Contractor Management Handbook

Environment, Transport and Works Bureau

Revision B July 2005

REVISION SHEET

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A	21/06/2002	25/2002	As shown in the Annex to WBTC No. 25/2002
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			9/2005

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SECTION 1 INTRODUCTION

1.1 General

1.1.1 The Contractor Management Handbook consolidates and updates the existing guidelines and procedures pertaining to administration and monitoring of the performance of contractors and suppliers on the List of Approved Contractors for Public Works and the List of Approved Suppliers of Materials and Specialist Contractors for Public Works into a single handbook.

1.2 Effective Date

1.2.1 The Revision B of this Handbook shall take effect from **1 July 2005**.

1.3 Effect on Existing Technical Circulars

- 1.3.1 This Handbook shall supersede the following Technical Circulars: -
 - (a) WBTC No. 5/2001 Contractor Management Handbook;
 - (b) WBTC No. 25/2002 Contractor Management Handbook Revision A; and
 - (c) ETWB TCW No. 44/2002 and 44/2002A Regulating Actions for Contractors Convicted of Employing Illegal Workers or of Having Illegal Workers on Sites under their Control.
- 1.3.2 This Handbook should be read in conjunction with the following Technical Circulars or such subsequent amendments as may be issued from time to time: -
 - (a) WBTC No. 17/96 Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing;
 - (b) WBTC No. 26/2000 Score Card for Assessment of Site Safety Performance;
 - (c) WBTC No. 13/2001 and ETWB TCW No. 13/2001A Quality Management System Certification of Consultants and Contractors for Public Works Administered by the Works Group of Departments;
 - (d) WBTC No. 25/2001 and ETWB TCW No. 25/2001A Admission of EMSTF onto the List of Approved Suppliers of Materials and Specialist Contractors for Public Works under 25 Categories of E&M, Electronics and Building Services;

- (e) WBTC No. 13/2002 Employment of Qualified Tradesmen and Intermediate Tradesmen by Contractors of Public Works Contracts;
- (f) ETWB TCW No. 47/2002 Management of Sub-contractors by Contractors;
- (g) ETWB TCW No. 50/2002 Contractors' Joint Ventures;
- (h) ETWB TCW Nos. 2/2003, 2/2003A and 2/2003B Regulating Action where a Serious Incident has or Site Safety or Environmental Offences have Occurred on a Construction Site;
- (i) ETWB TCW No. 12/2003 Employment of Technician Apprentices and Building & Civil Engineering Graduates by Contractors of Public Works Contracts:
- (j) ETWB TCW No. 18/2003 Substitution of Listing Status and Transfer of Benefits and Obligations of Contracts
- (k) ETWB TCW No. 22/2003 & 22/2003A Additional Measures to Improve Site Cleanliness and Control Mosquito Breeding on Construction Sites;
- (l) ETWB TCW No. 10/2004 Tenderer's Eligibility for the Award of Works Contracts:
- (m) ETWB TCW No. 13/2004 Engagement of Sub-contractors Registered from Voluntary Sub-contractor Registration Scheme; and
- (n) ETWB TCW No. 31/2004 Trip Ticket System for Disposal of Construction & Demolition Materials.

1.4 Changes Incorporated

- 1.4.1 The revisions made to the Revision A of this Handbook by the following documents have been incorporated in this Revision B: -
 - (a) ETWB TCW No. 13/2001A;
 - (b) ETWB TCW No. 44/2002 and 44/2002A;
 - (c) ETWB TCW No. 47/2002;
 - (d) ETWB TCW No. 2/2003, 2/2003A and 2/2003B;
 - (e) ETWB TCW No. 12/2003;
 - (f) ETWB TCW No. 18/2003;
 - (g) ETWB TCW No. 10/2004;

- (h) ETWB TCW No. 13/2004;
- (i) ETWB TCW No. 31/2004;
- (j) changes in category description as publicized in the website of ETWB;
- (k) deletion of 2 categories of works as publicized in the website of ETWB; and
- (l) subsequent amendments made on Appendix 3C to the Contractor Management Handbook Revision A, as publicized in the website of ETWB.

1.5 Amendments in the Revision B

1.5.1 The amendments made in the Revision B of this Handbook are listed hereunder for ease of reference: -

	Brief Description	Reference
(a)	General updating	
(b)	Requirement of submitting written partnership agreement	Paragraphs 2.1.7, 2.4.4 & 2.15.1
(c)	Clarification on the value of contracts for Group Tender Limits	Paragraph 2.2.1
(d)	Elaboration on the vetting required for changes in company structure	Sub-sections 2.15 & 3.15
(e)	Updating the means of publishing the Approved Lists	Paragraphs 2.4.8 & 3.4.8
(f)	Revision of the list of categories which financial checking is not required on the contractors except those tenderers whose contract is of value exceeding \$5,000,000	Paragraphs 3.4.6 & 3.9.2
(g)	Introduction of Profitability Trend Analysis (PTA) for contractors on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works	Paragraph 3.9.3; Appendix 3B: 7 to 10 & 14

(h)	Revision of reporting system at the maintenance and defects liability periods	Sub-section 4.5
(i)	Clarification on the procedure for issuing additional six-weekly intervening reports	Sub-section 4.5
(j)	Clarification on the timetable for reporting on contractors' performance if the Reporting Review Committee intends to alter any grades in the performance report	Paragraph 4.6.4; Appendix 4D
(k)	Clarification on the circumstances for failing to comply with any of the Rules for Administration of the Approved Lists	Sub-paragraph 5.1.3(xvii)
(1)	Clarification on "misconduct" & "suspected misconduct" leading to regulating actions	Sub-paragraphs 5.1.3(v), 5.2.3(a)(i), 5.2.3(a)(ii) & 5.2.3(c)(i) and paragraphs 5.2.4 & 5.2.5
(m)	Clarification on non-conforming tenders leading to regulating actions	Sub-paragraph 5.2.3(b)(i)
(n)	Elaboration of the definition of a competitive tender	Sub-paragraph 5.2.3(b)(i)
(0)	Specifying the commencement date of voluntary suspension for consecutive Adverse reports	Sub-paragraph 5.4.5(b)(ii)
(p)	Clarification on the procedure for uplifting of voluntary suspension made during the maintenance period or defects liability period	Sub-paragraph 5.4.5(b)(ii)

