

CHAPTER 8

TERM CONTRACT WORKS

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

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SYNOPSIS

This Chapter provides information on the recurrent votes and non-recurrent block votes to be used for works carried out under term contracts.

This Chapter also describes the administrative procedures and funding arrangements for works for and by others, damage to Government property by private parties, and works executed under term contracts.

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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:

Abbreviation	Term
CEDD	Civil Engineering and Development Department
CSSM	Construction Site Safety Manual
CTO	Chief Technical Officer
CWRF	Capital Works Reserve Fund
DSD	Drainage Services Department
DEVB	Development Bureau
DEVB TCW No.	DEVB Technical Circular (Works) No.
ER	Engineer's Representative
ETWB	Environment, Transport and Works Bureau
ETWB TCW No.	ETWB Technical Circular (Works) No.
FC No.	Financial Circular No.
FS	Financial Secretary
FSTB	Financial Services and the Treasury Bureau
GCC	General Conditions of Contract for Term Contracts for Civil Engineering Works, 2002 Edition
HA	Housing Authority
HOS	Home Ownership Scheme
HyD	Highways Department
IOW	Inspector of Works
IP	Interim Payment
MTRCL	Mass Transit Railway Corporation Limited
PAH	Project Administration Handbook for Civil Engineering Works
PE	Project Engineer
PFSS	Pay for Safety Scheme
PFSES	Pay for Safety and Environment Scheme
PLA	People's Liberation Army
PWDTC No.	Public Works Departmental Technical Circular No.
PWP	Public Works Programme
S for Tsy	Secretary for the Treasury
SDEV	Secretary for Development
SETW	Secretary for the Environment, Transport and Works

Abbreviation	Term
SFST	Secretary for Financial Services and the Treasury
SPR	Stores and Procurement Regulations
WBTC No.	Works Branch Technical Circular No. or Works Bureau Technical Circular No.
W.E.A	Works Expenditure Authorization
WO	Works Order
WSD	Water Supplies Department

II. GLOSSARY OF TERMS

II.01 Words and expressions to which meanings are assigned in this Chapter of the 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.)

“Contract”, “Contractor”, “Drawings”, “Employer”, “Engineer”, “Engineer’s Representative”, “Schedule of Rates”, “Site”, “Works” 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. RECURRENT VOTES

1.1 SUBHEADS AND ITEMS

Funds for maintenance and minor improvement works are provided annually under the following Subheads and Items:

CEDD

- (a) Subhead 121, Item 702 - Emergency repairs
- (b) Subhead 121, Item 704 - Maintenance of seawalls, piers
- (c) Subhead 121, Item 705 - Dredging at drainage outfalls
- (d) Subhead 121, Item 706 - Maintenance of public filling facilities
- (e) Subhead 121, Item 719 - Other contract maintenance

HyD

- (a) Subhead 273, Item 932 - Highways Maintenance - roads
- (b) Subhead 273, Item 933 - Highways Maintenance - public lighting

DSD

- (a) Subhead 121, Item 692 - Plant, furniture and equipment
- (b) Subhead 121, Item 693 - Sewers and drains
- (c) Subhead 121, Item 719 - Other contract maintenance

WSD

- (a) Subhead 119, Item 643 - Meters, hydrants and standpipes
- (b) Subhead 120, Item 670 - Buildings
- (c) Subhead 120, Item 672 - Plant, furniture and equipment
- (d) Subhead 120, Item 676 - Reservoirs and water mains
- (e) Subhead 120, Item 689 - Other maintenance materials
- (f) Subhead 121, Item 690 - Buildings - Contract
- (g) Subhead 121, Item 696 - Reservoir and water mains - Contract

- (h) Subhead 121, Item 702 - Emergency repairs - Contract
- (i) Subhead 121, Item 719 - Other contract maintenance

Details of these Subheads and Items can be found in the annual Estimates, Volume IA (General Revenue Account). Besides those mentioned above, funds for maintenance works can also be indirectly provided in the form of works executed on private account.

It should be noted that minor improvement works may be carried out, and funded by recurrent votes, at the same time as maintenance works, provided that the minor improvement works must be incidental to the maintenance works or must not form a major portion of the works described by the WO (see S for Tsy's memo, ref. (12) in FIN 111/2/1 III dated 15.6.1994). The Head of department has the authority to stipulate administrative limits concerning the allowable proportion of minor improvement works in a maintenance WO.

If a project is for minor improvement works only, the expenditure should be charged to the CWRF.

1.2 EMERGENCY REPAIRS

For CEDD, the cost of repairing major typhoon and rainstorm damage should be charged to Subhead 121, Item 702 - Emergency repairs.

For WSD, the cost of repairing major typhoon and rainstorm damage should be charged to Subhead 121, Item 702 - Emergency Repairs - Contract and appropriate maintenance votes as set out in WSD Departmental Instructions.

For DSD, the cost of repairing major typhoon and rainstorm damage should be charged to Subhead 121, Item 693 - Sewers and drains.

For HyD, the cost of repairing major typhoon and rainstorm damage should be charged to the following votes as appropriate:

- (a) Subhead 273 Item 932 Sub-item 702 - Road maintenance, Emergency works
- (b) CWRF Subhead 6100TX - Highway works, studies and investigations for items selected in Category D of the PWP
- (c) CWRF Subhead 5001BX - Landslip preventive measures

Emergency repairs should be authorized by the appropriate officer according to the financial limit set for the employment of maintenance contractor to carry out maintenance or new works (see Paragraph 5.2).

The cost of repairing road surfaces, minor storm damage and damage caused by seasonal weather should be charged to the appropriate maintenance vote, i.e. appropriate item under Subhead 121 or Subhead 273, and not to the items for emergency repairs mentioned in this Paragraph.

1.3 WORKS EXECUTED ON PRIVATE ACCOUNT

Works may be executed on private account in situations such as the construction of run-ins, drainage connections and reinstatement of footpath for private developers, reinstatement of pavements for utility undertakings, the provision of water supply connection, or the diversion of water mains under Special Conditions of a land lease.

Departmental overhead charges should be added to the cost of works executed on private account. Different rates are charged for different circumstances (see Paragraph 3.3).

A demand note for the total estimated cost, including the departmental overhead charges, should first be sent to the private party involved. The works should commence after the demand note has been paid (see also Paragraph 3.2). The works are directly funded by the payment of the demand note through a series of accounting procedures dealt with by the departmental accounts division/section and the departmental overhead charges will go to the Government's general revenue. If the amount stated in the demand note is insufficient to cover the actual cost plus the departmental overhead charges, a supplementary demand note should be issued. On the other hand, if there is surplus, it should be refunded to the private party involved.

2. NON-RECURRENT BLOCK VOTES

Works executed under term contracts as defined in paragraph 5.1 may be funded from the following block allocation Subheads under the appropriate Heads in the CWRF if the works fall within the ambit of the block allocations and the conditions set in Paragraph 5.3.2 are met.

CEDD

Subhead 5101CX - Civil engineering works, studies and investigations for items in Category D of the PWP

Subhead 5001BX - Landslip preventive measures

Subhead 7100CX - New town and urban area works, studies and investigations for items in Category D of the PWP

DSD

Subhead 4100DX - Drainage works, studies and investigations for items in Category D of the PWP

HyD

Subhead 6100TX - Highway works, studies and investigations for items in Category D of the PWP

WSD

Subhead 9100WX - Waterworks, studies and investigations for items in Category D of the PWP

The use of funds, the ambit, financial limits and authority for approval in respect of the above CWRF block allocation Subheads are not common to all departments. Officers must refer to FC No. 3/2011, their individual department's internal instruction/guide and the annual Estimates, Volume II (Fund Accounts) in managing the above CWRF block allocation Subheads.

The SFST's memo ref. (83) in LM to FP 25/2002 dated 9.6.2010 promulgates the guiding principles for accounting treatment for liquidated damages and payments relating to claims settlement received from contractors under contracts funded by the CWRF project votes for final settlement of contract accounts. Depending on whether there is additional cost due to the contractor's delay in completing the works and faults resulting in claims has been incurred and charged to project votes, such liquidated damages and settlement payments should be credited to the project vote or the "Other Receipts –Others" vote of the CWRF accordingly.

3. WORKS FOR AND BY OTHERS

3.1 WORKS FOR OTHER DEPARTMENTS AND OFFICES

Requests are often made by other Departments and Offices for works to be carried out and charged to votes controlled by them. If sufficient resources are available to do the work, the works division will prepare a cost estimate and ask for the necessary funds from the Department or Office requesting the works. If the source of funds is from recurrent votes, an allocation warrant, or a W.E.A. in case of works for other divisions within the same department, should be issued to the works department/division. If the source of funds is from non-recurrent votes, a letter of intent and an allocation warrant, or a W.E.A. in case of works for other divisions within the same department, should be issued to the works department/division. The letter of intent will cover the total estimated cost of the works, whilst the allocation warrant only covers the money required in one particular financial year. A W.E.A. is in effect a means of virement of funds within the same department and it covers the total/remaining estimated cost of works.

