</td>
<td>People’s Republic of China</td>
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<td>Public Works Programme</td>
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<td>Public Works Laboratory</td>
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<td>QPME</td>
<td>Quality Powered Mechanical Equipment</td>
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<td>SCC</td>
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<td>Standing Committee on Concrete Technology</td>
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<td>SCT</td>
<td>Special Conditions of Tender</td>
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<tr>
<td>SDEV</td>
<td>Secretary for Development</td>
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<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>
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<tr>
<td>S for W</td>
<td>Secretary for Works</td>
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<tr>
<td>SMP</td>
<td>Sub-contractor Management Plan</td>
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<tr>
<td>SoR</td>
<td>Schedule of Rates</td>
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<tr>
<td>SPID</td>
<td>Standard Phraseology of [Bill of Quantities] Item Descriptions</td>
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<tr>
<td>SPR</td>
<td>Stores and Procurement Regulations</td>
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<tr>
<td>SRM</td>
<td>Systematic Risk Management</td>
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<tr>
<td>SSC</td>
<td>Site Safety Cycle</td>
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<tr>
<td>Abbreviation</td>
<td>Term</td>
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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>
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</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 DEVB TCW No. 4/2015)

Paragraph 10 stipulates 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 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, Appendices 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 letters to tenderers) (see Paragraphs 5.2, 6.14.4, 7.2.1, 7.3, 7.6 & 8.1.1 of PAH Chapter 6).

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 Paragraph 8.1.1 of PAH Chapter 6).

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 Paragraph 5.2 of PAH Chapter 6).

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 1.5.1 of this Chapter).
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 Contract

The Administrative Procedures issued under DEVB TCW No. 4/2015 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 DEVB shall be obtained if the Procedures are not to be followed because of special consideration given to 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

(Ref.: SDEV’s memo ref. (026NM-01-3) in DEVB(W) 546/17/01 dated 25.6.2010)

Commonly used GCT clauses to be included in the Conditions of Tender are given in the Library of General Conditions of Tender promulgated in ETWB TCW No. 26/2004 which shall be used for all works contracts other than design and build contracts.

The GCTs 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/memos are promulgated which may affect the library content. For the latest version, please refer to the DEVB website.

The standard Conditions of Tender GCT 4 requires tenderers to submit the Form of Tender in hard copy format fully completed, signed, witnessed and dated. Such submission is also governed by GCT 21 – Submission of Essential Requirements so that failure to comply with the requirements shall render the tender invalid.

As the Form of Tender without being witnessed and/or dated will not affect the legal validity of the tender and has no effect on the tender evaluation, it is recommended to amend GCT 4(1)(a)(i) as shown at Appendix 5.33 so that the requirement for the Form of Tender to be witnessed and dated is not set out as a mandatory requirement.

The GCT and paragraph to be included in the “Instructions to Applicants” section of prequalification documents as to tenderer’s consent and authorization on conviction records are promulgated in Annex A and Annex B of SDEV’s memo ref. DEVB(W) 510/10/01 dated 3.12.2012 and Appendix B of Administrative Procedure 2015 for Use with General Conditions of Contract for Design and Build Contracts 1999 Edition, for all public works contracts requiring tenderers / prequalification applicants to give consent to collection of information on previous convictions.

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 the Library of Special Conditions of Tender promulgated in ETWB TCW No. 26/2004. In addition, any SCT 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 project office may use the SCTs promulgated 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.

The 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/memos 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 of 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.

SDEV promulgated a pilot scheme, commencing on 1 February 2014, introducing an additional index on Composite Selected Labour Trades for all public works contracts having a contract period of 48 months or less, including term contracts. The standard format for the Schedule of Proportions should be amended accordingly. Please see SDEV’s memo ref. DEVB(PS) 107/3 dated 20.1.2014 for details.

3.3 LIQUIDATED DAMAGES
(Ref.: ETWB TCW No. 4/2003)

3.3.1 General Principle

Liquidated damages (LD's) is a sum agreed by the Employer and the Contractor in advance as the amount to be paid by or deducted from payments to the Contractor as damages if the Contractor breaches the contract by failing to complete the work in time. A provision for LD's is enforceable if the amount fixed is a genuine
pre-estimate, judged at the time the contract is entered into, of the loss likely to arise from the anticipated breach. The Employer does not need to prove actual damages but LD's are not enforceable if imposed as a penalty. Guidelines for distinguishing between liquidated damages and a penalty are stated in the leading case of *Dunlop Pneumatic Tyre Company Limited v New Garage and Motor Company Limited* [1914-15] All ER 739. Reference may also be made to the judgement of the Privy Council in *Philips Hong Kong Limited v The Attorney General of Hong Kong* delivered on 9 February 1993. If the courts find the agreed sum to be "extravagant or unconscionable in amount in comparison with the greatest loss which could conceivably be proved to have followed from the breach" it will be held to be a penalty.

3.3.2 Calculation of Liquidated Damages

The 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. The General Conditions of Contract 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 instead of for the whole 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 amount 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.

Adopting this, the empirical formulae given in Appendix 5.34 may be used to calculate the components of LD's to be specified in the Contract unless an alternative, more accurate assessment can be made.

3.3.3 Special Damages

There may be situations where the Employer will suffer some special losses as a result of a project not being completed on time. For example, where a contract is on the critical path any delay may result in an ultimate delay to the completion of another contract (e.g. a separate demolition or piling contract can delay the completion of the whole project). The Employer will suffer a loss on the following contract(s) if delayed by the late completion of the contract in respect of which the calculation is being made. LD's for special damages cannot be imposed if there is a float period between contracts, because there cannot be any genuine pre-estimate of the special damages. However, in
many cases contracts are programmed so that there is no float. This should be confirmed before a calculation is made.

There may be other categories of loss caused by delay in meeting key dates. For example, there may be a special loss of running a less cost efficient facility until the replacement facility is available; the opening of a school or offices may depend on the completion of a road access; or the loss of interest on capital invested in an adjoining sewage treatment plant which cannot be commissioned until the sewer tunnel is completed.

There may also be occasions where Government is liable to a third party for losses caused by delay in completion of the Works. For example, Government undertakes the site formation of a leased land and is liable to damages for delay. Another example is that Government may have to pay its consultants additional fees and expenses arising from delay in completion of the Works.

If any such special damages can be identified at the project planning stage, it is essential that the rationale behind the calculation (but not the calculation itself), is clearly stated in the tender documents as a Special Condition of Tender and the appropriate sum representing the special damages included as part of the genuine pre-estimate of loss in the event of late completion of the Works or, as the case may be, the relevant Section.

3.3.4 Minimum Amount of Liquidated Damages

The amount of LD's is subject to proportional reduction under General Conditions of Contract 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. Under such circumstances, a SCC specifying the minimum amount of LD's should be incorporated in the contract by adding a sub-clause (5) to General Conditions of Contract Clause 52 as follows:

"General Conditions of Contract Clause 52 is amended by adding the following as sub-clause (5):

(5) Notwithstanding the proviso to General Conditions of Contract Clause 52(2) the resulting rate per day of liquidated damages for the Works or any Section after reduction in accordance with that sub-clause shall not be less than the minimum rate per day of liquidated damages for the Works or, as the case may be, the relevant Section as stated in the Appendix to the Form of Tender."

and the sum calculated in respect of the special damages and the minimum supervisory staff costs shall 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.

3.3.5 Lowering the Daily Rate of LD's

Contractually, there is no impediment to setting LD's at a level below the genuine pre-estimate of the Employer's loss as calculated in accordance with the above Paragraphs 3.3.2 and 3.3.3. If the daily rate of LD's is likely to be more than a contractor can reasonably bear, the procuring department may consider lowering the rate to a commercially acceptable level and seek the endorsement of the Development Bureau on the proposed amount of LD's on a case by case basis. Where such a rate is lower than the genuine pre-estimated loss, the approval of the Secretary for Financial Services and the Treasury must be sought before incorporating such a rate in the tender documentation.

3.3.6 LD's in the Tender Documentation

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 appropriate footnote should be added to the relevant LD's provisions in the Appendix to the Form of Tender. (e.g. \( A*Y_1 + B \) where \( Y_1 \) is the Contract Sum or the total sum of a Bill in the Bills of Quantities and \( A \) & \( B \) are some numerical values determined in accordance with Appendix 5.34 and Paragraph 3.3.3. See also the example given in Annex B of Appendix 5.35). The department shall notify the tenderer of the rate of LD's so calculated before tender acceptance and a copy of such notice shall be incorporated in the contract documents forming part of the contract.

In addition, to deal with possible anomalies which may arise as a result of negative pricing by tenderers, appropriate footnote (depending on whether or not there is minimum LD’s for the Works/Section) should be added to the relevant LD’s provisions in the Appendix to the Form of Tender along the following lines:

(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 each of [specify those indeterminate items] as appropriate,* with its corresponding value in the priced Bills of Quantities.”

[Note*: Consider inclusion of the words “as appropriate,” if the Works are divided into Sections and the footnote is used in relation to two or more Sections with no minimum LD's.]

(b) Where there is minimum LD’s

“The value of the formula within the square bracket shall be taken as
An example of the LD's provisions in the Appendix to the Form of Tender is at Annex C of Appendix 5.35.

3.3.7 Independent Check

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 Appendix 5.34. 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.

A pro-forma which may be useful as a guide in the calculation of LD's is at Annex A of Appendix 5.35. A worked example is at Annex B of Appendix 5.35. The summary statement only but not the calculations shall be included in the Appendix to the Form of Tender.

3.3.8 Check Before Tender Invitation

The formula to be entered into the Appendix to the Form of Tender for determining the rate of LD's (hereinafter referred to "the Formula") should be reviewed immediately before tender invitation, with reference to the latest available information.

3.3.9 Keep In View During the Tender Period

Should there be changes to the scope of the Works or the special damages before the tender closing date, the Formula should be adjusted by means of a tender addendum.

3.3.10 Check before the Issue of the Letter of Acceptance

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. If the Formula no longer represents a valid estimate of the likely loss to the Employer (e.g. the original assumption concerning the float period between contracts is found to be invalid or the special damages have changed due to changed circumstances), the following action should be taken:

(a) If the rate of LD's calculated in accordance with the Formula is higher than the latest estimate of the likely loss, the procuring department should negotiate with the tenderer(s) to amend the rate of LD's in accordance with the tender negotiation procedures stipulated in the SPRs.
(b) If the rate of LD's calculated in accordance with the Formula is lower than the latest estimate of the likely loss, the procuring department should follow the procedures in sub-paragraph (a) above to revise the rate of LD's. If as a result of negotiation the revised rate of LD's is at a level below the genuine pre-estimated loss i.e. the latest estimated loss in this case, the procuring department must seek DEVB's endorsement and the approval of Secretary for Financial Services and the Treasury.

3.3.11 Record

Full record of any review of LD's together with all related calculations should be kept on file.
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 DEVB TCW No. 7/2014.

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. Appropriate modification to the attestation clauses should be made in accordance with DEVB TCW No. 7/2014. 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)


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

(f) 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

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

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.gov.hk/en/publications_and_press_releases/publications/standard_contract_documents/index.html)

5.2 SPECIAL CONDITIONS OF CONTRACT

5.2.1 General Consideration

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

Commonly used standard SCC clauses for use with the General Conditions of Contract for Civil Engineering Works, Building Works and Electrical & Mechanical 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 and SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011. 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. 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.

The updated Library of standard SCC as promulgated in SDEV's memo ref. DEVB(W) 546/17/02 dated 9.2.2011 is available for use on the Works Group Intranet Portal. The current practice of updating the PAH to incorporate SCC from newly issued TCW/memo will be maintained. As updating of the Library of standard SCC may not be in pace with the PAH, newly issued SCC may have been updated to the PAH sooner than that of the SCC Library. In this regard, project officers should also make reference to the PAH when using the SCC Library. If any anomalies are found, they should notify their departmental contract advisors for further clarification with the DEVB subject officer [AS(WP)12, telephone no. 3509 8382].

The SCC for deletion of a provision in GCC which expressly disentitles a Contractor to an extension of time if the cause of the delay is a shortage of labour is promulgated in Appendix A of DEVB TCW No. 5/2013, and should be incorporated in works contracts of all categories including capital works contracts, term contracts and Design and Build (D&B) contracts whose tenders are invited on or after 15 August 2013.

The SCC for introducing Pay for Safety Performance Merit System (PFSPMS) as an extension to the existing Pay for Safety and Environment Scheme (PFSES) and Pay for Safety Scheme (PFSS) is promulgated in SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013, and should be included in all capital works contracts including electrical and mechanical contracts and D&B contracts which adopt PFSS/PFSES and with tenders to be invited on or after 1 February 2014.

The SCC for introducing an additional index on Composite Selected Labour Trades in Contract Price Fluctuation System is promulgated in Appendix 2 of SDEV’s memo ref. DEVB(PS) 107/3 dated 20.1.2014, and should be incorporated in all public works contracts using the General Conditions of Contracts (GCC) for Civil Engineering Works or Building Works or the GCC for Term Contracts for Civil Engineering Works or Building Works with provisions for Contract Price Fluctuation for tendering on or after 1 February 2014 with a specified contract period of 48 months or less.

The SCC for dealing with tenderers’ alternative designs, tenderer’s designs required for part of the Works and alternative designs from Contractors after contract award is promulgated in DEVB TCW No. 3/2014, and should be included in all works contracts for which tenders are invited on or after 15 May 2014 except D&B contracts.
The SCC for aligning with the Domestic Arbitration Rules (2014) promulgated by
the Hong Kong International Arbitration Centre which took effect on 1 November 2014 is
promulgated in SDEV’s memo ref. DEVB(W) 510/10/01 dated 4.12.2014, and should be
included in all public works contracts for which tenders are invited on or after 1 January
2015.

The SCC for the use of non-road mobile machinery approved under the Air
Pollution Control (Non-road Mobile Machinery) (Emission) Regulation is promulgated in
DEVB TCW No. 1/2015, and should be incorporated in tender documents for capital works
contracts of public works including D&B contracts, with an estimated contract value
exceeding $200 million and with tenders to be invited on or after 1 June 2015.

The SCC for excluding enforceable contractual rights on a third party is promulgated
in Annex of SEDV’s memo DEVB(W) 510/10/01 dated 28.8.2015, and should be included in
the tenders for all works contracts to be awarded on or after 1 January 2016.

The SCC for re-introducing the Independent Safety Audit Scheme is promulgated in
SDEV’s memo ref. (02SR7-01-1) in DEVB(W) 516/83/02 dated 30.10.2015, and should be
incorporated into the documents of mega capital works contracts (estimated contract sums
exceeding $1,000 million) or capital works contracts (excluding maintenance contracts)
involving unconventional construction method (such as working in compressed air at
pressure exceeding 3.45 bars) even if the estimated contract sum is less than $1,000 million,
and for which tenders are to be invited on or after 1 January 2016.

The SCC for allowing the use of the prefabricated rebar products produced in the
yards on the “List of Approved Steel Reinforcing Bar Prefabrication Yards for Public Works”
is promulgated in DEVB TCW No. 1/2016, and should be included into the public works
contracts including capital works contracts, term contracts, and D&B contracts of all
categories of building and civil engineering works for which the tenders are to be invited on
or after 1 March 2016.

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 and third party insurance) 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
(Subsumed from WBTC No. 18/92; Ref.: DEVB TCW No. 7/2007)

The General Specification for Civil Engineering Works (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). In supplementing the GS by a PS, compatibility of all changes must be ensured by the department preparing the tender documents. If changes are considered necessary, the revised items together with the reasons for the changes shall be submitted to the D1 (or higher) level officer administering the contract for approval. Furthermore, it is essential to ensure that the PS does not conflict with other parts of the tender documents.

The GS, 2006 Edition can be found on the CEDD website (http://www.cedd.gov.hk/eng/publications/standards_handbooks_cost/stan_gs_2006.htm). It has incorporated, among other changes, the use of “green” construction materials including recycled aggregates and reclaimed asphalt material to further promote environmentally friendly construction practices in public works projects. It has included two new sections on “Environmental Protection” and “Preservation and Protection of Trees”.

As the latest edition of the GS is publicly available and can be purchased at the Publications Sales Unit of the Information Services Department, it is therefore not necessary to bind the GS into the tender or contract documents. However, this should be reflected in the Conditions of Tender by stating that the GS is not issued as part of the tender documents.

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 MTR Corporation Limited, 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;


(viii) Not used;

(ix) For the control of Alkali Aggregate Reaction (AAR) in concrete, the particular specification given at Appendix A of WBTC No. 5/94 shall no longer be used. The requirements were incorporated into GS. For guidelines of the AAR control, reference should be made to Appendix 5.9;

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

(xi) For the Pay for Safety and Environment Scheme and Pay for Safety Performance Merit Scheme, reference should be made to WBTC No. 30/2000, the Construction Site Safety Manual, 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. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013;

(xii) For contracts including contract transport, reference should be made to LWBTC No. 11/84 and Paragraph 6.3.2(c);

(xiii) For independent checking of the Design, Erection, Use and Removal of Temporary Works, reference should be made to Paragraph 9.35;

(xiv) For contract measures to prevent non-payment of wages, reference should be made to Paragraph 9.11.

(xv) Not used;

(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/publications/geo/manu_eg6.htm (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) Not used;

(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 and SDEV’s memo ref. () in DEVB(W) 810/83/09 dated 24.9.2010;

(xxii) For metallic site hoardings and signboards, reference should be made to Paragraph 4.13(a) of Chapter 4 and Paragraph 9.38 of this Chapter;

(xxiii) For alternative hoarding design to enhance the aesthetic appearance of site and improve the image of construction sites and public’s perception, reference should be made to the guidelines in DEVB’s memo ref. (0289W-01-3) in DEVB(W) 516/95/02 dated 16.8.2010;

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

(xxv) For contracts involving alternative designs by tenderers, reference should be made to DEVB TCW No. 3/2014;

(xxvi) For enhanced control of site cleanliness and tidiness, reference should be made to DEVB TCW No. 8/2010;

(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 Paragraph 9.37 for details while for contracts involving the use of concrete paving units made of recycled aggregates, reference should be
(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 Paragraph 9.39 and ETWB TCW No. 9/2005;

(xxi) Not used;

(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 public works to be carried out within the protection boundary of the Harbour Area Treatment Scheme (HATS) Stage I sewerage tunnels, reference should be made to ETWB TCW No. 28/2003. For public works to be carried out in the vicinity of the drainage tunnels managed by Drainage Services Department (DSD) (e.g. Hong Kong West Drainage Tunnel), advice should be sought from DSD for the required protection requirements of the drainage tunnels;

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

(xxxvii) For contracts involving noise barriers, reference should be made to annex I to HyD’s Practice Notes No. BSTR/PN/003 Rev. C;

(xxxviii) For contracts involving the use of Sub-contractor Management Plan, reference should be made to Paragraph 9.33;

(xxxix) For contracts where construction and demolition materials including waste generated on site require disposal, reference should be made to DEVB TCW No. 6/2010;

(xl) For contracts involving provision of uniform for personnel working on public works sites, reference should be made to SDEV’s memo ref. () in DEVB(Trg) 133/3 (7) dated 11.5.2011;
(xli) For contract involving procurement of arboricultural service for tree risk assessment, reference should be made to ‘Service Specifications on Tree Risk Assessment and Mitigation Measures’ in the Tree Planting and Management section of the Cyber Manual for Greening or the direct link (http://devb.host.ccgo.hksarg/);

(xlii) For contract involving preservation of existing trees, reference should be made to ‘Contract Provision for Preservation of Existing Trees’ in the Tree Planting and Management section of the Cyber Manual for Greening and the Particular Specification given in Appendix D of DEVB TCW No. 7/2015. The Tree Management Guidelines promulgated by DEVB (see Paragraph 12 “References”) also contain considerations that should be taken into account in the contract provision;

(xliii) For adoption of green site offices of the public works projects with sustainable designs and features, reference should be made to the SDEV’s memo ref. () in DEVB(W) 810/17/02 dated 17.10.2014;

(xliv) For contracts involving the use of chainsaw in tree pruning works, reference should be made to the SDEV’s memo ref. (36) in L/M to DEVB(GLTM) 302/5/1 dated 17.12.2014;

(xlv) For promoting green procurement, it is encouraged to adopt the mandatory/desirable requirements as specified in the green specifications in Annexes II and IX of Environment Bureau Circular Memorandum No. 6/2015 in contracts as far as possible;

(xlvi) For public works contracts with tenders to be invited on or after 1 March 2016, the use of B5 diesel for all non-road based construction machinery is mandatory. Reference should be made to the SDEV’s memo ref. () in DEVB(W) 810/17/02 dated 8.1.2016;

(xlvii) For contracts incorporating the Independent Safety Audit Scheme, reference should be made to Paragraph 9.48.
6.3 SPECIFICATION REGARDING CONTRACT PRELIMINARIES AND EQUIPMENT

6.3.1 General Principles

(a) Specification in Terms of Performance

In the drafting of any PS clause, it should be noted that according to Paragraph 9 of DEVB TCW No. 2/2014, 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.

(b) Used Preliminaries

To accords 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 by the Contractor for use of the 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

(a) 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.”

(b) 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:

“Any 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.”

(c) Identification on Contract Transport

The contract transport for the Engineer should be properly painted or affixed by adhesive plastic labels with the contract number, Contractor name, Department name, Department logo, Department complaint hotline (or other suitable identifications) and the phrase “For Official Use Only” “只供公務用途” in good size letters for easy identification.

(d) 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
(Subsumed from WBTC No. 18/92; Ref.: 21/93, 21/93A and 21/93B)

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 addition 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”.

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 shall include a separate ‘Site Safety and Environmental Management’ section in the BQ.

The above task-tied payment, however, is not linked to the safety performance of the contractors. To motivate contractors to strive for better safety performance, the ‘Pay for Safety Performance Merit Scheme’ (PFSPMS) was promulgated via SDEV’s memo ref. (02LSV-01-1)
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. :
- 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.

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.

### 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 DAYWORK
(Subsumed from ETWB TCW No. 31/2002)

The HKCA Schedules For Plant Used in Dayworks Carried Out Incidental to Contract Work (“the Schedules”) published by the Hong Kong Construction Association (HKCA) have been developed to meet the absence of a developed plant hire market in Hong Kong. The Schedules are drawn up in broad categories thus enabling contractors, when tendering, to price the adjusting percentage on the various provisional sums included for dayworks plant in a manner suited to their particular plant holdings. In these circumstances the relativity of rates within an individual plant category assumes equal, if not greater, importance than the basic pricing level adopted in the Schedules.

Clause 27.03 in Part V of the SMM specifies that the rates contained in the Schedules current at the date for return of Tender shall be used for plant employed on dayworks. To provide certainty on the edition of the Schedules to be used under a contract, project officer shall check the homepage of HKCA for the current edition of the Schedules to be adopted and include the sample Particular Preamble given at Appendix 5.14 in the BQ.

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 DEVB TCW No. 8/2010.

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. Please also see Paragraph 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:

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

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

(c) Pre-work Safety Checks.

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

Guidelines for the SSC are given in ETWB TCW No. 30/2002. The updated sample BQ is incorporated into Appendix E 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.

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 3.1.2(g) of Chapter 3). 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.
7.8.5 **Pay for Safety Performance Merit Scheme (PFSPMS)**

Reference should be made to Paragraph 9.15.1 of this Chapter. Sample BQ, measurement rules and guidelines for preparing the section on PFSPMS are given in SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013.

7.9 **TRIP TICKET SYSTEM**

Sample Particular Preamble is provided in DEVB TCW No. 6/2010 for the requirement of Site Management Plan for Trip Ticket System.

7.10 **PRESEVATION AND PROTECTION OF PRESERVED TREES & OLD & VALUABLE TREES**

Sample contract provisions, guidelines and reference information for preservation and protection of preserved trees and Old and Valuable trees can be found in the Cyber Manual for Greening.

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 Particular Preambles and BQ for implementing “Pay for Monitoring Payment of Wages”.
8. DRAWINGS

8.1 DRAWINGS INCLUDED WITH TENDER DOCUMENT

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.

8.4 ELECTRONIC DRAWINGS

(Subsumed from WBTC No. 7/2000 and ETWB TCW No. 7/2000A; Ref.: SDEV’s memo ref. (57) in DEVB(W) 511/70/02 dated 15.6.2016)

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. (57) in DEVB(W) 511/70/02 dated 15.6.2016 are as follows:

(a) Handling Charge - $49 per drawing
(b) Material Charge

<table>
<thead>
<tr>
<th>Material</th>
<th>Unit Charge (HK$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) 700MB CD-ROM</td>
<td>$1.1</td>
</tr>
<tr>
<td>(ii) 4.7GB DVD+-R</td>
<td>$1.3</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.
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

Departments shall invite alternative designs and specify in the tender documents the part of the Works for which alternative designs are invited in situations where there is potential for better value for money or for enhancing buildability. The justifications for not inviting tenderers to submit alternative designs should be properly documented for future reference and auditing purposes.

Departments may require tenderers to submit tenderer’s design for part of the Works not covered by the Engineer/Architect’s design in the following circumstances:

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

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

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

(d) For piling works where several solutions are available; and

(e) For works of a short limited lifespan or temporary in nature.

For all tenders, departments shall include provisions to allow the Contractor to submit and the Employer to accept Cost Savings Designs to provide opportunities for achieving better value for money. The resultant saving in cost, if any, shall be shared between the Employer and the Contractor.

The contractual provisions to be incorporated into the tender documents for tenders inviting alternative designs and tenders requiring tenderer’s designs are given in DEVB TCW No. 3/2014. Particular attention is drawn to the following...
requirements:

(a) The tender documents shall include a complete set of design criteria, any outline drawings, plans and requirements related to the part of the Works for which tenderer’s design is required or alternative design is invited;

(b) The tender documents shall include clear indication to tenderers of any design material or method of construction which is not allowed; and

(c) An adequate tendering period shall be allowed, taking into account the time required to prepare a design in sufficient detail.

Where alternative designs are not to be invited, the following General Condition of Tender shall be incorporated in the tender documents:

“Alternative tenders or designs for which no invitation has been made shall not be considered.”

For tenders inviting alternative designs, tenderers have a choice to submit a conforming tender and/or a tender with an alternative design, i.e. an alternative tender. Those two tenders shall be assessed as two separate tenders. To this end, departments should include a Note to Tenderer to require tenderers to clearly mark on the respective sealed envelopes with the following words as appropriate:

“Technical Submission (Tender Conforming to the Engineer/Architect’s Design)”

“Tender Price Documents (Tender Conforming to the Engineer/Architect’s Design)”

or

“Technical Submission (Alternative Tender)”

“Tender Price Documents (Alternative Tender)”

To cater for the assessment of tenders inviting alternative designs or tenderer’s design are required, the Standard Marking Scheme for tender evaluation in Appendix C1 to DEVB TCW No. 4/2014, with due consideration to the points to note in Appendix E to DEVB TCW No. 3/2014 shall be used. There might be another situation where the Contractor, vis-à-vis tenderers, may be required to carry out and submit a relatively straight-forward design for part of the Works during the course of the Works. In these circumstances, the design need not be submitted at the tender stage for assessment or is only submitted for checking the compliance with essential requirements under the Stage I Screening. Tenders of this kind should be clearly distinguished from those tenders requiring tenderer’s designs at the tender stage.

9.4 CONSTRUCTION RELATED INSURANCE

9.4.1 Care of the Works Insurance and Third Party Liability 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:

(i) Owner Controlled Insurance Programme (OCIP)
(ii) 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.

9.4.2 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 the following amendment to the contractual provisions in respect of PII requirements for works contracts involving Contractor’s Design or Independent Checking Engineer’s Services:

DEVB TCW No. 9/2007

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

9.4.3 Insurance for works within or adjacent to Railway

When carrying out any work within the Railway Protection Area, which could affect the operation of the railway in any way whatsoever, the Engineer shall, in consultation with MTRCL, consider providing for third party insurance in the Contract, in accordance with the provisions of ETWB TCW No. 7/2005.

9.4.4 Provision of BQ items for construction related insurance

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

Unless Chief Geotechnical Engineer/Standards and Testing of GEO (CGE/S&T) advises otherwise, all materials compliance testing required by the Contract or by the Engineer must be done through Public Works Laboratories (PWL). CGE/S&T may 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. 3/2014)

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 Paragraphs 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, 19/2005 and DEVB TCW No. 6/2010 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. 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 (W) 810/72/01 dated 21.11.2005.
9.11 CONTRACT MEASURES TO PREVENT NON-PAYMENT OF WAGES
(Ref.: SDEV’s memo ref. (027RU-01-3) in DEVB(W) 510/17/01 dated 16.7.2010, SDEV’s memo ref. (02FYE-01-11) in DEVB(W) 510/17/01 dated 27.7.2012 and SDEV’s memo ref. (02H25-01-1) in DEVB(W) 510/17/01 dated 8.11.2012)

Since 2008, DEVB has promulgated a set of contract measures to prevent non-payment of wages for implementation in all works contracts except maintenance contracts and E&M supply and installation contracts.

The contract measures for preventing non-payment of wages were promulgated under SDEV’s memo dated 16.7.2010. The revised contract provisions are available at the Annexes to the “Guidelines on Wage Payment Monitoring and Reimbursement of Contractor’s and Sub-contractors’ Contributions to the Mandatory Provident Fund for their Site Personnel” (Rev. 1) promulgated under SDEV’s memo ref. (02H25-01-1) in DEVB(W) 510/17/01 dated 8.11.2012. The said Guidelines also serve as reference for project officers, site supervisory staff and Labour Relations Officers in the execution of the relevant contract provisions. The soft copy of the Guidelines, and any further amendments, is available at DEVB’s website.

As promulgated under SDEV’s memo dated 16.7.2010, some maintenance contracts were selected for trial implementation of the contract measures to prevent non-payment of wages. DEVB had no plan for further trial and no plan to implement the contract measures in maintenance contracts after the trial.

9.12 SITE CRUSHERS
(Subsumed from 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 Paragraph 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.

9.13 RESOLUTION OF DISPUTES BY MEDIATION / ADJUDICATION / ARBITRATION

(Ref.: SDEV’s memos ref. (02BBG-01-4) in DEVB(W) 506/00/01, () in DEVB(W) 510/83/03 and DEVB(W) 510/10/01 dated 24.3.2011, 15.10.2014 and 4.12.2014 respectively)

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 wherever is possible to
achieve cost effective resolution of disputes.

If the matter cannot be resolved by mediation, or if either the Employer or the Contractor does not wish the matter 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.