(q)	Clarification on the circumstances requiring an overall review of the situation after completion of the contract	Sub-paragraphs 5.4.5(b)(ii) & 5.4.5(d)
(r)	Additional circumstances which may lead to the taking of regulating actions against contractors on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works	Paragraph 5.6.4
(s)	Tightening the triggering criterion for taking regulating actions against contractors convicted of contraventions of the Employment Ordinance (Cap. 57)	Paragraph 5.7.1
(t)	Update on Sub-sections 6.5 - 6.8	Paragraphs 6.5.1 - 6.8.1; Appendices 6A - 6C
(u)	Revision of financial criteria for retention and tendering	Appendix 2A: 5; Appendix 3B: 3, 4 & 15
(v)	Clarification of the existing financial information required to be submitted for financial assessment	Appendix 2A: 2, 13; Appendix 3B: 2,12; Annex to Appendices 2A & 3B
(w)	Specifying time limits for the minimum technical criteria and the requirements for relevant experience as sub-contractors	Appendix 2B
(x)	Update on guidance notes for completion of reports on contractors' performance	Appendix 4B

1.5.2 In order to facilitate the existing contractors on the List of Approved Contractors for Public Works and/or the List of Approved Suppliers of Materials and Specialist Contractors for Public Works to maintain their present listing status, the contractors will be given a 18-months' grace period to adjust to the new financial criteria. All contractors on the aforesaid Lists shall meet the new financial criteria set out in the Revision B from **1 January 2007**. That is to say, all management accounts or audited accounts with

the accounting periods ending on or after 30 June 2006 will be subject to the new financial criteria.

- 1.5.3 Commencing from **1 July 2005**, all contractors shall meet the new financial criteria applicable to the specific category and/or Group for admission, confirmation or promotion even though application for admission, confirmation or promotion has been made prior to **1 July 2005** and consideration is being given to the application.
- 1.5.4 For the purpose of tender evaluation, contractors shall be subject to the financial assessment based on the new financial criteria set out in the Revision B if the tender closing date of a tender falls on **1 July 2005** or anytime thereafter.

SECTION 2 RULES FOR ADMINISTRATION OF THE LIST OF APPROVED CONTRACTORS FOR PUBLIC WORKS

2.1 General

2.1.1 The List of Approved Contractors for Public Works (the List) shall comprise contractors who are approved for carrying out public works in one or more of the categories listed below.

<u>Category</u> <u>Managing Department</u>

Buildings Architectural Services Department

Port Works Civil Engineering and Development Department

Roads and Drainage Highways Department

Site Formation Civil Engineering and Development Department

Waterworks Water Supplies Department

- 2.1.2 The Managing Department for a category is the department most closely connected with that particular type of work and is responsible for servicing and monitoring the performance of all contractors within that category. The Managing Department for a category may not necessarily be the department responsible for a contract let under that particular category.
- 2.1.3 Contractors within each category are further divided into Group A, B or C according to the value of contracts for which they are normally eligible to tender. A contractor's status in a particular group will be either probationary or confirmed. Probationary contractors are limited in the number and value of contracts for which they are eligible to tender in accordance with the rules set out in Sub-section 2.5 below.
- A contractor on the List shall be responsible for the good behaviour of his employees, agents and sub-contractors in relation to any public works contract under his control. The contractor shall advise his employees, agents or sub-contractors that they are not allowed offering or giving any advantage or excessive entertainment to any of the Government employees or members of their family, or to solicit or accept any advantage or excessive entertainment from other employees, agents or sub-contractors in relation to the works under any public works contract. The contractor may be subject to regulating actions as stated in sub-paragraph 5.1.3(xiii) below if the contractor, his employees, agents or sub-contractors have committed any offence under the Prevention of Bribery Ordinance in relation to any public works contract unless the misconduct is not within the control of the contractor. In addition, the contractor may be subject to regulating actions for poor integrity such as negligence, misconduct and impropriety as proven in cases where his employees, agents or sub-contractors have solicited, accepted or been given advantage as defined in the

Prevention of Bribery Ordinance in relation to any public works contract unless the misconduct is not within the control of the contractor.

- 2.1.5 The Secretary for the Environment, Transport and Works reserves the right to amend these Rules and any criteria pertaining to the administration of the List without reference to contractors on the List and any such amendments will be published by the Secretary for the Environment, Transport and Works in the appropriate manner.
- 2.1.6 Applying to be placed on Environment, Transport and Works Bureau's List under any category shall mean the contractor unconditionally accepts these Rules and any future amendments or additions thereto. Failure or refusal to observe these Rules may lead to refusal of entry to the List for the category being applied for, or removal from all categories in which the contractor is listed.
- 2.1.7 A contractor on the List is required to submit updated company information (including but not limited to updated partnership agreements) upon request of the Secretary for the Environment, Transport and Works or the Managing Department for reviewing his listing status as and when required. It is the duty of the contractor to immediately inform the Secretary for the Environment, Transport and Works of any material changes of his company which may affect his listing status.
- 2.1.8 A contractor who has been removed from any category under the List for financial reasons or for failure to submit a tender within a period of three years under sub-paragraph 5.2.3(b)(vi) below may be allowed to apply for re-inclusion in this category at any time after removal. However, a contractor who has been removed from any category under the List for any other reasons is not eligible for re-inclusion in that category for a period of two years from the date of removal. Any application for re-inclusion will be deemed a fresh application and will be subject to the criteria set forth in these Rules for the time being in force.

2.2 Group Tender Limits

2.2.1 The value upon which contracts are grouped is based on the value of the tendered sum offered by the successful tenderer. The Group Tender Limits are periodically adjusted and are currently set as follows: -

Group A - contracts of value up to \$30 million.

Group B - contracts of value up to \$75 million.

Group C - contracts of any values exceeding \$75 million.

2.2.2 Group C contractors will normally not be allowed to tender for contracts in Groups A and B unless the department considers that there may be an inadequate number of tenderers as a result of the restriction. In such cases, prior approval must be obtained from a D2, or higher level officer of the department concerned and notification given to the Managing Department of the intention to invite tenders from Group C contractors for lower group contracts.

2.3 Eligibility to Tender for Term Contracts

- 2.3.1 Eligibility to tender for term contracts shall be determined by the estimated value of the term contract except where a specialist category has been created in the List of Approved Suppliers of Materials and Specialist Contractors for Public Works in which case tenders shall be invited from contractors in the specialist category.
- 2.3.2 For the purpose of defining eligibility to tender, the value of a term contract shall be taken to mean the total estimated expenditure under the contract.
- 2.3.3 At the discretion of the head of the department responsible for the contract, contractors confirmed in Group B may be permitted to tender for term contracts above the limit of \$50 million but which are of a simple and repetitive nature, provided the contractors can demonstrate adequate technical and financial resources and have satisfactory performance records. Group B contractors who are carrying out or have recently completed similar term contracts satisfactorily shall be considered under this rule. However, the total value of the Group C term contracts in any one category should not exceed the Group C probationary limit given in sub-paragraph 2.5.1(c) below.