If works are carried out for other departments/offices/divisions as extra or additional works under a current contract, the requirements of the following paragraphs should be followed whenever applicable.

3.2 PRIVATE WORKS

Certain works for private parties, such as the provision of utility ducts in structures, the construction of vehicular access, the execution of trench works for utility companies, etc, may be included in Government contracts and carried out on private account.

The approval of the SFST has to be obtained if the private works form a substantial part of the contract or if the physical element of the private works would have significant political/financial implication. If in doubt, advice from the SFST may be sought.

When private works form part of a contract, the cost of preliminary and general items, the adjustment sum and contract price fluctuation should be apportioned according to the relative estimated costs of the works involved and the appropriate amount charged to the private works.

Departmental overhead charges should be added to the cost of the private works.

An estimate of the cost of the private works plus departmental overhead charges should be submitted for agreement to the organization requiring them (Authorized Person requesting drainage connection is an exception), followed by a demand note for the estimated amount (see also Paragraph 1.3). Demand notes should carry the following endorsement

"Government will use its best endeavour to carry out the work in accordance with the estimated cost, but reserves the right to charge additional amounts to cover any material supplied and work necessarily undertaken for which no allowance is made in the estimate".

Except for working for the following private parties or emergency works carried out by Government with a view to subsequent recovery of the cost from a private party, private works must not be started until the demand note has been paid :

MTRCL,

Public utilities companies,

Foreign consulates,

Tenants of Government quarters, and

Local Government officers co-operative building societies.

Private works may occasionally be carried out by direct labour in some departments. Charges should then be made at the rates laid down in accounting circulars issued from time to time by the department headquarters on "Direct labour charges - Private Works Account". For works carried out by direct labour or the term contractors of WSD, the detailed procedure for working out the cost to be recovered is set out in WSD Departmental Instructions.

Private works should normally be included in WO or the contract documents for the project of which they form part. They may, however, be carried out as extra or additional works under a current contract by variation, provided that:

- (a) The appropriate Chief Engineer approves the inclusion of private works estimated to cost less than 2½% of the tendered sum,
- (b) The appropriate D2 rank Officer approves the inclusion of private works estimated to cost between 2½% and 5% of the tendered sum,
- (c) The private works are within the Site of the Works as defined in the contract,
- (d) The rates for the private works have been agreed by the contractor, and,
- (e) The rates are reasonable compared with the maintenance contract rates.

3.3 DEPARTMENTAL OVERHEAD CHARGES FOR PRIVATE WORKS

Departmental overhead charges should normally be made on private works, including those for the Armed Services, at the standard rate of 20% for a job with an estimated value below \$500,000 as stipulated in the Financial & Accounting Regulation 440. However, the rate may vary depending on the private parties involved. A list of standard rates for some common situations are given below:

- | | |
|---|----------------|
| (a) Tramway shelters | nil |
| (b) Bus shelters and queue rails | 10% |
| (c) Works under the Buildings Ordinance | statutory rate |

- (d) Works under the Waterworks Regulation (see Paragraph 1.3) statutory rate
- (e) Works for HA adopt the same arrangement as applicable to MTRCL
- (f) Works for MTRCL 16.5%

According to the Financial & Accounting Regulation 440, for a job with an estimated value of \$500,000 or above, departments must conduct an individual costing to arrive at the appropriate overhead charge. The estimated value of a job should be either based on contractor's quotation if the works are contracted out or cost estimation if carried out in-house.

In certain circumstances where the works have not been requested but have been carried out by Government with a view to subsequent recovery of the cost from a private party, the imposition of a fixed percentage charge is inappropriate. FC No. 12/98 stipulates that in such cases it is necessary for supervision and administration costs to be compiled accurately so that Government's full claim for damages can be substantiated. Detailed accounting instructions which are set out in GF 348 should be followed. Advice can be sought from the departmental Senior Treasury Accountant regarding the updated details. It should be noted that in such cases the works will be funded by the appropriate maintenance vote and the money paid by the private party concerned will all go to the Government's general revenue.

For Government services provided to trading funds (TFs), see FC No. 3/2013 for details. As stipulated in paragraphs 6 and 7 of FC No. 3/2013, if the services provided to TFs are also available to the general public, such services should be charged at the public rates. All departments which provide services to TFs should send demand notes to the TFs concerned and credit the revenue to the relevant revenue Head.

3.4 WORKS IN NAVAL, MILITARY AND AIR FORCE ESTABLISHMENTS

Responsibility for works in defence establishments rests with the PLA Garrison in the Hong Kong Special Administrative Region.

The only exception is regarding works for WSD water mains within defence establishments, which is normally the responsibility of the WSD. WSD will liaise with the PLA Garrison for carrying out emergency/planned maintenance works to the WSD water mains if required, and will exercise financial control over all such works.

3.5 WORKS FOR GOVERNMENT BY PRIVATE PARTIES

Occasions arise when Government's obligations can most conveniently be met by including them in works being carried out by private parties. For instance, accommodation works in respect of road widening could conveniently be carried out in conjunction with private development. The approval by SFST is required and the following conditions are applicable:

- (a) Design
- (i) Responsibility for designing and detailing the works should be defined and the fees agreed with the private party. If the fees exceed the standard architects or consulting engineers rates, the approval of both the relevant Head of Department and the SFST must be obtained.
 - (ii) Working drawings should be approved by the Region/Division responsible for the works before tenders are invited. Amendment after invitation of tender should also be agreed with the Region/Division concerned.
- (b) Tender procedure
- (i) The contract documents should be approved by the Region/Division responsible for the works before tenders are invited. The Conditions of Contract should be modelled on the latest Government edition and the specification should be written so that works of acceptable departmental standard can be obtained. The contract should include provision for properly indemnifying the private party against Third Party risks and Workmen's compensation claims, so that there is no likelihood of any claim being made against Government.
 - (ii) When a project is entrusted to a non-Government organization, formal approval of the tender action by FSTB is not necessary, see the then S for Tsy's memo, ref. (54) in FT 111/2 dated 12.5.1993. However, department concerned should seek approval for entrustment from FSTB in advance and advise the entrusted party regarding the tendering procedure in order to safeguard the Government's interest. Reference should be made to the guidelines laid down in the SPR. It is the responsibility of the department concerned to approve the tendering method used for the captioned project and to ensure the value for money of the entrusted works.
 - (iii) Certified true copies of the contract have to be provided by the private party and lodged with the Director of Audit and the Head of Department concerned.
 - (iv) Compliance with all the foregoing conditions may not be possible where the Government works form only a small part of the overall scheme. In such cases, SFST's advice has to be sought on all agreements binding Government and the private party.
- (c) Contract supervision
- Arrangement for the proper supervision of the works must be made, and the expense of such supervision must be properly apportioned between Government and the private party. If the arrangements, particularly the salaries of site staff, differ from the normal Resident Staff Agreement or from Government salary scales, the approval of the relevant Head of Department

and the SFST must be obtained.

(d) Control of funds

- (i) An estimate of the cost of the Government works must be provided by the private party and approved by Government before tenders are invited. Before signing a contract committing Government to meeting the cost of any works, the private party would request confirmation from the relevant Department that funds are available and authority for the works has been given.
- (ii) Approval must be obtained from Government beforehand for any variation which will cause the cost of the Government works to exceed the approved estimate.

(e) Form of agreement

An agreement with a private party on entrustment of works may be in the form of exchange of correspondence or a formal entrustment agreement. For costly or complex works, a formal entrustment agreement shall be used. Formal entrustment agreements shall be vetted by Legal Advisory Division of the DEVB before their execution.

4. DAMAGE TO GOVERNMENT PROPERTY BY PRIVATE PARTIES

4.1 REPAIR COST FROM MAINTENANCE VOTE

The cost of repairing any damage to Government property should be chargeable to the appropriate recurrent maintenance vote.

4.2 RECOVERY OF REPAIR COSTS

If the person responsible for causing the damage is known, for instance in the case of a traffic accident, an attempt should be made to recover the cost of repairing the damage by issuing a demand note (see also Paragraphs 1.3 & 3.2).

Standardised procedures for recovery of repair costs and departmental charges, and writing-off of irrecoverable costs are established in each department. Reference should be made to each individual department's internal guidelines/instructions, or advice can be sought from the departmental Accounts Division/Section.

5. TERM CONTRACTS

5.1 GENERAL

Maintenance works, minor works, supply of materials and new works as ordered by departments concerned from time to time to suit the site conditions and implementation programme, etc. are normally awarded in the form of term contract. During the contract period, the term contractor carries out works and provides services as instructed in WO.

According to Sub-section 2.3 of Contractor Management Handbook, the value of a term contract, for the purpose of deciding which group of contractors should be invited to tender, should mean the total estimated expenditure under the contract. For details on eligibility to tender, see Sub-sections 2.2, 2.3, 2.5 and 2.8 of Contractor Management Handbook.