To foster co-operation between Contractor and the Employer and their consultants and sub-contractors, minimise the number of claims, avoid conflicts in the first instance and settle disagreements of disputes as they emerge, all capital engineering works contracts shall adopt Dispute Resolution Advisor (DRA) System in conjunction with Voluntary Adjudication (VA), subject to the following selection criteria:

(a) DRA System shall be adopted in capital civil and E&M engineering contracts with estimated contract sums exceeding $500M, except for those contracts which are of routine nature and primarily straightforward. Approval for exemption could be given by an officer of not lower than D2 level of the procuring Works Department; and

(b) Works Departments should also consider adopting the DRA System in capital civil and E&M engineering contracts with estimated contract sums not exceeding $500M, taking into account the complexity of the works. In this regard, the decisions and justifications to adopt DRA System in these contracts should be properly documented and endorsed by officers of not lower than D2 level of the procuring Works Departments.

The Guideline for the Use of the Dispute Resolution Advisor System with General Conditions of Contract for Civil Engineering Works (1999 Edition) and General Conditions of Contracts for Electrical and Mechanical Engineering Works (1999 Edition) and VA documents can be downloaded from Works Group Intranet Portal. Reference may be made to SDEV’s memo ref. (02BBG-01-4) in DEVB(W) 506/00/01 of 24.3.2011 and ref. () in DEVB(W) 510/83/03 of 15.10.2014.

The provisions of four sets of SCC on settlement of disputes, where the Domestic Arbitration Rules (2014) promulgated by the Hong Kong International Arbitration Centre have been catered for, for capital works contract (with or without adoption of voluntary adjudication), term contract, and design & build contract are set out in Annexes A to D of SDEV’s memo ref. () in DEVB(W) 510/10/01 dated 4.12.2014. The soft copies of the Annexes are available at Works Group Intranet Portal.
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

(Ref.: SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013)

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:

(a) 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;

(b) 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

(c) 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".

The sample contract provisions regarding the requirements on mechanical dump truck covers for application to capital works contracts with PFSES and term contracts with PFSS tendered on or after 1 November 2010 were promulgated under SDEV’s memo ref. DEVB(W) 810/83/09 dated 24.9.2010. The sample contract provisions include the following:

(a) A set of revised clauses in the Particular Specification at Appendix 5.48; and

(b) A new clause in the Notes to Tenderers at Appendix 5.49.

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.

9.15.1 Pay for Safety Performance Merit Scheme (PFSPMS)

Under the current PFSES/PFSS, contractors are paid if they have completed the respective task-tied safety items, such as provision and updating of safety plan, attending safety meetings/walks, and provision of safety trainings, etc. The task-tied payment, however, is not linked to the safety performance of the contractors. To motivate contractors to strive for better safety performance, DEVB has promulgated a performance-tied payment scheme for public works contracts as an extension to the PFSES/PFSS, i.e. the Pay for Safety Performance Merit System (PFSPMS) via SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013. The PFSPMS shall be applicable to all capital works contracts including electrical and mechanical contracts and Design and Build contracts which adopt PFSS/PFSES.

Under the PFSPMS, payment will be made under a set of pre-priced performance-tied payment items which are measured according to the contractors’ achievements in respect of the safety performance indicators specified in the contract. The total value of the performance-tied
payment items under the PFSPMS shall be about 1.7% of the estimated Contract Sum or total estimated expenditure as stipulated in Annex B to the Guidelines attached to SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013. The payment for PFSPMS is in addition to that for PFSES/PFSS.

The eight safety performance indicators of the PFSPMS are as follows:

(a) No reportable accident in a month;
(b) No notice of safety or environmental prosecution received in a month;
(c) Compliance of safety training (Silver Card) for workers of specified trades in a month;
(d) Half-yearly review of safety performance – based on inspection / improvement / suspension notices received from the Labour Department;
(e) 12-month rolling accident frequency rate for reportable accidents below 0.25 per 100,000 man-hours worked;
(f) Yearly review of safety performance - no fatal accident in a year;
(g) Achievement in safety campaign organized by Development Bureau, (i.e. Considerate Contractors Site Award Scheme); and
(h) Final review of safety performance – overall safety performance based on fatal accident and cumulative accident frequency rate for reportable accidents under the contract (Annex E to the Guidelines).

To implement the PFSPMS, DEVB have prepared a set of Guidelines and relevant contract provisions for inclusion in the tender/contract documents for capital works contracts. A copy of the Guidelines and contract provisions are enclosed at SDEV’s memo ref. (02LSV-01-1) in DEVB(W) 516/70/03 dated 22.11.2013.

The PFSPMS for term contracts is under preparation and will be promulgated in due course.

The Guidelines and the contract provisions have been posted on the DEVB website as an attachment to the ETWB TCW No. 19/2005 and incorporated in the Construction Site Safety Manual Chapter 12. The two documents could be accessed via the following links:

ETWB TCW No. 19/2005

Construction Site Safety Manual Chapter 12

9.16 SECTIONAL COMMENCEMENT OF THE WORKS
(Subsumed from 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’ given in the Library of standard SCC under SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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 Paragraph 9.41 of this chapter, the necessary contractual arrangement is already catered for by the SCC for ‘Section Subject to Excision’ as given in the Library of standard SCC under SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011.

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 cross-reference(s) need to be amended by reason of the SCC on sectional commencement.

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. () in ETWB(W) 1552/662/CL SF(1) dated 3.12.2003 refers).

9.18 DELETION OF EXTENSIONS OF TIME FOR INCLEMENT WEATHER
(Subsumed from WBTC No. 26/98)

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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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.

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. () in 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. () in 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, the project office should consider implementing measures (such as the use of parent company guarantee and performance bond) to minimize the risk of contract forfeiture and should strictly implement the contract conditions for the provision of parent company guarantee and performance bond (if any) to ensure the required contract instruments are submitted by the Contractor within the stipulated time limits. For the use of performance bonds security and retention money, 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.: SETW’s memo ref. (008BT-01) in ETWB(W) 830/31/01 dated 12.7.2004, Audit Recommendations on Public Works Contracts)

Under a works contract, some works may be required to be carried out within restricted hours. Experience has shown that during the construction stage, the Transport Department/the Hong Kong Police Force required the works at more locations to be carried out within restricted hours. This has led to claims and variations. With a view to minimizing claims for EOT and prolongation cost arising from works carried out within restricted hours, the project office should:

(a) Strengthen consultation with the Transport Department/Hong Kong Police Force to ensure that all locations, which require works to be carried out within 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 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 the DLO may charge a rental or may refuse the request.

9.24 TUNNEL WORKS

For contracts involving tunnel works, the project office should 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
(Ref.: SDEV’s memo ref. (0281L-01-5) in DEVB(W) 510/70/01 dated 1.11.2010)

Standard Notes to Tenderers, 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. Standard Special Conditions of Contract for incorporation into civil engineering works contracts are given in SDEV’s memo ref. (0281L-01-5) in DEVB(W) 510/70/01 dated 1.11.2010.

9.26 MEASURES TO PREVENT ILLEGAL EXTRACTION OR IMPORTATION OF BOULDERS/COBBLIES/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
(Ref: SETW’s memo ref. (0117S-01-2) in ETWB (W) 506/30/02 dated 30.3.2006)

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”.
9.27.1 Guidelines for selection of contracts for adoption of non-contractual partnering

In order to promote the wider use of the partnering approach in public works, the following criteria should be adopted as far as possible:

(a) For building and civil engineering capital works contracts with contract sum equal or greater than $100M; or

(b) For E&M contracts with contract sum equal of greater than $20M; or

(c) 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.

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 13.10.2006 - Assignment No. 04/2006 - Control of Off-site Fabrication of Construction Components)

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 specify in the contract documents the qualification requirements of the IIA 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:

(a) 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

(b) 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;

(c) 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;

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

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

(f) 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;

(g) 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) for management information; and

(h) 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/eng/services/fillmanagement/fm-mf.htm). 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 SUBCONTRACTOR REGISTRATION SCHEME
(Subsumed from ETWB TCW No. 13/2004 & SDEV’s memo ref. (02KJ8-01-4) in DEVB(W) 510/94/02 dated 22.7.2013)

All capital works and maintenance works contracts shall require the contractor to only employ sub-contractors (whether nominated, specialist or domestic) registered under the respective trades available in the Primary Register of the Subcontractor Registration Scheme (SRS) (formerly known as the Voluntary Subcontractor Registration Scheme (VSRS)) managed by the Construction Industry Council. 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 of all tiers.

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 & SDEV's memo ref. DEVB(W) 510/17/01 dated 6.9.2013)

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 capital works contracts and 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 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.

9.33 ENHANCEMENT MEASURES FOR SUB-CONTRACTOR MANAGEMENT PLAN (SMP)
(Subsumed from 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
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
(Subsumed from 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011), 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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:

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

(b) 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.

(c) 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011. During construction, the Engineer will be able to call for more details under GCC 7 and 16.

(d) Use of the SCC 26 promulgated under SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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.

(e) Temporary cut or filled slopes and excavations and access platforms may require method statements. These can be called for under GCC 16.

(f) 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011.

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

(a) 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.

(b) Chapter 9 of the Geotechnical Manual for Slopes and GEO Technical Guidance Note No. 40 provide guidance and good practice for implementing temporary drainage and rainfall precautionary and mitigation measures during construction in the wet season.

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

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.

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 DEVB(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)

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

This Paragraph 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. This Paragraph 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.
9.38 METALLIC SITE HOARDINGS AND SIGNBOARDS
(Ref.: WBTC No. 19/2001)

To reduce the amount of C&D waste generated from construction sites, all contracts shall specify the use of metal in all components of site hoardings and signboards. Furthermore, works departments shall specify a bolts and nuts jointing method in drawings and/or specifications for site hoardings and signboards where hoardings and signboards are to be erected, unless bolts and nuts jointing method are considered not feasible due to technical or safety reasons.

9.39 EMPLOYMENT OF TECHNICIAN APPRENTICES AND BUILDING & CIVIL ENGINEERING GRADUATES BY CONTRACTORS OF PUBLIC WORKS CONTRACTS
(Ref.: ETWB TCW No. 12/2003)

To achieve the Government’s objective to improve the quality and safety of public works projects, the contractors should employ, apart from qualified professionals, graduates and technicians for their works. The contractors of public works contracts are hence required to ensure that an adequate number of graduates and technicians are employed and provided with adequate training.

9.39.1 Technician Apprentices

For all capital works contracts exceeding $50M, the contractor is required to employ for each such contract the corresponding minimum number of technician apprentices under a valid contract of apprenticeship, as set out in the following table:

| (a) | For a contract the contract sum of which exceeds $50 million but is not more than $100 million. | - one |
| (b) | For a contract the contract sum of which exceeds $100 million but is not more than $200 million. | - two |
| (c) | For a contract the contract sum of which exceeds $200 million. | - three |

To improve the quality and safety of construction works in the long run, the contractor must ensure that training is given to all technician apprentices employed in all aspects of their trades, and to ensure that they attend a course of instruction at an approved technical institution leading to the award of either a Higher Certificate in Building Studies, Civil Engineering, Building Services or a comparable alternative qualification.

9.39.2 Building and Civil Engineering Graduates

For all capital works contracts exceeding $50M, the contractor is required to employ for each such contract the corresponding minimum number of full time building or civil engineering graduate with an academic qualification gained within the preceding three years, and recognized by an appropriate local or overseas professional qualification.
institutions such as the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Institution of Civil Engineers, the Institution of Structural Engineers or the Chartered Institute of Building, as set out in the following table:-

| (a) | For a contract the contract sum of which exceeds $50 million but is not more than $100 million. | - one |
| (b) | For a contract the contract sum of which exceeds $100 million. | - two |

To improve the quality and safety of construction works in the long run, the contractor must provide practical training on site to the employed graduates for a minimum of 12 months or 70% of the time for completion of the Works as stipulated in the Appendix to the Form of Tender, whichever is longer. The contractor should also follow established training guidelines for the various disciplines as far as possible. General guidelines on site practice are given at Appendix 5.31 for works departments’ information. The graduate(s) should be under the supervision of qualified professionals recognized by the relevant professional institutions mentioned in the first sub-paragraph of Paragraph 9.39.2. Unlike formal training, strict adherence to the guidelines and registration with the professional institutions mentioned are not required.

9.39.3 Implementation

Where the requirement on employment of technician apprentices and building & civil engineering graduates by contractors of public works contracts as given in Paragraph 9.39 applies, the Special Condition of Contract and Particular Specification given at Appendix 5.32 should be incorporated into the relevant tender document.

9.40 SPECIAL CONDITIONS OF CONTRACT FOR USE IN MEGA PROJECT CONTRACTS
(Ref.: WBTC No. 26/2002)

A set of SCC, as given at Appendix 5.36, is devised for use in mega project contracts in conjunction with the GCC for Civil Engineering Works 1999 Edition.

Mega project contracts have some or all of the following characteristics:

(a) The contract sum is very large (normally exceeds $1 billion). During the construction period, there should be tight financial control because of the large sums of money involved.

(b) There is a need to monitor the programme and control the progress closely because the contract itself or the project of which the subject contract forms an integral part has high social or economical implication

(c) The contract works are extensive and cover large areas, thus likely to have a lot of interfaces with other major projects. Hence very good co-ordination by all the concerned parties is required.
Project departments should have full regard to the “Guidelines for the Development of Major Infrastructure Projects” at Appendix 5.38.

This set of SCC has been prepared on the basis that all the SCC clauses will be used as a package (other than those optional clauses). As such, the full set of these SCC clauses (other than those optional clauses) must be used when a project department decides to use these SCC clauses in its works contract(s).

Project departments may adopt these SCC clauses including any modifications thereto on the approval of the Head of Department or his delegate. This delegation should not be down below the rank of D2 level. Any modifications to this set of SCC, including additions or omissions, should be vetted by LAD(Works)/DEVB.

Project departments are reminded that satisfying some or all of the criteria above does not automatically imply that the use of these SCC clauses is warranted. In deciding whether or not to use this set of SCC, project departments should consider the resource implication in the administration of the contract.

To facilitate the better management of the mega project contracts, the project department may wish to require the Engineer for the contract to obtain agreement of the Employer before making decisions on some of the following matters pursuant to Clause 2 of the GCC 1999 Edition in addition to those referred to in Paragraphs 7 and 8 of WBTC No. 20/2000, Paragraph 9.32 of this chapter.

<table>
<thead>
<tr>
<th>GCC Cl 16</th>
<th>Approval of the works programme and any revised version thereof.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCC Cl 34</td>
<td>Issuing instructions to afford facilities access and/or services to enable other parties to carry out their works.</td>
</tr>
<tr>
<td>GCC Cl 48(5)(a)</td>
<td>Deferral of a Portion handover date.</td>
</tr>
<tr>
<td>GCC Cl 50</td>
<td>Granting extensions of key dates.</td>
</tr>
<tr>
<td>GCC Cl 53</td>
<td>Issuing a Certificate of Completion in respect of the Works or of any part of the Works, any Section or any part of a Section or Certificate of Achievement for any Stage or any part of a Stage.</td>
</tr>
<tr>
<td>GCC Cl 54</td>
<td>Ordering suspension of the works or any part thereof save and except when considered to be essential on grounds of safety or other emergency in circumstances when it is impractical to refer the matter to the Employer beforehand.</td>
</tr>
<tr>
<td>GCC Cl 55</td>
<td>Recommencing work following suspension.</td>
</tr>
<tr>
<td>GCC Cl 80</td>
<td>Issuing the Maintenance Certificate.</td>
</tr>
<tr>
<td>GCC Cl 82(2)</td>
<td>Authorizing remedial works to be carried out by persons other than the Contractor.</td>
</tr>
<tr>
<td>GCC Cl 60(1)</td>
<td>Omitting works on grounds of improved or more economic functioning of the works or aesthetic.</td>
</tr>
</tbody>
</table>

For the purpose of Paragraph 9 of WBTC No. 20/2000, prior approval is deemed
to have been given by the SDEV for the above additional constraints on the Engineer once a decision has been made by the project department to classify the contract as a mega project contract.

When the use of the SCC Clause A4A (under which provision for extension of time due to inclement weather is not included) is contemplated the proposal must be approved and endorsed in the manner as prescribed in Paragraph 9.18 of this chapter prior to the invitation of tenders. If SCC Clause A10 at Appendix 5.36 is adopted in relation to a particular project, the SCT at Appendix 5.37 should be included in the tender documents in respect of that project.

The current requirement for legal vetting of draft tender documents by LAD(Works)/DEVB for all contracts of estimated value in excess of $300M is also applicable to mega project contracts. Please refer to Paragraph 1.5.1 of this chapter for details.

9.41 SECTIONS SUBJECT TO EXCISION
(Subsumed from LWBTC 6/89; Ref.: SDEV’s memo ref. (027N7-01-2) in DEVB(W) 510/10/01 dated 29.6.2010, SDEV’s memo ref. (02B2H-01-5) in DEVB(W) 510/10/01 dated 9.3.2011 and SDEV’s memo ref. (02BL7-01-2) in DEVB(W) 510/10/01 dated 12.4.2011)

‘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 the Library of standard SCC under SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 shall be included in the Contract.

It is obvious that the decision to proceed or not with the Section Subject to Excision shall rest with the Employer. The power of the Engineer to issue instruction to proceed with the works in a Section Subject to Excision is subject to a constraint in the sense that the Engineer is required to act in accordance with the direction of the Employer. In accordance with GCC Clause 2(1)(b), this constraint shall be set out in the Appendix to the Form of Tender.

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,

(c) the liquidated damages for the Section Subject to Excision; and

(d) the aforesaid constraint on the Engineer’s power.

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.

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.

In addition to civil engineering contracts, the provision for Section Subject to Excision has also been adopted in the “Administrative Procedures for use with the Government of the Hong Kong Special Administrative Region General Conditions of Contract for Design and Build Contracts, 1999 Edition”. In this regard, the requirements mentioned in the above shall also apply to such Design & Build contracts. The project officers and where applicable the project consultants should include the constraint clause in the Appendix to Form of Tender for all works tenders in which a Section Subject to Excision is included.

LWBTC No. 6/89 was promulgated in April 1989 to introduce the SCC for civil engineering works on Sections Subject to Excision. DEVB has reviewed the SCC and decided to amend the SCC to state clearly the contractual implication and effect on the Contract in the event that the Engineer does not issue the instruction within the time stated in the Appendix to the Form of Tender for ordering Sections Subject to Excision.

SDEV promulgated via his memo ref. (02B2H-01-5) in DEVB(W) 510/10/01 dated 9.3.2011 two sets of SCC on the provision for Section Subject to Excision; one set for use with GCC for Civil Engineering Works 1999 Edition is given in Appendix 5.39, and the other set for use with GCC for Design and Build Contracts 1999 Edition is given in Appendix 5.40. SDEV further promulgated via his memo ref. (02BL7-01-2) in DEVB(W) 510/10/01 dated 12.4.2011 an updated NTT(l) as shown in Appendix 5.41, which should be included in the Notes to Tenderers when SCC on Section Subject to Excision is incorporated in the tender documents. The updated NTT(l) supersedes the NTT(l) in ETWB TCW No. 26/2004.
9.42 ANTI-COLLUSION  
(Ref.: SDEV’s memo ref. (02B6J-01-6) in DEVB(W) 510/10/01 dated 24.3.2011)  

To strengthen the collusion prevention in the letting of works contracts, DEVB has reviewed the GCTs for anti-collusion as promulgated in ETWB TCW No. 26/2004 and decided to amend the relevant GCTs as well as introduce a new NTT.

Under the revised anti-collusion clauses, the tenderer shall submit with his tender a duly signed and witnessed letter to signify his understanding of the anti-collusion clauses. The above submission should not be included as an essential requirement under GCT 21.

SDEV promulgated via his memo ref. (02B6J-01-6) in DEVB(W) 510/10/01 dated 24.3.2011 a new NTT as shown in Appendix 5.42 and three revised GCTS on the provision for anti-collusion; GCT 1 on Definitions, GCT 25 on Submission of Further Information and GCT 26 on Anti-collusion as shown in Appendices 5.43, 5.44 and 5.45 respectively.

9.43 FINANCIAL RELIEF MEASURES TO ASSIST THE CONSTRUCTION INDUSTRY  
(Ref.: SDEV’s memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011 and SDEV’s memo ref. () in DEVB(W) 510/83/08 dated 20.7.2012)  

In the immediate aftermath of the financial tsunami in late 2008, a package of interim financial relief measures were implemented via the promulgation of SDEV’s memo ref. (01WLR-01-7) in DEVB(W) 510/83/08 dated 8.12.2008 with a view to relieving contractors, especially small and medium-sized contractors, of the cash flow difficulties they encountered at that time. Originally intended for one year, these interim measures were subsequently rolled forward to 2010 via SDEV’s memo ref. (025QN-01-3) in DEVB(W) 510/83/08 dated 4.3.2010.

A review of these interim measures was completed. It was decided to adopt these interim measures (together with some additional ones) as standing policies in public works contracts with immediate effect. Details are as follows.

9.43.1 Interim Payment  

(a) Interim payment should be instituted in all new public works contracts and existing public works contracts, which do not contain interim payment provision, including the quotation contracts of value less than $4 million. As the contracts without interim payment provision are in general small works contracts with different nature, works departments should prepare appropriate interim payment provisions specific to the contracts for incorporation; and

(b) In order to further enhance cash flow in major public works contracts, interim payments in respect of major off-site pre-fabrication works should be made as a standard practice, subject to the relevant precedent conditions including among others the maintenance of an effective bond to
cover the pre-fabrication works. In this respect, the SCC in Appendix 5.46 shall be adopted for new public works contracts involving major off-site pre-fabrication works. The guidelines for adoption of the SCC in public works contract are attached at Appendix 5.55.

9.43.2 Retention Money

For capital works contracts, the prevailing arrangement of releasing part of retention money after lapse of half of the maintenance period should be enhanced. It was decided to release retention money in stages in existing and new contracts viz. 50% of the retention money upon substantial completion of the works and the remaining 50% at expiry of the maintenance periods. Should there be minor outstanding works and defect rectification works remained, their estimated values at the material time should be taken into consideration in determining the amount of retention money to be released, making sure that these estimated values of works will be sufficiently covered by the remaining retention money after the first release of retention money upon substantial completion of the works and by retaining equivalent amount upon the second release at the expiry of the maintenance period until all minor outstanding works and defect rectification works are completed.

The enhanced arrangement is to be applied to existing capital works contracts, of which completion certificates of the Works are yet to be issued and supplementary agreements for releasing parts of retention money as promulgated in SDEV’s memo ref (01WPS-01-4) in DEVB(W) 510/83/08 dated 11.12.2008 are yet to be signed. Please make reference to the samples in Annexes B1 and B2 attached to SDEV’s memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011 for preparing the supplementary agreements of the existing contracts. As regards new capital works contracts, please adopt the SCC in Appendix 5.47 for preparing tender documents.

9.43.3 Payment Level for Term Contracts

It was decided to raise the payment levels to not less than 90% of the estimated value of works upon completion of the works orders in existing and new term contracts.

For existing term contracts, please make reference to the samples of supplementary agreements in Annex A3 and A4 attached to SDEV’s memo ref. (01WPS-01-4) in DEVB(W) 510/83/08 dated 11.12.2008 for raising the payment level. For new term contracts adopting General Conditions of Contract for Term Contracts for Building Works, please adopt the SCC in Annex D attached to SDEV’s memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011. For new term contracts adopting other General Conditions of Contract, please specify the payment level to not less than 90% of the estimated value of works in the Appendix to the Form of Tender.

9.44 EMPLOYER’S POWER TO REDUCE THE AMOUNT OF THE CONTINGENCY SUM PRIOR TO AWARD OF CONTRACT (Ref.: SDEV’s memo ref. DEVB(W) 546/70/01 dated 8.8.2011)

SDEV’s memo ref. DEVB(W) 546/70/01 dated 8.8.2011 promulgates a new tender provision to provide the Employer with the power to unilaterally reduce the
amount of the Contingency Sum stated in the tender documents prior to award of a works contract.

There were submissions to the Central Tender Board where the original tender sums of the recommended tenders had exceeded the Approved Project Estimates (APE). In each of these cases, the procuring department discovered an over-estimation of the amount of Contingency Sum allowed in the contract. Since there was no tender provision for the Employer to unilaterally reduce this amount, the procuring department resorted to conduct tender negotiation with the recommended tenderer after obtaining approval from the relevant authority to have the amount reduced. This then enabled the procuring department to reduce the contract sum below the APE and award the contract without the need to apply for additional funding.

Although no complication has occurred in the tender negotiations mentioned above, such a risk does exist since the tenderer may not accept the proposed reduction in the amount of the Contingency Sum which may open up an opportunity for the tenderer to retract his offer. In any event, tender negotiation will incur additional time and resources. To avoid the risk of tender complication and streamline the process under this circumstance, a new tender provision is introduced for (a) works contracts other than design and build (Non-D&B) contracts and (b) design and build (D&B) contracts, to provide the Employer with the aforesaid power.

(a) Non-D&B Contracts

The new tender provision is provided in the attached Special Conditions of Tender (SCT), special Form of Tender and Notes to Tenderers at Appendix 5.50. It should be noted that the inclusion of this provision is subject to an officer at D2 rank or above in the Project Office/Department being satisfied that the conditions given in the ‘Remarks/Guidelines’ provided alongside the SCT clause are met. The exercise of the power to reduce the amount of the Contingency Sum is also subject to meeting the requirements stated therein including the approval of the Vote Controller.

The relevant parts of the Project Administration Handbook (i.e. Paragraph 7.2 of PAH Chapter 6 on “Checks prior to accepting tender”, Appendix 5.5 on “Format of the Grand Summary to the Bills of Quantities” and Appendix 6.17 on “Sample Letter of Acceptance to Successful Tenderer”) are revised accordingly. A sample letter for notifying the tenderer, whose tender is going to be recommended for contract award, of the reduction in the amount of the Contingency Sum, is also attached at Appendix 5.51.

(b) D&B Contracts

While the use of the new tender provision is discretionary for non-D&B contracts, it is mandatory for D&B contracts to include such a provision in view of the higher uncertainty in estimating the Contingency Sum in the absence of detailed design at the tendering stage. The new tender provision for D&B contracts is provided in the attached General Conditions of Tender (GCT) at Appendix 5.52. Departments shall make reference to the samples provided for non-D&B contracts above in
preparing the Form of Tender, Notes to Tenderers, letter notifying the reduction in the amount of the Contingency Sum and the letter of acceptance to the successful tenderer for D&B contracts.

Departments must observe that the original tender sums of the tenderers (after being corrected for arithmetic errors, if any) shall be used in determining the price ranking or overall scores/marks in accordance with the prescribed tender evaluation criteria. The reduction in the amount of the Contingency Sum shall not affect the price ranking or overall scores/marks although the recommended contract sum will be reduced accordingly by the same amount.

Departments should be aware that the reduction in the amount of the Contingency Sum shall not affect any Provisional Sum, including that for reimbursement of Mandatory Provident Fund (MPF) as illustrated in the attached Appendix 5.5 of PAH. The reduction in the amount of the Contingency Sum shall also not affect the determination of liquidated damages (LD) since the Contingency Sum should have already been excluded from the contract sum in the LD computation according to ETWB TCW No. 4/2003. Departments shall check the LD formula(s) specified in the tender documents to ensure that the LD amount will not be affected by a reduction in the amount of the Contingency Sum.

Where the power to unilaterally reduce the amount of the Contingency Sum has been exercised, it should be clearly stated in the tender report. It should be confirmed in the tender report that the Vote Controller has approved the reduction in the amount of the Contingency Sum and the recommended tenderer has acknowledged the reduction of the Contingency Sum and the Tender Sum by the same amount.

Notwithstanding the availability of these new tender provisions, departments are reminded of their responsibility to prepare proper project estimates and pre-tender estimates as accurate as possible. Departments shall under no circumstances rely on these tender provisions to avoid seeking additional funding as a result of underestimation of the contract price. Prior to exercising the power, departments shall check that there will be sufficient remaining contingency sum to cover the contract and the project as a whole. Otherwise, departments shall resort to seeking additional funding prior to award of the contract.

The above new tender measure is applicable to all works contracts for which tenders are invited on or after 1 September 2011.

9.45 PROVISION OF UNIFORM FOR PERSONNEL WORKING ON PUBLIC WORKS SITES
(Ref.: SDEV’s memo ref. DEVB(Trg) 133/3 (7) dated 11.5.2011)

9.45.1 Purpose

SDEV’s memo ref. DEVB(Trg) 133/3 (7) dated 11.5.2011 sets out the policy and implementation details related to the provision of uniform to personnel working on public works sites.
9.45.2 Policy

All public works contracts, including Design and Build contracts and term contracts, with a construction period of not less than 12 months, the tender invitations of which are issued on or after 23 May 2011 shall implement the uniform initiative through the incorporation of relevant provisions into the tender documents. Similarly, the initiative shall apply to Consultancy Agreements covering works contract(s) with estimated construction period of not less than 12 months and for which the invitations of technical and fee proposals for the Consultancy Agreements are issued on or after 23 May 2011. The contract provisions to be incorporated into the public works contracts are available in SDEV’s memo ref. DEVB(Trg) 133/3(7) dated 11.5.2011. The soft copies of the SDEV’s memos and the Annexes are available at DEVB’s Works Group Intranet Portal.

In the present context, personnel working on public works sites means-

(a) All workers and staff employed by the Contractor or his sub-contractors of all tiers (including specialist sub-contractors and Nominated Sub-contractors) engaged for the execution of the Works on the Site, and includes drivers and lorry drivers engaged for the Works. For avoidance of doubt, they exclude personnel not involved in site work such as office-based staff, material deliverers, security guards, and drivers of the Engineer’s transport as well as workers engaged in work requiring personal protective equipment which renders the wearing of uniform unsuitable or impractical.

(b) Consultants’ resident site staff (RSS) engaged for supervision of the Works but exclude personnel not involved in site work such as office-based staff.

In-house site staff of works departments shall also be encouraged to wear uniform on site.

9.45.3 Design and Provision of Uniform

Main contractors of the public works contracts are responsible for the design and provision of uniform to their personnel working on site and their wearing on site of the uniform provided. For contracts managed by consultants, main contractors are required to provide uniform to consultants’ RSS if this is specified in the contract. However, the consultants are responsible for the design of the uniform and for including the detailed requirements of the RSS uniform into tender documents of the relevant works contract(s). Works departments shall arrange to provide uniform to their in-house site staff and encourage them to wear them on site. The requirements of the standard uniform set are at Appendix 5.53.

9.45.4 Provision of Associated Facilities

The provision of associated facilities to complement the provision of uniform, including uniform washing and drying facilities, lockers and uniform changing facilities, was thoroughly discussed with stakeholders during the consultation process. Taking into account the more severe environmental impacts and site constraints, it was
agreed with stakeholders that the provision of uniform washing and drying facilities will not be required. The provision of lockers for workers will however be enhanced as part of the enhancement of provision of welfare facilities for workers to be promulgated under a separate cover. The provision of uniform changing facilities on site is highly welcomed but it is not a mandatory requirement. A D2 rank or above officer of the department responsible for the contract may approve the inclusion of uniform changing facilities into the contract specifications after taking into consideration the practicality of providing these facilities in the contract and the availability of sufficient space on site to install the facilities.