2.4 Admission

- 2.4.1 Applications from contractors for admission to the List can be submitted at any time, and should be addressed to the Secretary for the Environment, Transport and Works, Environment, Transport and Works Bureau, Murray Building, Garden Road, Hong Kong (Attn: SEO(PS)).
- 2.4.2 The suitability of a contractor for inclusion in one or more of the works categories and in a particular group is assessed on the basis of both the contractor's global business activity and his activity in Hong Kong following his application for admission. Except in the most exceptional circumstances, a contractor will be admitted initially on probation to the appropriate category and group.
- 2.4.3 Upon receipt of an application by the Secretary for the Environment, Transport and Works, the Finance Section of Environment, Transport and Works Bureau will investigate whether the applicant meets the financial criteria established by Environment, Transport and Works Bureau included in Appendix 2A. The Managing Department will investigate whether the applicant has appropriate technical and management capability in respect of each particular category and group which they have applied for or is being considered and will submit a recommendation to the Secretary for the Environment, Transport and Works within two calendar months from the date of referral to the Managing Department. If the technical vetting cannot be proceeded due to incomplete or inadequate information from the applicant, the Managing Department shall recommend rejecting the application within 6 weeks from the date of requesting supplementary information. All recommendations shall be personally endorsed by the Director, the Deputy Director or an equivalent D3 officer of the department concerned. Should the Managing Department fail to do so by the due date, a situation report, signed by an officer at D3 rank or above, must be submitted within one week from the due date to Environment, Transport and Works Bureau (Attn.: PAS(W)4) stating the cause for delay and providing an anticipated date of completing the job. The minimum technical and management criteria for admission, confirmation and promotion within each category of work are included in Appendix 2B. If an applicant

applies for more than one category of works, only one Managing Department, usually the one responsible for the highest group applied, will conduct the vetting of top management. For cases where the groups applied are the same, Environment, Transport and Works Bureau will assign one department for the vetting of top management on a rotation basis. Admission will be subject to the applicant meeting the financial criteria, having the appropriate technical and management capabilities and in all other ways being considered suitable for inclusion in the List.

- 2.4.4 As a condition for admission, all applicants must possess or set up in Hong Kong a place of business as defined in Section 2 of the Business Registration Ordinance (Cap. 310) and employ in Hong Kong, the minimum number of full time management and technical personnel with relevant experience in engineering and project management specified in Appendix 2C. Details of the applicant's management and technical personnel and his business registration certificate shall be submitted with their applications for admission onto the List. In the case of partnerships, applicants must supply a certified true and complete copy of the Partnership Agreement signed by all partners in submitting their applications. The contractors who are admitted on the List must also submit updated partnership agreements to Environment, Transport and Works Bureau whenever there are changes in their partnerships. All contractors shall employ the minimum number of full time management and technical personnel specified in Appendix 2C while he is on the List and shall keep Environment, Transport and Works Bureau informed of any changes of such personnel. contractor shall be removed from the List or demoted to a lower group if he fails to comply with this requirement.
- 2.4.5 To facilitate investigation by Environment, Transport and Works Bureau and the Managing Department, applicants will be required to produce all necessary financial documents including their latest unconsolidated audited accounts showing their financial status (in English or Chinese), together with evidence of their technical and management capabilities. In the case of applications from contractors incorporated outside Hong Kong or whose main presence and head offices are outside Hong Kong, evidence of their technical and management capabilities overseas can be submitted as proof. Unless the Secretary for the Environment, Transport and Works specifically waives this requirement, these applicants must prove that their experience outside Hong Kong meet the admission criteria set out in Appendices 2B and 2C and such evidence must be substantiated by the consul or trade commissioner of the applicants' country in Hong Kong, or other appropriate authorities of the applicants' home country, which are considered acceptable by Environment, Transport and Works Bureau. For instance, contractors who are incorporated in the Mainland are required to submit a certified true and complete copy of certificates/proof issued by the Ministry of Commerce, or the China International Contractors Association as delegated by the Ministry of Commerce, and/or other authorities which are accepted by Environment, Transport and Works Bureau. Notwithstanding the above, the Secretary for the Environment, Transport and Works may seek references on the applicants' technical capabilities from the Ministry of Construction and other sources or confirmation on the authenticity of the proof provided by the applicants from the relevant authorities including the employers of the concerned projects completed by the applicants.
- 2.4.6 Contractors applying for admission to the Buildings category are required to be registered in the Contractors' Register kept by the Building Authority in accordance with the Buildings Ordinance (Cap 123) and shall submit proof of their registration with their applications.

- 2.4.7 Admission to the List will be notified in writing to the applicant by the Secretary for the Environment, Transport and Works. The letter of notification will specify the works category or categories to which the applicant has been admitted, his group and status as either probationary or confirmed. An unsuccessful applicant will be advised of the reasons for not being admitted but will be given the opportunity to present his view of the matter within 14 days from the date of notification before deciding on such action. The non-admission is confirmed if no representations from the applicant are submitted within the specified period.
- 2.4.8 The List is published annually in the Government of the Hong Kong Special Administrative Region Gazette and regularly in the ETWB web site as appropriate, giving the names of the contractors and their respective categories. Amendments to the List are also published from time to time.

2.5 Probationary Status

2.5.1 Probationary contractors are eligible for the award of contracts in each of the categories to which they have been admitted on probation, subject also to the rules set out in paragraphs 2.5.2 to 2.5.5 below, as follows:

(a) Probationary contractors in Group A

Any number of Group A contracts provided the total value of works in any one category does not exceed \$30 million.

(b) <u>Probationary contractors in Group B</u>

Any number of Group A contracts and any number of Group B contracts provided the total value of the Group B works in any one category does not exceed \$75 million.

(c) Probationary contractors in Group C

A maximum of two contracts exceeding \$75 million in any one category provided the total value of Group C works in any one category does not exceed \$220 million.

- 2.5.2 For the purpose of the rule in paragraph 2.5.1 above, a contract is considered completed when the certificate of completion of the works or the last section of the works (excluding establishment works) is issued or, for term contracts, the issue of last completion certificate for works order (excluding establishment works). The rule in paragraph 2.8.2 below shall extend to probationary contractors in Group A and Group B.
- 2.5.3 Contracts awarded by the Housing Authority in the corresponding category will be taken into consideration when calculating the total number and total value of contracts which may be awarded to probationary contractors.
- 2.5.4 Probationary Group C contractors in the "Buildings" category who are awarded Housing Authority contracts in the corresponding category in excess of the value limits for probationary status will be restricted to the award of one contract at any one time

with Architectural Services Department, up to a maximum value of \$220 million, until outstanding Housing Authority contracts in the corresponding category are substantially completed.