According to SFST's memo ref. (54) in FT 113/149 dated 5.8.2009 and SDEV's memo ref. DEVB(W) 546/70/01 dated 7.8.2009, Controlling Officers have the authority to invite tenders for a new term of an existing term contract and new types of term contracts under SPR. There is no need for the departments to seek the agreement of FSTB for such purposes, regardless of whether there will be significant financial implication in the change of arrangements for the new term.

The standard set of Conditions of Tenders as promulgated by DEVB can be found at DEVB's website. There is no standard set of Form of Tender and Special Conditions of Contract which may be used for term contracts in all Works Groups of departments. The Form of Tender included at Appendix 8.1 serves as an example for reference only. The PE should review and modify in accordance with the nature of the Works, individual department's internal instructions and guidelines and contract advisors' comments as deemed necessary.

According to WBTC No. 15/99B – Improvement to Quality of Maintenance Works, to prevent throat-cutting bidding by poorly performing contractors, departments should consider the need to adopt Stage I Screening in conjunction with the Marking Scheme tender evaluation method promulgated under DEVB TCW No. 4/2014 to ensure that the contract is awarded to technically competent contractors with good performance track records. In particular, the Standard Marking Scheme under DEVB TCW No. 4/2014 is revised with a view to enhancing competition on the technical quality of tenders, particularly on safety, innovation and creativity, productivity and constructability. DEVB TCW No. 4/2014A further enhances competition on the technical quality of tenders by setting out “training rating” in the evaluation of tenders for Group C contractors. The criteria of selection of tender evaluation method as stated in paragraph 10 of DEVB TCW No. 4/2014 should also be noted.

5.2 WORKS ORDERS

A WO should carry a full description of the works required, supplemented as necessary by drawings and additional instructions. Works should not be split up for the purpose of reducing the value of any one WO in order to avoid the need to seek higher authority.

5.2.1 Financial Limits

A WO shall be signed by the Engineer or the ER of the Contract subject to the financial limits in sub-clauses (a) and (b) below (except for cases stated in Paragraph 1.2):

- (a) Funding source for either works within the scope of term contract chargeable to the recurrent votes or works within the scope of term contract for private parties.

- (i) Except for WSD, WO to be signed by

<u>Authority</u>	<u>Financial Limit</u>
Assistant Engineer/ Assistant Landscape Architect/ Engineer/ Chief Technical Officer/ Landscape Architect (as the ER acting on delegated authority from the Engineer for the Contract)	≤ \$800,000
Senior Engineer/Senior Landscape Architect (as the ER acting on delegated authority from the Engineer for the Contract)	≤ \$1,500,000
D1 rank officer (as the Engineer for the Contract)	≤ \$3,000,000
D1 rank officer (as the Engineer for the Contract) with prior approval of D2 rank officer for the use of the term contractor	≤ \$6,000,000
D1 rank officer (as the Engineer for the Contract) with prior approval of D3 rank officer for the use of the term contractor	≤ \$9,000,000
D1 rank officer (as the Engineer for the Contract) with prior approval of Head of Department for the use of the term contractor	no limit

- (ii) In WSD, the practice is different. WSD's engineers, as the ER acting on delegated authority from the Engineer for the Contract, may issue all WO provided that the authority has been obtained. The financial limits/authority applicable in WSD are as follows:

<u>Authority</u>	<u>Financial Limit</u>
Engineer	≤ \$800,000
Chief Engineer	≤ \$2,000,000
Assistant Director	≤ \$5,000,000
Director	no limit

- (b) Funding source for works within scope of term contract chargeable to non-recurrent votes

For existing term contract tendered before 1 September 2008, the authority to issue WO delegated to departments is given in the then S for Tsy's memo ref. (2) in FT 36/88 dated 14.2.1995. According to the details of the delegation, approval from FSTB is also required for a WO with a value exceeding \$15 million.

For existing term contract tendered on or after 1 September 2008 and before 14 September 2012, the SFST has approved revising the financial limit of WO issued under a term contract for new works and minor works from \$15 million to \$21 million and delegated the authority to issue WO to departments vide his memo ref. (2) in L/M to FT 36/88 Pt 2 dated 1.9.2008. Details of the delegation are as follows –

<u>Rank</u>	<u>WO not exceeding the value of</u>
D1 officer	\$4,000,000
D2 officer	\$8,000,000
D3 officer	\$13,000,000
Head of Department	\$21,000,000

According to SFST's memo ref. (18) in L/M to FT 36/88 Pt 2 dated 14.9.2012, approval has been given for the financial limit of works orders to be issued under a term contract tendered on or after 14 September 2012 for new works and minor works to be revised from \$21 million to \$30 million with effect from the next term. Details of the delegation are as follows –

<u>Rank</u>	<u>WO not exceeding the value of</u>
D1 officer	\$6,000,000
D2 officer	\$12,000,000
D3 officer	\$19,000,000
Head of Department	\$30,000,000

In inviting tenders for a new term contract on or after 14 September 2012, tenderers should be notified of this revision by including a statement in the Notes to Tenderers that the value of works for each WO would normally not exceed \$30 million.

The authority specified in the above memoranda cannot be further delegated.

Approval from FSTB is still required for issuing a WO with a value exceeding \$21 million under an existing term contract tendered on or after 1 September 2008 and before 14 September 2012.

The financial limits mentioned in (a) and (b) above shall apply equally to works carried out for other departments/offices under the term contract. Officers should check with their department's internal instructions/guidelines regarding the authority of approval and financial limits in managing WO chargeable to recurrent and non-recurrent votes.

In approving or separately seeking approval to the use of the maintenance term contractor from the D2/D3 rank officer, Head of Department or SFST for works chargeable to non-recurrent votes, the D1 rank officer shall confirm that the conditions laid down in Paragraph 5.3.2 have been met.

More than one WO may be issued to the term contractor for any PWP Item provided that the total value of WO issued for works under a particular PWP item does not exceed \$21,000,000 or \$30,000,000 as appropriate and that approval for the use of the term contractor for each WO has been given by an officer of a rank appropriate to the value of that particular WO.

5.2.2 Variation

(Ref.: WBTC Nos. 15/99 and 15A/99, ETWB TC(W) No. 15/99B and SDEV's memo ref. () in DEVB(W) 510/92/01 dated 5.5.2020) Amd No. 6/2020

GCC Clause 62(3) requires that variations made by the Engineer on works under any WO must be ordered in writing and any order given verbally in the first instance must be confirmed subsequently in writing. Whenever applicable, drawings illustrating the nature and extent of the variation should be issued to the Contractor.

Where a proposed variation requires works to be carried out at a significant distance beyond the limit of works shown on the drawing attached to the original WO, a separate WO shall be issued.

For situations mentioned in the above two paragraphs, if

- (a) the total cost of the works, as amended by the variation order, is likely to exceed the limit of financial authority of either the officer who signed the original WO or the officer who gave approval to the use of the term contractor, or
- (b) the total cost of the original and the separate WO is likely to exceed the limit of financial authority of either the officer who signed the original WO or the officer who gave approval to the use of the term contractor,

approval to the use of the term contractor shall first be obtained from an officer at the relevant higher level of authority. If the works are chargeable against a CWRP block allocation, and the variation or the separate WO requires a significant change in scope and/or results in the approved estimate for the item being exceeded, full details shall be submitted to the relevant authority or authorities for approval of the change in scope (i.e. Technical Approval) and/or the increase in approved estimate (i.e. Financial Approval) before the variation is made or the separate WO is issued.

According to WBTC No. 15/99, which should be read in conjunction with WBTC Nos. 15A/99 and 15/99B, it is necessary to avoid the use of non-schedule rates and variation orders, and stick to the use of tendered rates as far as possible as stipulated in the Conditions of Contract. Amd No. 6/2020 For maintenance term contracts, if the variation involves the use of non-schedule Amd No. 6/2020 rates, approval from officers at least at D2 level should be obtained. In deciding on change in materials for repair and reconstruction involving the use of schedule items with higher tendered percentages, justification must be submitted to obtain the prior approval from officers at least at D2 level. Amd No. 6/2020 Additional constraints imposed on the Engineer in regard to the variation and claim as stipulated in paragraph 7 of the WBTC No. 16/2002 should also be noted.

SDEV's memo ref. () in DEVB(W) 510/92/01 dated 5.5.2020 promulgates a set of new measures for controlling the use of non-schedule rates. For term contracts (maintenance or otherwise), if the estimated aggregate value of works items adopting non-schedule rates exceeds \$7 million in a works order or the variation of a works order, the Head of Department shall be the approving authority to issue the works order or the variation of the works order. There are cases whereby a non-schedule rate item of value less than \$7 million is adopted in a term contract and the same non-schedule rate is subsequently reapplied in other works orders or variations under the same contract. Works department shall keep track of the cumulative value of the non-schedule rate item adopted in all works orders or variations ("Cumulative Value") under the same contract. When the value of the non-schedule rate item in a new order or variation renders the Cumulative Value exceeding \$7 million, the Head of Department shall be the approving authority to issue the new works order or variation. Exemption for special circumstances could be found on para. 5 of the SDEV's memo.