9.45.5 Payment and Control

Payment for the provision of uniform to contractor’s personnel working on site will be effected through a pre-priced lump sum item. However, the amount of actual payment is subject to the compliance audit on the wearing of site uniform to be conducted by the Engineer/ Architect/ Supervising Officer/ Surveyor as set out in the contract provisions. As the costs involved in the provision of uniform to consultants’ RSS are relatively minor, they are covered by the billed item for the Engineer’s Temporary Accommodation.

Furthermore, a new aspect of performance on “Compliance with site uniform requirements” has been introduced in Section 7 (Industry awareness) of Part II of the Contractor’s Performance Report (CPR) for assessing the contractor’s performance in complying with the requirements related to the present initiative.

9.45.6 Implementation Guidelines

Guidelines have been prepared to facilitate project officers to implement the uniform initiative. The guidelines for the pre-contract stage is at Appendix 5.54. The guidelines for the construction stage are given in Paragraph 21.26 of PAH Chapter 7.

9.46 IMPLEMENTATION OF MANDATORY CONTRACTOR COOPERATIVE TRAINING SCHEME (CCTS) IN PUBLIC WORKS CONTRACTS
(Ref.: SDEV’s memo ref. DEVB(Trg) 133/4 (5) dated 30.12.2011, SDEV’s email dated 20.3.2012, SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 5.8.2013 and SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 16.8.2013)

9.46.1 Purpose

SDEV’s memo ref. DEVB(Trg) 133/4 (5) dated 30.12.2011 promulgates the implementation of the CCTS in selected public works contracts to help boost the training capacity of the construction industry as an industry-wide drive to meet the construction manpower demands. With the support of Works Departments, the Works Policies Coordination Committee at its 21st meeting held on 24 April 2013 agreed that all relevant capital works contracts and term contracts as stated in paragraphs 9.46.3.1 to 9.46.3.3 shall incorporate the SCC into the tender document for the purpose of requiring the contractor to participate in the CCTS.
9.46.2 The CCTS

Under the CCTS, either the main contractor or the first-tier/second-tier sub-contractors (where appropriate) are required to recruit trainees as employees and provide them with training in the relevant trade on site. The CIC will monitor the quality and progress of the training and provide training subsidy as appropriate during the training period to the main contractor and the first-tier/second-tier sub-contractors (where appropriate). At the end of the training, trainees are required to take the intermediate trade test or the like in the relevant trade conducted by the CIC. The training is completed when the trainees pass the test. Further, the main contractor or the first-tier/second-tier sub-contractors (where appropriate) are requested to continue to employ them for at least 12 months subject to the availability of sufficient relevant trade works under the relevant contracts to support such continuing employment.

Detailed requirements of the CCTS can be found in CIC’s current CCTS Framework Document. This is a living document subject to updating from time to time. The latest CCTS Framework Document will be made available on CIC’s website at the following link:


9.46.3 Implementation

9.46.3.1 CCTS for Building & Civil Engineering (B&C) Trades

All B&C capital works contracts or term contracts (including Design and Build) with an estimated contract sum or estimated total expenditure of over $200 million and with a contract period of 2.5 years or longer, and (i) without E&M works or (ii) with E&M works of estimated total value of $50 million or below or estimated construction period for the E&M works of less than 6 months shall incorporate the NTT and SCC at Appendix 1 to SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 16.8.2013 for the implementation of mandatory participation in the CCTS for B&C trades only.

9.46.3.2 CCTS for both B&C Trades and E&M Trades

All B&C capital works contracts and term contracts (including Design and Build) with an estimated contract sum or estimated total expenditure of over $200 million and with a contract period of 2.5 years or longer, and with E&M works of estimated value of over $50 million and an estimated construction period for the E&M works of 6 months or longer shall incorporate the NTT and SCC at Appendix 1 to SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 5.8.2013 for the implementation of mandatory participation in the CCTS for both B&C trades and E&M trades.

9.46.3.3 CCTS for E&M Trades

All E&M supply and installation contracts and term contracts with an estimated contract sum or estimated total expenditure of over $50 million (for lift/escalator maintenance term contracts, over $20 million) and with an estimated construction period for the E&M works of 6 months or longer shall incorporate the NTT and SCC at Appendix 2 to SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 5.8.2013 for the implementation of mandatory participation in the CCTS for E&M trades only.
The soft copies of the SDEV’s memos ref. DEVB(Trg) 133/4 (9) dated 5.8.2013 and 16.8.2013 and the Appendices are available at DEVB’s Works Group Intranet Portal.

9.46.4 Implementation Guidelines

The guidelines are given in Paragraph 21.27 of PAH Chapter 7 to facilitate project officers in implementing the CCTS in their contracts.

9.47 IMPLEMENTATION IN PUBLIC WORKS CONTRACTS OF THE MANDATORY EMPLOYMENT OF GRADUATES OF THE ENHANCED CONSTRUCTION MANPOWER TRAINING SCHEME (ECMTS)
(Ref.: SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 7.12.2012)

9.47.1 Purpose

SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 7.12.2012 promulgates the implementation of the mandatory employment of Enhanced Construction Manpower Training Scheme (ECMTS) Graduates in public works contracts to help enhance the attractiveness of the scheme and to provide better opportunities for ECMTS Graduates to further strengthen their skills.

9.47.2 Background

The Construction Industry Council (CIC) provides placement services to ECMTS Graduates to help them secure employment in the construction industry.

As a long-term measure to provide better employment opportunities for ECMTS Graduates and to maintain the attractiveness of the ECMTS in attracting new blood to join the industry, the Works Policies Coordination Committee endorsed at its meeting held on 9 July 2012 the proposal to implement the mandatory of ECMTS Graduates in public works contracts.

9.47.3 Implementation

All B&C capital works contracts and term contracts (including Design and Build contracts) with an estimated contract sum or estimated total expenditure of over $200 million and with a construction period of 2 years or longer shall incorporate the SCC at Appendix 1 to SDEV’s memo ref. DEVB(Trg) 133/4 (9) dated 7.12.2012 for the mandatory employment of ECMTS Graduates. The soft copy of the Appendix is available at DEVB’s Works Group Intranet Portal.

The mandatory employment of ECMTS Graduates is a separate scheme from the mandatory Contractor Cooperative Training Scheme (CCTS) promulgated on 30 December 2011 (refer to Paragraph 9.46 above). Where applicable, both schemes should be incorporated in the relevant public works contracts. In the current context, graduates from the CCTS trained by contractors are not regarded as ECMTS Graduates. This has been made clear at the end of sub-clause (1)(i) of the SCC.
9.48 INDEPENDENT SAFETY AUDIT SCHEME FOR MEGA CAPITAL WORKS CONTRACTS OR CAPITAL WORKS CONTRACTS INVOLVING UNCONVENTIONAL CONSTRUCTION METHOD
(Ref.: SDEV’s memo ref. (02SR7-01-1) in DEVB(W) 516/83/02 dated 30.10.2015)

The requirement of the Independent Safety Audit Scheme (ISAS) using the safety auditing system version 1.3 are to be incorporated into the tender documents of mega capital works contracts (estimated contract sums exceeding $1,000 million) or capital works contracts involving unconventional construction method (upon confirmation from the Departmental Safety & Environmental Advisors, such as working in compressed air at pressure exceeding 3.45 bars) even if the estimated contract sum is not exceeding $1,000 million, and for which tenders are to be invited on or after 1 January 2016 (maintenance contracts are excluded).

If incorporation of the ISAS is considered not warranted despite meeting the above criteria, the project office concerned shall seek the approval of an officer at D2 level or above for exemption.

The Special Conditions of Contract (replacing those in the library SCC in the Works Group Intranet Portal), Particular Specifications and Guidance Notes on the Administration of the ISAS respectively, as revised from those under WBTC No. 32/99, are provided under Appendices B, C and E of SDEV’s memo ref. (02SR7-01-1) in DEVB(W) 516/83/02 dated 30.10.2015 for incorporation. The soft copies of the SDEV’s memo and the Appendices are available at DEVB’s Works Group Intranet Portal.

9.49 EMISSIONS CONTROL OF NON-ROAD MOBILE MACHINERY IN CAPITAL WORKS CONTRACTS OF PUBLIC WORKS
(Ref.: DEVB TCW No. 1/2015)

DEVB TCW No. 1/2015 promulgates the requirements for the use of non-road mobile machinery (“NRMM”) approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (“the Regulation”) in new capital works contracts of public works including design and build contracts, in addition to the statutory requirements of the Regulation.

To improve the air quality of Hong Kong, the Secretary for the Environment has, after consultation with the Advisory Council on the Environment, made the Regulation under the Air Pollution Control Ordinance (Cap. 311) to mandate that NRMM (with the exception of exempted NRMM) to be sold or leased in Hong Kong or used in specified activities (including the use of NRMM in construction sites) must meet a set of emission standards and must be NRMM approved by the Authority under the Regulation (“approved NRMM”). Approved NRMM must be affixed with an approval label for identification.

The Authority under the Regulation may, on application, exempt certain NRMM and existing NRMM from the new emission-control requirements. Exempted NRMM must be affixed with an exemption label for identification.
Approved NRMM are more environmentally friendly as compared to exempted NRMM. As such, notwithstanding the permitted use of exempted NRMM under the Regulation, DEVB requires the use of more approved NRMM in the execution of public works.

In this connection, Appendix A of DEVB TCW No. 1/2015 sets out an implementation plan to phase out the use of exempted NRMM for four types of NRMM, namely generators, air compressors, excavators and crawler cranes in new capital works contracts of public works including design and build contracts, with an estimated contract value exceeding $200 million and tenders invited on or after 1 June 2015. The following provisions shall be incorporated in tender documents of such contracts:

(a) Special Condition of Contract – Use of non-road mobile machinery approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation in Appendix B of DEVB TCW No. 1/2015; and

(b) Note to Tenderer in paragraph 9(B) of DEVB TCW No. 1/2015.
10. LUMP SUM CONTRACTS WITH FIRM BILLS OF QUANTITIES
(Subsumed from 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011) 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 NTT that they do not form part of the Contract. The NTT 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 the Library of Notes to Tenderers promulgated in ETWB TCW No. 26/2004. In addition, any NTT 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 project office may use the clauses promulgated 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 (or Public Works Tender Box as the case may be), 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.

For the latest version, please refer to the DEVB website:

The clause for noting the tenderers that the Waste Disposal (Charges for Disposal of Construction Waste) Regulation has come into operation on 1 December 2005 is promulgated in Attachment 5 of SETW’s memo ref. (00W45-01-9) in ETWB(W) 810/72/01 dated 21.11.2005, and should be included in NTT for tendering of contracts with value ≥ $1M. Where the value of a construction contract is less than $1M, the NTT promulgated in Annex B of SETW’s memo ref. (00XFX-01-4) in ETWB(W) 810/72/01 dated 21.12.2005 should be included.

The clause for disclosing cashflow discount rates (CDR) for tender evaluation to tenderers is promulgated in SDEV’s memo ref. () in DEVB(W) 545/17/01 dated 19.4.2010, and should be included in NTT for invitation of works tenders from 3 May 2010. The CDR applicable for tender evaluation shall be the rates prevailing as on the first date of tender invitation, and CDR effective from 1 April 2016 is promulgated in SFST’s memo ref. (43) in TsyB MA 00/550/1 (C) Pt. 2 dated 14.3.2016.
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 Clause GCT 2 of the General Conditions of Tender. 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 23.4.2008)

(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.
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 or the tender closing date or cancellation of the prequalification/tender exercise) notwithstanding that a disclaimer may have already been incorporated in the prequalification documents 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 UNDERTAKING BY OFFICERS INVOLVED IN PREPARING TENDER DOCUMENTATION INCLUDING TENDER SPECIFICATIONS

As required under SPR Clause 186, 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 memos ref. (10) in FT 93/88 dated 19.12.2007 and ref. (27) in TsyB T 00/810-4/9/0 Pt. 2 dated 30.5.2012 from the

The specimen Declaration and Undertaking in Appendix I (A) of the latest version of SPR shall be used for the declaration. All declarations should be kept in file for record.
# 12. REFERENCES

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<td>Employment of Technician Apprentices and Building &amp; Civil Engineering Graduates by Contractors of Public Works Contracts</td>
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DEVB TCW No. 6/2010  Trip Ticket System for Disposal of Construction & Demolition Materials

DEVB TCW No. 8/2010  Enhanced Specification for Site Cleanliness and Tidiness

DEVB TCW No. 5/2013  Extension of Time due to Labour Shortage

DEVB TCW No. 2/2014  Tender Procedures for Procurement governed by the Agreement on Government Procurement of the World Trade Organization

DEVB TCW No. 3/2014  Contractors' Designs and Alternative Designs

DEVB TCW No. 4/2014  Tender Evaluation Methods for Works Contracts

DEVB TCW No. 7/2014  Guidance on Execution of Public Works Contracts as a Deed

DEVB TCW No. 1/2015  Emissions Control of Non-road Mobile Machinery in Capital Works Contracts of Public Works

DEVB TCW No. 4/2015  Administrative Procedures 2015 for Use with the Government of the Hong Kong Special Administrative Region General Conditions of Contract for Design and Build Contracts 1999 Edition

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Environment Bureau Circular Memorandum No. 6/2015  Green Procurement in the Government

FC No. 3/2014  Correctional Services Industries

S for W's memo ref. () in WB(W) 209/32/110 Pt. 12 dated 9.1.2001  WTO GPA Article VI - Technical Specifications

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Provision of land for works areas

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Audit Recommendations on Public Works Contracts

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

SETW's memo ref. (00W45-01-9) in ETWB(W) 810/72/01 dated 21.11.2005
Waste Disposal (Charges for Disposal of Construction Waste) Regulation

SETW's memo ref. (00XFX-01-4) in ETWB(W) 810/72/01 dated 21.12.2005
Waste Disposal (Charges for Disposal of Construction Waste) Regulation

SETW's memo ref. (0117S-01-2) in ETWB(W) 506/30/02 dated 30.3.2006
Practice Note on Adoption of Non-contractual Partnering in Public Works Contracts

SETW's memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006
Interim Guidance Note on the Administration of 'Environmental Management on Construction Sites' (ETWB TCW No. 19/2005)

SETW's memo ref. (014DQ-01-8) in ETWB(W) L/M(4)505/91/01 dated 29.8.2006
Particular Specification Clauses for Control of Dogs on Construction Sites

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Assignment No. 04/2006 - Control of Off Site Fabrication of Construction Components

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Inclusion of Lok Ma Chau Spur Line in ETWB TCW No. 2/2005

DEVB's email dated 25.9.2007
Inclusion of Lok Ma Chau Spur Line in ETWB TCW No. 2/2005
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<td>Works Bureau Technical Circular No. 13/2002 Employment of Qualified Tradesmen and Intermediate Tradesmen by Contractors of Public Works Contracts</td>
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<td>Installation of Mechanical Dump Truck Covers in Capital/Term Contracts tendered on or after 1 November 2010</td>
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Audit Report No. 53 Ch. 3 - Construction works under Castle Peak Road Improvement Project

DEVB Construction Site Safety Manual

DEVB Contractor Management Handbook

DEVB Standard Contract Documents

DEVB Tree Management Guidelines

Guidelines on Yard Waste Reduction and Treatment

Guidelines for Tree Risk Assessment and Management Arrangement on an Area Basis and on a Tree Basis

Guidelines on Arboriculture Occupational Safety and Health

Management Guidelines for Stonewall Trees

Guideline on Pavement Renovation Works and Tree Stability

Management Guidelines for Mature Trees

Guidelines on Tree Preservation during Development

HyD Practice Notes BSTR/PN/003 Rev. C – Noise Barriers with Transparent Panels

http://www.aud.gov.hk/pdf_e/e53ch03.pdf


APPENDICES
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, Ground Floor, East Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, 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 2 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 3 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.
42. 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 $........, such deposited sum to be returned to me/us in accordance with the said Conditions.

(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 .....................................................................................................................

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| 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, Aftercare to Old and Registrable Trees ...... months and preservation and protection to existing trees (Section xx)]
Maintenance Period for Establishment Works ...... months
1 [Maintenance Period for preservation and protection to existing trees (Section xx) ...... months]
1 [Maintenance Period for Aftercare to Old and Registrable Trees2 ...... 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.

3 [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[X5].]

* [The Engineer/Supervising Officer 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 issuing instruction on implementation of the Section Subject to Excision as defined in sub-clause (1) of SCC [X10].]

11 [The Engineer/Supervising Officer 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 issuing instruction on implementation of the Section Subject to Excision as defined in sub-clause (1) of SCC [X10].]
Employer and, in the event of an objection, to act in accordance with the Employer’s direction before approving alternative disposal grounds proposed by the Contractor in accordance with sub-clause (3) of PS[X12]

*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 Liquidated damages

[For use where the Works are not divided into Section]
For the Works HK$[..............* (Y1 + …. Yn)+..............]7 per day

[For use where the Works are divided into Sections]
Section A HK$[.... *Y1 + ....*Yn+ ....*Y2 + ....]7 per day

Section B HK$[.... *Y1 + ....*Yn+ ....*Y3+ ....]7 per day

In the above summary statement of liquidated damages:
Y1 = Total sum of Bill No. 1 in the Bills of Quantities
Y2 = Total sum of Bill No. 2 in the Bills of Quantities
Y3 = Total sum of Bill No. 3 in the Bills of Quantities
Yn = 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 ..... per cent

79(1) Limit of Retention Money $ ............... 

79(2) Minimum amount of interim certificate $ ............... 

*[There shall be no minimum amount of interim certificates for the Establishment Works]

Special Conditions of Contract

*SCC __ Period for Establishment Works ...... months

*SCC __ Time, commencing from and including the date for commencement of the Works notified by the Engineer in accordance with GCC Clause 47, within which the Section Subject to Excision may be ordered .......... days

*SCC __ Minimum amount of third party insurance $ ............... 

*SCC __ Minimum amount of liquidated damages for the *Works/Sections $ .... per day

*SCC __ Sum8 payable to the Employer in the event that Old and Valuable Tree No. __ dies or becomes moribund $ ............... 

Chapter 5 (Rev. 0) 112
**SCC ** Period for Aftercare to Old and Valuable Trees (*Tree/Trees No. ____) \(2 \) ……months

**NOTES:**

* Delete or modify as appropriate

1. 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. 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.

3. This paragraph is applicable to all public works contracts. Please refer to SDEV’s memos ref. (01TC9-01-5) in DEVB(W) 510/17/01 dated 17.7.2008, ref. (01VP5-01-4) in DEVB(W) 510/17/01 dated 11.11.2008 and ref. DEVB(W) 510/17/01 dated 6.9.2013.

4. Where the Engineer is a consultant, works department should take steps to ensure that the constraint is stipulated in the relevant consultancy agreement.

5. To insert relevant clause number for the SCC clause on Limiting the Tiers of Sub-contracting.

6. 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.

7. 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 \( Y_1, \ldots, Y_n \) 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 \( Y_1, \ldots, Y_n \) 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.”

8. 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 the cost that the Employer has expended in nurturing, preservation,
protection and maintenance of that particular tree.

9. Where the Engineer/Supervising Officer is a consultant, works departments should
take steps to ensure that the constraint is stipulated in the relevant consultancy
agreement.

10. To insert relevant clause number of the SCC clause on Section Subject to Excision.

11. This paragraph is applicable to all public works contracts, including capital works
contracts and term contracts. Please refer to the revised trip ticket system as
promulgated in DEVB TCW No. 6/2010.

12. To insert relevant clause number for the PS clause on Trip Ticket System.
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, Aftercare to 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. Besides, the Engineer may, subject to the Employer’s right of objection, (i) permit the contractor in all public works contracts (other than maintenance contracts) to introduce an extra tier of sub-contracting for a part of the Works, (ii) issuing instruction on implementation of the Section Subject to Excision and (iii) approve alternative disposal grounds proposed by the Contractor. These provisions 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 (reference should be made to Paragraph 9.18).

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 $ 10 M</td>
<td>$110,000</td>
</tr>
<tr>
<td>over $ 10 M up to and including $ 25 M</td>
<td>$160,000</td>
</tr>
<tr>
<td>over $ 25 M up to and including $ 50 M</td>
<td>$250,000</td>
</tr>
<tr>
<td>over $ 50 M up to and including $100M</td>
<td>$350,000</td>
</tr>
<tr>
<td>over $ 100 M up to and including $250 M</td>
<td>$500,000</td>
</tr>
<tr>
<td>over $ 250 M</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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Max.</td>
<td>Min.</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Composite labour for civil engineering contracts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bitumen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel reinforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galvanised mild steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portland cement (ordinary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timber formwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other costs not subject to adjustment</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-</td>
<td>-</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$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Preliminaries</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>..</td>
<td></td>
</tr>
<tr>
<td>..</td>
<td></td>
<td>..</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>Site Safety and Environmental Management</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>Daywork</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prime Cost and Provisional Sums (excluding the sum allowed for MPF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>reimbursement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-Total of bill No. 1 to Y inclusive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contingency Sum$^{(1)}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total of the above</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Add 3.5%$^{(2)}$ of the Total above as a Provisional Sum for reimbursement of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MPF$^{(2)}$</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

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of person authorized</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to sign on behalf of tenderer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of tenderer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^{(1)}$ 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

# Exact percentage to be decided by the project office
* delete where inappropriate

(1) Where the Special Condition of Tender on reduction of Contingency Sum has been included, the Employer has power to reduce the amount of the Contingency Sum as stated in the Bills of Quantities by giving notification in writing to the tenderer whose tender is going to be recommended for contract award.

(2) Where the Special Condition of Tender (SCT) on reduction of Contingency Sum has been included and in accordance with sub-clause (2)(c) of the SCT, this provisional sum for reimbursement of Mandatory Provident Fund contribution shall not be affected by a reduction in the amount of the Contingency Sum by the Employer under sub-clause (2)(a) of the SCT.
APPENDIX 5.6  NOTE TO TENDERERS AND SPECIAL CONDITION OF CONTRACT FOR ENGAGEMENT OF SUB-CONTRACTORS REGISTERED FROM SUBCONTRACTOR REGISTRATION SCHEME
(Subsumed from ETWB TCW No. 13/2004 & SDEV’s memo ref. (02KJ8-01-4) in DEVB(W) 510/94/02 dated 22.7.2013)

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 Subcontractor 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 Subcontractor 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]\(^1\) part of the Works execution of which involves trades available under the Primary Register of the Subcontractor 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]\(^2\), [Specialist Sub-contractors]\(^3\) and [sub-contractors for specialist works referred to in Special Condition of Contract Clause [ ]\(^4\)]\(^5\).

(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;]\(^2\)

[(iii)  a Specialist Sub-contractor; or]\(^3\)
[(iv) a sub-contractor for specialist works referred to in Special Condition of Contract Clause [4 5],

execution of which involves trades available under the Primary Register of the Subcontractor 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 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, “Subcontractor Registration Scheme” and “Primary Register of the Subcontractor Registration Scheme” respectively means the Subcontractor Registration Scheme managed by the Construction Industry Council and the Primary Register of the Subcontractor Registration Scheme as referred to in the Rules and Procedures applicable to the aforementioned Subcontractor Registration Scheme.”

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 (Subsumed from WBTC No. 7/2000)  

(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)

(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 _____________________

Company Chop

*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 *$10¹ /*$14² 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 0.1m² 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 $49³ per electronic file and a material charge of $1.1³ per CD-ROM and $1.3³ per 4.7GB DVD+/-R, 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.
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 SFST’s memo ref. (109) in TsyB T ADM/1-135/1/0 Pt.8 dated 13.12.2016.

2. For tenders opened by PWTB, see PWTB’s memo ref. (21) in PW/TB/GEN/16 dated 12.8.2016.

3. See SDEV’s memo ref. (57) in DEVB(W) 511/70/02 dated 15.6.2016.
APPENDIX 5.9 CONTROL OF ALKALI SILICA REACTION IN CONCRETE

1. Alkali Silica Reaction (ASR) is a type of Alkali Aggregate Reaction (AAR) which is caused by the reaction in concrete between the alkaline cement paste with the reactive forms of silica in the aggregate. It can cause concrete to expand and crack. ASR can occur if the aggregate in the concrete is alkali reactive and if other unfavourable factors are present. As the local aggregate is mainly of granitic type, only ASR has been observed in Hong Kong. Other form of AAR has not been recorded.

2. For ASR to occur there must be alkali reactive minerals present in the aggregate, together with sufficient alkalis and moisture in the concrete to support the reaction process. A range of minerals, including opal, tridymite, cristobalite, highly strained quartz, microcrystalline quartz, volcanic glasses, and synthetic siliceous glass, have been reported alkali reactive. The occurrence of ASR depends on both the type and percentage by mass of alkali reactive minerals present, as well as other factors mentioned earlier. The alkalis in the concrete come mainly from the cement. Therefore, effective means of reducing the risk of ASR include the reduction of the amount of alkalis present in the concrete to 3 kg/m$^3$. This could be achieved by the reduction of the amount of cement used in the concrete mix, the use of low alkali cement, or the use of supplementary cementitious materials such as PFA and GGBS. One of the conditions for ASR to occur is that sufficient moisture has to be available in the concrete. For structural elements for which ingress of moisture of the concrete is not possible throughout the design life, the 3 kg/m$^3$ limit on alkali reactive content need not apply. The drawings should indicate the concrete elements for which the specification for the control of ASR do not apply.

3. Aggregate is classified into three categories in terms of the potential alkali-reactivity: non-reactive, potentially reactive and reactive. Aggregate used in Hong Kong is mostly of the “non-reactive” category. Occasionally, aggregate of the “potentially reactive” category is found, e.g. due to contamination by alkali reactive dyke rocks. Alkali reactive aggregate should not be used in permanent structural concrete unless it can be assured that ASR will not occur or ASR cracking is not a concern. The ultra-accelerated mortar bar test (AMBT) is a commonly adopted method to classify the potential alkali-reactivity of aggregate, and the detailed test procedure is specified in CS1:2010. Concrete prism test and petrographic analysis are also sometimes used in classifying the potential alkali-reactivity of aggregate.

4. The Standing Committee on Concrete Technology (SCCT) and its Sub-committees conducted studies on ASR and established an ASR control framework for use in Hong Kong. The recommended control framework is given in Appendix H “Alkali Aggregate Reaction Control Framework for Hong Kong” of GEO Report No 167, which is accessible from the CEDD website:


5. The concrete mix design 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. For “Class 1” and “Class 2” structures, aggregate in the “non-reactive” or “potentially reactive” categories may be used in concrete for works and the reactive alkali content of the
concrete shall be limited to 3 kg/m$^3$. Aggregate in the “reactive” category is not permitted to be used in concrete for works unless with prior approval of the Engineer.

6. For Class 3 structures (long service life or highly critical structures), where no ASR damage is acceptable, e.g. nuclear installations, dams, tunnels, exceptionally important bridges or viaducts and structures retaining hazardous materials, only aggregate in the “non-reactive” category is to be used and the reactive alkali content of the concrete is to be limited to 3 kg/m$^3$. The designer should indicate which parts of the works are categorised as Class 3 structures and specify these requirements in the relevant Drawings and/or include suitable Particular Specification clauses in the contract as necessary.
APPENDIX 5.10  CONFIRMATION BY CONTRACTOR ON CESSATION OF THE USE OF GOVERNMENT DIGITAL MAP DATA
(Subsumed from WBTC No. 7/2000)

(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 contractor in full) (Name of Government Department in full) (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
(Subsumed from WBTC No. 3/97)

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
(Subsumed from WBTC No. 17/95)

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 SDEV's memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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 SDEV’s memo ref. DEVB(W) 546/17/02 dated 9.2.2011 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.
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.
APPENDIX 5.14  PARTICULAR PREAMBLE TO SPECIFY THE CURRENT EDITION OF HKCA SCHEDULES FOR PLANT USED IN DAYWORKS CARRIED OUT INCIDENTAL TO CONTRACT WORK

SECTION 27

DAYWORK

DAYWORK

Measurement  27.03A Replace “HKCA Schedules for Plant Used in Dayworks Carried Out Incidental to Contract Work” current at the date for return of Tender” with “HKCA Schedules for Plant Used in Dayworks Carried Out Incidental to Contract Work (xxxx Edition#)” in line 1 of paragraph 1.

#  Insert the appropriate edition, e.g. 2013 Edition, of the Schedules current at the date for return of tender with reference to the information of Hong Kong Construction Association.

* * * * *
APPENDIX 5.15  (NOT USED)
APPENDIX 5.16 (NOT USED)
APPENDIX 5.17  (NOT USED)
APPENDIX 5.18  (NOT USED)
APPENDIX 5.19 CONTRACT MEASURES TO LIMIT THE NUMBER OF TIERS OF SUB-CONTRACTING

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. 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/Maintenance Surveyor* 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/Maintenance Surveyor* 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/Maintenance Surveyor* 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/Maintenance Surveyor* if it is not expressly rejected by the Engineer/Maintenance Surveyor* in writing within 14 days from the date of receipt by the Engineer/Maintenance Surveyor* 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/Maintenance Surveyor* 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;

"Sub-contractor Registration Scheme" means the Sub-contractor Registration Scheme managed by the Construction Industry Council.

* Delete as appropriate

** 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)

This page should only be updated by Works Branch of Development Bureau.

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 5.22   NOTES TO TENDERERS FOR PAYMENT FOR
SUB-CONTRACTOR MANAGEMENT PLAN

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.
APPENDIX 5.23 SPECIAL CONDITIONS OF CONTRACT FOR MANAGEMENT OF SUB-CONTRACTORS

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.

vii) 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.
Appendix [x] to SCC[x]

[For contracts without contract measures to prevent non-payment of wages and/or limiting number of tiers of sub-contracting]

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.
Appendix [y] to SCC[x]

**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.
APPENDIX 5.25 PARTICULAR SPECIFICATION FOR MANAGEMENT OF SUB-CONTRACTORS

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
APPENDIX 5.26  METHOD OF MEASUREMENT FOR PAYMENT FOR SUB-CONTRACTOR MANAGEMENT PLAN

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

<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></td>
<td>Quarterly Updating of SMP (each time)</td>
</tr>
<tr>
<td>Less than 20M</td>
<td>4,800</td>
</tr>
<tr>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Between 20M and 50M</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>More than 50M</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>2,000</td>
</tr>
</tbody>
</table>
APPENDIX 5.28  PRACTICE NOTE ON ADOPTION OF NON-CONTRACTUAL PARTNERING IN PUBLIC WORKS CONTRACTS
(Ref: SETW’s memo ref. (0117S-01-2) in ETWB (W) 506/30/02 dated 30.3.2006)

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 DEVB TCW No. 3/2014]. 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**

- **NO**
- **YES**

**CREASES ALIGNMENT TOWARDS SOLVING THE PROBLEM TOGETHER**

**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.
ANNEX B

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.
Annex C

(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>1</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 __________________________________________
Annex E

Client’s Brief to Service Providers for
Designing and Facilitating Partnering Workshops and Related Services

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 time or costs.
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>
APPENDIX 5.29 CONTRACT PROVISIONS – REVISED APPENDICES E, F & G OF WBTC NO. 13/2001 AND REVISED APPENDIX I OF ETWB TCW NO. 13/2001A
(Ref.: SDEV’s memo ref. (025B1) in DEVB(W) 520/83/01 dated 26.1.2010)

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 Architect/Engineer designate issued in accordance with General Conditions of Tender Clause 25, submit to the Architect/Engineer designate:

EITHER

(a) a copy of his ISO 9001:2000 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/aspect 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 Architect/Engineer designate issued in accordance with General Conditions of Tender Clause 25, submit to the 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# 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# 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# or ISO 9001:2008 certification on or before the date of acceptance of the Tender.