2.5.5 Although the total value of contracts allowed for probationary contractors to undertake as described in the rule in paragraph 2.5.1 above is the normal criterion for limiting eligibility for award of contracts, this criterion may be relaxed in circumstances which justify a more flexible approach. Such a flexible approach may be justified, for example, where a probationary contractor who is carrying out contract(s) wishes, towards the end of the contract(s), to submit a tender for another contract of the same category. Under such circumstances, the outstanding value of the existing contract(s) may be taken into account instead of the total value of the existing contract(s) in assessing the financial capability of the contractor. The limit of the value of outstanding work for assessing the financial capability of the contractor may also be raised in special circumstances.

[Note - Pursuant to a trial scheme applicable to tenders invited within a period of one year commencing on 12 June 2009, the outstanding value instead of the total value of the existing contract(s) is to be used for checking compliance with the tender/contract limits for probationary contractors. The outstanding value of an existing contract shall be the difference between the original contract sum and the aggregate of all payments certified under the contract up to and including the date set for the close of tender or, if this has been extended, the extended date for the contract being procured. The outstanding value shall be taken as zero if the original contract sum is less than the aggregate of all payments certified.]

2.6 Confirmation

A probationary contractor may, subject to a minimum probationary period of 24 months, apply for confirmation in writing to the Secretary for the Environment, Transport and Works when he has satisfactorily completed works appropriate to his probationary status in accordance with the criteria for confirmation in **Appendix 2B**. The Managing Department shall submit a recommendation to the Secretary for the Environment, Transport and Works within two calendar months from the date of referral to the Managing Department. The procedures of submitting a recommendation are the same as those given in paragraph 2.4.3 above. Confirmation will also be subject to the contractor being able to meet the financial criteria applicable to confirmed status, having the appropriate technical and management capabilities and in all other ways being considered suitable for confirmation. The contractor will be notified in writing accordingly. If the contractor's application is unsuccessful, he will be advised of the reasons.

2.7 Promotion

2.7.1 A confirmed contractor wishing to be promoted to the next higher group in a particular category may apply in writing to the Secretary for the Environment, Transport and Works. The Managing Department shall submit a recommendation to the Secretary for the Environment, Transport and Works within two calendar months from the date of referral to the Managing Department. The procedures of submitting a recommendation are the same as those given in paragraph 2.4.3 above. Promotion will be subject to the contractor being able to meet the financial criteria applicable to the higher group, having the appropriate technical

and management capabilities, a satisfactory record of performance and in all respects being considered suitable for promotion. The contractor will be notified in writing accordingly. If the contractor's application is unsuccessful, he will be advised of the reasons.

2.7.2 Other than in the most exceptional circumstances, a contractor applying for promotion will be admitted initially on probation to the next higher group and the rules applicable to probationary contractors will apply.

2.8 Tendering

- 2.8.1 Invitations of tenders for works contracts will be published in the Government Gazette normally for Government contracts with estimated value exceeding a certain limit. Tender invitations for works contracts under that limit may only be published in the web site of the Financial Services and the Treasury Bureau.
- 2.8.2 Invitations to contractors to tender will normally be limited to the particular group appropriate to the value of the contract. However, when the work involved is of a simple or repetitive nature, the span of groups invited to tender may be broadened at the discretion of the head of the department responsible for the contract, without immediate regard to the value of the contract.
- 2.8.3 If a contractor's tender falls outside the limits applicable to his group, category or status, he may not be eligible for the award of the contract.
- 2.8.4 A tender submitted by a contractor who is on probation in the category(ies) of work specified in the tender invitation and who already holds the maximum number of contracts or is otherwise ineligible to tender will not be considered unless he has become eligible for the award of a further contract by the date set for the close of tender, or if this has been extended, the extended date.
- 2.8.5 A tenderer who has applied for admission or promotion to the group specified in the tender invitation or who has applied for confirmed status will be permitted to take tender documents in respect of a contract in the relevant group or status and to submit a tender. However, such a tender will not be considered unless his application for admission or promotion or confirmation is approved by the date set for the close of tender, or if this has been extended, the extended date.
- 2.8.6 The Government reserves the right of dealing with contracts demanding the application of considerable financial resources, highly specialized equipment or unusual professional or technical expertise of a high order, on the basis of single, restricted or prequalified tendering by invitation.

2.9 Award of a Contract

2.9.1 Before recommending the award of a contract, the department responsible for the contract must be satisfied that the contractor being recommended is both technically and to the best of their knowledge financially capable of successfully carrying out the contract and, all other Government contracts he may hold. Please refer to ETWB TCW No. 10/2004 for tenderer's eligibility for the award of works contracts.

- 2.9.2 In checking the financial capability of the tenderers, the department responsible for the contract is required to consult the Finance Section of Environment, Transport and Works Bureau:
 - (a) in respect of all tenderers for contracts of value exceeding \$5,000,000; and
 - (b) in cases where there is reason to doubt the financial capability of tenderers for contracts with a value of \$5,000,000 or less.

For both (a) and (b) above, it is normally only necessary to refer the three highest combined scorers for a contract to the Finance Section of Environment, Transport and Works Bureau for financial checking.

2.9.3 A contractor must meet the financial requirements for acceptance of tenders established by Environment, Transport and Works Bureau and included in **Appendix 2A** before the award of a contract. It should be noted that should the contractor fail to meet the financial requirements or to rectify the shortfall, or if the contractor's loss rate is greater than 30% under the Profitability Trend Analysis, he will not be recommended for the award of contracts in his prevailing groups.

2.10 Submission of Accounts

- 2.10.1 All contractors shall submit a copy of their unconsolidated audited accounts annually to the Secretary for the Environment, Transport and Works. In addition, in order to enable the Finance Section of Environment, Transport and Works Bureau to make a more up-to-date financial appraisal, all Group C contractors shall submit half-yearly accounts. These shall be certified by their auditors but, if this is not feasible, by the directors, partners or the sole proprietor of the company.
- 2.10.2 Contractors are required to provide additional financial information as and when required to enable the Finance Section of Environment, Transport and Works Bureau to carry out ad hoc financial assessment.

2.11 Holding Companies and Subsidiaries

2.11.1 A holding company and his subsidiaries shall be permitted to be included in the List, either in the same or different categories or groups. However, the holding company and all its subsidiaries who are included in the List shall each give an undertaking that only one company will submit a tender for a particular contract. Failure to observe this undertaking will render all related tenders null and void. The existence of a holding-subsidiary relationship shall be determined in accordance with the provisions in Section 2(4) to (8) of the Companies Ordinance (Cap. 32).