Amd No. 6/2020

5.2.3 Completion Date

The completion date stated on a WO should allow a realistic but not excessive time for completion. The Contractor may object to the date for completion in accordance with GCC Clause 51(2).

The actual completion date should be entered when WO are certified for completion. If the works have not been completed by the original completion date due to circumstances justifying extensions of time for completion, a letter should be issued to grant extension of time for completion. Should the Contractor fail to complete the Works by the original or extended completion date due to his own default, liquidated damages shall be imposed in accordance with GCC Clause 54.

5.3 LIMITATIONS ON USE OF THE MAINTENANCE TERM CONTRACTOR

5.3.1 Works Chargeable to Recurrent Votes (Including Works for Private Parties)

The maintenance term contractor is normally employed for all maintenance works, minor improvement works and works for private parties, unless separate tender procedure is expected to be significantly advantageous to Government.

5.3.2 Works Chargeable to Non-recurrent Votes

New works chargeable to non-recurrent votes are normally subject to separate tender procedure.

The maintenance term contractor may, however, be employed for new works if both of the following conditions are met :

(a) EITHER

the works required are urgent, and they would cause unacceptable delay if the normal tender procedure were followed;

OR

there are other compelling reasons for not using the normal tender procedure, e.g. shortage of staff to prepare tender documents in time of emergency;

OR

it is reasonably certain that the use of the term contractor is the more economical option, taking into consideration the maintenance rates and savings of departmental expenditure, e.g. savings in overheads due to earlier completion of the works;

(b) the scheduled rates are reasonable in relation to the works in question and scheduled completion time.

The SFST's memo ref. (17) in L/M to FT 36/88 Pt 2 dated 14.9.2012 promulgates

the revised financial limits under which works departments are delegated the authority to employ a maintenance term contractor to undertake new works that fall outside the scope of the maintenance term contract subject to the conditions set out above being satisfied. The authority cannot be further delegated, nor could they be applied to other types of term contracts. Prior approval must be obtained from FSTB for employing a maintenance term contractor for new works with a value exceeding \$30,000,000. Departments should ensure that maintenance term contractors are aware that they may be required to undertake new works based on the contract rates.

According to FC No. 3/2011, for minor items funded under various CWRP block allocations, FS has authorised a number of Permanent Secretaries to approve expenditure within the scope set by the Finance Committee. Other delegations on the administration of CWRP block allocations relating to Heads of Departments and directorate officers in policy bureaux remain valid. Details of the revised delegated authorities for administering the CWRP block allocations are shown in the Annex to FC No. 3/2011.

For projects entrusted to/from Housing Authority, the on-cost rates should refer to SFST's memo ref. () in L/M 9/2005 (I Div) dated 29.3.2006.

5.4 EMERGENCY REPAIRS TO UTILITIES WORKS

In case of road subsidence or failures of similar nature caused by failure or faults of utilities works, it is the responsibility of the HyD to ensure that the temporary and urgent measures such as the provision of guarding, lighting and signing etc. are promptly and properly taken with a view to minimising the inconvenience caused to the public. Instead of leaving the matter to the utility undertaking, the engineer, the CTO or the IOW in control of the area should ascertain from the utility undertaking concerned when the affected area can be cordoned off and arrange to instruct the HyD maintenance term contractor or road gangs to take necessary action if:

- (a) the utility undertaking cannot indicate the exact time when the area can be fenced off,
- (b) the time required by the utility undertaking to arrive at the site is longer than that by HyD maintenance term contractor or road gangs (say 2 hours), or
- (c) no responsible staff of the utility undertaking can be contacted.

Prior to any emergency and temporary action being taken by HyD or utility contractor, HyD staff should ensure that the affected area is properly attended to by seeking Police's assistance and remaining on site if necessary.

The maintenance term contractors should be reminded that they are required to provide warning, lighting and guarding equipment and maintain them in good working order. In addition, their attention should be drawn to the provision in the contract that they shall have available at all time workmen and plant for the execution of urgent works in order that such works shall be commenced immediately unless otherwise agreed by the Engineer, but in all circumstances, the works shall be commenced within 2 hours after receiving the instruction from the Engineer.

5.5 SITE SAFETY AND ENVIRONMENTAL MANAGEMENT

5.5.1 Pay for Safety Scheme

All term contracts where Safety Plans are required should be included in the PFSS. A Safety Plan is a mandatory requirement for term contracts, either 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. For term contracts with total estimated expenditure 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 works within the scope of the contract. Departmental Safety and Environmental Advisers should be consulted for advice on specific requirements.

For term contracts included in PFSS, the appendices to Chapter 3 of the CSSM stipulate the various contractual provisions to be incorporated in the contract documents for site safety. The latest version can be found at DEVB's website.

For term contracts not included in PFSS, the Special Conditions of Tender and Special Conditions of Contract in the CSSM should not be included. The Particular Specifications and Method of Measurement should be amended or deleted according to Clause 3.1.10 of Chapter 3 of the CSSM.

However, there may be term contracts which, owing to their small size and/or nature will warrant changes to the contractual provisions. PE should seek advice from their Departmental Safety & Environmental Advisor and the agreement of the appropriate (D2 or above) officer for such changes.

Chapter 12 of the CSSM incorporates the background and guidance notes on the administration of PFSS. Basically, all appropriate tenders included in PFSS should include a separate "Site Safety" section in the Schedule of Rates. A sample Schedule of Rates for PFSS term contracts can be found in Appendix II(a) and Appendix III(b) to Chapter 12 of CSSM.

5.5.2 Pay for Environment Scheme

ETWB TCW No. 19/2005 which sets out the policy and procedures for environmental management and the PFSES was partially updated by the Interim Guidance Note on the Administration of Environmental Management and Pay for Safety and Environmental Scheme for Public Works Contracts issued under the then SETW's memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006. In this connection, all references in ETWB TCW No. 19/2005 to term contracts become obsolete. The environmental management procedures and the PFSES are not to be implemented in term contracts and details should refer to the then SETW's memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006.

Nevertheless, to provide a more effective means for dust control and to further enhance the safety of the working environment, the SDEV's memos ref. (01KKA-01-8) in

DEVB(W) 810/83/09 dated 11.10.2007 and ref. (01N5V-01-2) in DEVB(W) 810/83/09 dated 24.12.2007 promulgated a set of sample contractual provisions on the installation of mechanical dump truck covers to be incorporated in the contract documents for term contracts included in PFSS, which is applicable for contracts tendered between 1 November 2007 and 31 October 2010 inclusive.

According to SDEV's memo ref. (01ZSP-01-2) in DEVB(W) L/M(2)810/83/09 dated 7.4.2009, grab-mounted dump trucks working for public works contracts with mechanical covers requirements should be equipped with suitable cover with effect from 1 September 2009. Details of suitable cover are given in SDEV's memo.

5.6 FINANCIAL RELIEF MEASURES TO ASSIST THE CONSTRUCTION INDUSTRY

To help alleviate the difficulties faced by public works contractors in the midst of the financial turmoil, SDEV announced the interim financial relief measures to be adopted in term contracts vide his memos ref. (01WLR-01-7) in DEVB(W) 510/83/08 dated 8.12.2008 and ref. (025QN-01-3) in DEVB(W) 510/83/08 dated 4.3.2010. These relief measures are related to interim payment (IP), payment of WO and contract finalization. The measures on IP and payment of WO should be adopted as standing policies vide his memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011. As regards the measure on contract finalization, this should be a permanent measure and each works department is required to continue to monitor the status with standing targets for achieving early contract finalization.

5.6.1 Interim Payment

IP should be instituted in all existing contracts which do not contain IP provision to improve the cash flow of contractors who are currently paid upon completion of the works. The same measures will be applicable to all new contracts.

5.6.2 Payment of Works Order

The payment level before completion of a WO in existing and new term contracts should be raised to 90% if it has been specified or is normally set below such a level.

5.6.3 Finalization of Accounts

Works departments should strive to finalise the accounts of works that have been completed and put in place a high-level monitoring mechanism (if not already done so) to oversee progress of account finalisation. Justification for individual contracts not being able to meet the target should be scrutinized by the respective works director or his deputy.

5.7 EMERGENCY COMMAND SYSTEM

To deal with exceptional emergency incidents, SDEV has introduced the Emergency Command System (ECS) in the memo ref. DEVB(CR) 1-150/93 dated 18.8.2008. Exceptional emergency incidents refer to emergency situations that cannot be adequately handled by normal emergency organizations or when the situations that warrant a more

integrated/coherent emergency management approach.