# For use before 15 November 2010

§ 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

**WBTC No. 13/2001** Revised Appendix G
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
APPENDIX 5.30 PARTICULAR SPECIFICATIONS TO FACILITATE THE USE OF RECYCLED AGGREGATES IN CONCRETE PRODUCTION (Ref.: WBTC No. 12/2002)

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. Fine aggregate derived from recycled 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.

Mix Proportions: Concrete shall be mixed in the following proportions:

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Portland Cement</td>
<td>100 Kg</td>
</tr>
<tr>
<td>Fine Aggregate</td>
<td>180 Kg</td>
</tr>
<tr>
<td>20 mm Coarse Aggregate</td>
<td>180 Kg</td>
</tr>
<tr>
<td>10 mm Coarse Aggregate</td>
<td>90 Kg</td>
</tr>
</tbody>
</table>

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 Strength: The minimum concrete cube strength shall be 14 MPa and 20 MPa at 7 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>
</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 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 100 kN. BS 882 states that the 10% fines value to be 50 kN for concrete not subjected to wearing. BRE Digest 433 states that 70 kN is achievable in recycled aggregate derived from brickwork, and 100 kN for those derived from crushed concrete. In recent tests carried out on recycled aggregates derived from old concrete, 100 kN 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**  
Compliance criteria shall be as in Cl. 16.27 and Cl. 16.26 of GS
Criteria 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>
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</tr>
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<td>Max. water absorption</td>
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<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>Manual sorting in accordance with BRE Digest 433</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 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 100 kN. 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 100 kN for those derived from crushed concrete. In recent tests carried out on recycled aggregates derived from old concrete, 100 kN can be satisfied.

Note 4  BRE Digest 433 recommends to determine acid soluble chloride rather than water soluble chloride.
APPENDIX 5.31  GENERAL GUIDELINES ON SITE PRACTICE FOR BUILDING AND CIVIL ENGINEERING GRADUATES  
(Ref.: ETWB TCW No. 12/2003)

Experience with regard to site practice should, where possible, be provided in the following areas:

- Planning and programming of construction
- Resource planning, allocation and control
- Methods of construction and their proper sequence, including design of temporary works
- Setting out works and knowledge of surveying instrument
- Mechanical plant including knowledge of use, capacity, output & cost
- Materials including their cost, storage and handling problems, quality and other characteristics
- Testing materials
- Measurement of work
- Valuation of variations including variation orders
- Interim statements and certificates
- Site safety
- Working conditions and welfare
- Liaison with other organizations and the public
- Site administration including control and management of subordinates
- Site records and reports

Note:  
The guidance on site practice is reproduced from the section on training for a Civil Engineer (Technologist) in the current Report on “Training Programmes for Principal Jobs in the Building and Civil Engineering Industry, Volume One : Technologists Jobs”. The Report was prepared by the Building and Civil Engineering Industry Training Board of the Vocational Training Council.
APPENDIX 5.32 CONTRACT MEASURES FOR TECHNICIAN APPRENTICES AND BUILDING & CIVIL ENGINEERING GRADUATES
(Ref.: ETWB TCW No. 12/2003)

Special Conditions of Contract for Technician Apprentices and Building and Civil Engineering Graduates

“SCC [  ] (1) The Contractor shall employ at least the minimum number of technician apprentices and building or civil engineering graduates as specified in the Contract.

(2) Where the Contractor employs the technician apprentice(s) pursuant to sub-clause (1) of this Clause, the Contractor shall ensure that all employed technician apprentice(s) attend a course of instruction at an approved technical institution leading to the award of either a Higher Certificate in Building Studies, Civil Engineering, Building Services or other comparable alternative qualification.

(3) Where the Contractor employs the building or civil engineering graduate(s) pursuant to sub-clause (1) of this Clause, the Contractor shall ensure that all employed graduate(s) are provided with practical training on site for a minimum of 12 months or 70% of the time for completion of the Works as stipulated in the Appendix to the Form of Tender, whichever is longer, and follow established training guidelines for the relevant disciplines as far as possible.”

Particular Specification

1 The Contractor shall employ for each capital works contract exceeding $50M the corresponding minimum number of technician apprentices under a valid contract of apprenticeship, as set out in the following table. The contractor shall provide to the procuring department the names of technician apprentices employed, together with evidence of each technician apprentice’s contract of apprenticeship, within three months after the date of commencement of the contract. Any subsequent changes on the employed technician apprentices must also be reported to the procuring department within 1-month time.

<table>
<thead>
<tr>
<th>(a)</th>
<th>For a contract the contract sum of which exceeds $50 million but is not more than $100 million.</th>
<th>- one</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>For a contract the contract sum of which exceeds $100 million but is not more than $200 million.</td>
<td>- two</td>
</tr>
<tr>
<td>(c)</td>
<td>For a contract the contract sum of which exceeds $200 million.</td>
<td>- three</td>
</tr>
</tbody>
</table>

2 The Contractor shall employ for each capital works contract exceeding $50M the corresponding minimum number of building or civil engineering graduate with an academic qualification gained within the preceding three years, and recognised by an appropriate local or overseas professional institution, such as the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers,
the Institution of Civil Engineers, the Institution of Structural Engineers or the Chartered Institute of Building, as set out in the following table. The contractor shall provide to the procuring department the names of the building or civil engineering graduates employed, together with evidence of each graduate’s terms or contract of employment and the qualified professional supervising such graduates, within three months after the date of commencement of the contract. Any subsequent changes on the employed graduates must be reported to the procuring department within 1-month time.

<table>
<thead>
<tr>
<th></th>
<th>For a contract the contract sum of which exceeds $50 million but is not more than $100 million.</th>
<th>- one</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>For a contract the contract sum of which exceeds $100 million.</td>
<td>- two</td>
</tr>
</tbody>
</table>

(b) For a contract the contract sum of which exceeds $100 million.
### APPENDIX 5.33 GCT 4 - SUBMISSION OF TENDER (FORMULA APPROACH AND MARKING SCHEME)
(Ref.: SDEV’s memo ref. (026NM-01-3) in DEVB(W) 546/17/01 dated 25.6.2010)

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GCT 4 Submission of Tender (Formula Approach)</strong></td>
<td>For tenders not using a marking scheme for tender evaluation.</td>
</tr>
<tr>
<td>(1)</td>
<td>The following documents shall be enclosed in a sealed envelope addressed, endorsed and deposited as required by the Gazette Notification or Letter of Invitation to Tender or the Tender Notice:</td>
</tr>
<tr>
<td>(a)</td>
<td>One set of the documents referred to in Clause 2(b)* above with:</td>
</tr>
<tr>
<td>(i)</td>
<td>The Form of Tender in hard copy format duly completed and signed.</td>
</tr>
<tr>
<td><em>(ii)</em></td>
<td><em>The Bills of Quantities/Schedule of Quantities/Schedule of Rates in either hard copy format or electronic format [See Note 1] fully priced as to each item, extended, cast and totalled as appropriate. [See also Note 2]</em></td>
</tr>
<tr>
<td><em>(iii)</em></td>
<td>Summary of Tender in either hard copy format or electronic format.</td>
</tr>
<tr>
<td><em>(iv)</em></td>
<td>Column 3 in the Schedule of Proportions to be used in calculating the Price Fluctuation Factor completed, in hard copy format.</td>
</tr>
<tr>
<td><em>(v)</em></td>
<td>*Plant and Labour Schedule/Equipment Schedule/Schedules of Particulars completed, in either hard copy format or in electronic format.</td>
</tr>
<tr>
<td>(b)</td>
<td>A copy each of the documents submitted under sub-clauses (1)(a)(i), *(1)(a)(ii), *(1)(a)(iii) and <em>(1)(a)(iv)</em> of this Clause.</td>
</tr>
<tr>
<td>(c)</td>
<td>The submissions that are required by the General Conditions of Tender (GCT) and Special Conditions of</td>
</tr>
</tbody>
</table>

Note:
1. Delete the option of electronic submission when the Bills of Quantities or Schedule of Quantities or Schedule of Rates in the EDP have not been provided in Excel format.
2. In some contracts, e.g. term contracts, tenderers are not required to return the Schedule of Rates etc. in which case sub-clause (1)(a)(ii) should be deleted.
3. Attach an appendix to the GCT on the prevailing technical requirements for tender submission in electronic format (Appendix 4 to ETWB TCW No. 11/2005).
<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender (SCT).</td>
<td>* Delete/Modify as appropriate. ** Works Departments should stipulate the prevailing rates which may from time to time be prescribed by DEVB, FSTB and/or PWTB. Ref: SDEV’s memo ref. (57) in DEVB(W) 511/70/02 dated 15.6.2016, SFST’s memo ref. (109) in TsyB T ADM/1-135/1/0 Pt.8 dated 13.12.2016 and PWTB’s memo ref. (21) in PW/TB/GEN/16 dated 12.8.2016.</td>
</tr>
<tr>
<td>(2) If a tenderer submitted the documents required under sub-clause (1)(a) of this Clause in electronic format as allowed thereunder but failed to submit the required copy under sub-clause (1)(b) of this Clause, the tender opening team shall make the required copy in electronic format on the tenderer's behalf. The tenderer may be asked to bear the cost of making the copy. The cost of duplication is currently set at $49** per electronic file and the material charge at $1.1** per CD-ROM and $1.3** per 4.7GB DVD+/−R.</td>
<td></td>
</tr>
<tr>
<td>(3) If a tenderer submitted the documents required under sub-clause (1)(a) of this Clause in hard copy format as allowed or required thereunder but failed to submit the required copy under sub-clause (1)(b) of this Clause, the tender opening team shall make the required photocopies on the tenderer's behalf. The tenderer may be asked to bear the cost of making the photocopies. The cost of photocopying is currently set at $10 /$14 ** per copied page, which cost also covers material.</td>
<td></td>
</tr>
<tr>
<td>(4) If a tenderer elects to submit the priced *Bills of Quantities/ *Schedule of Quantities/ *Schedule of Rates in hard copy format and where a hard copy has been supplied by the Employer, he should price the *Bills of Quantities/ *Schedule of Quantities/ *Schedule of Rates on the hard copy supplied by the Employer. If a tenderer fails to do so, any extra cost incurred by the Employer in checking whether the printed descriptions or figures of the tender are identical to those in the hard copy supplied by the Employer is recoverable by the Employer as a debt. The tenderer whose tender has been so checked shall pay such cost if demanded by the Employer.</td>
<td></td>
</tr>
<tr>
<td>Clause</td>
<td>Remarks/Guidelines</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------</td>
</tr>
<tr>
<td>(5)</td>
<td>Where a document may be submitted in hard copy format or electronic format and if a tenderer makes two submissions for the same document, one in hard copy format and one in electronic format, the submission in hard copy format shall be discarded.</td>
</tr>
<tr>
<td>(6)</td>
<td>All submissions in electronic format shall comply with the requirements set out in Appendix [ ] [See Note 3].</td>
</tr>
</tbody>
</table>
**Clause 5**  

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remark/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCT 4</td>
<td>Submission of Tender (Marking Scheme)</td>
</tr>
<tr>
<td>(1) The following documents shall be placed in two separate envelopes as specified below and the two envelopes shall then be enclosed in a sealed envelope addressed, endorsed and deposited as required by the Gazette Notification or Letter of Invitation to Tender or the Tender Notice:</td>
<td></td>
</tr>
<tr>
<td>In an envelope clearly marked with the tender reference and the words 'Tender Price Documents'</td>
<td></td>
</tr>
<tr>
<td>(a) One set of documents referred to in Clause 2(b)* above with:</td>
<td></td>
</tr>
<tr>
<td>(i) The Form of Tender in hard copy format duly completed and signed.</td>
<td></td>
</tr>
<tr>
<td>*(ii) The *Bills of Quantities/*Schedule of Quantities/*Schedule of Rates in either hard copy format or electronic format [See Note 1] fully priced as to each item, extended, cast and totalled as appropriate. [See Note 2]</td>
<td></td>
</tr>
<tr>
<td>*(iii) Summary of Tender in either hard copy format or electronic format.</td>
<td></td>
</tr>
<tr>
<td>*(iv) Column 3 in the Schedule of Proportions to be used in calculating the Price Fluctuation Factor completed, in hard copy format</td>
<td></td>
</tr>
<tr>
<td>(b) A copy each of the documents submitted under sub-clauses (1)(a)(i), *(1)(a)(ii), *(1)(a)(iii) and *(1)(a)(iv) of this Clause.</td>
<td></td>
</tr>
<tr>
<td>(c) The following submissions that are required by the General Conditions of Tender (GCT) and Special Conditions of Tender (SCT) [See Note 3]:</td>
<td></td>
</tr>
<tr>
<td>(i) ……………… (GCT Clause [ ] )</td>
<td></td>
</tr>
<tr>
<td>(ii) ………………(SCT Clause [ ] )</td>
<td></td>
</tr>
<tr>
<td>In another envelope clearly marked</td>
<td></td>
</tr>
</tbody>
</table>

Alternative Clause 4 for tenders using a marking scheme for tender evaluation

* Delete/Modify as appropriate.

**Note:**
1. Delete the option of electronic submission when the Bills of Quantities or Schedule of Quantities or Schedule of Rates in the EDP have not been provided in Excel format.
2. In some contracts, e.g. term contracts, tenderers are not required to return the Schedule of Rates etc. in which case sub-clause (1)(a)(ii) should be deleted.
3. All submissions required from tenderers should be stated, quoting where the details of the requirements are given, e.g. Clause 1 of the Special Conditions of Tender.
4. Attach an appendix to the GCT on the prevailing technical requirements for tender submission in electronic format (Appendix 4 to ETWB TCW No. 11/2005).
<table>
<thead>
<tr>
<th>Clause</th>
<th>Remark/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>with the tender reference and the words 'Technical Submission'</td>
<td></td>
</tr>
<tr>
<td>(d) Submissions on technical resources and technical proposals which are the subject of evaluation in accordance with the marking scheme at [Annex to Notes to Tenderers] and more particularly described in Special Conditions of Tender Clause, in either hard copy format or electronic format.</td>
<td></td>
</tr>
<tr>
<td>(e) The following submissions that are required by the General Conditions of Tender (GCT) and Special Conditions of Tender (SCT) [See Note 3]: (i) ………………. (GCT Clause [ ]) (ii) ……………….(SCT Clause [ ])</td>
<td></td>
</tr>
<tr>
<td>(2) If a tenderer submitted the documents required under sub-clause (1)(a) of this Clause in electronic format as allowed thereunder but failed to submit the required copy under sub-clause (1)(b) of this Clause, the tender opening team shall make the required copy in electronic format on the tenderer's behalf. The tenderer may be asked to bear the cost of making the copy. The cost of duplication is currently set at $49** per electronic file and the material charge at $1.1** per CD-ROM and $1.3** per 4.7GB DVD+-R.</td>
<td>** Works Departments should stipulate the prevailing rates which may from time to time be prescribed by DEVB, FSTB and/or PWTB. Ref: SDEV’s memo ref. (57) in DEVB(W) 511/70/02 dated 15.6.2016, SFST’s memo ref. (109) in TsyB TADM/1-135/1/0 Pt.8 dated 13.12.2016 and PWTB’s memo ref. (21) in PW/TB/GEN/16 dated 12.8.2016.</td>
</tr>
<tr>
<td>(3) If a tenderer submitted the documents required under sub-clause (1)(a) of this Clause in hard copy format as allowed or required thereunder but failed to submit the required copy under sub-clause (1)(b) of this Clause, the tender opening team shall make the required photocopies on the tenderer's behalf. The tenderer may be asked to bear the cost of making the photocopies. The cost of photocopying is currently set at $10 /$14 ** per copied page, which cost also covers material.</td>
<td></td>
</tr>
<tr>
<td>(4) If a tenderer elects to submit the priced</td>
<td></td>
</tr>
<tr>
<td>Clause</td>
<td>Remark/Guidelines</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td><em>(Bills of Quantities)</em>/<em>Schedule of Quantities</em>/<em>Schedule of Rates</em> in hard copy format and where a hard copy has been supplied by the Employer, he should price the <em>(Bills of Quantities)</em>/<em>Schedules of Quantities</em>/<em>Schedule of Rates</em> on the hard copy supplied by the Employer. If a tenderer fails to do so, any extra cost incurred by the Employer in checking whether the printed descriptions or figures of the tender are identical to those in the hard copy supplied by the Employer is recoverable by the Employer as a debt. The tenderer whose tender has been so checked shall pay such cost if demanded by the Employer.</td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>Where a document may be submitted in hard copy format or electronic format and if a tenderer makes two submissions for the same document, one in hard copy format and one in electronic format, the submission in hard copy format shall be discarded.</td>
</tr>
<tr>
<td>(6)</td>
<td>All submission in electronic format shall comply with the requirements set out in Appendix [ ] [See Note 4].</td>
</tr>
</tbody>
</table>
APPENDIX 5.34  EMPIRICAL FORMULAE FOR CALCULATION OF LIQUIDATED DAMAGES  
(Ref.: ETWB TCW No. 4/2003)

The following empirical formulae may be used to calculate the components of LD’s to be specified in the Contract unless an alternative, more accurate assessment can be made.

(a) Recovery on Capital Invested (Notes 1 & 4)

\[
\text{Daily LD’s} = \frac{(C+E) \times (1-V) \times P}{365}
\]

(b) Site Supervisory Costs (Notes 2 & 4)

\[
\text{Daily LD’s} = \frac{S}{T}
\]

(c) Fluctuation (Note 3)

\[
\text{Daily LD’s} = \frac{V \times C \times T \times F}{2 \times D \times 365}
\]

Where:

\[C\] = the contract value of the Works (including preliminary items and the Provisional Sum for price fluctuations (if any) but excluding the payment for site safety, Contingency Sum and daywork) or, as the case may be, the contract value of the Section (including a share of preliminary items and the Provisional Sum for price fluctuations).

\[D\] = the assumed delay in days for the completion of the Works, or the delay in completion of a Section.

\[E\] = the estimated lump sum cost for providing professional and site supervisory staff.

\[F\] = the assumed annual change in the Price Fluctuation Factor applicable to the Contract.

\[P\] = the assumed lending rate (% per annum) during the course of the Contract.

\[S\] = the estimated lump sum site supervisory costs.

\[T\] = the time in days for completion of the Works, or time for completion of a Section.

\[V\] = the assumed value of outstanding works in percentage of \(C\) at time for completion.
The following guidelines are provided for reference:

(i) D may be determined by reference to department’s record of similar or equivalent contracts completed in the past 5 years;

(ii) E and S vary with the size and complexity of the project as well as the prevailing level of charge for professional service. They should exclude contingent sums such as allowance for supervisory costs during extended contract periods;

(iii) the average annual change in the Price Fluctuation Factor pertaining to the contract based on the past 5-year record may be taken as F;

(iv) the quoted best lending rate (% per annum) of the Hong Kong Monetary Authority recorded in the latest issue of the Hong Kong Monthly Digest of Statistics published by the Census and Statistics Department, Hong Kong may be taken as P; and

(v) V should be determined based on the value of D, the construction sequence and the rates for the works.

Note

1. If it is possible to carry out a cost-benefit analysis, such as the estimated daily revenue expected from the facility on completion, this sum should replace that derived by formula at (a).

2. The formula at (b) applies where site supervisory costs are likely to continue at a constant rate during the period of delay. See also Paragraph 3.3.4.

3. Daily LD’s at (c) only apply to contracts to which price fluctuations apply.

4. For term contracts, it is not possible to estimate a lump sum value for E & S applicable to all works orders. The following formulae may be used in lieu of that in (a) and (b):

(i) Recovery on Capital Invested (alternative version for term contracts)

\[ \text{Daily LD’s} = \frac{(1 + E_1) \times (1-V) \times C \times P}{365} \]

(ii) Site Supervisory Costs (alternative version for term contracts)

\[ \text{Daily LD’s} = \frac{C \times S_1}{T} \]
Where $E_1 =$ the estimated cost for providing professional and site supervisory staff in percentage of $C$.

$S_1 =$ the estimated site supervisory costs in percentage of $C$. 
APPENDIX 5.35  GUIDELINES ON CALCULATION OF LIQUIDATED DAMAGES
(Ref.: ETWB TCW No. 4/2003)

ANNEX A - SUGGESTED FORMAT FOR CALCULATION OF LIQUIDATED DAMAGES

Title of Contract
______________________________________________________________________

Contract No.______________________________Date____________________________________

Estimated final contract sum (including contingencies)
$_____________________________SECTION_______________________________
______________________________________________________________________

Value of Section    (C)    (include preliminaries but exclude contingencies) $ =

Time for Completion of Section    (T)    =   days

Interest Rate    (P)    =   %

Assumed delay in completion of the Section    (D)    =   days

Value of outstanding work at time for completion    (V)    =   %

Cost of Professional service and site supervision    (E)/(E₁)    =

Site supervisory costs    (S)/(S₁)    =

Annual change in the Price Fluctuation Factor    (F)    =   %

(a) Recovery on capital invested

\[ \frac{[(C+E) * (1-V) * P ÷ 365]}{(1+E₁) * (1-V) * C * P ÷ 365} \] OR

\[ \frac{C * E}{T} \] OR

\[ \frac{S}{T} \]

Daily rate of economic benefit $ =

(b) Site Supervisory Costs

(i) \[ \frac{S}{T} \] OR \[ C * S₁ ÷ T \] $ =

(ii) Minimum site Supervisory Costs $ =

(c) Fluctuations \[ V * C * T * F ÷ (2 * D * 365)(if any) \] $ =


(d) Special damages (if any) =

Total LD’s (a + b(i) + c + d) = per day

$
ANNEX B – WORKED EXAMPLE

Contract for a service reservoir with an access road which requires early completion. There will be no special damages if the project is not completed on time. In the Bills of Quantities, Bill 1(Y₁) covers the preliminaries, Bill 2(Y₂) the access road and Bill 3 & 4(Y₃) the remainder of the Works. The preliminaries for the access road is 0.2 * Y₁. The contingency sums for the access road and remainder of the works are $0.1M and $0.2M respectively.

Section A (Access Road)

Value of Section A (C) = 0.2 * Y₁ + Y₂ – 0.1M

Time for completion of Section A (T) = 350 days

Lending Rate (P) = 10%

Delay in completion of the Section (D) = 88 days

Outstanding work at time for completion (V) = 20%

Cost of professional service and site supervision (E) = 3M

Site supervisory costs (S) = 2M

Annual change in the Price Fluctuation Factor (F) = 6.1%

(a) Recovery on capital invested = 0.8 * (0.2 * Y₁ + Y₂ – 0.1M + 3M) * 10% / 365
   = 2.192 * 10⁻⁴ * (0.2 * Y₁ + Y₂ + 2.9M)

(b) (i) Site supervisory costs = 2M / 350 = 5714
   (ii) Minimum site supervisory costs = zero

(c) Fluctuations = 0.2 * (0.2 * Y₁ + Y₂ – 0.1M) * 350 * 0.061 / (2 * 88 * 365)
   = 6.647 * 10⁻⁵ * (0.2 * Y₁ + Y₂ – 0.1M)

(d) Special damages = zero

Total LD’s = 0.571 * 10⁻⁴ * Y₁ + 2.857 * 10⁻⁴ * Y₂ + 6356
Section B (remainder of the Works)

Value of Section B (C) = (0.8 * Y₁ + Y₃ – 0.2M)

Time for completion of Section B (T) = 400 days

Lending Rate (P) = 10 %

Delay in completion of the Section (D) = 100 days

Outstanding work at time for completion (V) = 20 %

Cost of professional service and site supervision (E) = 12M

Site supervisory costs (S) = 8M

Annual change in the Price Fluctuation Factor (F) = 6.1 %

(a) Recovery on capital invested

= 0.8 * (0.8 * Y₁ + Y₃ – 0.2M + 12M) * 10% ÷ 365

= 2.192 * 10⁻⁴ * (0.8 * Y₁ + Y₃ + 11.8M)

(b) (i) Site supervisory costs

= 8M ÷ 400 = 20,000

(ii) Minimum site supervisory costs

= (to be calculated based on the minimum establishment, say $15,000 for this example)

(c) Fluctuations

= 0.2*(0.8*Y₁+Y₃-0.2M) * 0.061 ÷ (2*100* 365)

= 6.685 * 10⁻⁵ * (0.8 * Y₁ + Y₃ – 0.2M)

(d) Special damages

= zero

Total LD’s

= 2.288 * 10⁻⁴ * Y₁ + 2.861 * 10⁻⁴ * Y₃ + 22,573

Summary statement of liquidated damages:

Liquidated damages for section A

= $ (0.571*10⁻⁴*Y₁+2.857*10⁻⁴*Y₂+256) per day

Liquidated damages for Section B

= $ (2.288*10⁻⁴*Y₁+2.861*10⁻⁴*Y₃+22,573) per day

Minimum liquidated damages for Section A

= N/A

Minimum liquidated damages for Section B

= $15,000 per day
ANNEX C - APPENDIX TO FORM OF TENDER

52 Liquidated Damages

Summary statement of liquidated damages:

Section A
HK$ \left[ 0.571 \times 10^{-4} Y_1 + 2.857 \times 10^{-4} Y_2 + 6356 \right] \# per day

Section B
HK$ \left[ 2.288 \times 10^{-4} Y_1 + 2.861 \times 10^{-4} Y_3 + 22,573 \right] \## per day

Section B minimum liquidated damages
HK$15,000 per day

In the above summary statement of liquidated damages:

\[ Y_1 = \text{Total sum of Bill No. 1 in the Bills of Quantities} \]
\[ Y_2 = \text{Total sum of Bill No. 2 in the Bills of Quantities} \]
\[ Y_3 = \text{Total sum of Bill No. 3 and Bill No. 4 in the Bills of Quantities} \]

\# 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 each of \( Y_1 \) and \( Y_2 \) with its corresponding value in the priced Bills of Quantities.

\## The value of the formula within the square brackets shall be taken as HK$15,000 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$15,000 per day by substituting each of \( Y_1 \) and \( Y_3 \) with its corresponding value in the priced Bills of Quantities.
## APPENDIX 5.36 SPECIAL CONDITIONS OF CONTRACT FOR USE IN MEGA PROJECT CONTRACTS
(Ref.: WBTC No. 26/2002)

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S.C.C. A1  Programmes and progress reports

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

“Monthly Progress Report” means the report to be prepared by the Contractor in the form and detail prescribed by the Specification and submitted monthly to the Engineer in accordance with Clause 16(10).

“Works Programme” means the programme showing the sequence, method and timing in which the Contractor proposes to carry out the construction, testing, commissioning of the Works and related activities and any investigations and design as may be required to be carried out by the Contractor under the Contract including (in so far as such work is described in the Contract) due allowance for the carrying out of Specialist Works and work by utility undertakings, in the form and content prescribed by the Specification, or any amended or varied version thereof, as submitted by the Contractor and approved by the Engineer in accordance with Clause 16.”

(2) General Conditions of Contract Clause 16 is deleted and replaced by the following:

“16 (1) Within 7 days of acceptance of the Tender, the Contractor shall submit to the Engineer his proposed programme for approval as the initial Works Programme in the form and content prescribed by the Specification. Within 60 days of approval of the initial Works Programme in accordance with Clause 16(2) or such other period as may be prescribed in the Specification, the Contractor shall submit to the Engineer for his approval an expanded and more detailed version of the initial Works Programme in the form and content prescribed by the Specification.
S.C.C. A1  Programmes and progress reports

(2) The Engineer shall, within 30 days of receipt of any programme submitted pursuant to this Clause 16, notify the Contractor in writing:

(a) that the programme is approved; or

(b) that the programme is rejected, in which case reasons for such rejection shall be given, including indication of those parts of the programme with which the Engineer is not satisfied; or

(c) that further information is required to clarify or substantiate the programme or to satisfy the Engineer as to its reasonableness.

Provided that if none of the above actions is taken within the said period of 30 days the Engineer shall be deemed to have approved the programme submitted.

(3) The Contractor shall within 21 days of receiving notification under Clause 16(2)(c), or within such further period as the Engineer may allow in writing, provide the further information requested failing which the programme shall, subject to the provisions of Clause 16(4), be deemed to have been rejected. The Engineer shall within 21 days of receipt of such further information approve or reject the programme in accordance with Clause 16(2).
S.C.C. A1 Programs and progress reports

(4) If the Engineer is of the opinion that the Contractor has provided sufficient information to satisfy him as to the reasonableness of a substantial part of any programme submitted pursuant to this Clause 16, the Engineer may but shall not be bound to notify the Contractor in writing that the programme is approved notwithstanding the failure of the Contractor to provide all or any of the further information requested under Clause 16(2)(c) in respect of the remaining part of the programme.

(5) In the event of a programme being rejected under Clause 16(2)(b) or deemed to have been rejected under Clause 16(3), the Contractor shall within 21 days thereafter submit a revised programme taking into account of the reasons given for the rejection or incorporating the further information requested by the Engineer, as the case may be.

(6) (a) The Contractor may at any time following approval of a programme as the Works Programme submit to the Engineer an amended or varied version thereof.

(b) The Contractor shall review the Works Programme in the event that:

(i) the Engineer grants an extension of time in accordance with Clause 50;
S.C.C. A1  Programmes and progress reports

(ii) the Engineer instructs steps be taken to expedite the completion of the Works or any Section thereof or the achievement of any Stage under Clause 51;

(iii) the Engineer instructs a variation under Clause 60;

(iv) the Contractor considers for any reason that there is or will be a significant deviation between the actual or anticipated progress of the Works and the Works Programme, including without limitation the Contractor foreseeing a substantial increase or decrease in the quantity of an item of work included in the Contract;
S.C.C. A1  Programmes and progress reports

(v) the Engineer requests the Contractor in writing to reflect or incorporate any other matter in the Works Programme;

and shall within 21 days of such event either submit an amended or varied programme to the Engineer in accordance with Clause 16(2) or inform the Engineer in writing of the reasons why the Contractor considers that such a submission is inappropriate.