2.12 Regulating Actions

2.12.1 Please refer to Section 5 below.

2.13 Change of Company Name, Substitution and Transfer of Benefits and Obligations of Contracts

2.13.1 Please refer to Section 6 below.

2.14 Quality Management System Certification

2.14.1 Please refer to WBTC No. 13/2001 and ETWB TCW No. 13/2001A.

2.15 Changes in Company Structure

- 2.15.1 As provided in paragraph 2.1.7 above, it is the duty of the contractor to immediately inform the Secretary for the Environment, Transport and Works of any material changes of his company which may affect his listing status, which include changes in company structure. When there are changes to the partnership, the contractor shall submit updated partnership agreements to the Secretary for the Environment, Transport and Works in accordance with paragraph in 2.4.4 above. Upon receipt of the contractor's notice or update, Environment, Transport and Works Bureau will carry out vetting and, where necessary, ascertain the contractor's capability for retention. The Secretary for the Environment, Transport and Works shall have the absolute discretion on whether or not such changes shall be approved for purpose of retention on the List and shall inform the contractor in writing as soon as a decision has been made.
- 2.15.2 Changes of a limited company involving a change in his legal entity will be classified as substitution under Sub-Section 6.5 below, which is no longer allowed after 18 September 2003.
- 2.15.3 Changes from sole-proprietorship to partnership are normally allowed, provided that the sole-proprietor becomes one of the partners in the partnership, holding a majority percentage of share after the change and the newly-formed partnership meets the minimum financial and personnel requirements as set out in **Appendices 2A** and **2C**. When Environment, Transport and Works Bureau is informed of the change, the contractor shall confirm in writing whether there are any changes to the full time management and technical personnel of the contractor and, if so, specify the details of the change. Changes from sole-proprietorship to a limited company are not allowed.
- 2.15.4 Changes in partnership involving mere addition of partner(s) are normally allowed, provided that the existing partners before the addition remain as partners in the newly constituted partnership and the newly constituted partnership meets the minimum financial and personnel requirements as set out in **Appendices 2A** and **2C.** Financial assessment will be conducted to ascertain if the new composition of partnership still meets the retention requirements in the List. When Environment, Transport and Works Bureau is informed of the change, the contractor shall confirm in writing whether there are any changes to the full time management and technical personnel of the contractor and, if so, specify the details of the change.
- 2.15.5 For changes in partnership involving the death or retirement or replacement of an existing partner, a full vetting on the firm's financial, management, technical and

personnel capabilities shall be conducted afresh in accordance with the criteria specified in Appendices 2A to 2C. For the purpose of assessing the technical and management capabilities under Appendix 2B, the experience of each partner will be apportioned according to his percentage of share in the partnership. Any experience or qualification claimed by a partner by virtue of being a shareholder, director, agent or employee of a limited company will not be counted as the experience or qualification of the partner. Under normal circumstances, only the experience or qualification obtained by a partner in the capacity of a proprietor or a partner of a partnership will be counted. The partnership must collectively meet the stipulated requirements. Changes from partnership to a limited company are not allowed.

2.15.6 Any contractor who fails to comply with the retention requirements set out in this Sub-section or fails to obtain the approval of Environment, Transport and Works Bureau for the changes shall be liable to be removed from all categories of the List.

SECTION 3 RULES FOR ADMINISTRATION OF THE LIST OF APPROVED SUPPLIERS OF MATERIALS AND SPECIALIST CONTRACTORS FOR PUBLIC WORKS

3.1 General

- 3.1.1 The List of Approved Suppliers of Materials and Specialist Contractors for Public Works (the Specialist List) shall comprise contractors who are approved for carrying out public works in one or more of the categories listed in **Appendix 3A**. Some Works Departments also administer their own contractor/supplier/acceptable material lists and the concerned information can be found in ETWB web site.
- 3.1.2 Same as paragraph 2.1.2 above.
- 3.1.3 Some contractors within a category are further divided into classes according to the type of works within that particular category and groups according to the value of contracts for which they are normally eligible to tender.
- 3.1.4 Same as paragraph 2.1.4 above.
- 3.1.5 Same as paragraph 2.1.5 above.
- 3.1.6 Same as paragraph 2.1.6 above.
- 3.1.7 Same as paragraph 2.1.7 above.
- 3.1.8 Same as paragraph 2.1.8 above.

3.2 Group Tender Limits

3.2.1 Group Tender Limits are applicable to 8 categories of works in the Specialist List. They are periodically adjusted and are currently set as shown in **Appendix 3A**.

3.3 Eligibility to Tender for Term Contracts

3.3.1 Same as paragraph 2.3.2 above.

3.4 Admission

3.4.1 Same as paragraph 2.4.1 above.

- 3.4.2 Same as paragraph 2.4.2 above except that some categories in the Specialist List do not have probationary status as shown in **Appendix 3C**.
- 3.4.3 Same as paragraph 2.4.3 above except that the Managing Department shall submit a recommendation to the Secretary for the Environment, Transport and Works within three calendar months from the date of referral to the Managing Department. If the applicant does not return the completed questionnaire or the required information to the Managing Department within 6 weeks, it may mean that the applicant is not ready for admission and the Managing Department shall inform Environment, Transport and Works Bureau (Attn.: SEO(PS)) to terminate the processing of application. In addition, the financial criteria and the minimum technical and management criteria of the Specialist List are included in **Appendices 3B & 3C** respectively.
- 3.4.4 All applicants must submit a copy of his business registration certificate in his application for admission onto the Specialist List. Contractors who are required to employ top management and/or technical personnel as specified in **Appendix 3C** shall keep the Managing Department informed of any changes of such personnel. The contractor shall be removed from the Specialist List or demoted to a lower group if he fails to comply with this requirement.
- 3.4.5 Same as paragraph 2.4.5 above except that only those contractors requiring to comply with the top management and/or technical staff requirements as specified in **Appendix 3C** are required to produce evidence of their management and/or technical capabilities.
- 3.4.6 Financial checking is not required for applicants of the following 16 categories but shall be subject to review from time to time (see paragraph 3.9.2 below):
 - (a) Broadcast Reception Installation
 - (b) Catering Equipment Installation
 - (c) Fabrication of Steel Pipe Specials
 - (d) Fabrication of Unfired Pressure Vessels
 - (e) Land, Engineering and Hydrographic Survey Services
 - (f) Liquefied Petroleum Gas Installation
 - (g) Motor Vehicle Body-building and Painting
 - (h) Radio Electronics Installation
 - (i) Repair and Restoration of Historic Buildings
 - (i) Repair of Motors, Transformers and Switchgear

- (k) Soil and Rock Testing
- (l) Space Frame Systems
- (m) Survey of Government Land Pressure Receivers subject to Steam and Air Pressure (but excluding Steam Boilers)
- (n) Survey of Government Land Steam Boilers
- (o) Survey of Lifting Appliances and Lifting Gear
- (p) Uninterruptible Power Supply Installation
- 3.4.7 Same as paragraph 2.4.7 above.
- 3.4.8 Same as paragraph 2.4.8 above.