To facilitate the implementation of the ECS, SDEV has announced the enhancement measures including unified schedule of rates, emergency vote, delineation of responsibilities for emergency works to natural terrain landslides and working on private land vide his memos ref. DEVB(G) 1-90/8 dated 19.3.2009 and ref. (01ZDK-01-1) in DEVB(G) 1-90/8 dated 25.3.2009. The proposed Special Conditions of Contract and Particular Preambles for Method of Measurement for incorporation into maintenance/term contracts are given in Annex 1 of memo ref. DEVB(G) 1-90/8 dated 19.3.2009. Please note that the proposed Special Conditions of Contract and Particular Preambles for Method of Measurement have been subsequently revised by DEVB vide e-mail on 9.5.2009 and 20.5.2009 and the unified schedule of rates has been updated by CEDD vide memo ref. GCW 4/1C/30 dated 6.2.2013 as shown in Appendix 8.2 for incorporation into existing and new maintenance/term contracts.

For normal emergency incidents, the existing emergency organizations, procedures and guidelines set out in relevant circulars including DEVB TCW No. 7/2011, ETWB General Circular No. 2/2005 and ETWB TCW No. 20/2005 should apply.

5.8 ENHANCEMENT OF PRODUCTIVITY OF SKILLED WORKERS IN PUBLIC WORKS PROJECTS

In order to rationalize the demand for skilled workers in trades with projected shortage, guidelines to illustrate the 3S concept (Standardization Simplification and Single Integrated Element) adopted in design and other specific measures in construction process for individual trades are given in the DEVB's memo ref. (38) in DEVB(Trg) 133/8 dated 17.4.2013. The guidelines are available on DEVB's website via the following link: [http://www.devb.gov.hk/filemanager/en/content_29/Guidelines_Enhancement_of_Productivity_\(Mar_2013\)_English.pdf](http://www.devb.gov.hk/filemanager/en/content_29/Guidelines_Enhancement_of_Productivity_(Mar_2013)_English.pdf).

6. REFERENCES

WBTC No. 15/99	Improvement to Quality of Maintenance Works
WBTC No. 15A/99	Improvement to Quality of Maintenance Works
ETWB TCW No. 15/99B	Improvement to Quality of Maintenance Works
WBTC No. 16/2002	General Conditions of Contract for Term Contracts for Civil Engineering Works, 2002 Edition
ETWB GC No. 2/2005	Crisis Management
ETWB TCW No. 19/2005	Environmental Management on Construction Sites
ETWB TCW No. 20/2005	Upward Reporting of Major Emergency Incidents from Works Departments
DEVB TCW No. 7/2011	Natural Disaster Emergency Organization Responsibilities of the Development Bureau and the Transport and Housing Bureau Groups of Departments
DEVB TCW No. 4/2014	Tender Evaluation Methods for Works Contracts
DEVB TCW No. 4/2014A	Tender Evaluation Methods for Works Contracts
FC No. 12/98	Calculation of Supervision and Administration Costs for the Purpose of Claims brought by Government
FC No. 3/2011	Capital Works Reserve Fund Delegated authorities in respect of block allocations
FC No. 3/2013	Charging Arrangements for Trading Funds
CEDD's memo ref. () in GCW 4/1C/30 dated 6.2.2013	Emergency Command System (Updating of Unified Schedule of Rates)
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)
SDEV's memo ref. (01KKA-01-8) in DEVB(W) 810/83/09 dated 11.10.2007	Pay for Safety and Environment Scheme - Installation of Mechanical Dump Truck Covers
SDEV's memo ref. (01N5V-01-2) in DEVB(W) 810/83/09 dated 24.12.2007	Pay for Safety and Environment Scheme/Pay for Safety Scheme - Installation of Mechanical Dump Truck Covers, Amended Particular Specification
SDEV's memo ref. () in DEVB(CR) 1-150/93 dated 18.8.2008	Emergency Command System

SDEV's memo ref. (01WLR-01-7) in DEVB(W) 510/83/08 dated 8.12.2008	Immediate Measures to Assist the Construction Industry
SDEV's memo ref. () in DEVB(G) 1-90/8 dated 19.3.2009	Emergency Command System
SDEV's memo ref. (01ZDK-01-1) in DEVB(G) 1-90/8 dated 25.3.2009	Emergency Command System
SDEV's memo ref. (01ZSP-01-2) in DEVB(W) L/M(2)810/83/09 dated 7.4.2009	Covers for Grab-mounted Trucks
SDEV's memo ref. () in DEVB(W) 546/70/01 dated 7.8.2009	Agreement of Financial Services and the Treasury Bureau (FSTB) on Tender Invitation for New Types of Term Contracts
SDEV's memo ref. (025QN-01-3) in DEVB(W) 510/83/08 dated 4.3.2010	Financial Relief Measures to assist the Construction Industry
SDEV's memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011	Financial Relief Measures to assist the Construction Industry
SDEV's memo ref. () in DEVB(W) 510/92/01 dated 5.5.2020	Control on the Use of Non-schedule Rates in Term Contracts
	Amd No. 6/2020
DEVB's memo ref. (38) in DEVB(Trg) 133/8 dated 17.4.2013	Guidelines for Enhancement of Productivity of Skilled Workers in Public Works Projects
S for Tsy's memo ref. (54) in FT 111/2 dated 12.5.1993	10TH-Pok Fu Lam Rd Widening Stage V Part II, Grade Separated Access-Selective Tendering
S for Tsy's memo ref. (12) in FIN 111/2/1 III dated 15.6.1994	Charging of Minor Improvement Works to Recurrent Vote
S for Tsy's memo ref. (2) in FT 36/88 dated 14.2.1995	Employment of Term Contractors for New Works and Minor Works
FSTB (Treasury Branch)'s memo ref. () in L/M 9/2005 (I Div) dated 29.3.2006	On-cost Rates for Projects Entrusted to/from Housing Authority (HA)

SFST's memo ref. (2) in L/M to FT 36/88 Pt 2 dated 1.9.2008	Employment of Term Contractors for New Works and Minor Works
SFST's memo ref. (54) in FT 113/149 dated 5.8.2009	Request for Policy Bureau's support of Architectural Services Department Proposed New Design & Construction Minor Works Term Contracts for Fire Services Installation (DCMWTC (FS))
SFST's memo ref. (83) in LM to FP 25/2002 dated 9.6.2010	Guiding principles for accounting treatment for liquidated damages and payments relating to claims settlement received from contractors under contracts funded by the CWRP project votes for final settlement of contract accounts
SFST's memo ref. (17) in L/M to FT 36/88 Pt 2 dated 14.9.2012	Employment of Maintenance Term Contractors for New Works
SFST's memo ref. (18) in L/M to FT 36/88 Pt 2 dated 14.9.2012	Employment of Term Contractors for New Works and Minor Works
DEVB Construction Site Safety Manual	http://www.devb.gov.hk/en/publications_and_press_releases/publications/construction_site_safety_manual/index.html
DEVB Contractor Management Handbook	http://www.devb.gov.hk/en/construction_sector_matters/contractors/contractor_management_handbook_revision_b/index.html
DEVB Standard Contract Documents	http://www.devb.gov.hk/en/publications_and_press_releases/publications/standard_contract_documents/index.html
FSTB Financial and Accounting Regulation 440 - Overheads Charge on Stores or Services Supplied for Private Works	-
FSTB Stores and Procurement Regulations Chapter III - Tender Procedures (300-390)	-
FSTB Stores and Procurement Regulations Chapter V - Contract Administration (500-541)	-
FSTB Stores and Procurement Regulations FC/FSTBCM to be read in conjunction with SPR	-

APPENDICES

APPENDIX 8.1 AN EXAMPLE OF A FORM OF TENDER FOR A TERM CONTRACT**THE GOVERNMENT OF THE HONG KONG
SPECIAL ADMINISTRATIVE REGION****(name of department)****CONTRACT NO. (contract number)****(contract title)****FORM OF TENDER****NOTES :**

- (1) The Appendix forms part of the Contract.
- (2) If a tender is a sole proprietorship or a partnership, the names(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 date of the business registration certificate here :-

Number :

Expiry Date :

¹To: The Chairman,
Central Tender Board,
Central Government Offices,
Hong Kong.

Having inspected the Contract Area, examined the General Conditions of Contract and Special Conditions of Contract (hereinafter referred to as "the said Conditions"), Drawings, Specification and Schedule of Rates for the execution of the above-named Works, I/we offer to provide such articles and to perform such services for the maintaining, repairing and constructing of such works as may from time to time be demanded and in conformity with the said Conditions, Drawings, and Specification at the rates given in the Schedule of Rates, subject to such adjustments as stated in the Contract, for a Contract Period of xxx days².

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 Contract Period may be measured in days or months, since different departments may have different practices.