(7) Should it appear to the Engineer at any time that there is or will be a significant deviation between the actual or anticipated progress of the Works and the Works Programme, the Engineer shall be entitled by written instruction to require the Contractor to produce a revised version showing such modifications to the Works Programme as may be necessary to ensure or to be consistent with substantial completion of the Works and all Sections and the achievement of all Stages by the Key Dates. The Contractor shall submit such revised programme within 14 days of the Engineer’s instruction or within such other time as the Engineer shall allow in writing.
S.C.C. A1  Programmes and progress reports

(8)  (a)  Unless and until an amended version of the Works Programme is approved by the Engineer in accordance with this Clause 16, the programme previously approved by the Engineer shall remain as the Works Programme for all purposes of the Contract.

(b)  Approval by the Engineer of a Works Programme in accordance with this Clause 16 shall not relieve the Contractor of any its duties or responsibilities under the Contract nor bind or create any obligation or liability on the part of the Employer nor, in the event that a Works Programme indicates that a Key Date has not or will not be met entitle the Contractor to an extension of time in relation to such Key Date.

(9)  Within 14 days of acceptance of the Tender, and thereafter at the end of each calendar month, the Contractor shall submit to the Engineer its three month rolling programme in the form and detail prescribed by the Specification setting out the work to be carried out during the following three months.
S.C.C. A1  Programmes and progress reports

(10) (a) The Contractor shall submit to the Engineer by the end of each monthly period (the first of such monthly periods to commence on the date for commencement of the Works) its Monthly Progress Report which shall, amongst other things, highlight actual or potential departures from the Works Programme and state the measures which the Contractor proposes to take in order to make good or reduce any delays.

(b) If requested by the Engineer, the Contractor shall submit to the Engineer at weekly intervals a written report as to the progress of off-Site manufacture of goods and materials.”

(3) General Conditions of Contract Clause 78 is amended by adding the following:

“(3) As a condition precedent to consideration by the Engineer of any sums due to the Contractor, each of such statement shall be accompanied by the Monthly Progress Report for the month to which the statement relates.”
S.C.C. A2  Facilities for and coordination with others

(1) General Conditions of Contract Clause 34 is deleted and replaced by the following:

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"34 (1) In accordance with the Contract and/or the reasonable instructions of the Engineer, the Contractor shall not impede and shall afford all reasonable facilities, access and/or services to any person who may be carrying out, on or adjacent to the Site, any work not included in the Contract but required by the Employer, any utility undertaking or other duly constituted authority, [(including in particular but without limitation the following interfacing works which are more particularly described in the Specification :

(a) …….to be carried out by ……

(b) …….to be carried out by ……

(c) …….to be carried out by ……]¹

(2) The Contractor shall take all reasonable steps to ensure that the Works are coordinated and integrated with the design and construction of such other work as referred to in Clause 34(1), and shall in particular (but without limitation) consult, liaise and cooperate with those responsible for carrying out such other work including where necessary in the preparation of joint programmes, method statements, coordination drawings and specifications.
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¹ The words in square brackets at the end of Clause 34(1) should be incorporated only if Government is in a position to describe in sufficient details the “interfacing works” which are anticipated to have substantial interface with the Works.
S.C.C. A2 Facilities for and coordination with others

(3) (a) The Contractor shall be deemed to have made adequate allowance in his Tender and in the Works Programme in respect of his obligations under Clauses 34(1) and 34(2).

(b) Without prejudice to the generality of Clauses 50, 63 and 64, if the Contractor considers that he has been requested or instructed to act in a manner which goes beyond his obligations under Clause 34(1) and if the Contractor considers that compliance with such request or instruction may entitle him to any extension of time and/or any additional payment of Cost, it shall be a condition precedent to any such entitlement that:

(i) the Contractor shall have notified the Engineer in writing prior to taking any such action that he considers such an entitlement may arise from the provision of such facilities, access and/or services, giving full particulars of the estimated duration of the delays and of the Cost which would be incurred; and
S.C.C. A2  Facilities for and coordination with others

(ii) following receipt of such notice, the Engineer shall have instructed the Contractor in writing to take such action.”

(2) General Conditions of Contract Clause 63 is amended by replacing paragraph (d) with the following:

“(d) delay caused by any person or any company, not being a utility undertaking, engaged by the Employer in supplying materials or in executing work directly connected with but not forming part of the Works save to the extent that such delay was caused or contributed to by some default on the part of the Contractor (including without limitation any failure by the Contractor to comply with his obligations under Clause 34(1) or Clause 34(2)) or by the Contractor complying with his obligations under Clause 34(1) or Clause 34(2), or”

“(3) The Contractor shall be entitled to the sums set out in the section of the Bills of Quantities concerning coordination with those responsible for carrying out the interfacing works referred to in General Conditions of Contract Clause 34(1), provided that the Contractor shall have fulfilled his obligations for each item to the satisfaction of the Engineer.”

2 Sub-clause (3) should be included only if Government is in a position to describe in sufficient details the “interfacing works” which are anticipated to have substantial interface with the Works and an item (pre-priced by the Engineer) is included in the BQ to cover the cost of promoting and facilitating co-ordination with the contractors carrying out such “interfacing works”
S.C.C. A3 Possession of site

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

Possession of Site Must be used with SCC

Must be used with SCC

A1 – A2 and
A4 – A9

“Portion Handover Date” means a date identified as such in the Appendix to the Form of Tender for possession of a Portion to be made available to or relinquished by the Contractor, as the same may be deferred by the Engineer in accordance with Clause 48(5)(a).”

(2) General Conditions of Contract Clause 48 is deleted and replaced by the following:

“48 (1) The Contract may prescribe:

(a) the Portions of the Site to which the Contractor is intended to be given possession from time to time;

(b) the periods during which possession of such Portions of the Site is intended to be made available to the Contractor and the respective Portion Handover Dates;

(c) the order in which the Works shall be executed;

(d) the availability and nature of the access which is to be provided by the Employer;

(e) the availability and nature of the access which the Contractor is to provide to others;

(f) the use which the Contractor may make of such Portions of the Site.

(2) The Employer shall give to the Contractor on the date for commencement of the Works notified by the Engineer in accordance with Clause 47 possession of so much of the Site and access thereto as may be required to enable the Contractor to commence and proceed with the
Possession of site

construction of the Works in accordance with the Works Programme and shall from time to time, as the Works proceed, give to the Contractor possession of such further parts of the Site and such further access as may be required to enable the Contractor to proceed with the construction of the Works with due despatch in accordance with the Works Programme.

Provided always that:

(a) the Employer shall not in any event be obliged to give to the Contractor possession of a Portion of the Site or any part thereof or access thereto earlier or for a longer period than is prescribed pursuant to Clause 48(1); and

(b) the Employer may, on or at any time after the date for commencement of the Works notified by the Engineer in accordance with Clause 47, give the Contractor possession of any or all of the Portions of the Site, or of any part thereof, before the date prescribed pursuant to Clause 48(1) for such possession to be given to the Contractor.

Provided further that the Contractor shall not be entitled to any extension of time or additional payment by reason of the Contractor being given early possession of the Site or any Portion or part thereof in accordance with Clause 48(2)(b).
S.C.C. A3   Possession of site

(3) Unless the Contract expressly provides to the contrary the Contractor shall not be entitled to exclusive possession of or uninterrupted access to the Site or any Portion or part of the Site and shall co-ordinate its activities with others on or in the vicinity of Site as described in Clause 34 and elsewhere in the Contract.

(4) Subject to Clause 64, if the Engineer is of the opinion that the Contractor has been involved in additional expenditure by reason of the progress of the Works or any part thereof having been materially affected by the failure of the Employer to give possession of or access to the Site or any Portion or part thereof in accordance with this Clause 48 then the Engineer shall as soon as reasonably practicable ascertain the Cost incurred, and shall certify in accordance with Clause 79.

(5) In the event that a Portion Handover Date is prescribed pursuant to Clause 48(1) for the release by the Contractor of a Portion of the Site:

(a) the Contractor shall relinquish possession of the relevant Portion of the Site on the Portion Handover Date unless the Engineer shall have deferred the Portion Handover Date by prior notice in writing. Such a notice shall not in any event constitute a variation within the meaning of Clause 60; and
S.C.C. A3  Possession of site

(b) the Contractor shall, subject to any express provision of the Contract or written instruction of the Engineer to the contrary, clear away and remove from the relevant Portion of the Site before the Portion Handover Date all Constructional Plant, temporary buildings, surplus materials and all rubbish of any kind whatsoever. If the Contractor should fail to do so, the Employer may exercise the powers set out in Clauses 73(2)(a) and (b).

(6) (a) If the Engineer is of the opinion that the Contractor has been involved in additional expenditure by reason of the Engineer’s decision under Clause 48(5)(a) to defer any Portion Handover Date, the Engineer shall ascertain the Cost incurred and certify payment to the Contractor.

(b) Any payment made in accordance with Clause 48(6)(a) shall be deemed to be in full compensation to the Contractor of any expenditure incurred by reason of the Engineer’s decision under Clause 48(5)(a) to defer the Portion Handover Date. The Contractor shall be entitled to no further payment whatsoever or extension of any Key Date by reason of the Engineer’s decision under Clause 48(5)(a) to defer the Portion Handover Date.

(7) The Contractor shall bear all expenses and charges for special or temporary wayleaves required by him in connection with access to the Site.

(8) Notwithstanding sub-clause (4) of this Clause, with respect to prescribed Portions of the Site of which the Contractor is to be given possession
S.C.C. A3 Possession of site

from time to time, if the Contractor suffers delay from failure on the part of the Employer to give possession of any Portion in accordance with the terms of the Contract and the Engineer grants an extension of time for completion [of the Works or, as the case may be, the relevant Section in accordance with General Conditions of Contract Clause 50]$^+$ in respect thereof, the Engineer shall certify payment to the Contractor a sum calculated at the rate per day inserted by the Contractor in the Bills of Quantities (hereinafter referred to as “the specified rate”), the number of days for which payment is certified being equal to the number of days granted as an extension of time. If possession of part of any Portion of the Site is delayed the Engineer shall reduce the specified rate for the affected Portion as he considers fair and reasonable having regard to all the circumstances.

(9) Any extension of time for completion [of the Works or, as the case may be, the relevant Section]$^+$ granted in accordance with General Conditions of Contract Clause 50 and any payment made in accordance with sub-clause (8) of this Clause shall be deemed to be in full compensation to the Contractor for whatever claims that it may have as a result of failure on the part of the Employer to give possession of any Portion or any part of any Portion.”

[Note : (1) Sub-clauses (8) and (9) should only be used for contracts where delay in possession of the Site is envisaged. )
(2) If sub-clauses (8) and (9) are used, there is no need to use SCC 8 of the WB Library of Standard SCCs (Delayed Possession of Portion of the Site) Not part of the SCC ]

$^+$ Where sectional completion is envisaged.
$^*$ Where sectional completion is envisaged.
S.C.C. A3 Possession of site

+Under GCC Clause 50, EOT could be granted for completion of the Works/Section as well as achievement of a Stage on the ground of non-possession of the Site or any Portion or part thereof. Sub-clauses (8) and (9) only make reference to EOT for completion of the Works or the relevant Section because, it is submitted, EOT for achievement of a Stage is irrelevant for the purposes of sub-clauses (8) and (9).

(3) General Conditions of Contract Clause 13 is amended by replacing sub-clause (1) with the following:

“13 (1) The Contractor shall be deemed to have examined and inspected the Site and its surroundings and to have satisfied himself, before submitting his Tender, as regards existing roads or other means of communication with and access to the Site, the possibility of interference by persons other than the Employer who will also have access to or use of the Site or any Portion or part thereof after the Employer has given the Contractor possession of the Site or, as the case may be, the relevant Portion or part, the nature of the ground and sub-soil, the form and nature of the Site, the risk of injury or damage to property, the nature of materials (whether natural or otherwise) to be excavated, the nature of the work, and materials necessary for the execution of the Works, the accommodation he may require and generally to have obtained his own information on all matters affecting his Tender and the execution of the Works.”

(4) General Conditions of Contract Clause 20 is deleted and replaced by the following:

“20 (1) The Contractor shall throughout the continuance of the Contract and the
S.C.C. A3 Possession of site

progress of the Works take full responsibility for the adequate stability and safety of all operations on the Site other than those of Specialist Contractors and utility undertakings and have full regard for the safety of all persons on the Site. The Contractor shall keep the Site and the Works in an orderly state appropriate to the avoidance of danger to all persons.

(2) The Contractor shall in connection with the Works or for the purpose of the Contract provide and maintain all lights, guards, fences and warning signs and provide watchmen when and where necessary or required by the Engineer or by any competent statutory or other authority for the protection of the Works or the Site or for the safety and convenience of the public or others.

(3) The Contractor shall ensure that all parts of the Site where work is being carried out are so lighted as to ensure the safety of all persons on or in the vicinity of the Site and of such work.

(4) The Contractor, after obtaining any necessary approval from any relevant authority, shall submit to the Engineer proposals showing the layout of pedestrian routes, lighting, signing and guarding for any road opening or traffic diversion which may be required in connection with the execution of the Works or otherwise required for the purposes of the Contract. No such road opening or traffic diversion shall be brought into operation or use unless the proposals submitted have been previously approved by the Engineer and properly provided and implemented on the Site.”
(5) General Conditions of Contract Clause 21(1) is amended by appending the following:

“And provided further that if the Engineer has decided under Clause 48(5)(a) to defer any Portion Handover Date to a date later than 28 days after the date of completion of the Works certified by the Engineer in accordance with Clause 53, the Contractor shall continue to be responsible for the care of the part of the Works on the relevant Portion and for the care of all things which are required to be retained on the relevant Portion by reason of the Engineer’s decision under Clause 48(5)(a) to defer the Portion Handover Date until and including the deferred date of relinquishment.”

(6) General Conditions of Contract Clause 22 is amended by replacing sub-clause (1) with the following:

“22 (1) The Contractor shall, except if and so far as the Contract otherwise provides, indemnify and keep indemnified the Employer against all losses and claims for injury or damage to any person or property whatsoever, other than surface or other damage to land or crops on the Site, which may arise out of or in consequence of the execution of the Works or the carrying out of the Contract and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.”

[Note: If the Contractor in respect of a particular project is required to take out care of the Works insurance, SCC11 in the Works Bureau Library of Standard Special Conditions of Contract, as amended along the following lines, should be adopted.]

“SCC[ ] (1) Without limiting the Contractor’s obligations and responsibilities under General Conditions of Contract Clause 21, the Contractor shall procure before the date for
S.C.C. A3 Possession of site

commencement of the Works in the joint names of the Contractor and the Employer, an insurance policy with an insurer and in terms approved by the Employer (which approval shall not unreasonably be withheld). The Contractor shall also assess the value of Specialist Works. The insurance policy shall be consistent with the terms in the specimen in the Appendix to these Conditions and shall at least cover the risks stipulated therein. The insurance policy shall cover the period from the date for commencement of the Works until 28 days after the date of completion of the Works certified by the Engineer in accordance with General Conditions of Contract Clause 53 or, where the Engineer has decided under General Conditions of Contract Clause 48 (5)(a) to defer any Portion Handover Date to a date later than 28 days after the date of the completion of the Works certified by the Engineer in accordance with General Conditions of Contract Clause 53, until and including the deferred date of relinquishment. The Contractor shall lodge with the Employer through the Engineer or the Engineer’s Representative the originals or certified true copies of the policy or policies of insurance and copies of the receipts for payment of the current premiums.

(2) The extent of the cover to be provided shall be:
S.C.C. A3  Possession of site

(a) The Works and Specialist Works to the full reinstatement value; and

(b) materials, Constructional Plant and other things brought on the Site by anyone so authorized to do so to the full value of such materials, Constructional Plant and other things.”
S.C.C. A4  Extension of time

(1)  General Conditions of Contract Clause 50 is deleted and replaced by the following:

“50  (1)  (a)  As soon as practicable but in any event within 28 days after the cause of any delay to the progress of the Works or any Section thereof or to the achievement of any Stage has arisen, the Contractor shall give notice in writing to the Engineer of the cause and probable extent of the delay.

Provided that as soon as the Contractor can reasonably foresee that any order or instruction issued by the Engineer is likely to cause a delay to the progress of the Works or any Section thereof or to the achievement of any Stage the Contractor shall forthwith give notice in writing to the Engineer and specify the probable effect and extent of such delay. Such notice shall not in any event be given later than 28 days after the Engineer has issued the relevant order or instruction.

(b)  If in the opinion of the Engineer the cause of the delay is:

(i)  inclement weather and/or its consequences adversely affecting the progress of the Works, or

(ii)  the hoisting of tropical cyclone warning signal No. 8 or above, or

(iii)  a Black Rainstorm Warning, or

(iv)  an instruction issued by the Engineer under Clause 5, or

(v)  a variation ordered under Clause 60, or
S.C.C. A4  Extension of time

(v) a substantial increase in the quantity of any item of work included in the Contract not resulting from a variation ordered under Clause 60, or

(vi) the Contractor not being given possession of or access to the Site or any Portion or part thereof in accordance with the Contract or is subsequently deprived of it by the Employer, or

(vii) a disturbance to the progress of the Works for which the Employer or the Engineer or a Specialist Contractor is responsible including but not restricted to any matter referred to in Clause 63, or

(viii) the Engineer suspending the Works in accordance with Clause 54 in so far as the suspension is not occasioned by the circumstances described in Clause 54(2)(a) to (d), or

(ix) any utility undertaking or other duly constituted authority failing to commence or to carry out in due time any work directly affecting the execution of the Works, provided that the Contractor has taken all practical steps to cause the utility undertaking or duly constituted authority to commence or to proceed with such work, or
S.C.C. A4  

Extension of time

(x) the imposition by the Engineer of requirements or limitations in relation to the Contractor’s methods of construction, in the circumstances described in Special Conditions of Contract Clause A9, or

(xi) the provision of facilities, access and/or services to the Employer or third parties in excess of the obligations of the Contractor under Clause 34(1) pursuant to an instruction of the Engineer in accordance with Clause 34(3)(b), or

(xii) delay on the part of any Nominated Sub-contractor for any reason specified in sub-clauses (b)(i) to (xi) of this Clause and which the Contractor has taken all reasonable steps to avoid or reduce, or

(xiii) any special circumstance of any kind whatsoever,

then the Engineer shall in accordance with Clause 50(3) consider whether the Contractor is fairly entitled to an extension of the Key Dates.

(c) Notwithstanding the powers of the Engineer under the provisions of this Clause to decide whether the Contractor is fairly entitled to an extension of time the Contractor shall not be entitled to an extension of time if the cause of the delay is:

(i) a suspension occasioned by the circumstances described in Clause 54(2)(a) to (d), or

(ii) a shortage of Constructional Plant or labour, or
S.C.C. A4 Extension of time

(iii) interference by reason of the provision of facilities, access and/or services to the Employer or third parties in accordance with the Contractor’s obligations under Clause 34(1), or

(iv) inclement weather (but not including Black Rainstorm Warning and the hoisting of tropical cyclone warning signal No. 8 or above) and/or its consequences adversely affecting the progress of the Works or any Section thereof or the achievement of any Stage occurring on or after the date identified in the Appendix to the Form of Tender or on or after the date to which extension of time has been granted under this Clause for completion of the Works or the relevant Section or, as the case may be, for achievement of the relevant Stage.

(2) The Contractor shall use and continue to use all reasonable endeavours to avoid or reduce the effects of a cause of delay to the progress of the Works or any Section or to the achievement of any Stage and as soon as practicable but in any event within 28 days of notification under Clause 50(1) submit by further written notice to the Engineer:

(a) full and detailed particulars of the cause and actual or likely extent of the delay to the progress of the Works or any Section or to the achievement of any Stage; or
S.C.C. A4 Extension of time

(b) where a cause of delay has a continuing effect or where the Contractor is unable to determine whether the effect of a cause of delay will actually cause delay to the progress of the Works or any Section or to the achievement of any Stage, such that it is not practicable for the Contractor to submit full and detailed particulars in accordance with Clause 50(2)(a), a statement to that effect with reasons together with interim written particulars (including details of the likely consequences of the cause of delay on progress of the Works and an estimate of the likelihood or likely extent of the delay); the Contractor shall thereafter submit to the Engineer at intervals of not more than 28 days further interim written particulars until the actual or likely delay caused (if any) is ascertainable, whereupon the Contractor shall as soon as practicable but in any event within 28 days submit to the Engineer full and detailed particulars of the cause and actual or likely extent of the delay; and

(c) details of the measures which the Contractor has adopted and/or proposes to adopt to avoid or reduce the effects of such cause of delay to the progress of the Works or any Section or to the achievement of any Stage.

(3) If in accordance with Clause 50(1)(b) the Engineer considers that the Contractor is using and will continue to use all reasonable endeavours to make good any delay, and that the Contractor is fairly entitled to an extension of the Key Dates, the Engineer shall within 28 days or such further time as may be reasonable in the circumstances of:

(a) receipt of final full and detailed particulars of the cause and actual or likely effect of any delaying factor, or
S.C.C. A4 Extension of time

(b) where a cause of delay has a continuing effect or where the Engineer anticipates a significant delay before the actual or likely effect of a cause of delay becomes ascertainable and the Engineer considers an interim extension of time should be granted, receipt of such particulars as in the Engineer’s opinion are sufficient for him to determine such an interim extension of time,

determine, grant and notify in writing to the Contractor such extension. The Engineer in determining any extension shall take into account all the circumstances known to him at that time, including in particular but without limitation the effect of any omission of work or part of any Stage, or substantial decrease in the quantity of any item of work.

Provided that:

(i) the Engineer may at any time following notification of a cause of delay under Clause 50(1)(a) determine and notify the Contractor in writing as to whether or not the said cause of delay constitutes a potential ground upon which an extension of time may be granted in accordance with Clause 50(1)(b) and the foregoing provisions of Clause 50(3);

(ii) the Engineer may in the absence of any claim assess and determine the delay that he considers has been suffered by the Contractor as a result of any of the events described in Clause 50(1)(b) in which case he shall determine, grant and notify in writing to the Contractor any such extension he considers appropriate;

(iii) notwithstanding Clause 50(2) and the foregoing provisions of this Clause 50(3), the Engineer may in the event of
S.C.C. A4  Extension of time

failure by the Contractor to comply
with the provisions of Clause 50(2)
consider such extension to the extent
that the Engineer is able on the
information available.

(4) If the Engineer decides that the Contractor
is not entitled to an extension, the Engineer
shall as soon as reasonably practicable
notify the Contractor in writing
accordingly.

(5) (a) Without prejudice to the Engineer’s
powers pursuant to Clause 50(3)(b),
the Contractor shall not be entitled to
an extension of time by reason of any
delay unless such delay actually affects
substantial completion of the Works
or any Section or achievement of any
Stage by the relevant Key Date.

(b) Any extension to a Key Date shall not
of itself entitle the Contractor to an
extension to any other Key Date.

(6) The Engineer shall within 28 days of the
issue of either the certificate of completion
of the Works or, in the event of division of
the Works into Sections, of the certificate of
completion of the last Section review and
finally determine and certify the overall
extension of time (if any) to which he
considers the Contractor is entitled in
respect of the Works or any Section or any
Stage. Such final review shall not result in
a decrease in any extension of time already
granted by the Engineer under Clause
50(3).
S.C.C. A4 Extension of time

(7) For the avoidance of doubt if the Engineer grants an extension of time in respect of a cause of delay occurring after the Employer is entitled to recover liquidated damages in respect of the Works or any Section or any Stage, the period of extension of time granted shall be added to the relevant Key Date identified in the Appendix to the Form of Tender or, if the same has been extended in accordance with this Clause 50, the relevant previously extended Key Date.

(8) Except as provided elsewhere in the Contract, any extension of time granted by the Engineer to the Contractor shall be deemed to be in full compensation and satisfaction for any loss or injury sustained or sustainable by the Contractor in respect of any matter or thing in connection with which such extension shall have been granted and every extension shall exonerate the Contractor from any claim or demand on the part of the Employer for the delay during the period of such extension but not for any delay continued beyond such period.

(9) For the purpose of this Clause, “Black Rainstorm Warning” means a warning issued by the Director of Hong Kong Observatory of a heavy rainstorm in, or in the vicinity of, Hong Kong by the use of the heavy rainstorm signal commonly referred to as “Black.”
S.C.C. A4A  Extension of time (alternative version)

(1) General Conditions of Contract Clause 50 is deleted and replaced by the following:

“50 (1) (a) As soon as practicable but in any event within 28 days after the cause of any delay to the progress of the Works or any Section thereof or to the achievement of any Stage has arisen, the Contractor shall give notice in writing to the Engineer of the cause and probable extent of the delay.

Provided that as soon as the Contractor can reasonably foresee that any order or instruction issued by the Engineer is likely to cause a delay to the progress of the Works or any Section thereof or to the achievement of any Stage the Contractor shall forthwith give notice in writing to the Engineer and specify the probable effect and extent of such delay. Such notice shall not in any event be given later than 28 days after the Engineer has issued the relevant order or instruction.

(b) If in the opinion of the Engineer the cause of the delay is:

(i) the hoisting of tropical cyclone warning signal No. 8 or above, or

(ii) a Black Rainstorm Warning, or

(iii) an instruction issued by the Engineer under Clause 5, or

(iv) a variation ordered under Clause 60, or

(v) a substantial increase in the quantity of any item of work included in the Contract not resulting from a variation ordered under Clause 60, or

(vi) the Contractor not being given possession of or access to the Site or any Portion or part
S.C.C. A4A  Extension of time (alternative version)

thereof in accordance with the Contract or is subsequently deprived of it by the Employer, or

(vii) a disturbance to the progress of the Works for which the Employer or the Engineer or a Specialist Contractor is responsible including but not restricted to any matter referred to in Clause 63, or

(viii) the Engineer suspending the Works in accordance with Clause 54 in so far as the suspension is not occasioned by the circumstances described in Clause 54(2)(a) to (d), or

(ix) any utility undertaking or other duly constituted authority failing to commence or to carry out in due time any work directly affecting the execution of the Works, provided that the Contractor has taken all practical steps to cause the utility undertaking or duly constituted authority to commence or to proceed with such work, or

(x) the imposition by the Engineer of requirements or limitations in relation to the Contractor’s methods of construction, in the circumstances described in Special Conditions of Contract Clause A9, or
S.C.C. A4A  Extension of time (alternative version)

(xi) the provision of facilities, access and/or services to the Employer or third parties in excess of the obligations of the Contractor under Clause 34(1) pursuant to an instruction of the Engineer in accordance with Clause 34(3)(b), or

(xii) inclement weather (but not including Black Rainstorm Warning and the hoisting of tropical cyclone warning signal No. 8 or above) and/or its consequences adversely affecting the progress of the Works or any Section thereof or the achievement of any Stage occurring after the date identified in the Appendix to the Form of Tender for completion of the Works or the relevant Section or, as the case may be, for achievement of the relevant Stage but before the Employer is entitled to recover liquidated damages in respect of the Works or the relevant Section or, as the case may be, the relevant Stage, or

(xiii) delay on the part of any Nominated Sub-contractor for any reason specified in sub-clauses (b)(i) to (xii) of this Clause and which the Contractor has taken all reasonable steps to avoid or reduce, or

(xiv) any special circumstance of any kind whatsoever,
S.C.C. A4A  Extension of time (alternative version)

then the Engineer shall in accordance with Clause 50(3) consider whether the Contractor is fairly entitled to an extension of the Key Dates.

(c)  Notwithstanding the powers of the Engineer under the provisions of this Clause to decide whether the Contractor is fairly entitled to an extension of time the Contractor shall not be entitled to an extension of time if the cause of the delay is:

(i) a suspension occasioned by the circumstances described in Clause 54(2)(a) to (d), or

(ii) a shortage of Constructional Plant or labour, or

(iii) interference by reason of the provision of facilities, access and/or services to the Employer or third parties in accordance with the Contractor’s obligations under Clause 34(1), or

(iv) inclement weather (but not including Black Rainstorm Warning and the hoisting of tropical cyclone warning signal No. 8 or above) and/or its consequences adversely affecting the progress of the Works or any Section thereof or the achievement of any Stage occurring on or before the date identified in the Appendix to the Form of Tender for completion of the Works or the relevant Section or, as the case may be, for achievement of the relevant Stage.
S.C.C. A4A  Extension of time (alternative version)

(2) The Contractor shall use and continue to use all reasonable endeavours to avoid or reduce the effects of a cause of delay to the progress of the Works or any Section or to the achievement of any Stage and as soon as practicable but in any event within 28 days of notification under Clause 50(1) submit by further written notice to the Engineer:

(a) full and detailed particulars of the cause and actual or likely extent of the delay to the progress of the Works or any Section or to the achievement of any Stage; or

(b) where a cause of delay has a continuing effect or where the Contractor is unable to determine whether the effect of a cause of delay will actually cause delay to the progress of the Works or any Section or to the achievement of any Stage, such that it is not practicable for the Contractor to submit full and detailed particulars in accordance with Clause 50(2)(a), a statement to that effect with reasons together with interim written particulars (including details of the likely consequences of the cause of delay on progress of the Works and an estimate of the likelihood or likely extent of the delay); the Contractor shall thereafter submit to the Engineer at intervals of not more than 28 days further interim written particulars until the actual or likely delay caused (if any) is ascertainable, whereupon the Contractor shall as soon as practicable but in any event within 28 days submit to the Engineer full and detailed particulars of the cause and actual or likely extent of the delay; and
S.C.C. A4A  Extension of time (alternative version)

(c) details of the measures which the Contractor has adopted and/or proposes to adopt to avoid or reduce the effects of such cause of delay to the progress of the Works or any Section or to the achievement of any Stage.

(3) If in accordance with Clause 50(1)(b) the Engineer considers that the Contractor is using and will continue to use all reasonable endeavours to make good any delay, and that the Contractor is fairly entitled to an extension of the Key Dates, the Engineer shall within 28 days or such further time as may be reasonable in the circumstances of:

(a) receipt of final full and detailed particulars of the cause and actual or likely effect of any delaying factor, or

(b) where a cause of delay has a continuing effect or where the Engineer anticipates a significant delay before the actual or likely effect of a cause of delay becomes ascertainable and the Engineer considers an interim extension of time should be granted, receipt of such particulars as in the Engineer’s opinion are sufficient for him to determine such an interim extension of time,

determine, grant and notify in writing to the Contractor such extension. The Engineer in determining any extension shall take into account all the circumstances known to him at that time, including in particular but without limitation the effect of any omission of work or part of any Stage, or substantial decrease in the quantity of any item of work.

Provided that:
S.C.C. A4A  Extension of time (alternative version)

(i) the Engineer may at any time following notification of a cause of delay under Clause 50(1)(a) determine and notify the Contractor in writing as to whether or not the said cause of delay constitutes a potential ground upon which an extension of time may be granted in accordance with Clause 50(1)(b) and the foregoing provisions of Clause 50(3);

(ii) the Engineer may in the absence of any claim assess and determine the delay that he considers has been suffered by the Contractor as a result of any of the events described in Clause 50(1)(b) in which case he shall determine, grant and notify in writing to the Contractor any such extension he considers appropriate;

(iii) notwithstanding Clause 50(2) and the foregoing provisions of this Clause 50(3), the Engineer may in the event of failure by the Contractor to comply with the provisions of Clause 50(2) consider such extension to the extent that the Engineer is able on the information available.