3.5 Probationary Status

- 3.5.1 Some categories of works have probationary status. Probationary contractors are eligible for the award of contracts in each of the category to which they have been admitted on probation, subject to the rules set out in **Appendices 3B & 3C** and paragraphs 3.5.2 to 3.5.4 below.
- 3.5.2 For the purpose of the rule in paragraph 3.5.1 above, a contract is considered completed when the certificate of completion of the works or the last section of the works is issued or, for term contracts, upon the issue of last completion certificate for works order.
- 3.5.3 Same as paragraph 2.5.3 above.
- 3.5.4 Same as paragraph 2.5.5 above except that the total value of contracts allowed for probationary contractors to undertake is described in the rule in paragraph 3.5.1 above.

3.6 Confirmation

3.6.1 Same as paragraph 2.6.1 above except that the length of probationary period for each category, if any, and the confirmation criteria are set out in **Appendix 3C**.

3.7 Promotion

3.7.1 Same as paragraph 2.7.1 above.

3.8 Tendering

- 3.8.1 Same as paragraph 2.8.1 above.
- 3.8.2 Same as paragraph 2.8.3 above.
- 3.8.3 Same as paragraph 2.8.4 above except that contractors should observe the Rules for Administration of the Specialist List.
- 3.8.4 Same as paragraph 2.8.5 above.
- 3.8.5 Same as paragraph 2.8.6 above.

3.9 Award of a Contract

- 3.9.1 Same as paragraph 2.9.1 above.
- 3.9.2 Same as paragraph 2.9.2 above. Financial checking is also required on the tenderers for contracts under the categories listed in paragraph 3.4.6 above if the contract is of a value exceeding \$5,000,000.
- 3.9.3 Same as paragraph 2.9.3 above except that the financial requirements of the Specialist List are included in **Appendix 3B**.

3.10 Submission of Accounts

- 3.10.1 All contractors except those under the 16 categories of works as listed in paragraph 3.4.6 above, shall submit a copy of their unconsolidated audited accounts annually to the Secretary for the Environment, Transport and Works. In respect of the contractors who are also Group C contractors on the List of Approved Contractors for Public Works, they shall also submit half-yearly accounts. The accounts shall be certified by their auditors but, if this is not feasible, by the directors, partners or the sole proprietor of the company.
- 3.10.2 Same as paragraph 2.10.2 above.

3.11 Holding Companies and Subsidiaries

3.11.1 Same as paragraph 2.11.1 above.

3.12 Regulating Actions

3.12.1 Please refer to Section 5 below.

3.13 Change of Company Name, Substitution and Transfer of Benefits and Obligations of Contracts

3.13.1 Please refer to Section 6 below.

3.14 Quality Management System Certification

3.14.1 Please refer to WBTC No. 13/2001 and ETWB TCW No. 13/2001A.

3.15 Changes in Company Structure

- 3.15.1 Same as paragraph 2.15.1 above.
- 3.15.2 Same as paragraph 2.15.2 above.
- 3.15.3 Same as paragraph 2.15.3 above except that the financial and personnel requirements are set out in **Appendices 3B** and **3C** respectively.
- 3.15.4 Same as paragraph 2.15.4 above except that the financial, management & technical and personnel requirements are set out in **Appendices 3B** to **3C**.
- 3.15.5 Same as paragraph 2.15.5 above.

SECTION 4 REPORT ON CONTRACTORS'PERFORMANCE

4.1 General

4.1.1 The standard proforma of the Report on Contractor's Performance is attached at **Appendix 4A**. The report should be completed in accordance with the Guidance Notes attached at **Appendix 4B**. The category codes are shown in **Appendix 4C**.

4.2 Central Record

- 4.2.1 A Central Record System is maintained in Environment, Transport and Works Bureau to monitor the workload, performance and financial status of contractors entering into contracts with Government for capital works including specialist works, term and maintenance contracts and specialist suppliers. This Central Record is maintained by SEO(PS), Environment, Transport and Works Bureau and is based on the Reports on Contractors' Performance compiled by the Works Departments on all current contracts. Finance Section of Environment, Transport and Works Bureau also assists in the maintenance of the Central Record by reference to the information received from the tender boards and departments.
- 4.2.2 Reports held by Environment, Transport and Works Bureau that are more than 5 years old will be destroyed provided that 10 subsequent reports are held on the contractors for the same category of works. Copies of reports held by a department may be retained for as long as it is deemed necessary by that department. However it should be noted that for purposes of Audit, the copies of reports must be retained for at least 7 years.
- 4.2.3 The Central Record of the Reports on Contractors' Performance is computerised to enable these to be more readily available for tender assessments and other purposes.

4.3 Managing Department

- 4.3.1 Please refer to paragraphs 2.1.2 and 3.1.2 above for the role of the Managing Department.
- 4.3.2 Managing Departments shall receive copies of all Adverse reports on contractors in the relevant category. If, after comparing all the reports on a particular contractor in the category, the Managing Department has reason to doubt the assessment of any individual report, it may request the Reporting Department to review the report.

4.4 Reporting Department

- 4.4.1 The department which controls a contract and prepares the reports on the contractor's performance on that contract is referred to as the Reporting Department.
- 4.4.2 After having given the reports appropriate consideration, the Reporting Departments shall send the copies of all Adverse reports to SEO(PS), Environment, Transport and Works Bureau for inclusion in the Central Record.
- 4.4.3 Where the Reporting Department is not also the Managing Department, it is important that the Managing Department is fully aware of the existence of the contract and is kept fully informed of the contractor's performance. The Reporting Department shall copy the Letter of Acceptance and all Adverse reports on the contractor's performance to the Managing Department. Where the contractor was required to be in more than one category or was required to be in one of two or more categories and is in more than one of the relevant categories, copies of the Letter of Acceptance and the reports shall be sent to all the relevant Managing Departments.
- 4.4.4 In addition, Reporting Departments shall send copies of all Adverse reports to all other Works Departments and Housing Authority. If any department requires further details with respect to an Adverse report, that department shall approach the Reporting Department direct who will respond direct, copying correspondence to the relevant Managing Department.

4.5 Reports on Contractors' Performance

- 4.5.1 Regular reports on contractor's performance are required for all current contracts. Domestic sub-contractors and minor works will not be included in the performance reporting system of Environment, Transport and Works Bureau, but departments may maintain their own records of sub-contractors' performance and if necessary, recommend to ETWB for any follow up action in cases of poor performance.
- 4.5.2 Subject to paragraphs 4.5.4 and 4.5.5 below, the reports should normally be quarterly from the commencement of the Works until the issue of the Maintenance Certificate or the Defects Liability Certificate, or until completion of all Works Orders in the case of term contracts.
- 4.5.3 For reporting of contractors' performance during the maintenance or defects liability periods, a minimum of five out of the eleven major aspects of performance (including Attitude to claims) shall be assessed and rated. It should be noted that the performance to be reported during such periods would mainly cover performance of outstanding works and repair or rectification of defects.
- 4.5.4 After the Maintenance Certificate or the Defects Liability Certificate has been issued, quarterly reports are no longer required. Instead, except for term contracts for which no further reports are required, a report on the contractor's performance should be made upon issue of the final payment certificate (which will cover the resolution of claims).