FORM OF TENDER - P. 2

- ³2. 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.
 - #: Tenderer to delete either clause 2(a) or 2(b)
3. I/We agree to abide by this Tender for the period of xxx⁴ 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 here of 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.

³ This item may be deleted if a security is not required.

⁴ Normally 90 days. Seek advice as appropriate.

FORM OF TENDER - P. 3

Name

Signature

in the capacity of

duly authorized to sign tenders for and on behalf of +

.....

.....

.....

.....

.....

Trading in Hong Kong under the style of @

Registered address of firm.....

.....

.....

Date

Name of Witness

Signature of Witness

Occupation

Address of Witness

.....

.....

.....

.....

FORM OF TENDER - P. 4

Name(s) of the sole proprietor/partners

Residential address(es) of the sole proprietor/partners

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

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

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

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

Security Deposit (if any) Receipt No.

Amount

Date

APPENDIX TO FORM OF TENDER – P. 1
SCHEDULE OF CONTRACT PERCENTAGES

This Schedule must be completed in accordance with the notes on the following page and submitted with the Tender.

Section No. of Schedule of Rates (1)	Item No. of Schedule of Rates (2)	Section Percentage (whole number) (%) (3)	Adjustment Percentage (whole number) (%) (4)	Contract Percentage (%) (5)	Weighting Factor (6)	Value for Tender Assessment (%) (7)
SECTION 01	01001 – 01048		*PLUS / MINUS % (Not applicable to Section 28 and Item 27020)		0.250	
	01049 – 01051				0.015	
SECTION 02	02001 – 02026				0.010	
SECTION 03	03001 – 03013				0.005	
SECTION 04	04001 – 04006				0.010	
SECTION 05	05001 – 05119				0.050	
SECTION 07	07001 – 07030				0.030	
SECTION 08	08001 – 08020				0.005	
SECTION 09	09001 – 09041				0.020	
SECTION 10	10001 – 10021				0.010	
SECTION 11	11001 – 11047				0.010	
SECTION 12	12001 – 12008				0.020	
SECTION 14	14001 – 14005				0.005	
SECTION 16	16001 – 16009				0.005	
SECTION 19	19001 – 19055 19194 – 19213					0.100
	19056 – 19078				0.100	
	19079 – 19193				0.255	
SECTION 22	22001 – 22009				0.010	
SECTION 24	24001 – 24067				0.020	
	24068 – 24091				0.010	
SECTION 26	26001 – 26030				0.030	
SECTION 27	27001 – 27019				0.008	
	27020	0	0	0	0.002	0
SECTION 28	28001 – 28010	0	0	0	0.020	0
				Total	1.000	

* Delete whichever is inapplicable

(The item groupings, limits on Contract Percentages and Weighing Factors are given for illustration purposes. The project engineer should review and modify in accordance with the nature of the Works as deemed necessary.)

APPENDIX TO FORM OF TENDER – P. 2
NOTES TO THE SCHEDULE OF CONTRACT PERCENTAGES

- (a) The tenderer shall complete the Schedule of Contract Percentages strictly in accordance with the following notes.
- (b) The tenderer shall complete Section Percentages in column (3) in whole numbers. Section Percentages should lie within the maximum and minimum limits specified. Each Section Percentage shall not be less than a minimum of –20 nor greater than a maximum of +70. If a tenderer has inserted Section Percentages outside the limits stipulated, inserted percentages lower than the minimum limit will be corrected to the minimum limit –20 while inserted percentages higher than the maximum limit will be corrected to the maximum limit +70. If a tenderer has failed to insert any Section Percentage, the Section Percentage will be corrected to zero. Each value (except the value zero) entered shall be preceded with “+” sign to represent positive value or “-” sign to represent negative value. If neither “+” nor “-” is added to a non-zero number, the value shall be corrected as a positive number.
- (c) The tenderer shall insert an Adjustment Percentage in whole number in column (4) and delete the word “PLUS” or “MINUS” whichever is inapplicable. The tenderer shall not precede the entered number with “+” sign or “-” sign. If such “+” or “-” sign is added, it will be disregarded. If a tenderer has failed to insert the Adjustment Percentage or has failed to delete either of the words “PLUS” or “MINUS” marked against the Adjustment Percentage or has deleted both the words “PLUS” and “MINUS” marked against the Adjustment Percentage, the Adjustment Percentage will be ascertained by back calculation using the equation stipulated in Note (d). If the Adjustment Percentage cannot be so determined with certainty, it shall be corrected to zero.
- (d) The tenderer shall calculate the Contract Percentages and insert the values in column (5) using the following formula and rounding to the nearest whole number, e.g. +10.49 shall be rounded down to +10; +10.50 shall be rounded up to +11.

$$\text{Contract Percentage} = \frac{(100 + \frac{\text{The corresponding Section Percentage}}{100}) \times (100 + \text{Adjustment Percentage})}{100} - 100$$

- (e) The tenderer shall complete the values in column (7) which shall be equal to the values in column (5) multiplied by the corresponding values in column (6).
- (f) The Total of Values for Tender Assessment is to be the summation of the values in column (7).
- (g) If a tenderer has inserted any Section Percentage, Adjustment Percentage or Contract Percentage not in whole number, the relevant Section Percentage, Adjustment Percentage or Contract Percentage shall be corrected by rounding to the nearest whole number, e.g. +10.49 shall be rounded down to +10; +10.50 shall be rounded up to +11. If any mistakes are found in the Contract Percentages, Values for Tender Assessment or the Total of the Values for Tender Assessment, correction will be made to these Contract Percentages, Values for Tender Assessment or the Total of the Values for Tender Assessment as the case may be to bring them strictly in accordance with the above notes. If a tenderer has amended the Section Percentage, Adjustment Percentage or Contract Percentage which are fixed values, the amendment(s) will be disregarded.

- (h) The Section Percentage and Adjustment Percentage applicable to the Schedule of Rates of Section 28 on Site Safety and Item 27020 are fixed at 0% and hence the Contract Percentage for Section 28 is also fixed at 0%. Tenderers shall not amend the Section Percentage, Adjustment Percentage and Contract Percentage for Section 28 and Item 27020.
- (i) The weighting factors given are to be used for tender assessment purpose only, and they do not indicate the extent of the work. The Employer does not give any representation, warranty or guarantee that the weighting factors or any part thereof bears any relation to the actual proportion of any item of work to the Whole of the Works.
- (j)
- $$\text{Contract Rate of an item of work} = \frac{\text{rate of the item of work in the Schedule of Rates}}{\text{Contract Percentage}} \times (100 + \text{the relevant Contract Percentage})/100$$
- (k) All values in columns (3), (4), (6) and (7) are for tender assessment purpose only.

APPENDIX TO FORM OF TENDER – P. 3**General Conditions of Contract for Term Contracts for Civil Engineering Works (2002 Edition)****Clause No.**

1(1) Contract Period..... xxx days

1(1) Maintenance Period for:-

- (i) Works other than Establishment Works for each Works Order xx months
 (ii) Establishment Works for each Works Order x day

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 Clause 56 of the General Conditions of Contract) 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 56) which may commit the Employer to additional expenditure under the Contract, other than in respect of claims, without the need to obtain confirmation of no objection from the Employer if the value of such order or commitment is estimated not to exceed HK\$300,000.

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

49(1) Mobilisation period, from date of commencement stated in the Works Order
 x days unless otherwise stated in the Works Order

54 Liquidated damages for each Works Order shall be calculated in accordance with the following formula:

(formula to calculate the liquidated damages to be inserted by the project office) ^{Note 1}

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.

Note 1 : The project office shall refer to the guidelines given in ETWB TCW No. 4/2003 for the formula used to calculate the Liquidated damages for each Works Order.

APPENDIX TO FORM OF TENDER – P. 4

- 79(2)(a) Limit of interim payment for any one Works Order xx%
- 79(2)(c) Minimum amount of interim payment for:
- (i) Each Works Order (except Works Order for Establishment Works) \$xxx
- (ii) Works Order for Establishment Works only..... xxxx

Special Conditions of Contract

- S.C.C. xx Minimum amount of third party insurance \$xxxx
- S.C.C. xx Period for Establishment Works xxx months

Cyber Manual for Greening + ETWB TCW No. 29/2004 *The following 2 entries shall be added where the existing trees that are to be preserved and protected include **Old and Valuable Trees** from the register at the website: <http://www.lcsd.gov.hk/LEISURE/LP/gc/tree>. Further details on the registration procedures and special protection measures required are given in ETWB TCW No. 29/2004*

- SCC 42B(2) Sum⁵ payable to the Employer in the event that Old and Valuable Tree No. __ dies or becomes moribund \$ _____
- SCC 42D Period for Aftercare to Old and Valuable Trees (*Tree/Trees No. __) ⁶..... __ months
- Maintenance Period for Aftercare to Old and Valuable Trees⁶ __ months

Note : The estimated total expenditure on this Contract is about _____ million dollars. The estimated total expenditure on the Contract is given for information only. The Employer does not give any representation, warranty or guarantee that the actual expenditure on the Contract will not differ, whether substantially or otherwise, from the estimated total expenditure on the Contract

⁵ 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.