(4) If the Engineer decides that the Contractor is not entitled to an extension, the Engineer shall as soon as reasonably practicable notify the Contractor in writing accordingly.

(5) (a) Without prejudice to the Engineer’s powers pursuant to Clause 50(3)(b), the Contractor shall not be entitled to an extension of time by reason of any delay unless such delay actually affects substantial completion of the Works or any Section or achievement of any Stage by the relevant Key Date.
S.C.C. A4A  Extension of time (alternative version)

(b) Any extension to a Key Date shall not of itself entitle the Contractor to an extension to any other Key Date.

(6) The Engineer shall within 28 days of the issue of either the certificate of completion of the Works or, in the event of division of the Works into Sections, of the certificate of completion of the last Section review and finally determine and certify the overall extension of time (if any) to which he considers the Contractor is entitled in respect of the Works or any Section or any Stage. Such final review shall not result in a decrease in any extension of time already granted by the Engineer under Clause 50(3).

(7) For the avoidance of doubt if the Engineer grants an extension of time in respect of a cause of delay occurring after the Employer is entitled to recover liquidated damages in respect of the Works or any Section or any Stage, the period of extension of time granted shall be added to the relevant Key Date identified in the Appendix to the Form of Tender or, if the same has been extended in accordance with this Clause 50, the relevant previously extended Key Date.

(8) Except as provided elsewhere in the Contract, any extension of time granted by the Engineer to the Contractor shall be deemed to be in full compensation and satisfaction for any loss or injury sustained or sustainable by the Contractor in respect of any matter or thing in connection with which such extension shall have been granted and every extension shall exonerate the Contractor from any claim or demand on the part of the Employer for the delay during the period of such extension but not for any delay continued beyond such period.
(9) For the purpose of this Clause, “Black Rainstorm Warning” means a warning issued by the Director of Hong Kong Observatory of a heavy rainstorm in, or in the vicinity of, Hong Kong by the use of the heavy rainstorm signal commonly referred to as “Black”.”
S.C.C. A5 Liquidated damages for delay

(1) General Conditions of Contract Clause 52 is deleted and replaced by the following:

“52 (1) If the Contractor fails to achieve any Stage or complete the Works or, where the Works are divided into Sections, any Section by the relevant Key Date, then the Employer shall be entitled to recover from the Contractor liquidated damages, and may but shall not be bound to deduct such damages either in whole or in part, in accordance with the provisions of Clause 83. The payment of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligation under the Contract.

(2) (a) The liquidated damages shall be calculated using the rate per day prescribed in the Appendix to the Form of Tender, either for the Works or for the relevant Section or Stage, whichever is applicable.

Provided that, if the Engineer:
S.C.C. A5  Liquidated damages for delay

(i) certifies completion under Clause 53(5) of any part of the Works before completion of the Works or, where the Works are divided into Sections, any part of any Section before the completion of the whole thereof, or

(ii) certifies achievement under Clause 53(9) of any part of any Stage before achievement of the Stage,

then the daily rate of liquidated damages for the Works, the relevant Section or the relevant Stage, as the case may be, shall from the date of such certification be reduced in the proportion which the value of the part so certified bears to the value of the Works, the relevant Section or the relevant Stage, as applicable, both values as of the date of such certification shall be determined by the Engineer.

(b) The obligations to achieve any Stage and to complete the Works or, where the Works are divided into Sections, any Section by the relevant Key Dates are
S.C.C. A5  Liquidated damages for delay

separate obligations of the Contractor. The Contractor acknowledges that the liquidated damages have been estimated by the Employer on the basis of damages likely to be suffered as a result of failure to meet any relevant Key Date irrespective of and independent from any damages which are likely to be suffered as a result of failure to meet any other Key Date. Liquidated damages attributed to separate Key Dates may, therefore, run concurrently.

(3) The period for which liquidated damages shall be calculated shall be the number of days from the relevant Key Date until and including the date when the Works are completed or, where the Works are divided into Sections, the relevant Section is completed or, as the case may be, the relevant Stage is achieved.

Provided that, if the Engineer subsequently grants an extension of time which affects the period described above, then the Employer shall reimburse the Contractor the liquidated damages for the number of days so affected at the rate described in sub-clause (2) of this Clause together with interest at the rate provided for in Clause 79(4) within 28 days of the granting of such extension of time.
S.C.C. A5 Liquidated damages for delay

(4) All monies payable by the Contractor to the Employer pursuant to this Clause shall be paid as liquidated damages for delay and not as a penalty."

[(5) Notwithstanding the proviso to Clause 52(2)(a) the resulting daily rate of liquidated damages for the Works, any Section or any Stage after reduction in accordance with that proviso shall not be less than the minimum rate per day of liquidated damages for the Works, the relevant Section or the relevant Stage, as the case may be, as stated in the Appendix to the Form of Tender.]*

[Note : *Sub-clause (5) should be deleted if no minimum liquidated damages is specified in the Appendix to the Form of Tender.]} Not part of the SCC
S.C.C. A6 Variations

(1) General Conditions of Contract Clause 60 is deleted and replaced by the following:

"60 (1) The Engineer shall order any variation to any part of the Works or any Stage that is in his opinion necessary for the completion of the Works or for the achievement of any Stage and may order any variation that is in his opinion desirable to achieve satisfactory or timely completion, or improved or more economic functioning of the Works or to achieve satisfactory or timely achievement of any Stage, or on aesthetic grounds. Such variations may include:

(a) additions, omissions, substitutions, alterations, changes in quality, form, character, kind, position, dimension, level or line;

(b) changes to any sequence, method or timing of construction specified in the Contract; and

(c) changes to any Portion or part of the Site or access thereto, and may be ordered during the Maintenance Period.

(2) No such variation shall be made by the Contractor without an order in writing, in the form specified in Appendix ____ hereto, by the Engineer. No variation shall in any way vitiate or invalidate the Contract, but the value of all such variations determined in accordance with Clause 61 shall be taken into account by the Engineer in ascertaining the Final Contract Sum.

(3) The Employer may procure that work omitted as a variation to the Works pursuant to an order under Clause 60(1) be carried out by another contractor provided always that:
S.C.C. A6 Variations

(a) upon such omitted work being let to another contractor, the Engineer shall, subject to the provisions of Clause 60(4), determine a fair amount in respect of the profit reasonably anticipated by the Contractor in respect of such omitted work as at the time of the relevant variation order and shall make such revision to the Final Contract Sum; and

(b) if the effect of the omission of such work would be to reduce an extension of time to which the Contractor would otherwise have been entitled had no such variation been ordered, the Engineer shall take the effect of such omission into account and, subject to the provisions of Clause 50, grant such extension of time (if any) so as to put the Contractor in no better and no worse position than if the said variation had not been ordered.

(4) Sub-clause (3)(a) of this Clause shall have no application if the omitted work is let to another contractor after the issue of the certificate of completion of the Works or earlier termination of the Contract or determination of the Contractor’s employment, entry and expulsion in accordance with Clause 81. In the event of different certificates of completion having been issued for different Sections or parts of the Works pursuant to Clause 53, the expression “certificate of completion” shall for the purpose of this sub-clause, mean the last of such certificates.
S.C.C. A6 Variations

(5) An instruction of the Engineer requiring the Contractor to comply with his obligations under Clause 30 or arising from a breach or apprehended breach by the Contractor of his obligations under Clause 30, shall not under any circumstances constitute a variation for the purposes of this Clause 60.

(6) The Engineer may order a variation to any part of the outstanding work referred to in Clause 53 during the Maintenance Period if such a variation shall in the opinion of the Engineer be desirable for or to achieve the satisfactory completion and functioning of the Works.”
S.C.C. A7  Stages and Key Dates

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

   “‘Key Date’ means a date identified as such in the Appendix to the Form of Tender as the same may be extended in accordance with Clause 50.

   “Stage” means a degree of achievement in the execution of the Works identified as such and more particularly described in the Specification for which a Key Date for the achievement thereof is stipulated in the Appendix to the Form of Tender.”

(2) General Conditions of Contract Clause 1(1) is amended by replacing the definition of “Section” with the following:

   “‘Section’ means a part of the Works identified as such and more particularly described in the Specification for which a Key Date for the completion thereof is stipulated in the Appendix to the Form of Tender.”

(3) General Conditions of Contract Clause 49(1) is deleted and replaced by the following:

   “49  (1) The Works and any Section thereof shall be completed and any Stage shall be achieved by the respective Key Dates thereof.”

(4) General Conditions of Contract Clause 51(1) is deleted and replaced by the following:
S.C.C. A7  Stages and Key Dates

“51  (1)  If the rate of progress of the Works or any Section thereof or any Stage is at any time in the opinion of the Engineer too slow to ensure completion of the Works or any Section thereof or the achievement of any Stage by the relevant Key Date, the Engineer may so inform the Contractor in writing and the Contractor shall immediately take such steps as are necessary to expedite the completion of the Works or any Section thereof or the achievement of any Stage by the relevant Key Date. The Contractor shall inform the Engineer of such proposed steps and review the Works Programme in accordance with Clause 16(6)(b)(ii).”

(5)  General Conditions of Contract Clause 53 is amended by adding the following:

“53  (8)  When a Stage has been achieved and has satisfactorily passed any test that may be prescribed by the Contract, the Contractor may serve notice in writing to that effect on the Engineer, accompanied by an undertaking to carry out any outstanding work as soon as practicable but in any event within 42 days of issue of the certificate of achievement, requesting the Engineer to issue a certificate of achievement in respect of that Stage. The Engineer shall within 21 days of the date of receipt of such notice either:

(a)  issue a certificate of achievement stating the date on which, in the Engineer’s opinion, the Stage was achieved in accordance with the Contract, or
S.C.C. A7  Stages and Key Dates

(b) issue instructions in writing to the Contractor specifying all the work which, in the Engineer’s opinion, is required to be done by the Contractor before such certificate of achievement can be issued, in which case the Contractor shall be entitled to receive such certificate of achievement within 14 days of carrying out to the satisfaction of the Engineer the works specified by the said instructions.

(9) (a) The Engineer shall give a certificate of achievement in respect of any part of any Stage which has been achieved to the satisfaction of the Engineer and is required by the Employer for occupation or use or by any utility undertaking or other duly constituted authority for carrying out on or adjacent to the Site any work not included in the Contract but required by the Employer before achievement of the Stage.

(b) The Engineer, following a written request by the Contractor, may give a certificate of achievement in respect of any part of any Stage which has been achieved to the satisfaction of the Engineer before achievement of the Stage and is capable of occupation and/or use by the Employer for any purpose or capable of occupation and/or use by any utility undertaking or other duly constituted authority for carrying out on or adjacent to the Site any work not included in the Contract but required by the Employer.

(10) Achievement of a Stage shall not of itself constitute completion or substantial completion of a part of the Works for the purposes of Clause 53(5).”

(6) General Conditions of Contract Clause 63(a) is deleted and replaced by the following:
S.C.C. A7 Stages and Key Dates

“63 (a) the Contractor not having received in due time necessary instructions, orders, directions, decisions, Drawings, specifications, details or levels from the Engineer for which the Contractor specifically applied in writing on a date which having regard to the Key Date for completion of the Works or any Section or achievement of any Stage was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for the Contractor to receive the same, or”
S.C.C. A8  Maintenance of records

(1) The Contractor shall establish at the Site or elsewhere as may be permitted in writing by the Engineer an office which shall be staffed during all normal business hours and at which shall be kept copies of all documents relating to or arising under the Contract and a complete, up-to-date and orderly documentary record of all transactions entered into by the Contractor for the purposes of the Contract, including copies of all sub-contracts, purchase orders, correspondence, whether by letter, telex, facsimile or electronic transmission, manufacturer’s specifications and details, minutes of meetings, all documents relating to the procurement of Constructional Plant, goods and materials, payroll and salary cost records, and all other matters whatsoever.

(2) To the extent that the design and other records of the Contractor are to be created and/or maintained on a computer or other information system or data storage device, the Contractor shall agree with the Engineer a procedure for backup and off-Site storage of copies of such design and other records and shall adhere, and shall cause its sub-contractors [and the engineer carrying out independent checking of the Temporary Works in accordance with Special Conditions of Contract Clause _____] * to adhere, to such agreed procedure.

(3) If the Contractor uses proprietary software for the purpose of storing or utilizing records maintained in accordance with sub-clause (1) of this Clause and sub-clause (3) of Clause 64 of the General Conditions of Contract, the Contractor shall procure at his own expense the grant of a licence or sub-licence to use such software in favour of the Employer, the Engineer and their respective agents and employees and shall pay such licence fee or other payment as the grantor of such licence may require provided that the use of such software under the licence may be restricted to use relating to the design, construction, reconstruction, completion, maintenance, reinstatement, extension, repair and operation of the Works or any part thereof or any other works required to be carried

* The words in square brackets should be deleted if SCC clause 26 “Independent Checking of the Design, Erection, Use and Removal of Temporary Works” of the Works Bureau Library of Standard Special Conditions of Contract is not adopted.
S.C.C. A8  Maintenance of records

out by the Employer in Hong Kong (irrespective of whether or not such works are related to the Works) and settlement of disputes or differences in accordance with Clause 86 of the General Conditions of Contract.

(4)  General Conditions of Contract Clause 6 is amended by replacing sub-clause (5) with the following:

“(5)  Without prejudice to the generality of Clause A8(1) of the Special Conditions of Contract, one copy of the Drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer’s Representative and by any other person authorized by the Engineer in writing.”
S.C.C. A9  Construction methods

(1) The Contractor shall submit in accordance with General Conditions of Contract Clause 7 such documents and information pertaining to the methods of construction (including Temporary Works [other than those parts of the Temporary Works which are subject to independent checking in accordance with Special Conditions of Contract Clause _____ 1] and the use of Constructional Plant) which the Contractor proposes to adopt or use and such calculations of stresses, strains and deflections that will or may arise in the permanent work or any parts thereof during construction from the use of such methods as will enable the Engineer to decide whether, if such methods are adhered to, the Works can be executed in accordance with the Drawings and the Specification and without detriment when completed to the permanent work.

(2) The Engineer shall inform the Contractor in writing within a reasonable period after receipt of the information submitted in accordance with sub-clause (1) of this Clause:

(a) that the Contractor’s proposed methods of construction have the consent of the Engineer (which consent shall not be unreasonably withheld); or

(b) in what respects in the opinion of the Engineer the Contractor’s proposed methods of construction:

(i) fail to meet the requirements of the Drawings and/or the Specification; or

(ii) would be detrimental to the permanent work; or

(iii) do not comply with the other requirements of the Contract; or

(c) as to the further documents or information which are required to enable the Engineer properly to assess the proposed methods of construction.

In the event that the Engineer does not give his consent, the Contractor shall take such steps or make

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1 Insert SCC Clause number for checking of Temporary Works here.
S.C.C. A9  Construction methods

such changes in the said methods or supply such
further documents or information as may be
necessary to meet the Engineer’s requirements and to
obtain his consent. The Contractor shall not change
the methods of construction which have received the
Engineer’s consent without the further consent in
writing of the Engineer which shall not be
unreasonably withheld.

(3) The Engineer shall at the written request of the
Contractor provide to the Contractor such design
criteria relating to the permanent work or any
Temporary Works designed by the Engineer which
are relevant, in the opinion of the Engineer, to the
Contractor’s obligations under sub-clauses (1) and
(2) of this Clause.

(4) If the Engineer’s consent to the proposed methods of
construction shall be unreasonably withheld or
delayed or if the requirements of the Engineer
pursuant to sub-clauses (2)(b)(i) and (ii) of this
Clause or any limitations imposed by any of the
design criteria supplied by the Engineer pursuant to
sub-clause (3) of this Clause could not reasonably
have been foreseen by an experienced contractor at
the time of tender and if in consequence of any of the
aforesaid the Contractor unavoidably incurs delay or
Cost the Engineer shall:

(a) subject to Clause 50 of the General Conditions
of Contract take such delay into account in
determining any extension of time to which the
Contractor is entitled, and

(b) subject to Clause 64 of the General Conditions
of Contract and as soon as reasonably
practicable determine such sum in respect of
the Cost incurred and notify the Contractor in
writing of such determination.

(5) Notwithstanding the foregoing provisions of this
Clause or that certain of the Contractor’s proposed
methods of construction may be the subject of the
consent of the Engineer given in accordance with
sub-clause (2) of this Clause, the Contractor shall not
be relieved of any liability or obligation under the
Contract nor shall the same bind or create any
obligation or liability on the part of the Employer.
S.C.C. A10  General damages

(1) General Conditions of Contract Clause 52 shall not apply to [Section _____] of the Works.

(2) If the Contractor fails to complete [Section _____] of the Works by the relevant Key Date, he shall indemnify the Employer against all loss or liability incurred by the Employer (including without limitation any and all liability under the Employer’s contracts with third parties) arising from the delay between the Key Date for [Section _____] and the date of completion of [Section _____] certified in accordance with General Conditions of Contract Clause 53. All amounts payable by the Contractor pursuant to this Special Condition of Contract Clause A10 are hereafter to as “general damages”.

(3) The Employer may but shall not be bound to deduct such general damages, either in whole or in part, in accordance with the provisions of General Conditions of Contract Clause 83. The payment of such damages shall not relieve the Contractor from his obligations to complete the Works or from any other of his obligations under the Contract.

(4)* The total amount of general damages in respect of [Section _____] of the Works to which this Special Condition of Contract Clause A10 applies shall be limited in aggregate to the relevant sum stated in the Appendix to the Form of Tender.

(5) If the Engineer subsequently grants an extension or further extension of time for completion of [Section _____] of the Works such that the Employer shall no longer be entitled to general damages in respect of the period of such extension, then any sum in respect of such extension which may already have been recovered under this Special Condition of Contract Clause A10 shall be reimbursed forthwith to the Contractor together with interest at the rate provided for in General Conditions of Contract Clause 79(4) within 28 days of the granting of such extension of time.

* To adopt where liquidated damages will not apply in respect to the Works, any Section or Stage and general damages are to be recoverable.

* Sub-clause (4) should be deleted (and sub-clause (5) re-numbered accordingly) if it is decided, in relation to a particular project, that there is no need to limit the total amount of general damages payable.
APPENDIX 5.37 SPECIAL CONDITIONS OF TENDER FOR USE IN MEGA
PROJECT CONTRACTS
(Ref.: WBTC No. 26/2002)

SCT (General damages)

The tenderer’s attention is drawn to the Contractor’s obligation under Special
Conditions of Contract Clause A10 to indemnify the Employer against all loss
or liability incurred by the Employer (including without limitation any and all
liability under the Employer’s contracts with third parties) arising from the
delay in completion of [Section ______] of the Works. Based on the
information currently available to the Employer such loss or liability would
include without limitation the Employer’s obligation to compensate [specify
the third party(ies) and refer to the relevant contract(s)/agreement(s) with the
third party(ies) as described in Appendix [ ] to these Special Conditions of
Tender. The tenderer shall be deemed to have allowed in his tender for all
the risks, liabilities and obligations set out or implied in the Contract and all
matters and things necessary for the proper execution of the Works including
without limitation the full extent of the obligation to comply with the
provisions of Special Conditions of Contract Clause A10.
A Background

The original set of the Guidelines was prepared based on experience learnt from the implementation of the Airport Core Programme. Since its promulgation in October 1999, the Guidelines had been applied in a few major infrastructure projects. A review of the application of the Guidelines was later completed. Based on the feedbacks from the bureaux and departments, the Guidelines were considered generally in order but it would be appropriate to highlight in the Guidelines the need to address environmental issues at the earliest possible stage. As a result, a set of updated internal administrative guidelines for managing the delivery of major infrastructure projects was promulgated with paragraph 8 of the Guidelines expanded accordingly.

B Application

The Guidelines should be given full regard and careful consideration before embarking on major infrastructure projects. The Guidelines cover all stages in the delivery of a major infrastructure project starting from the initial selection of a suitable delivery agent through to the final operation stage. In addition, they contain special features such as project auditing, risk assessment and contingency planning. Thus all bureaux and works departments dealing with such projects should comply with the Guidelines as a matter of policy. However, it should be realized that major infrastructure projects may differ widely in nature and that different institutional arrangements for their delivery are possible. These Guidelines are therefore meant to be only broad principles of general applicability. During the implementation process the concerned policy bureau could further develop or refine them to suit the circumstances of individual project. Due consideration should be given to the complexity of the project, number of parties involved, number of interfaces and so forth. The Development Bureau will continue to monitor, review and update the Guidelines.

C The Guidelines

The Guidelines are set out in the following pages.
GUIDELINES FOR THE DEVELOPMENT OF MAJOR INFRASTRUCTURE PROJECTS

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GUIDELINES FOR THE DEVELOPMENT OF
MAJOR INFRASTRUCTURE PROJECTS

I. Selecting the Most Appropriate Institutional Entity of Delivery

At a very early stage, careful thought should be given to how a project is to be delivered. A comparison should be made of the basic choices, such as designating a Government department as the delivery agent, commissioning a statutory organization as the executive agency or involving a private enterprise through a franchise or some other form of agreement. As a general rule, we should give a project to a Government department, a statutory organization or a private enterprise for delivery only when their ability to do so has been fully proven. The degree of control available to Government (in case of a non-government delivery agent), the track record of the organization and the experience of the key personnel involved are important considerations which would need to be taken into account.

II. Clear Demarcation of Responsibility and Authority

2. After the selection of the institutional entity of delivery, a basic ‘charter’ should be drawn up in consultation with the concerned parties, setting out the control and monitoring framework, with detailed description of their respective roles and responsibilities. Three points are particularly important:

(a) Authority and responsibility must be aligned – Parties involved must not be left in any doubt as to their own responsibilities, whatever the overall monitoring mechanism is. In the case of a project undertaken by a non-Government organization, the demarcation of responsibilities must be clearly spelt out and formally agreed between Government and the organization and widely promulgated. Government must avoid getting more involved than its position requires, which might create the wrong impression that the success or otherwise of the project is a Government responsibility.

(b) ‘Re-energization’ is required – Parties involved in the delivery of a project should be reminded of their respective roles and responsibilities from time to time so that there will be no misunderstanding of what they should be. There can be updating exercises, conferences or seminars at crucial points for re-familiarization as necessary.

(c) In the ‘charter’, there should be clear and precise procedures and standards for measuring, tracking and reporting progress of the project by the delivery agent and all concerned parties. A commonly accepted glossary of terms and reporting formats for this purpose should be included.

III. Good Governance as a General Requirement
3. This is of particular importance when the implementation of a huge and complex project is undertaken by a statutory organization, which is autonomous by law. The proper governance of the statutory organization is of pivotal importance. For example, its chairman and members are knowledgeable about the main functional areas of the project (e.g. engineering, finance, management, information technology, legal, etc) or can have ready access to external expert advice. The Board of the statutory organization and its senior management should work together as a fully integrated entity with their responsibilities and relationship clearly delineated. The Board should be given authority commensurate with its responsibilities, including power to hire and fire staff. In order not to undermine the authority of the Board, Government should deal with the Board as far as practicable rather than solely with its staff.

IV. A Unified Project Management Approach

4. For a large scale project involving a multitude of key activities which must be centrally coordinated, consideration should be given to setting up a central point of monitoring and control with sufficient authority over project scope, schedule and budgets.

   (a) Where Government has the ultimate responsibility and authority, certain powers should be vested in a Project Management Office within Government. In addition to authority, the Office would need to be provided with the necessary resources so that it is able to control critical milestones, use budget and project contingencies, order risk assessments and authorize acceleration of works. On top of this Office and directing its operation should be a high-level Steering Committee overseeing progress and budget of the project.

   (b) Where the works have to be carried out by a statutory organization, a Steering Committee and a Project Management Office should be set up by mutual agreement. The respective responsibilities of the Steering Committee, the Project Management Office and the organization must be clearly delineated and promulgated, preferably in a Project Agreement. The Project Agreement should also cover other terms and conditions and serve as a binding document between the organization and the Government. It will need to be approved by both the management Board of the organization and the Government’s policy secretary in charge of the project. As a general point, both the Steering Committee and the Project Management Office should have readily available professional input at a senior level, from either the head or senior members of the concerned Government department.

5. The project management framework in paragraph 4(b) above should also apply to situations where a number of projects which require close co-ordination are to be delivered in a mixed manner, i.e. some by Government and some by one or several autonomous statutory organizations. For entrustment works, the statutory organization will
operate as the works agent for Government, and the same project management structure as set out in paragraph 4(a) should be considered although there is a case for a closer level of monitoring by the Project Management Office because of the more immediate accountability of Government for the timely completion of the works.

V. Check and Balance

6. At the macro level, a Project Management Office independent of the delivery agent working direct to a Steering Committee should operate as check and balance by way of exercising overall project management and control – see paragraphs 4 and 5 above. Depending on the nature and complexity of individual projects, the Office could be headed by a professional, if considered necessary.

7. At the micro level, out-sourced project management – Consideration should be given to contracting out project management or construction management services for new types of projects and for projects undertaken by an organization without a significant history in constructing and operating similar projects using its own resources. Leaving everything to the project team within the organization will run the risk of the project team being too much in control, to the detriment of the overall objectives of the project. The situation is particularly unsatisfactory when internal monitoring is absent or weak, or when the project team dominates the operation team.

8. Ongoing reviews during the design and construction stages – Technical viability considerations, including environmental issues, must be addressed in the design of the project at the earliest possible stage, before designs are fully committed. Design and construction should not be carried out in parallel as far as possible. Where this is necessary, a special mechanism would need to be set up to deal with design changes and their impact on project delivery so as to mitigate problems. In addition, an ongoing programme of value engineering by the project team and a one-off peer review of the project by an independent expert should be considered.

9. Early involvement of the operation team or the users – Assuming there is an ultimate operation team or user(s) of the facilities (not necessarily the owner) who can be identified early, the operation team or the users should be involved at the earliest possible stage. Operability should be an important consideration at the design stage and customer orientation should be recognized throughout the life cycle of the project. This is particularly true of integrated operational systems. Early and comprehensive work on systems performance and technical specifications, operational characteristics and systems integration planning should require and respect input from the operation team. The procuring body must spell out its specifications in clear and comprehensive terms which do not allow for any alternative interpretation. The bidder of a systems contract must be able to demonstrate that he fully understands the proposed systems before a contract is awarded to him. This would
prevent substantial changes to the specifications at a later stage. Where changes are inevitable, they should be thoroughly discussed between the project team and the operation team and properly authorized at the appropriate level. A full documentary record of any such changes should be kept.

10. Formal handing over of systems to the operation team – At a predetermined point in the master programme, the systems must be handed over formally to the operation team, who would then assess the operational status in accordance with their priorities during the commissioning stage and determine whether the systems are in fact ready for operational use on the target opening day.

11. Confirming readiness all around – There should be a predetermined checklist, prepared by an independent expert where appropriate, to be signed off by each and everyone of the operators of the key systems, attesting to the compliance and readiness of the systems for the opening day and the satisfactory completion of the required training, testing and trial activities. Any discrepancy must be attended to by the project team and/or the operation team as appropriate at the earliest possible opportunity. Unless the checklist is completely signed off, the project must not be considered ready for operational use. If an opening date for the project has been fixed well in advance, the opening date will need to be critically reviewed if items in the checklist are still outstanding. Where appropriate, this procedure of self-verification can be enhanced by an independent expert audit (see paragraph 19 below) or be tied in with statutory licensing procedures.

VI. Transparency and Co-ordination

12. Use an ‘open book’ approach to project management – Throughout the project management cycle, there shall be no withholding of information by the delivery agent. This is achieved through an ‘open book’ concept which includes full access for all concerned parties to reports and information notes, open attendance at review meetings etc. The Project Management Office will take the lead and set the example. It is recognized that there may be restrictions where proprietary or commercially sensitive information is involved. However, if the principle is recognized there should be a free flow of information between the project team and the Project Management Office, and between the delivery agent and their business partners, franchisees and Government departments to facilitate effective monitoring of progress of all key items.

13. Co-ordination meetings and progress review meetings – The successful airport relocation exercise and operations of Government departments at the airport highlight the importance of an early start on co-ordination and a close working relationship between the parties concerned. If outside agents or business partners are involved in the provision of services, their activities should be properly co-ordinated by the delivery agent. However the delivery agent should avoid creating too many committees with overlapping functions and responsibilities, but should rather devise
an open, comprehensive and flexible coordination mechanism. Moreover, progress reports should be studied carefully and digested, and any problems identified from such reports should be brought up for discussion in the appropriate forum. All discussions and decisions made together with subsequent actions should be properly documented.

VII. Programme Management

14. Use of well-defined critical milestones as ‘project decision points’ – There should be established targets and critical milestones incorporated into baseline implementation plans and contracts. Milestones should be integrated with scope control documents and programmes, and must be rigorously controlled. If a critical milestone is missed or forecast to be missed by a certain threshold value, the Project Management Office should be in a position to order an impact study or a risk assessment to determine possible ‘workarounds’, such as resequencing or acceleration, based on the invariable assumption that unless ‘workarounds’ are available and authorized, the opening date will be delayed by at least a corresponding duration as the milestone is missed. The burden of proof to overcome this assumption will rest with the project team.

15. A master programme for overview and tracking of progress – A project should proceed on the basis of a master programme that links activities together and allows progress and impact of delays to be measured. Without it, formal programme risk assessment cannot be conducted. The delivery agent must provide the Project Management Office with a comprehensive master programme setting out the resource requirements, updated and statused on a regular basis for control and monitoring purposes. Where applicable, the master programme should incorporate key dates for awarding contracts in time to meet the project completion date and key transitional activities such as progression from construction to operation.

16. Critical item reporting – The flow of information from the delivery agent to the Project Management Office and from the Project Management Office to the Steering Committee must be complete and honest. There should exist a mechanism whereby critical items are identified and reported on with follow-up actions taken as a matter of course. It will be a prime function of the Project Management Office to ensure that such a system is in place and is strongly enforced.

VIII. Managing the Transition from Construction to Operation

17. Transitional activities such as testing, commissioning, training and trials should be co-ordinated by the executive agent for the project on a comprehensive basis (i.e. all key operators included) as part of the master programme. There should be ample time allowed for each phase of the activities. Any compression of the timetable should be critically reviewed by the Project Management Office and the operation team. The entire process should be carried out under the overall charge of an
officer with suitable experience in project management or with close professional support.

IX. An International Perspective

18. Use of international experts should be considered if local resources are not available. A degree of ‘networking’ with overseas authorities, overseas visits and, where appropriate, some international ‘benchmarking’ should be considered.

X. Use of an Auditor

19. In addition to the regular monitoring system, the Project Management Office and the delivery agent should also consider separate auditing of the project by an independent auditor, either on an ad hoc or regular basis as an additional safeguard on top of the regular monitoring mechanism. It will be necessary for the auditor to be guaranteed access to full information on the project so that he can be authorized, for example, to certify certain key activities such as trials or tests. Care should be taken to avoid confusion of roles or duplication of efforts.