- 4.5.5 If a contractor's overall performance is poor and close monitoring is desirable, additional six-weekly intervening reports between the normal reporting periods may be made by the Reporting Officer provided that the contractor shall be given written notice of not less than 7 working days before the next reporting date. The contractor will be informed when the intervening reports are no longer required.
- 4.5.6 The reports should be prepared by the Architect's/Engineer's Representative and be agreed by the Architect/Engineer. Where a consultant is named as the Architect/Engineer for the contract, the report should be endorsed by the appropriate officer (D1 or above) of the Reporting Department.
- 4.5.7 The circulation of reports and correspondence relating to reports shall be classified as Restricted (Administration).
- 4.5.8 The amendments made to Sub-section 4.5 in the Revision B shall not apply to existing contracts where the Completion Certificate has been issued on or before the effective date of the Revision B.

4.6 Review of Reports on Contractors' Performance

4.6.1 General

- (a) In order to ensure that reports on contractors' performance are properly reviewed and considered, particularly when action is likely to be taken as a result of poor performance, departments shall establish, where these do not already exist, two Contractors' Performance Review Committees, namely Reporting Review Committee and Managing Review Committee.
- (b) The Reporting Review Committee shall be established within the Reporting Department which will review the performance of all the contractors undertaking work for the department. It will endorse/amend the Architect's/Engineer's assessment and forward the reports together with recommendations when appropriate, to the secretary of the relevant Managing Review Committee. The Managing Review Committee shall be established within the Managing Department which will review the performance of those contractors in the relevant category with respect to all contracts in this category.
- (c) Where a Managing Department employs only contractors from the categories it manages, it may combine the two committees into a single Reporting/Managing Review Committee. However, if other departments employ contractors from the categories the Managing Department manages, its Reporting/Managing Review Committee must meet at the time for Managing Review Committees (see later) so that Reporting Departments have time to forward copies of their reports.

(d) Where a department establishes Reporting Review Committees for one or more of its Offices, rather than a departmental Reporting Review Committee, the Office Reporting Review Committees shall send copies of the report and recommendations direct to the relevant Managing Review Committee. Reports with recommendations may be routed through departmental headquarters if required by the department.

4.6.2 <u>Reporting Review Committee</u>

(a) Membership shall be: - Chairman: a D2 officer or above

Secretary: Senior professional officer or above

Members: at least a D1 officer or above and one other officer of at least professional rank

(b) Functions: -

- (i) The Committee should preferably review the reports on all contracts under its jurisdiction. However, this may not be practicable for some departments, who have a large number of small contracts. The Committee should, however, review and endorse/amend at least all Adverse and borderline reports. These shall be brought to the Committee's attention by the secretary. The Chairman may authorise the secretary to endorse all other reports on his behalf.
- (ii) The Architect/Engineer may be in attendance as the Committee requires and should normally be so when an Adverse report has been given. In addition, when the Architect's/Engineer's Representative anticipates, towards the end of the reporting period, that he will give the contractor an Adverse report, he must advise the officer who will agree his report. The officer concerned should take particular measures, which would normally include visiting the site, to satisfy himself that the anticipated assessment is correct.
- (iii) The Committee shall decide which reports are to be confirmed as Adverse reports and endorsed accordingly by the Chairman. The reasons for amending the Architect's/Engineer's assessment must, when applicable, be recorded on the report. In case the Committee does not accept the Architect's/Engineer's assessment, the remarks by the Architect/Engineer, or his representative, will still be stored in the computerised Central Record in Environment, Transport and Works Bureau.
- (iv) With respect to Adverse reports, the committee shall decide, in consultation with the Architect/Engineer, what action should be taken or recommended to the Managing Department. In any event, the Chairman shall write to the contractor concerned advising him that the report is Adverse and warning him of the possible consequences.

- (v) The secretary shall send copies of all Adverse reports, duly endorsed, to SEO(PS), Environment, Transport and Works Bureau and to the secretaries of the appropriate Managing Review Committee together with details of any action being taken as a result of Adverse reports and/or any recommendations for suspensions (voluntary or mandatory), downgrading or deletions. In addition, the secretary will provide the name of the member of the Committee the relevant Managing Review Committee may contact with respect to each Adverse report. Where downgrading or deletion is being recommended, the member of the Committee named should attend the meeting of the relevant Managing Review Committee when the contractor concerned is being considered.
- (vi) When an interview with the contractor by the Reporting Department is considered necessary as a result of Adverse reports, the Chairman or his representative will interview the contractor.
- (vii) The Chairman shall keep the relevant Managing Review Committee fully informed of interviews held and any action taken.

4.6.3 <u>Managing Review Committee</u>

(a) Membership shall be: - Chairman : D3 or above

Secretary : Senior professional officer or above

Members : at least a D2 officer and one other

officer of at least senior professional

rank

- (b) Functions: -
 - (i) The secretary shall maintain a record of all reports on contractors in the relevant categories and lists.
 - (ii) The Committee shall review the overall performance of each contractor who receives an Adverse report by referring to all the current reports on that contractor's performance in the relevant category or list. After considering the action being taken and the recommendations made by the Reporting Review Committee(s), the Committee shall decide what action it considers appropriate and recommend accordingly.
 - (iii) For mandatory suspension, downgrading or deletion, the Director of the Managing Department, or the Chairman of the Committee or the Deputy Director, if the Director so wishes, should interview the contractor prior to a recommendation being made to Environment, Transport and Works Bureau. The Architect/Engineer, together with others considered necessary by the Director of the Managing Department, should attend the interview. Where a consultant is the Architect/Engineer, the officer from the Reporting Department who endorsed the report should also attend the interview.

- (iv) For voluntary suspension, the Chairman of the relevant Reporting Review Committee should interview the contractor if requested to do so by the Director of the Managing Department. The contractor shall send written confirmation of his acceptance of voluntary suspension to the Director of the Managing Department who will circulate this confirmation to all Works Departments, Housing Authority and Environment, Transport and Works Bureau.
- (v) As soon as the Committee has considered the reports, the secretary shall forward to Environment, Transport and Works Bureau the minutes of the Committee's consideration of Adverse reports.