⁶ The Period for Aftercare to Old and Valuable Trees together with its subsequent Maintenance Period should preferably end on the same date as the Maintenance Period for the Works, or if there is more than one Maintenance Period, on the same date as the last Maintenance Period.

APPENDIX 8.2 SPECIAL CONDITIONS OF CONTRACT AND PARTICULAR PREAMBLES FOR METHOD OF MEASUREMENT RELATING TO EMERGENCY COMMAND SYSTEM**SCC for Landslide-related Emergency Works under Exceptional Circumstances**

- SCC [X]* (1) Where so ordered by the Engineer in accordance with General Conditions of Contract Clause 20(2), the Contractor shall carry out the works comprising the landslide-related emergency works under exceptional circumstances (“LEWUEC”) which are described as such and more particularly detailed in the order. For the purposes of General Conditions of Contract Clause 49(1), the Contractor shall commence the works comprising the LEWUEC on Site within 2 hours after receipt of the order from the Engineer for such works. The works comprising the LEWUEC shall be completed within the time for completion stipulated in the Engineer’s order and shall, if so instructed by the Engineer, be carried out continuously by the Contractor on shifts working 24 hours a day. **Landslide-related emergency works under exceptional circumstances**
- (2) Where LEWUEC are ordered by the Engineer under the provisions of this Clause, the Schedule of Rates for LEWUEC shall apply to valuation of the works comprising the LEWUEC. Should there be no items of works given in the Schedule of Rates for LEWUEC covering such works or any part or parts thereof or if such works or any part or parts thereof are required to be carried out at an inaccessible location, the Engineer shall ascertain the expenditure reasonably incurred by the Contractor in carrying out such works or, as the case may be, the relevant part or parts thereof (subject only to 30% upward adjustment for overhead and profit) and certify in accordance with General Conditions of Contract Clause 78 or, as the case may be, Clause 79.
- (3) For the purposes of this Clause:
- (a) a “day” means a calendar day or, where applicable, a part thereof, irrespective of whether it is a General Holiday or a day throughout or for part of which any tropical cyclone warning signal or any rainstorm warning is in force; and

- (b) “inaccessible” has the meaning ascribed to that term in paragraph 2 of the Particular Preambles for Landslide-related Emergency Works under Exceptional Circumstances.
- (4) For the avoidance of doubt, sub-clauses (1), (2) and (3) of this Clause shall only apply to LEWUEC ordered by the Engineer in accordance with the provisions of this Clause and shall not apply to any other works.
- (5) The provisions of this Clause are without prejudice to the power of the Engineer under General Conditions of Contract Clause 20(2) to order any other emergency works.
- (6) For the further avoidance of doubt, no adjustment including without limitation adjustment by any Contract Percentage¹ shall be made to the valuation of the works comprising the LEWUEC except those specified in sub-clause (2) of this Clause and General Conditions of Contract Clause 92².

SCC [Y]* General Conditions of Contract Clause 1(1) is amended as follows by addition of the following definition :

- (a) replacing the definition of “Schedule of Rates” with the following:
- “Schedule of Rates” means the schedule of rates referred to in the Contract, including without limitation the Schedule of Rates for LEWUEC;
- (b) addition of the following definition:
- “landslide-related emergency works under exceptional circumstances” or “LEWUEC” has the meaning ascribed to that term in Special Conditions of Contract Clause SCC [X]*.

¹ Please check whether there is any definition of “Contract Percentage” in the particular contract, and if there is none, add an appropriate definition.

² This is a provision to exclude adjustments in general. In addition to such provision, it is advisable to include in the Preambles or other parts of the Contract provisions to exclude specific adjustments specified therein, if any.

SCC [Z]* General Conditions of Contract Clause 92(3)(b) is deleted and replaced by the following:

“(b) Base Index Figure” shall mean:

- (i) in respect of any final payment certificate for the works comprising the LEWUEC issued by the Engineer pursuant to Clause 78³, the appropriate Index Figure applicable to 1 July 2012; and**
- (ii) in respect of any final payment certificate in respect of any other works issued by the Engineer pursuant to Clause 78, the appropriate Index Figure applicable to the date 42 days prior to the date for the return of tenders.”**

³ The wording “any final payment certificate for the works comprising the LEWUEC issued by the Engineer pursuant to Clause 78” is adopted on the assumption that a Works Order for LEWUEC will not cover other works. If this is not the case, the wording will have to be further revised.

Form of Tender

Insert the following paragraph into the Appendix to Form of Tender

Clause No.

GCC 2(1)(b) 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 the landslide-related emergency works under exceptional circumstances in accordance with SCC Clause [X] *.

*** The SCC Clause number should be amended to suit the requirements of particular contract.**

+ Where the Engineer is a consultant, steps should be taken to ensure that the constraint is stipulated in the relevant consultancy agreement.

**PARTICULAR PREAMBLES FOR
LANDSLIDE-RELATED EMERGENCY WORKS UNDER
EXCEPTIONAL CIRCUMSTANCES ⁴**

- | | |
|--|---|
| <i>Amendments to Method of Measurement</i> | 1. For landslide-related emergency works under exceptional circumstances (LEWUEC) ordered under SCC [X]*, the Method of Measurement is amended in accordance with these Particular Preambles for LEWUEC. |
| <i>Valuation by actual resources under special circumstances</i> | 2. Notwithstanding the General Preambles and where there are no items of works given in the Schedule of Rates for LEWUEC covering the works comprising the LEWUEC or any part or parts thereof or where such works or any part or parts thereof ordered under SCC [X]* are required to be carried out at an inaccessible location, such works or, as the case may be, the relevant part or parts thereof shall be valued based on expenditure reasonably incurred by the Contractor in carrying out such works or, as the case may be, the relevant part or parts thereof (subject only to 30% upward adjustment for overhead and profit). For the purposes of this paragraph 2, “inaccessible” means the situation where <ol style="list-style-type: none">(a) the location of the works comprising the LEWUEC or, as the case may be, the relevant part or parts thereof is not accessible by lorry, pick-up van or similar vehicle of capacity equal to or greater than 1.5 tonnes; and(b)<ol style="list-style-type: none">(i) the inaccessible distance between the location of the works comprising the LEWUEC or, as the case may be, the relevant part or parts thereof and a point along the road or platform nearest to such location which is accessible by lorry, pick-up van or similar vehicle of capacity equal to or greater than 1.5 tonnes exceeds 30m; or(ii) where the LEWUEC comprise works to be carried out at a slope, the vertical distance between the location of the works comprising the LEWUEC or, as the case may be, the relevant part or parts thereof and the toe of the slope or the crest of the slope where the LEWUEC or, as the case may be, the relevant part or parts thereof are to be carried out exceeds 30m. The vertical distance shall be measured (a) from the toe of the slope if the majority of the materials for the works comprising the LEWUEC or, as the case may be, the relevant part or parts thereof are delivered through the toe of the slope or the majority of the landslide debris is removed through the toe of the slope as the case may be, or (b) from the crest of the slope if the majority of the materials for the works comprising the LEWUEC or, as the case may be, the relevant part or parts |

thereof are delivered through the crest of the slope or the majority of the landslide debris is removed through the crest of slope as the case may be.

- * The SCC Clause number should be amended to suit the requirements of particular contract.**
- ⁴ The Particular Preambles for LEWUEC and Section X – LEWUEC have been prepared on the assumption that the Standard Method of Measurement (“SMM”) will be used. If the SMM is not used for any particular contract, amendments may have to be made to suit the particular contract.**

**SECTION [X]⁵ –LANDSLIDE-RELATED EMERGENCY
WORKS UNDER EXCEPTIONAL CIRCUMSTANCES**

TEMPORARY SAFETY FENCES

<i><u>Units</u></i>	[X.01] ⁶	The unit of measurement shall be : (i) temporary safety fences linear metre.				
<i>Measurement</i>	[X.02] ⁶	The measurement of temporary safety fences shall be the length along their external face on plan, inclusive of gates and entrances.				
	[X.03] ⁶	Temporary safety fences shall only be measured where shown on the Drawings or ordered by the Engineer.				
<i>Itemisation</i>	[X.04] ⁶	Separate items shall be provided for temporary safety fences in accordance with General Principles paragraph 3 and the following:				
		<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Group</th> <th style="text-align: left;">Feature</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">I</td> <td>1. Different types.</td> </tr> </tbody> </table>	Group	Feature	I	1. Different types.
Group	Feature					
I	1. Different types.					
<i>Temporary safety fences</i>	[X.05] ⁶	The items for temporary safety fences shall, in accordance with General Preambles paragraph 2, include for :				
<i>Item coverage</i>		(a) excavation in any material; (b) backfilling and compaction; (c) disposal of surplus excavated material; (d) concrete, reinforcement, formwork and granular material to foundations and anchorages, forming holes, pockets, sockets, mortices and the like.				