XI. Risk Assessment and Contingency Plan

20. At the final stage of the project and in good time, the operation team should consider an overall risk assessment. Comprehensive contingency plans, prepared in consultation with all concerned parties and fully tried out, should exist to deal with unexpected situations with particular attention to the possible ‘snowballing’ effects of relatively minor problems. It should be the responsibility of the Project Management Office to oversee the work of all concerned parties in these issues.

XII. Community Support

21. Efforts should be made to seek and maintain the support of the community for the project. This process can become a source of useful feedback on the future operation of the project. Publicity activities however must not be allowed to interfere with project work, particularly when time is at a premium. Where public expectations run high, care should be taken to forewarn that for huge and complex projects some minor difficulties at the commissioning stage might be unavoidable.
APPENDIX 5.39  SCC ON SECTION SUBJECT TO EXCISION (FOR USE WITH GENERAL CONDITIONS OF CONTRACT FOR CIVIL ENGINEERING WORKS 1999 EDITION)

(1) "Section Subject to Excision" means a Section of the Works which is identified as such with details in the [ ], but the implementation of which has not been decided upon by the Employer at the time the tender documents are issued and which shall only be implemented upon a subsequent decision of the Employer, followed by a written instruction from the Engineer.

(2) The Contractor shall allow for the work within the Section Subject to Excision in his programme submitted in accordance with General Conditions of Contract Clause 16.

(3) The Engineer may, within the time stated in the Appendix to the Form of Tender for ordering the Section Subject to Excision (commencing from and including the date for commencement of the Works notified by the Engineer in accordance with General Conditions of Contract Clause 47), instruct the Contractor to proceed with the work within that Section.

(4) Notwithstanding the provisions of General Conditions of Contract Clause 47, the Contractor shall not execute the work within the Section Subject to Excision without the Engineer's instruction in writing in accordance with sub-clause (3) of this Clause, but upon receipt of the instruction:

(a) the Contractor shall execute and complete that work within the Section Subject to Excision within the time for completion of that Section stated in the Contract, or such extended time as may be determined in accordance with General Conditions of Contract Clause 50 and this time for completion commences from and includes the date for commencement of the Works notified by the Engineer in accordance with General Conditions of Contract Clause 47; and

(b) the Contract shall thereafter be construed in every way as if work within the Section Subject to Excision had at all times formed part of the Works.

(5) In the event that the Engineer does not issue an instruction in accordance with sub-clause (3) of this Clause:

(a) without prejudice to the provisions of General Conditions of Contract Clause 60, the Contractor shall not thereafter be obliged to execute and complete the work within the Section Subject to Excision;

(b) the Contractor shall not be entitled to any payment or other compensation or relief in respect of or attributable to the work within the Section Subject to Excision;

(c) the Contract shall thereafter be construed in every way as if the work
within the Section Subject to Excision had not at any time formed part of the Contract and all references thereto shall have no effect;

(d) the Contractor shall review the programme submitted in accordance with General Conditions of Contract Clause 16 and, where appropriate, submit a revised programme to the Engineer in accordance with General Conditions of Contract Clause 16(2); and

(e) the Contractor shall review each of the other documents submitted in accordance with the provisions of the Contract (including but not limited to the documents set out in Appendix [ ] to these Special Conditions of Contract) and, where appropriate, submit an amended or varied version of the same to the Engineer.

* State the relevant contract provisions.

NOTE: For contracts which also use SCC 6 in the Library of SCCs (i.e. the SCC on Sectional Commencement), "Clause 47" referred to in this SCC on Section Subject to Excision should be replaced by "Clause 47(1)".
(1) "Section Subject to Excision" means a Section of the Works which is identified as such with details in the [          ], but the implementation of which has not been decided upon by the Employer at the time the tender documents are issued and which shall only be implemented upon a subsequent decision of the Employer, followed by a written instruction from the Supervising Officer.

(2) The Contractor shall allow for the work within the Section Subject to Excision in his programme submitted in accordance with General Conditions of Contract Clause 16.

(3) The Supervising Officer may, within the time stated in the Appendix to the Form of Tender for ordering the Section Subject to Excision (commencing from and including the date for commencement of the construction of the Works notified by the Supervising Officer in accordance with General Conditions of Contract Clause 47(2)), instruct the Contractor to proceed with the work within that Section.

(4) Notwithstanding the provisions of General Conditions of Contract Clause 47, the Contractor shall not execute the work within the Section Subject to Excision without the Supervising Officer's instruction in writing in accordance with sub-clause (3) of this Clause, but upon receipt of the instruction:

   (a) the Contractor shall execute and complete that work within the Section Subject to Excision within the time for completion of that Section stated in the Contract, or such extended time as may be determined in accordance with General Conditions of Contract Clause 50 or revised time as may be determined in accordance with General Conditions of Contract Clause 13 (if appropriate) or agreed in accordance with General Conditions of Contract Clause 60 and this time for completion commences from and includes the date for commencement of the construction of the Works notified by the Supervising Officer in accordance with General Conditions of Contract Clause 47(2); and

   (b) the Contract shall thereafter be construed in every way as if work within the Section Subject to Excision had at all times formed part of the Works.

(5) In the event that the Supervising Officer does not issue an instruction in accordance with sub-clause (3) of this Clause:

   (a) without prejudice to the provisions of General Conditions of Contract Clause 60, the Contractor shall not thereafter be obliged to execute and complete the work within the Section Subject to Excision;
(b) the Contractor shall not be entitled to any payment or other compensation or relief in respect of or attributable to the work within the Section Subject to Excision;

(c) the Contract shall thereafter be construed in every way as if the work within the Section Subject to Excision had not at any time formed part of the Contract and all references thereto shall have no effect;

(d) the Contractor shall review the programme submitted in accordance with General Conditions of Contract Clause 16 and, where appropriate, submit a revised programme to the Supervising Officer in accordance with General Conditions of Contract Clause 16(2); and

(e) the Contractor shall review each of the other documents submitted in accordance with the provisions of the Contract (including but not limited to the documents set out in Appendix [    ] to these Special Conditions of Contract) and, where appropriate, submit an amended or varied version of the same to the Supervising Officer.

* State the relevant contract provisions.
APPENDIX 5.41  NTT ON SECTION SUBJECT TO EXCISION

Notes to Tenderers

[NTT(l) to be included in the Notes to Tenderers when SCC [   ] on Section Subject to Excision is incorporated. ]

(I) Tenderers are advised that if, by the time a tender recommendation is made, the Government has decided not to proceed with the work contained within the Section Subject to Excision as defined in sub-clause (1) of SCC [   ]\#, then the tender price for that Section shall be discarded and the net tender value shall be taken for the purposes of tender evaluation.

\# Insert the relevant clause number of the SCC clause on Section Subject to Excision.
APPENDIX 5.42  NTT ON ANTI-COLLUSION

Tenderers’ attention is drawn to the anti-collusion provisions in GCT 26.
### APPENDIX 5.43  GCT 1 ON DEFINITIONS

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
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</thead>
<tbody>
<tr>
<td><strong>GCT 1 Definitions</strong></td>
<td></td>
</tr>
<tr>
<td>(1) For the purpose of these General Conditions of Tender and Special Conditions of Tender, words and expressions used throughout shall, except when the context otherwise requires, have the same meaning assigned to them under Clause 1(1) of the General Conditions of Contract. In addition, the following words and expressions shall have the meaning hereby assigned to them:</td>
<td># Full description of the “Engineer / Architect / Maintenance Surveyor designate” (including full name or, as the case may be, full description of the post and name of the current holder of the post, address, telephone number and fax number) should be given in the definition.</td>
</tr>
<tr>
<td>(a) “Engineer/Architect/Maintenance Surveyor designate” means ______#</td>
<td></td>
</tr>
<tr>
<td>(b) “unincorporated joint venture”, “participant”, “incorporated joint venture” and “shareholder” shall bear the same meanings as those given in paragraph 6 of the Environment, Transport and Works Bureau Technical Circular (Works) No. 50/2002 on Contractors’ Joint Venture.</td>
<td></td>
</tr>
<tr>
<td>(c) &quot;person&quot; includes individual, corporation, partnership, firm and unincorporated body.</td>
<td></td>
</tr>
<tr>
<td>(2) In these General Conditions of Tender and Special Conditions of Tender, except where the context otherwise requires, the singular shall include the plural and vice versa and any gender shall include all genders.</td>
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</tbody>
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### APPENDIX 5.44 GCT 25 ON SUBMISSION OF FURTHER INFORMATION

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
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</table>
| GCT 25 Submission of further information | The tenderer shall upon written request by the *Architect/Engineer/Surveyor/Maintenance Surveyor designate* (which may be issued at any time after the tender closing date) submit to the *Architect/Engineer/Surveyor/Maintenance Surveyor designate* within 7 days of the date of issue of the written request or within reasonable time upon the written request the following documents: #[(a) ............................................; (b) ..............................................; and (c) .............................................] | * Delete as appropriate. Note: Non submission will be regarded as withdrawal of tender. # Project office to specify the relevant documents with reference to the relevant GCT or SCT clause, e.g. the financial information as referred to in General Conditions of Tender Clause 5. Such documents should not contain information which will affect the evaluation process or the marking scheme.

Failure to comply with this Clause by the tenderer shall render his tender invalid.
### APPENDIX 5.45  GCT 26 ON ANTI-COLLUSION

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GCT 26 Anti-collusion</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(1)</strong></td>
<td></td>
</tr>
</tbody>
</table>
| (a) Subject to sub-clause (2) of this Clause, the tenderer shall not communicate to any person other than the Employer the amount of the tender price or any part thereof until the tenderer is notified by the Employer of the outcome of the tender exercise.  
(b) Further to paragraph (a) of this sub-clause, the tenderer shall not fix the amount of the tender price or any part thereof by arrangement with any other person, make any arrangement with any person about whether or not he or that other person will or will not submit a tender or otherwise collude with any person in any manner whatsoever in the tendering process.  
(c) Any breach of or non-compliance with this sub-clause by the tenderer shall, without affecting the tenderer’s liability for such breach or non-compliance, invalidate his tender. | |
| **(2)** |  |
| Sub-clause (1)(a) of this Clause shall have no application to the tenderer’s communications in strict confidence with:  
(a) his own insurers or brokers to obtain an insurance quotation for computation of tender price;  
(b) his consultants or sub-contractors to solicit their assistance in preparation of tender submission; and  
(c) his bankers in relation to financial resources for the Contract. | |
| **(3)** |  |
| The tenderer shall submit with his tender a duly signed and witnessed letter in the form set out in Appendix [ ]^+ to these General Conditions of Tender. The signatory to the letter shall be a person authorized to sign Government contracts on the tenderer’s behalf. |  
^+ See below.
Clause

(4) The tenderer shall indemnify and keep indemnified the Employer against all losses, damages, costs or expenses arising out of or in relation to any breach of or non-compliance with sub-clause (1) of this Clause by the tenderer, including but not limited to additional costs due to price escalation, costs and expenses of re-tendering and other costs incurred.

Remarks/Guidelines

Appendix [ ]

To: The Government of the Hong Kong Special Administrative Region ("Government")

Date: _____________________

Dear Sir/Madam,

Contract No.: [ ]

Title: [ ]

*I/We, [(name of the tenderer) of (address of the tenderer)]^1, refer to *[my/our] tender for the above Contract.

^1 Where the tenderer comprises two or more persons or companies acting in partnership, joint venture or otherwise, this part in square brackets should be expanded to include the respective names and addresses of such persons or as the case may be companies.

*I/We confirm that, before *I/we sign this letter, *I/we have read and fully understand this letter and the anti-collusion clause in General Conditions of Tender Clause 26.

*I/We, represent and warrant that in relation to the tender for the above Contract:

(i) *I/We, other than the Excepted Communications referred to in the last paragraph of this letter, have not communicated and will not communicate to any person other than the Government the amount of the tender price or any part thereof until *I/we have been notified by the Government of the outcome of the tender exercise;

(ii) *I/We have not fixed and will not fix the amount of the tender price or any

* Delete as appropriate.

1 Where the tenderer comprises two or more persons or companies acting in partnership, joint venture or otherwise, this part in square brackets should be expanded to include the respective names and addresses of such persons or as the case may be companies.

2 Where the tenderer comprises two or more persons or companies acting in partnership, joint venture or otherwise, all such persons or as the case may be companies must sign. The signatory for each of such persons or companies shall be a person authorized to sign Government contracts on behalf of that person or as the case may be company.
part thereof by arrangement with any person;

(iii) *[I/We] have not made and will not make any arrangement with any person as to whether *[I/we] or that other person will or will not submit a tender; and

(iv) *[I/We] have not otherwise colluded and will not otherwise collude with any person in any manner whatsoever in the tendering process.

*[I/We] shall indemnify and keep indemnified the Government against all losses, damages, costs or expenses arising out of or in relation to any breach of any of the representations and/or warranties above, including but not limited to damages for delay, costs and expenses of re-tendering and other costs incurred.

In this letter, the expression “Excepted Communications” means *[my/our] communications in strict confidence with:

(i) *[my/our] own insurers or brokers to obtain an insurance quotation for computation of tender price;

(ii) *[my/our] consultants or sub-contractors to solicit their assistance in preparation of tender submission; and

(iii) *[my/our] bankers in relation to financial resources for the Contract.

Signed for and on behalf of [name of the tenderer] by [name and position of the signatory]:

Name of Witness: __________________________
Signature of Witness: ______________________
Occupation: ______________________________
APPENDIX 5.46  SCC ON BOND FOR OFF-SITE MANUFACTURES OF MAJOR PREFABRICATION ITEM(S)

S.C.C. xx  (1) For purposes of the Contract, “[Major Prefabrication Items]” shall mean the following item(s) of works:

(a) [description] identified in [set out the relevant Drawing number(s) and the relevant clause/section number(s) of the Contract documents, e.g. Specification]; and

(b) ……
[set out details of any further item(s) of works],
which has/have been completed off-Site in accordance with the Contract but is/are yet to be delivered to the Site for inclusion in the Works.

(2) Should the Contractor elect to apply for interim payment for the manufacturing and fabrication of any Major Prefabrication Item carried out off-Site before delivery to Site, the Contractor shall, as a condition precedent to his right to apply for any interim payment or to continue to apply for any interim payment pursuant to General Conditions of Contract Clause 79 in relation to the elected Major Prefabrication Item, provide the Employer with and maintain in existence a separate bond in the form annexed at Appendix [ ] to the Special Conditions of Contract covering the elected Major Prefabrication Item, in the amount therein described and subject to the terms more particularly described in the Contract, with only such amendments thereto as may previously have been agreed in writing by the Engineer. The bond shall be released in the manner described in the bond. The Contractor shall submit a separate bond in relation to each elected Major Prefabrication Item.
(3) For the avoidance of doubt, if no bond as described in sub-clause (2) of this Clause covering the elected Major Prefabrication Item has been provided to the Employer and maintained in existence, no interim payment shall be made under the Contract for the Major Prefabrication Item and the payment for such Major Prefabrication Item shall continue to be processed and made in the normal manner upon delivery to Site under the provisions of the Contract.

(4) Upon the Contractor having provided to the Employer a duly executed bond under sub-clause (2) of this Clause in relation to any Major Prefabrication Item, the following amendments, effective from the date of the receipt of such bond by the Employer, shall be deemed to have been made to the Contract:

Clause 21 of General Conditions of Contract shall be amended by:

(A) Adding to the end of the first sub-paragraph of sub-clause (1) after “Specialist Works” but before the full stop:

“, and, in relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx, for the care of the Major Prefabrication Item(s) whether stored off-Site or in the course of transportation.”

(B) Adding after “on the Site,” in line 4 of sub-clause (2):

“or, in relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx,
to the Major Prefabrication Item(s) whether stored off-Site or in the course of transportation,”

**Clause 72 of General Conditions of Contract shall be deleted and replaced by:**

(1) All materials owned by the Contractor for incorporation in the Works shall be and become the property of the Employer upon delivery to the Site, except to the extent that property in such materials shall have already been passed to the Employer in accordance with sub-clause (2) of this Clause.

(2) In relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx, such Major Prefabrication Item(s) located in the manufacture / fabrication / assembly yard(s) off-Site or in the course of transportation shall be and become the property of the Employer upon property in such Major Prefabrication Item(s) vesting in the Contractor or otherwise passing unconditionally to the Contractor under relevant sub-contract.

(3) The materials under sub-clauses (1) and the Major Prefabrication Item(s) under sub-clause (2) of this Clause shall not be removed without an instruction or the prior written consent of the Engineer. Such materials and Major Prefabrication Item(s) shall, subject to Clause 81, only re-vest in the Contractor to the extent that they may be found to be surplus to
requirements upon or prior to completion of the Works. The operation of this Clause shall not be deemed to imply any approval by the Engineer of such materials or Major Prefabrication Item(s) or prevent the rejection by the Engineer of any material or Major Prefabrication Item at any time.

Clause 78 of General Conditions of Contract shall be amended by:

(A) Adding after sub-clause (1)(b):

“(c) a list of the Major Prefabrication Item(s) for which the Contractor has provided the duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx and the estimated contract value of such Major Prefabrication Item(s)”; and”

(B) Renumbering original sub-clause (1)(c) as sub-clause (1)(d).

Clause 79 of General Conditions of Contract shall be amended by:

(A) Adding after sub-clause (1)(c):

“(d) the estimated value of the Major Prefabrication Item(s) for which the Contractor has provided the duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx; and”

(B) Renumbering original sub-clause “(1)(d)” and “(1)(e)” as (1)(e)” and “(1)(f)” respectively.

(C) Amending the further proviso at the end of sub-clause (1) to read:

"Provided further that, for the purpose of interim payments:
(i) the value of the materials as referred to in (c) above for use in connection with any item of permanent work priced in the Contract and the value of the Major Prefabrication Item(s) referred to in (d) above shall be determined on the basis of the rate set out in the Contract for such work; and

(ii) in relation to the Major Prefabrication Item(s) referred to in (d) above, it shall be a condition precedent to valuation and certification by the Engineer of such Major Prefabrication Item(s) under this sub-clause that the Contractor has complied with the provisions of sub-clause (5) of Special Conditions of Contract Clause xx."

For the avoidance of doubt, if the Contractor has not elected to apply for interim payment for any Major Prefabrication Item by not submitting the bond as required in sub-clause (2) of this Clause, this sub-clause (4) shall have no application to such Major Prefabrication Item.

(5) If the Contractor exercises his right under this Clause to apply for interim payment in relation to any Major Prefabrication Item(s), he shall be responsible for the arrangement and for all the costs and expenditure incurred by the Engineer’s Representative in connection with his visit(s) to any off-Site manufacture / fabrication / assembly yard(s) to verify the Contractor’s entitlement to any interim payment for such Major Prefabrication Item(s). The aforesaid costs and expenditure shall be deemed to be included in the rates of the Bills of Quantities.
Furthermore, the Contractor shall furnish to the Engineer the following:

(i) clear proof that the Major Prefabrication Item(s) has/have met all Contract requirements and especially geometric configurations, ready for shipment to the Site for erection;

(ii) in the case the Major Prefabrication Item(s) is / are stored whether at the manufacture / fabrication / assembly yard(s) where the Major Prefabrication Item(s) has / have been manufactured / fabricated / assembled or at other place(s) of storage off-Site, evidence that there is in relation to such Major Prefabrication Item(s) clear identification of:

1. the Employer as the person to whose order it is / they are held, and

2. its / their destination as the Works and such Major Prefabrication Item(s) either is / are set apart or has / have been clearly and visibly marked, individually or insets, by letters or figures or by reference to a pre-determined code;

(iii) in the case the Major Prefabrication Item(s) is / are under shipment by sea, the relevant shipping documents;

(iv) clear proof that the Major Prefabrication Item(s) is / are the property of the Contractor and that the conditions set out in paragraphs (i) to (iii) of this sub-clause, as applicable, have been complied with; and
[(v) clear proof that such Major Prefabrication Item(s) is/are fully insured against loss or damage for their full value under a policy of insurance protecting the interests of the Employer and the Contractor, during the period commencing with the transfer of property in the Major Prefabrication Item(s) to the Contractor until they are delivered to the Works.]

NOTE: In implementation of the risk-based assessment for insurance procurement according to ETWB TCW Nos. 6/2005 and 7/2005, the project officer’s attention is drawn to the risk of damage to the third party during the period commencing with the transfer of property in the Major Prefabrication Item(s) to the Employer until they are delivered to the Works.

* Delete if OCIP arrangement has been adopted for the Contract.
Appendix [ ]

FORM OF CONTRACTOR’S BOND IN RESPECT OF OFF-SITE PAYMENT FOR A MAJOR PREFABRICATION ITEM

BY THIS BOND dated the day of [ ] 201X
[ ] whose registered office is at
[ ] (“the Surety”) is irrevocably and unconditionally bound to the Government of the Hong Kong Special Administrative Region (together with its successors and assigns, “the Employer”) for payment of a sum (“the Bonded Sum”) not exceeding [ ] ([$ ]1) for payment of which sum the Surety binds itself its successors and assigns in accordance with the provisions of this Bond.

WHEREAS

(A) By a contract dated [ ] (“the Contract”) made between the Employer and [ ] (“the Contractor”), the Contractor has agreed to execute and complete certain works (“the Works”) upon the terms and conditions contained in the Contract.

(B) Pursuant to the terms of the Contract, the Contractor agrees that if he elects to apply for interim payment for any Major Prefabrication Items (“the Off-Site Payment”) pursuant to Special Conditions of Contract Clause xx, the Contractor shall, as a condition precedent to its right to apply for any such interim payment, provide this on-demand bond (“Bond”).

(C) The Contractor has elected to apply for interim payment for the Major Prefabrication Item comprising [ ] pursuant to Special Conditions of Contract Clause xx (“Relevant Major Prefabrication Item”)

NOW THE TERMS AND CONDITIONS of this Bond are:-

1. The Surety hereby irrevocably and unconditionally undertakes to pay to the Employer an amount not exceeding [ ] ([$ ]1) upon receipt from the Employer of a written demand therefor accompanied by a certificate signed on behalf of the Employer stating:
   (a) that the Employer is entitled to terminate or has terminated the Contract or the employment of the Contractor under the Contract; and
   (b) the amount due and payable under this Bond in accordance with Clause 3 below.

2. The Surety shall pay to the Employer the amount thus demanded without requiring further evidence or proof of:-
   (a) the default of the Contractor or
   (b) the Employer’s entitlement to terminate the Contract or the employment of the Contractor under the Contract or

1 The value stated in the Appendix to Form of Tender which the Employer considers will be sufficient to cover him for maximum Off-Site Payment payable to the Contractor for the Relevant Major Prefabrication Item.
(c) any termination of the Contract or the employment of the Contractor under the Contract or

(d) of the amount due and payable under this Bond.

3. The amount payable under this Bond shall be the aggregate of the sum stated in the latest interim payment certificate representing the Off-Site Payment paid to the Contractor under the Contract prior to the date of the written demand referred to in Clause 1 above less the aggregate of any and all sums in respect of the Relevant Major Prefabrication Item delivered to the Site as certified by the Engineer (as defined in the Contract) in accordance with the terms of the Contract provided always that the liability of the Surety under this Bond shall not exceeded [ ] ([ ])]\(^1\).

4. The liability of the Surety under this Bond shall remain in full force and effect and shall not be affected or discharged in any way by and the Surety hereby waives notice of:-

(a) any suspension of the Works, variation to or amendment of the Contract (including without limitation extension of time for performance), or any concession or waiver by the Employer in respect of the Contractor’s obligations under the Contract;

(b) the termination of the Contract or of the employment of the Contractor under the Contract solely as a result of default by the Contractor under the Contract;

(c) any forbearance or waiver of any right of action or remedy the Employer may have against the Contractor or negligence by the Employer in enforcing any such right of action or remedy;

(d) any other bond, security or guarantee held or obtained by the Employer for any of the obligations of the Contractor under the Contract or any release or waiver thereof;

(e) any act or omission of the Contractor pursuant to any other arrangement with the Surety.

5. The liability of the Surety under this Bond shall cease on whichever of the following events first occurs:-

(a) payment by the Surety of the Bonded Sum in full to the Employer; or

(b) receipt of written notification from the Employer that all the components comprising the Relevant Major Prefabrication Item have been delivered to the Site; or

6. The Employer shall be entitled to assign the benefit of this Bond at any time without the consent of the Surety or the Contractor being required.

7. All documents arising out of or in connection with this bond shall be served:-

(a) Upon the Employer, at [ ], marked for the attention of [ ];

(b) Upon the Surety, at [ ] Hong Kong.
8. The Employer and the Surety may change their respective nominated addresses for service of documents to another address in Hong Kong but only by prior written notice to each other. All demands and notices must be in writing.

9. This Bond shall be governed by and construed according to the laws for the time being in force in Hong Kong and the Surety agrees to submit to the non-exclusive jurisdiction of the courts of Hong Kong.

10. In this Bond, “Hong Kong” means the Hong Kong Special Administrative Region. Where applicable, words and expressions used in this Bond shall have the meanings assigned to them in the Contract.

IN WITNESS whereof this Bond has been executed as a deed on the date first above written.

(a) SIGNED, SEALED and DELIVERED
   by [name of sole proprietor]
   trading as [name of the Surety]
   in the presence of:

   .........................................................................
   [Name]
   [Occupation]
   [Address]

   Or

(b) SIGNED, SEALED and DELIVERED by
   [name of partner] and
   [name of partner]^ being the partners of [name of the Surety]
   in the presence of:

   .........................................................................
   [Name]
   [Occupation]
   [Address]

   Or
(c) Executed and delivered as a deed and the COMMON SEAL of [name of the Surety] was affixed in the presence of [ ] its [director(s) or director and secretary or person(s) authorized to sign the bond by its board of directors]** in the presence of a witness:

..............................................................................
[Name]
[Occupation]
[Address]

Or

(d) Executed and delivered as a deed by [name of the Surety] acting through [ ] (its sole director) or [ ] and [ ] (its directors) or [ ] (its director) and [ ] (its company secretary)** in the presence of a witness:

..............................................................................
[Name]
[Occupation]
[Address]

Or

(e) SIGNED, SEALED and DELIVERED by [name of the Surety] by [ ] his/her/its** attorney under power of attorney dated [ ] in the presence of:

..............................................................................
[Name]
[Occupation]
[Address]

Note:
(a) For use where the surety is a sole proprietor.
(b) For use where the surety is a partnership.
(c) For use where the surety is a company incorporated in Hong Kong and executes the deed with a Common Seal.
(d) For use where the surety is a company incorporated in Hong Kong and executes the deed without a Common Seal.
(e) For use where the surety executes the deed under a power of attorney.
* The italic parts are not part of the execution clause. They are for guidance or information only.
** Select the correct expression for use. If none is applicable, insert an appropriate expression.
^ The deed shall be executed by all the partners. Add more names if required.
APPENDIX 5.47  SCC ON RELEASE OF RETENTION MONEY (FOR USE IN CONJUNCTION WITH GCCS FOR BUILDING WORKS, CIVIL ENGINEERING WORKS, DESIGN AND BUILD CONTRACTS AND ELECTRICAL AND MECHANICAL ENGINEERING WORKS, 1999 EDITIONS)

SCC on Release of Retention Money

(For Capital Works contracts)

General Conditions of Contract Clause 79(3) is deleted and replaced by the following:

“(3)(a) The Engineer[/Surveyor]3[/Supervising Officer]4 shall, within 14 days of the date of issue of the certificate of completion in respect of the Works in accordance with Clause 53(1), issue a certificate for the payment of not more than 50% of the Retention Money giving due account to the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]5 repair, rectification and making good of any defects[/Defects]6 [imperfection, shrinkage, settlement and other fault]7 referred to in Clause 56 which have been notified in writing to the Contractor (“Outstanding Work”) [, which certificate shall state any Retention Money due to any Nominated Sub-contractor]8 and, subject to Clause 83, the Employer shall pay such portion of Retention Money to the Contractor within 21 days of such certificate. In the event of different certificates of completion having been issued for different Sections or parts of the Works pursuant to Clause 53, the expression “certificate of completion” shall, for the purposes of this sub-clause, mean the last of such certificates.

(b) Further to paragraph (a) of this sub-clause and within 14 days after the date of the expiry of the Maintenance Period [/Defects Liability Period]9 for the Works or, where there is more than one such Period, the latest Period, the Engineer [/Surveyor]10 [/Supervising Officer]11 shall issue a certificate for the payment of a further portion of the Retention Money representing the remainder of the Retention Money less, where applicable, an amount (“Remaining Amount”) which, in the opinion of the Engineer [/Surveyor]12[/Supervising Officer]13, represents the cost of any Outstanding Work then remaining to be carried out [, which certificate shall state any Retention Money due to any Nominated Subcontractor]14 and, subject to Clause 83, the Employer shall pay such further portion of the Retention Money to the Contractor within 21 days of the date of such certificate.

3 Only applicable to Building Works contracts
4 Only applicable to Design and Build contracts
5 Not applicable to E&M contracts
6 Only applicable to E&M contracts
7 Not applicable to E&M contracts
8 Only applicable to contracts with provision for Nominated Sub-contractor
9 Only applicable to E&M contracts
10 Only applicable to Building Works contracts
11 Only applicable to Design and Build contracts
12 Only applicable to Building Works contracts
13 Only applicable to Design and Build contracts
14 Only applicable to contracts with provision for Nominated Sub-contractor
(c) Where a sum representing the Remaining Amount is withheld from certification under paragraph (b) of this sub-clause, the Engineer [/Surveyor]\textsuperscript{15} [/Supervising Officer]\textsuperscript{16} shall, within 14 days of the date of issue by the Engineer [/Architect]\textsuperscript{17} [/Supervising Officer]\textsuperscript{18} of the maintenance certificate [/defects liability certificate]\textsuperscript{19} in accordance with Clause 80, issue a certificate for the payment of the sum representing the Remaining Amount [, which certificate shall state any Retention Money due to any Nominated Subcontractor]\textsuperscript{20} and, subject to Clause 83, the Employer shall pay such sum to the Contractor within 21 days of the date of such certificate.”

\textsuperscript{15} Only applicable to Building Works contracts
\textsuperscript{16} Only applicable to Design and Build contracts
\textsuperscript{17} Only applicable to Building Works contracts
\textsuperscript{18} Only applicable to Design and Build contracts
\textsuperscript{19} Only applicable to E&M contracts
\textsuperscript{20} Only applicable to contracts with provision for Nominated Sub-contractor
SCC on Release of Retention Money

(For Capital Works contracts – landscape works)

General Conditions of Contract Clause 79(3) is deleted and replaced by the following:

“(3)(a) The Engineer[/Surveyor]^{21}/[/Supervising Officer]^{22} shall within 14 days of the date of issue of the certificate of completion in respect of the Works except Landscape Works in accordance with Clause 53(1), issue a certificate for the payment of not more than 50% of the Retention Money giving due account to, in respect of the Works except Landscape Works, the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]^{23} repair, rectification and making good any defects[/Defects]^{24}, [imperfection, shrinkage, settlement and other fault]^{25} referred to in Clause 56 which have been notified in writing to the Contractor [and , which certificate shall state any Retention Money due to any Nominated Sub-contractor]^{26} and, subject to Clause 83, the Employer shall pay such portion of Retention Money to the Contractor within 21 days of such certificate. In the event of different certificates of completion having been issued for different Sections or parts of the Works except Landscape Works pursuant to Clause 53, the expression “certificate of completion” shall, for the purposes of this sub-clause, mean the last of such certificates.

(b) Further to paragraph (a) of this sub-clause and upon the expiry of the Maintenance Period[/Defects Liability Period]^{27} for the Works except Landscape Works, or where there is more than one such Period, the latest Period, the Engineer[/Architect]^{28}[/Supervising Officer]^{29} shall notify the Contractor in writing the date of expiry of such Maintenance Period [/Defects Liability Period]^{30}, and within 14 days of the date of notification by the Engineer [/Architect]^{31}[/Supervising Officer]^{32}, the Engineer [/Surveyor]^{33}[/Supervising Officer]^{34} shall issue a certificate for the payment of a further portion of the Retention Money and such further portion shall be equal to the Relevant Percentage of the Retention Money less an amount which, in the opinion of the Engineer [/Surveyor]^{35}/[/Supervising Officer]^{36}, represents the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]^{37} repair, rectification and making good any defects[/Defects]^{38}, [imperfection, shrinkage, settlement and other fault]^{39} referred to in

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21 Only applicable to Building Works contracts
22 Only applicable to Design and Build contracts
23 Not applicable to E&M contracts
24 Only applicable to E&M contracts
25 Not applicable to E&M contracts
26 Only applicable to contracts with provision for Nominated Sub-contractor
27 Only applicable to E&M contracts
28 Only applicable to Building Works contracts
29 Only applicable to Design and Build contracts
30 Only applicable to E&M contracts
31 Only applicable to Building Works contracts
32 Only applicable to Design and Build contracts
33 Only applicable to Building Works contracts
34 Only applicable to Design and Build contracts
35 Only applicable to Building Works contracts
36 Only applicable to Design and Build contracts
37 Not applicable to E&M contracts
38 Only applicable to E&M contracts
Clause 56 then remaining to be carried out ) [], which certificate shall state any Retention Money due to any Nominated Sub-contractor\(^{39}\) and, subject to Clause 83, the Employer shall pay such further portion of Retention Money to the Contractor within 21 days of the date of such certificate. For the purposes of this sub-clause, “Relevant Percentage” means \(^{98}\)\(^{41}\) % minus the percentage of the Retention Money certified under paragraph (a) of this sub-clause.

(c) The Engineer[/Surveyor]\(^{42}\) [/Supervising Officer]\(^{43}\) shall, within 14 days of the date of issue by the Engineer[/Architect]\(^{44}\) [/Supervising Officer]\(^{45}\) of the maintenance certificate[/defects liability certificate]\(^{46}\) in accordance with Clause 80, issue a certificate for the payment of the remaining portion of Retention Money [], which certificate shall state any Retention Money due to any Nominated Sub-contractor\(^{47}\) and, subject to Clause 83, the Employer shall pay such remaining portion of Retention Money to the Contractor within 21 days of the date of such certificate.”

\(^{39}\) Not applicable to E&M contracts  
\(^{40}\) Only applicable to contracts with provision for Nominated Sub-contractor  
\(^{41}\) To insert a percentage appropriate to the Contract taking into account the proportion of Retention Money for Landscape Works  
\(^{42}\) Only applicable to Building Works contracts  
\(^{43}\) Only applicable to Design and Build contracts  
\(^{44}\) Only applicable to Building Works contracts  
\(^{45}\) Only applicable to Design and Build contracts  
\(^{46}\) Only applicable to E&M contracts  
\(^{47}\) Only applicable to contracts with provision for Nominated Sub-contractor
APPENDIX 5.48 SAMPLE PARTICULAR SPECIFICATION FOR MECHANICAL DUMP TRUCK COVERS

1. (a) All dump trucks (i.e. goods vehicles of gross vehicle weight equal to or more than 16 tonnes, fitted with a dump bed) leaving the Site carrying dusty materials shall be fitted with a mechanical cover in good service condition which covers the dump bed. Such dump truck covers shall comply with the following.

   (i) The cover shall be constructed of durable materials and suitable components in good condition. The covering materials shall be effective in preventing dust emissions. The cover shall be power-operated with manual backup. Except in the manual backup mode, the cover shall only be operable inside the driving cabin, if applicable.

   (ii) The cover system shall incorporate controls to ensure safety in operation. The cover shall be inoperable unless the vehicle has come to a standstill, and after the hand brake is on. A warning system, consisting of flashing amber lights and audible alarm, shall be activated automatically when the cover is being operated inside the driving cabin. The warning system shall be visible and audible from both inside (by an indicator light or the like if necessary) and outside the driving cabin. A locking system shall be in place to prevent accidental opening of the cover, if applicable.

   (iii) The cover shall be able to withstand strong winds under normal circumstances. After the cover to the dump bed is closed, any gap left on the system of enclosure shall be less than 25 mm wide measured in a direction across the gap as far as practicable. Any remaining gap shall be sealed up tightly with suitable materials of sufficient length to bridge across the gap as far as practicable. In addition, the cover shall not accumulate any significant amount of dust or debris which may obstruct its operation. The gross vehicle weight and maximum dimensions of the truck after fitted with the cover and associated accessories shall comply with the relevant legislation.

(b) The Contractor shall be responsible for selecting the design of mechanical cover satisfying the above requirements.

(c) The Architect/Engineer/Supervising Officer or his Representative shall have the power to:

   (i) refuse entry into the Site any dump truck that fails to meet this specification; and

   (ii) require any loaded dump truck to unload its contents before leaving the Site if its dump bed and cover is found not to comply with the above requirements after loading.
Provided always that approval for leaving the Site of a loaded dump truck by the *Architect/Engineer/Supervising Officer or his site supervisory staff shall not relieve the Contractor of his obligation to comply with the relevant legislation, and the Employer shall not be liable for any loss or damage sustained by the Contractor or the truck drivers or truck owners arising from or in connection with any offence committee by the Contractor or the truck drivers or truck owners in relation to transportation of the C&D materials from the Site.

2. Vehicles other than ‘dump trucks’ carrying dusty materials away from the Site may use means other than mechanical covers to cover their dusty materials, provided that the vehicle shall have properly fitted side boards and tailboards, with the dusty material loaded to a height not exceeding the height of side boards and tailboards, and covered by a tarpaulin or suitably impervious covering materials (as approved by the *Architect/Engineer/Supervising Officer or his Representative) in good condition. The covering shall be properly secured and extended at least 300 mm over the side boards and tailboards before leaving the Site.
### APPENDIX 5.49 NTT ON MECHANICAL DUMP TRUCK COVERS

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT(x) (a) Tenderers’ attention is drawn to Particular Specification Clause [ ] on mechanical dump truck covers</td>
<td>This is to be used in Capital Works Contracts with Pay for Safety and Environment Scheme and Term Contracts with Pay for Safety Scheme to be tendered on or after 1 November 2010.</td>
</tr>
<tr>
<td>(b) Tenderers should note that there are no separate items in the [*Bills of Quantities/Schedule of Rates] for measurement of use of mechanical dump truck covers and that, in line with the [*General Preambles/Method of Measurement] to the [*Bills of Quantities/Schedule of Rates], the rates in the [*Bills of Quantities/Schedule of Rates] shall cover, inter alia, provision of mechanical covers for dump trucks.</td>
<td></td>
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</table>

* Delete or amend as appropriate
APPENDIX 5.50  TENDER PROVISION (NON-D&B CONTRACTS) ON EMPLOYER’S POWER TO REDUCE THE AMOUNT OF THE CONTINGENCY SUM PRIOR TO AWARD OF CONTRACT

Special Condition of Tender on Employer’s Power to Reduce the Amount of the Contingency Sum prior to Award of Contract

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCT XX Reduction of Contingency Sum</td>
<td>1. This SCT shall only be included in a works contract involving Contingency Sum if an officer at D2 rank or above in the Project Office/Works Department is satisfied that the following adoption criterion is met: - The contract is identified in the risk assessment at the pre-tender stage to have highly uncertain risk factors that could lead to an over-estimation of the allowance made in the Contingency Sum for covering such risks. This finding must be properly documented in file. 2. Subject to compliance with the requirements given in paragraph 3 below, this SCT enables the Project Office, in case the original tender sum of the recommended tender exceeds the funding allowed for the contract in the Approved Project Estimate, to unilaterally reduce the Contingency Sum stated in the tender documents and consequentially the tender sum without the need for tender negotiation. The Project Office can then under properly justified circumstances: (i) keep the tender sum of the recommended tender within the funding available and, subject to approval by the relevant tender board, accept the tender without the need to seek additional funding; or (ii) reduce the amount of additional funding required even if after such reduction the tender sum of the recommended tender still exceeds the funding available and additional funding is still required to be sought. 3. In order to exercise this SCT, the</td>
</tr>
</tbody>
</table>

(1) Without prejudice to the generality of the other General Conditions of Tender and Special Conditions of Tender, the Employer reserves the right to reduce unilaterally the amount of the Contingency Sum as stated in the [Bills of Quantities] by himself giving or requiring the *Engineer / Architect / Maintenance Surveyor designate to give a notification in writing as regards the reduction to a tenderer at any time after determination of the price ranking or overall marks/scores of the tenders in accordance with the evaluation criteria set forth in the tender documents but before award of the Contract.

(2) By submitting his tender, a tenderer shall be deemed to have agreed that upon receipt by the tenderer of a notification in writing referred to sub-clause (1) of this Clause: (a) the amount of the Contingency Sum as stated in the [Bills of Quantities] shall be taken to be reduced accordingly; (b) the amount of the tender sum as stated in the Form of Tender and [Bills of Quantities] shall be taken to be reduced accordingly to reflect the reduction in the amount of the Contingency Sum under paragraph (a) above;[and][2] (c) the reduction in the amount of the Contingency Sum under paragraph (a) above shall not affect any Provisional Sums specified in the [Bills of Quantities] [or the amount of the Adjustment Item; and]
(d) for the purposes of paragraph (c) above, "Adjustment Item" shall have the meaning given in [Preambles to the Bills of Quantities/Special Conditions of Tender Clause [ ]** and Special Conditions of Contract Clause [ ]**]¹, and the amount of which may (where applicable) be revised in accordance with General Conditions of Tender Clause [ ]*** ³.

(3) For the avoidance of doubt, the original tender sum as stated in the Form of Tender and [Bills of Quantities]¹ will, subject to correction (where applicable) in accordance with General Conditions of Tender Clause [ ]***, be used for determination of the price ranking or overall marks/scores of the tenders in accordance with the evaluation criteria set forth in the tender documents irrespective of whether or not the Employer has subsequently exercised his right under this Clause to reduce the amount of the Contingency Sum.

<table>
<thead>
<tr>
<th>Clause</th>
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<tbody>
<tr>
<td>(d) for the purposes of paragraph (c) above, &quot;Adjustment Item&quot; shall have the meaning given in [Preambles to the Bills of Quantities/Special Conditions of Tender Clause [ ]** and Special Conditions of Contract Clause [ ]<strong>]¹, and the amount of which may (where applicable) be revised in accordance with General Conditions of Tender Clause [ ]</strong>* ³.</td>
<td>Project Office shall have: (a) reviewed the risk assessment made at the pre-tender stage in arriving at the original Contingency Sum; (b) proper justifications that the amount of reduction is genuinely an excessive allowance in the original Contingency Sum; and (c) obtained approval of the Vote Controller.</td>
</tr>
</tbody>
</table>

4. In conjunction with the use of this SCT, the Form of Tender and the Letter of Acceptance to Successful Tenderer shall be modified as provided in the memo promulgating this SCT ref. DEVB(W) 546/70/01 of 8.8.2011. Sample letter notifying the tenderer (whose tender is going to be recommended for contract award) of the reduction of the Contingency Sum is also provided in the said memo.

5. This SCT is for use in works contracts other than design and build (D&B) contracts. A GCT is separately provided for D&B contracts in the memo mentioned in paragraph 4 above.

Explanatory notes to words in square brackets

1 The Project Office shall determine the appropriate wording to suit the contract/tender documentation arrangements of the contract being tendered.

2 To be inserted if the last part of paragraph (c) and the whole of paragraph (d), are deleted (see note 3 below).

3 The last part of paragraph (c) and the whole of paragraph (d), which are in square brackets, should be deleted if "Adjustment Item" is not allowed in relation to the contract being tendered.

* Delete as appropriate.

** Insert the clause numbers of the Special Condition of Tender and Special Conditions of Contract.
<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Condition of Contract respectively on Adjustment Item (applicable to a contract which has adopted an SCT and an SCC dealing with Adjustment Item). *** Insert the clause number of the General Condition of Tender dealing with correction rules for tender errors (i.e. GCT 11 in DEVB's Library of GCTs, SCTs and NTTs).</td>
</tr>
</tbody>
</table>
Form of Tender on Employer’s Power to Reduce the Amount of the Contingency Sum prior to Award of Contract

FORM OF TENDER
(For capital works contracts other than design-and-build contracts WHICH HAVE ADOPTED SCT XX ON REDUCTION OF CONTINGENCY SUM)

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:

1To: The Chairman,
Central Tender Board,
Ground Floor, East Wing,
Central Government Offices,
2 Tim Mei Avenue, Tamar, 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 2 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 3 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.

2. I/we agree that, upon receipt by me/us of a notification in writing referred to in sub-clause (1) of Special Condition of Tender Clause [ ] 4 (a copy of which is at the
Appendix hereto) concerning reduction in the amount of the Contingency Sum, my/our Tender shall be taken to be amended as follows:

(a) the amount of the Contingency Sum as stated in the Bills of Quantities shall be taken to be reduced accordingly; and

(b) the amount of the tender sum as stated in clause 1 of this Form of Tender and the Bills of Quantities shall be taken to be reduced accordingly to reflect the reduction in the amount of the Contingency Sum under paragraph (a) above, and I/we further agree that the reduction in the amount of the Contingency Sum under paragraph (a) above shall not affect any Provisional Sum specified in the Bills of Quantities [or the amount of the Adjustment Item. For the purposes of this clause 2, "Adjustment Item" shall have the same meaning as given in §Preambles to the Bills of Quantities/Special Conditions of Tender Clause § and Special Conditions of Contract Clause §, and the amount of which may (where applicable) be revised in accordance with General Conditions of Tender Clause § (a copy of which is at the Appendix hereto)]

93. 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 $........, such deposited sum to be returned to me/us in accordance with the said Conditions.

#(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.

4. I/We agree to abide by this Tender for the period of 1090 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.

5. 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 4 hereof shall constitute a binding Contract between us.

6. 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 3(1)(d) of the General Conditions of Tender” when the tender adopts a marking scheme for use in tender evaluation.

4. Insert the clause number of the Special Condition of Tender (SCT) dealing with reduction of Contingency Sum. If a tender addendum is issued to amend this SCT clause prior to tender closing, the copy of this SCT clause at the Appendix hereto should also be amended in the same manner by the same tender addendum.

5. Adopt the appropriate wording to suit the contract/tender documentation arrangements of the contract being tendered.

6. Insert the respective clause numbers of the SCT and Special Condition of Contract (SCC) on Adjustment Item. If a tender addendum is issued to amend this SCT clause prior to tender closing, the copy of this SCT clause at the Appendix hereto should also be amended in the same manner by the same tender addendum.

7. Insert the clause number of the General Condition of Tender (GCT) dealing with correction rules for tender errors (i.e. GCT 11 in DEVB's Library of GCTs, SCTs and NTTs). If a tender addendum is issued to amend this GCT clause prior to tender closing, the copy of this GCT clause at the Appendix hereto should also be amended in the same manner by the same tender addendum.

8. The part in square brackets should be deleted if "Adjustment Item" is not allowed in relation to the contract being tendered.

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

10. Normally 90 days

#: Tenderer to delete either clause 3(a) or 3(b)
Notes to Tenderer on Employer’s Power to Reduce the Amount of the Contingency Sum prior to Award of Contract

Notes to Tenderer
Clause (XX) Employer’s Power to Reduce Contingency Sum

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenderers' attention is drawn to Special Conditions of Tender Clause [ ] on “Reduction of Contingency Sum”.</td>
<td>This is to be used where the Special Condition of Tender on &quot;Reduction of Contingency Sum&quot; is included.</td>
</tr>
</tbody>
</table>
APPENDIX 5.51 SAMPLE LETTER FOR NOTIFICATION OF REDUCTION OF CONTINGENCY SUM

Dear Sirs,

(Contract Title)
Reduction of Contingency Sum

Pursuant to sub-clause (1) of Special Conditions of Tender (SCT) XX, I hereby notify you that the Contingency Sum in the amount of $_____ as stated in the [Bills of Quantities]¹ is reduced to $_____.

Please note that in accordance with sub-clause (2) of SCT XX, you are deemed to have agreed that:

(1) the amount of the Contingency Sum as stated in the [Bills of Quantities]¹ shall be taken to be reduced accordingly; and

(2) the amount of the tender sum as stated in the Form of Tender and [Bills of Quantities]¹ shall be taken to be reduced to $______ to reflect the reduction in the amount of the Contingency Sum under (1) above.

Please also note that the Government is yet to decide on the award of the Contract and nothing in this letter should be construed as either an acceptance or rejection of your tender. The Government is not bound to accept any tender irrespective of whether the tender is the lowest tender or, where the assessment of the tenders is based on a marking scheme or formula approach, the tender has the highest overall mark.

I enclose an acknowledgement letter which you are required to sign and return within two days of receipt of this letter.

Yours faithfully,

................................................
(Designation of the Engineer designate for the Contract)
ACKNOWLEDGEMENT
(To be signed and returned within two days of receipt of the above letter)

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

To: (Designation of the Engineer designate for the Contract or Consultant’s Project Officer as appropriate)

Dear Sir,

(Contract Title)
Reduction of Contingency Sum

We hereby acknowledge receipt of the notification letter dated ___(date)___ on reduction of the Contingency Sum as stated in the [Bills of Quantities] for the above Contract.

Yours faithfully,

.......................................................... (Authorized Signature with Company chop)

Name of Company ......................

1 The Project Office shall determine the appropriate wording to suit the contract/tender documentation arrangements of the contract being tendered.
**APPENDIX 5.52  TENDER PROVISION (D&B CONTRACTS) ON EMPLOYER’S POWER TO REDUCE THE AMOUNT OF THE CONTINGENCY SUM PRIOR TO AWARD OF CONTRACT**

General Conditions of Tender Clause for Design and Build Contracts

<table>
<thead>
<tr>
<th>Clause</th>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GCT XX  Reduction of Contingency Sum</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Without prejudice to the generality of the other General Conditions of Tender and Special Conditions of Tender, the Employer reserves the right to reduce unilaterally the amount of the Contingency Sum as stated in the Employer’s Requirements by himself giving or requiring the Supervising Officer designate to give a notification in writing as regards the reduction to a tenderer at any time after determination of the overall scores of the tenders in accordance with the evaluation criteria set forth in the tender documents but before award of the Contract.</td>
<td>1. Subject to compliance with the requirements given in paragraph 2 below, this GCT enables the Project Office, in case the original tender sum of the recommended tender exceeds the funding allowed for the contract in the Approved Project Estimate, to unilaterally reduce the Contingency Sum stated in the tender documents and consequently the tender sum without the need for tender negotiation. The Project Office can then under properly justified circumstances: (i) keep the tender sum of the recommended tender within the funding available and, subject to approval by the relevant tender board, accept the tender without the need to seek additional funding; or (ii) reduce the amount of additional funding required even if after such reduction the tender sum of the recommended tender still exceeds the funding available and additional funding is still required to be sought.</td>
</tr>
<tr>
<td>(2) By submitting his tender, a tenderer shall be deemed to have agreed that upon receipt by the tenderer of a notification in writing referred to sub-clause (1) of this Clause: (a) the amount of the Contingency Sum as stated in the Employer’s Requirements shall be taken to be reduced accordingly; (b) the amount of the tender sum as stated in the Form of Tender and Contractor’s Proposals shall be taken to be reduced accordingly to reflect the reduction in the amount of the Contingency Sum under paragraph (a) above;[and] (c) the reduction in the amount of the Contingency Sum under paragraph (a) above shall not affect any Provisional Sums specified in the Employer’s Requirements [or the amount of the Adjustment Item]; and (d) for the purposes of paragraph (c) above, &quot;Adjustment Item&quot; shall</td>
<td>2. In order to exercise this GCT, the Project Office shall have: (a) reviewed the risk assessment made at the pre-tender stage in arriving at the original Contingency Sum; (b) proper justifications that the amount of reduction is genuinely an excessive allowance in the original Contingency Sum; and (c) obtained approval of the Vote Controller.</td>
</tr>
</tbody>
</table>

3. In conjunction with the use of this GCT, the Form of Tender and the
<table>
<thead>
<tr>
<th>Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>have the meaning given in [the Employer’s Requirements/Special Conditions of Tender Clause [<em>] and Special Conditions of Contract Clause [</em>]], and the amount of which may (where applicable) be revised in accordance with General Conditions of Tender Clause [**].</td>
</tr>
</tbody>
</table>

(3) For the avoidance of doubt, the original tender sum as stated in the Form of Tender and Contractor’s Proposals will, subject to correction (where applicable) in accordance with General Conditions of Tender Clause [**], be used for determination of the overall scores of the tenders in accordance with the evaluation criteria set forth in the tender documents irrespective of whether or not the Employer has subsequently exercised his right under this Clause to reduce the amount of the Contingency Sum.

<table>
<thead>
<tr>
<th>Remarks/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter of Acceptance of Successful Tender shall be modified with reference to those amendments provided for non-D&amp;B contracts in the memo promulgating this GCT ref. DEVB(W) 546/7/01 of 8.8.2011. The letter notifying the tenderer (whose tender is going to be recommended for contract award) of the reduction of the Contingency Sum should also follow the sample provided in the said memo with necessary amendments made to suit D&amp;B contracts.</td>
</tr>
</tbody>
</table>

Explanatory notes to words in square brackets

1 To be inserted if the last part of paragraph (c) and the whole of paragraph (d), are deleted (see note 2 below).

2 The last part of paragraph (c) and the whole of paragraph (d), which are in square brackets, should be deleted if "Adjustment Item" is not allowed in relation to the contract being tendered.

* Insert the clause numbers of the Special Condition of Tender and Special Condition of Contract respectively on Adjustment Item (applicable to a contract which has adopted an SCT and an SCC dealing with Adjustment Item).

** Insert the clause number of the General Condition of Tender dealing with correction rules for tender errors.
## APPENDIX 5.53  REQUIREMENTS OF STANDARD UNIFORM SET

### Provision of Uniform for Site Personnel (See Note 1)

Capital Works Contracts (including Term Capital Works Contracts) (See Note 2)

<table>
<thead>
<tr>
<th>Type of Site Personnel (See Note 3)</th>
<th>Standard Uniform Set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-casual Workers and Staff</td>
</tr>
<tr>
<td><strong>Contractor</strong></td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td>Workers including those of sub-contractors of all tiers</td>
<td>• Polo shirt (long and short sleeves to suit weather)</td>
</tr>
<tr>
<td></td>
<td>• Winter jacket</td>
</tr>
<tr>
<td></td>
<td>• Trousers</td>
</tr>
<tr>
<td>Supervisory, technical and managerial staff</td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td></td>
<td>• Polo shirt or shirt (long and short sleeves to suit weather)</td>
</tr>
<tr>
<td></td>
<td>• Winter jacket</td>
</tr>
<tr>
<td></td>
<td>• Trousers</td>
</tr>
<tr>
<td><strong>Consultants’ Resident Site Staff</strong></td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td>Professional and technical/ supervisory staff</td>
<td>• Shirt (long and short sleeves to suit weather)</td>
</tr>
<tr>
<td></td>
<td>• Winter jacket</td>
</tr>
<tr>
<td></td>
<td>• Trousers</td>
</tr>
<tr>
<td><strong>In-house Staff</strong></td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td>Professional and technical/ supervisory staff</td>
<td>• Vest</td>
</tr>
</tbody>
</table>

Term Maintenance Contracts (See Note 2)

<table>
<thead>
<tr>
<th>Type of Site Personnel (See Note 3)</th>
<th>Standard Uniform Set</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contractor and Consultants’ Resident Site Staff</strong></td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td>All personnel involved in site work (including casual workers or staff)</td>
<td>• Polo shirt (long sleeves and short sleeves to suit weather) or vest for workers</td>
</tr>
<tr>
<td></td>
<td>• Polo shirt or shirt (long sleeves and short sleeves to suit weather) or vest for other staff</td>
</tr>
<tr>
<td><strong>In-house Staff</strong></td>
<td>• Safety helmet with chin strap</td>
</tr>
<tr>
<td>Professional and technical/ supervisory staff</td>
<td>• Vest</td>
</tr>
</tbody>
</table>
Notes

1. When the requirements of the standard uniform set is in conflict with any statutory requirements or standing requirements related to Personal Protective Equipment, the latter requirements shall prevail.

2. Some contracts, such as those for Landslip Preventive Measures works, are procured as term contracts but their mode of execution is similar to capital works contracts. The requirements of standard uniform sets for capital works contracts shall apply.

3. Personnel not involved in site work (e.g. site office clerks, materials deliverers, security guards) are not required to wear uniform.

4. “Casual workers or staff” refers to those who are anticipated to work on site for not more than an aggregated total of 7 days throughout the contract period.
APPENDIX 5.54  IMPLEMENTATION GUIDELINES FOR PROVISION OF UNIFORM

Implementation Guidelines

INTRODUCTION

1. These guidelines provide information and guidance on implementing the site uniform initiative at the pre-contract stage. They should be read in conjunction with the memo promulgating the initiative and the associated contract provisions.

PRE-CONTRACT STAGE

Provision of Uniform Changing Facilities

2. Uniform changing facilities are by default not required to be specified in the Contract because it is anticipated in many cases, there will be space and site constraints that may render the provision of such facilities not practicable. However, such facilities are highly welcome if it is practicable to provide them on site. Project officers should, at the project planning stage, critically assess the availability of space on the Site and the practicality for such facilities to be included in the Contract and if considered suitable, project officers should seek the approval of a D2 or above officer to include uniform changing facilities in the Contract. The location of the proposed uniform changing facilities should be shown on the Drawing but the Contractor may propose alternative locations for the approval of the Engineer / Architect / Supervising Officer / Maintenance Surveyor.

Uniform for Resident Site Staff (RSS)

3. For Contracts supervised by Consultants under Consultancy Agreements in which the need for RSS to wear uniform is included in the Brief, the Consultants should specify the design and technical requirements of the uniform in the tender documents. The Construction Industry Logo should also be incorporated into the RSS uniform design and be shown in reasonable size on the top right front side of the uniform top. The number of each of the RSS uniform items required should also be specified in the Contract. As the Contractor is required to only provide the RSS uniform items specified in the Contract and is not responsible for replacing the uniform for wear and tear or for possible losses, the Consultants should specify adequate number of uniform items in the Contract taking account of the size of the RSS establishment, possible staff turnover and wear and tear of uniform.

Estimating the Rate of the Pre-priced Item

4. The pre-priced lump sum rate is estimated making reference to the “Methodology for Estimating the Rate of the Pre-priced Item for Provision of Uniform for Site Personnel and Self-employed Workers” for internal reference at Enclosure 1 to Annex F of SDEV’s memo ref. DEVB(Trg) 133/3 (7) dated 11.5.2011, which can be downloaded from Works Group Intranet.

Do’s and Don’ts
Do's

- Do critically assess the availability of space and practicality for including uniform changing facilities in the Contract and seek the approval of a D2 or above officer for such inclusion.

- Do consider the RSS establishment, possible staff turnover and wear and tear when specifying the number of uniform items for the RSS in the Contract.

Note: The full Implementation Guidelines covering both the pre-contract stage and the construction stage are available at Annex F of SDEV’s memo ref. DEVB(Trg) 133/3 (7) dated 11.5.2011, which can be downloaded from Works Group Intranet.
APPENDIX 5.55  GUIDELINES ON ADOPTION OF SCC ON INTERIM PAYMENT FOR OFF-SITE PREFABRICATION ITEM

1. In order to enhance the cash flow of contractors, we promote wider adoption of the SCC in public works contracts. Project officers should pay attention to the requirements as stipulated in SCC. In gist, making interim payment(s) for major off-Site prefabrication item / equipment (“the item”) are subject to the following preconditions, including

   (i) maintenance of an effective bond by Contractor,

   (ii) Contractor’s undertaking of arrangement and all the costs and expenditure incurred by the Engineer’s Representative in connection with his visit to off-Site manufacture / fabrication / assembly yards for verification on Contractor’s entitlement on interim payment(s),

   (iii) clear proof that the item has met Contract requirements,

   (iv) clear identification of the item on whose order it is held and its destination,

   (v) shipping documents (if by sea),

   (vi) clear proof of Contractor’s ownership of the item, and

   (vii) if applicable, insurance against loss or damage for the full value of the item under a policy protecting the interests of Employer and Contractor during the period from transfer of property in the item to the Contractor until it is delivered to the Works.

2. Works Departments are required to incorporate the SCC into contracts satisfying the following criteria:-

   (i) Project officer anticipates that an item under the Contract is likely to be prefabricated off-Site (e.g. bridge deck, steel truss and E&M equipment); and

   (ii) The estimated total value of a single type of off-Site prefabrication item is not less than $1.4 million or 0.3% of pre-tender estimate (PTE) of the Contract, whichever is the greater.

3. The above requirements in paragraph 2 may be waived for a particular contract, where justified, with the approval of an officer at D2 or above rank.

4. Notwithstanding the requirement in paragraph 2(ii), when it is desirable, the project officer may still incorporate the SCC for smaller value of the off-Site prefabrication item having regard to the PTE.

Development Bureau
July 2012

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48 Item should be completed in off-Site manufacture / fabrication / assembly yards and no considerable assembly work is required on Site. Item may not be considered if its identification cannot be easily proved (e.g. typical precast concrete kerbs, precast pipes, electrical cables, bus-ducts and other more generic items and manufactured products).

49 E&M equipment referred to may mean
(i) Heat Pump; (ii) Chiller; (iii) Air-handling units; (iv) Pumpset (including fire pump); (v) Motor Control Centre (vi) Generator; (vii)Transformer; (viii) Switchboard; (ix) Centrifuge; (x) Filter Press; (xi) Air Blower; (xii) Traffic Control and Surveillance System; and (xiii) Boiler.