⁵ Insert an appropriate section number to suit the particular contract.

⁶ Insert appropriate paragraph numbers to suit the particular contract.

REMOVAL OF LANDSLIDE DEBRIS

- Units** [X.06]⁶ The unit of measurement shall be :
 (i) Removal of landslide debris cubic metre.
- Measurement** [X.07]⁶ The measurement of removal of landslide debris shall be the volume of landslide debris (including soil, rock, vegetation, artificial hard materials and the like) within or adjacent to the Site, which are required to be removed as ordered by the Engineer.
- Itemisation** [X.08]⁶ Separate items shall be provided for removal of landslide debris in accordance with General Principles paragraph 3 and the following :

Group	Feature
-------	---------

- | | |
|---|---------------------------------|
| I | 1. Removal of landslide debris. |
|---|---------------------------------|
-

- Removal of landslide debris** [X.09]⁶ The items for removal of landslide debris shall, in accordance with General Preambles paragraph 2, include for :

- Item coverage**
- (a) excavation of landslide debris including soil, rock, vegetation, artificial hard materials and the like;
 - (b) forming and removal of temporary access;
 - (c) loading into transport;
 - (d) haulage, deposition and disposal to designated locations as instructed by the Engineer;
 - (e) loosening or breaking up materials before or in the process of excavation;
 - (f) multiple handling of excavated materials;
 - (g) forming and trimming side slopes, benching and berms or in the case of structural foundations, trimming the bottom and sides of excavation including additional excavation, filling and disposal;
 - (h) dealing with water in watercourses;
 - (i) carrying out excavation by hand adjacent to utilities that are known, proven or suspected to exist;
 - (j) carrying out excavation next to structure by hand;
 - (k) cutting through reinforcement;
 - (l) trimming and clearing away loose rock or boulders;
 - (m) provision, maintenance and removal of temporary drainage measure to keep excavation free from water.

IMPORTATION, DEPOSITION AND COMPACTION OF ROCKFILL MATERIAL

Units [X.10]⁶ The unit of measurement shall be :

- (i) Importation, deposition and compaction of rockfill materialcubic metre.

Measurement [X.11]⁶ The measurement of importation, deposition and compaction of rockfill material shall be the volume formed or void filled up from existing ground level to the formation level as ordered by the Engineer.

Itemisation [X.12]⁶ Separate items shall be provided for importation, deposition and compaction of rockfill material in accordance with General Principles paragraph 3 and the following :

Group	Feature
I	1. Importation, deposition and compaction of Grade 200 rockfill material.

Importation, deposition and compaction of rockfill Material [X.13]⁶ The items for importation, deposition and compaction of rockfill material shall, in accordance with General Preambles paragraph 2, include for :

- Item coverage*
- (a) supply of material of stated types from any source and haulage;
 - (b) layering or deposition in specified locations;
 - (c) excavation, deposition and compaction in benches;
 - (d) multiple handling of excavated material;
 - (e) overfilling of fill areas and embankments and subsequent removal;
 - (f) spreading and levelling;
 - (g) forming and trimming of side slopes, benching and berms;
 - (h) compaction of overfilling to fill areas and embankments;
 - (i) protection of the formation;
 - (j) trimming, shaping and forming the surfaces to required levels and contours;
 - (k) completion of formations and earthworks final surfaces;
 - (l) provision, maintenance and removal of temporary drainage measures to keep filling works free from water and erosion;
 - (m) forming benching on existing surface;
 - (n) disposal of surplus materials to designated locations as instructed by the Engineer.

IN-SITU CONCRETE

Units [X.14]⁶ The unit of measurement shall be :

- (i) concrete cubic metre.

Measurement [X.15]⁶ No deduction shall be made for :

- (a) built-in items, holes, ducts, pockets, sockets, mortices and the like each not exceeding 0.15 cubic metres in volume;
 (b) reinforcement;
 (c) individual fillets, chamfers, splays, drips, rebates, recesses, grooves and the like not exceeding 100 millimetres in girth measured on the faces in contact with the formwork;

Itemisation [X.16]⁶ Separate items shall be provided for in-situ concrete in accordance with General Principles paragraph 3 and the following :

Group	Feature
I	1. Different grades of concrete.
II	1. No-fines concrete 2. Sprayed concrete in-fill

Concrete [X.17]⁶ The items for concrete shall, in accordance with General Preambles paragraph 2, include for :

Item coverage

- (a) mixing, placing in or against any surface, including soil faces where required, compaction and finishes to unformed surfaces;
 (b) curing and protection;
 (c) falls, cambers and shaped profiles;
 (d) weep pipes, pipe sleeves and the like;
 (e) holes, pockets, mortices casting in items and the like, each not exceeding 0.15 cubic metres in volume, including formwork;
 (f) ducts and sockets;
 (g) concrete to fill over-break and working space;
 (h) admixtures;
 (i) dealing with water in watercourses;
 (j) cleaning the existing surfaces against which the concrete is to be placed.

MESH PROTECTION

Units [X.18]⁶ The unit of measurement shall be :

- (i) mesh protection. square metre.

Measurement [X.19]⁶ The measurement of mesh protection shall be the surface area of the face to be protected. No allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for openings each not exceeding one square metre.

Itemisation [X.20]⁶ Separate items shall be provided for mesh protection in accordance with General Principles paragraph 3 and the following:

Group	Feature
I	1. Mesh protection.

Mesh protection [X.21]⁶ The items for mesh protection shall, in accordance with General Preambles paragraph 2, include for :

Item coverage

- (a) preparation of surfaces;
- (b) bolts, anchorages, clips and tie wires;
- (c) lapping, binding and jointing;
- (d) cutting of holes or other openings around existing structures or protrusions.

SURFACE PROTECTION

Units [X.22]⁶ The unit of measurement shall be :

- (i) sprayed concrete square metre.

Measurement [X.23]⁶ Surface protection shall only be measured if ordered by the Engineer or shown on the Drawings and shall be measured at the top surface. No deduction shall be made for openings each not exceeding 0.1 square metres. No allowance shall be made for surface irregularities or other local peculiarities.

Itemisation [X.24]⁶ Separate items shall be provided for surface protection in accordance with General Principles paragraph 3 and the following :

Group	Feature
I	1. Sprayed concrete.
II	1. Different thicknesses of layers.

-
- | | |
|------------|---|
| III | 1. With steel fabric reinforcement. |
| | 2. Without steel fabric reinforcement. |
-

Sprayed concrete [X.25]⁶ The items for sprayed concrete shall, in accordance with Preambles paragraph 2, include for :

Item coverage

- (a) preparation of surfaces to be covered;
- (b) reinforcement and anchor bars;
- (c) admixtures;
- (d) weepholes and filter materials;
- (e) finishing and curing;
- (f) recording and supplying records to the Engineer;
- (g) filling core holes and compacting;
- (h) protection of trees, structures, street furniture and the like;
- (i) forming step and toe-in;
- (j) disposal of surplus material and rebound materials to designated locations as instructed by the Engineer;
- (k) provision, maintain and removal of working platform.

Section 31 : Landslide-related Emergency Works under Exceptional Circumstances			
Item No.	Description	Unit	Schedule Rate
	<u>SECTION 31</u>		
	<u>LANDSLIDE-RELATED EMERGENCY WORKS UNDER EXCEPTIONAL CIRCUMSTANCES</u>		
	<u>Temporary Safety Fences</u>		
31001	Temporary safety fence Type A as Standard Drawings C2501/1B and C2501/2B	m	5,170.00
31002	Temporary safety fence Type B as Standard Drawings C2502/1C and C2502/2C	m	4,450.00
31003	Temporary safety fence Type C as Sketch R1062A	m	5,170.00
	<u>Removal of Landslide Debris</u>		
31004	Removal of landslide debris	cu.m	460.00
	<u>Importation, Deposition and Compaction of Rockfill Material</u>		
31005	Importation, deposition and compaction of Grade 200 rockfill material	cu.m	600.00
	<u>In-situ Concrete</u>		
31006	No-fines concrete	cu.m	1,430.00
31007	Grade 20 sprayed concrete infill	cu.m	2,310.00
	<u>Mesh Protection</u>		
31008	Mesh protection as Standard Drawing C2205D	sq.m	320.00
	<u>Surface Protection</u>		
	Grade 20 sprayed concrete, with one layer of 50 mm x 50 mm x 2.7 mm (wire diameter) welded mesh, galvanised:-		
31009	50 mm thick	sq.m	340.00
31010	75 mm thick	sq.m	420.00
31011	100 mm thick	sq.m	500.00
	Grade 20 sprayed concrete, without mesh: -		
31012	50 mm thick	sq.m	280.00
31013	75 mm thick	sq.m	350.00
31014	100 mm thick	sq.m	430.00