4.6.4 Timetable for Reporting on Contractors' Performance

- (a) Subject to paragraphs 4.5.4 and 4.5.5 above, the reporting date shall normally be the last day of February, May, August and November.
- (b) On or before the third working day after the reporting date (Saturdays not being counted as working days), the Reporting Officer shall prepare and send the soft copy of the performance report together with a duly signed hard copy to the secretary of the Reporting Review Committee for review and endorsement.
- (c) At the same time, the contractor shall be sent an advance copy of both Parts I and II of the Report on Contractor's Performance, after agreement by the Engineer/Architect or endorsement by the Chief Engineer/Architect in the case of consultant administered projects. The report shall be sent to the contractor's head office by fax or by hand with a caveat that it will be subject to endorsement by the Chairman of the Reporting Review Committee. Where the report is subsequently amended by the Chairman of the Reporting Review Committee, the contractor shall be notified accordingly.
- (d) In the event of disagreement with the grading in the performance report, the contractor should notify the Reporting Review Committee on or before the 6th working day after the reporting date (Saturdays not being counted as working days) and submit written representations to the Reporting Review Committee in accordance with sub-paragraph (f) below.
- (e) On or before the thirteenth working day after the reporting date (Saturdays not being counted as working days), the Reporting Review Committee shall complete the review on all the reports except those where the contractors have indicated disagreements in accordance with sub-paragraph (d) above and, if the Reporting Review Committee does not propose any alterations to the performance report, it shall send the reviewed Adverse reports, together with details of action being taken and recommendation, to reach the secretary of the relevant Managing Review Committee, with copies to Environment, Transport and Works Bureau

(Attn: SEO(PS)), other Works Departments and Housing Authority. Simultaneously, the Reporting Department shall arrange to upload all the performance reports to the Contractor Management Information System (CMIS) and dispatch written notification to the Managing Department and Environment, Transport and Works Bureau (Attn: SEO(PS)) with all details of the contract number, contractor name, the contractor's classification and remarks (stating whether the report is Adverse or Not Adverse, and other remarks, if any) of each of the performance reports uploaded to the CMIS on or before the twenty-second working day after the reporting date (Saturdays not being counted as working days). Except for Adverse reports, hard copies of the performance reports need not be sent to the Managing Department and Environment, Transport and Works Bureau.

- (f) Subsequent to notifying the Reporting Review Committee of its disagreement with the grading in the performance report in accordance with sub-paragraph (d) above, the contractor should submit written representations to the Reporting Review Committee for a review of the grading by fax or by hand on or before the sixteenth working day after the reporting date (Saturdays not being counted as working days). The Reporting Review Committee shall inform the contractor in writing as soon as a decision has been made.
- (g) If the Reporting Review Committee intends to alter any grades in the performance report, it shall notify the contractor its intention in writing on or before the fourteenth working day (Saturdays not being counted as working days). In the event of disagreement with such proposed alterations, the contractor should notify the Reporting Review Committee on or before the sixteenth working day (Saturdays not being counted as working days) and submit written representations to the Reporting Review Committee for a review of the grading by fax or by hand on or before the twenty-first working day (Saturdays not being counted as working days). The Reporting Review Committee shall inform the contractor in writing as soon as a decision has been made.
- On or before the twenty-sixth working day after the reporting date (Saturdays (h) not being counted as working days), the Reporting Review Committee shall complete the review on the disagreement of the contractor with the grading in the performance report or its proposed alterations, and send the reviewed reports, together with details of action being taken and recommendation, to reach the secretary of the relevant Managing Review Committee, with copies to Environment, Transport and Works Bureau (Attn: SEO(PS)), other Works Departments and Housing Authority. Simultaneously, the Reporting Department shall arrange to upload all the performance reports to the CMIS and dispatch written notification to the Managing Department and Environment, Transport and Works Bureau (Attn: SEO(PS)) with all details of the contract number, contractor name, the contractor's classification and remarks (stating whether the report is Adverse or Not Adverse, and other remarks, if any) of each of the performance reports uploaded to the

CMIS on or before the thirty-fifth working day after the reporting date (Saturdays not being counted as working days). Except for Adverse reports, hard copies of the performance reports need not be sent to the Managing Department and Environment, Transport and Works Bureau. The Reporting Review Committee shall inform the contractor in writing as soon as a decision has been made.

- (i) On receipt of the reviewed Adverse reports from the Reporting Review Committee, the Managing Review Committee shall conduct further review on such reports, the actions being taken and the recommendations made by the Reporting Review Committee. The minutes of the Managing Review Committee meeting and copies of the reports (where applicable) shall then be prepared and dispatched to Environment, Transport and Works Bureau (Attn: SEO(PS)) on or before the thirty-fifth working day after the reporting day (Saturdays not being counted as working days).
- (j) When additional six-weekly intervening reports between the normal reporting periods are required pursuant to sub-paragraph 5.4.5 (b) (iv) of Section 5, the Reporting Officer shall proceed with such reporting once the notification has been sent in accordance with paragraph 4.5.5 even if the review result of the Managing Review Committee is not yet available.
- (k) When reports are being made for periods with reporting dates different to the normal quarterly reporting dates, the Architect/Engineer should complete the report within the time frame mentioned in sub-paragraph 4.6.4(b) above. However, the Review Committees shall exercise discretion in scheduling the reviews of reports as they deem appropriate to the circumstances, i.e. either immediately or as part of the normal review meeting.
- (l) It is recommended that Managing Review Committees should fix the dates of their normal review meetings at least twelve months in advance and advise all Reporting Review Committees such that all appropriate representatives will be made available to attend Managing Review Committee meetings if required.
- (m) The above timetable is illustrated in **Appendix 4D**.

SECTION 5 REGULATING ACTIONS

5.1 General

- 5.1.1 The List, Specialist List and the associated regulatory regime are put in place to ensure that certain standards of financial capability, expertise, management and safety are maintained by the contractors carrying out Government works. If doubts arise about the ability of a contractor to meet the minimum standards generally or for a particular class of contracts, it is appropriate that he is not allowed to tender for any new work until he can demonstrate that he can meet the required standard.
- 5.1.2 The Secretary for the Environment, Transport and Works reserves the right to remove any contractor from the List and/or the Specialist List or take other regulating action against a contractor such as suspension, or where applicable, downgrading to probationary status or demotion to a lower group, in respect of all or any of the works categories he is in. Before deciding on such action, a contractor will be given adequate warning of the action proposed and advised of the reasons for it and given the opportunity to present his views of the matter.
- 5.1.3 Circumstances which may lead to the taking of regulating actions include, but are not limited to: -
 - (i) unsatisfactory performance;
 - (ii) failure to submit a valid competitive tender for a period of three years;
 - (iii) failure to submit accounts or meet the financial criteria within the prescribed time;
 - (iv) failure to answer queries or provide information relevant to the listing status of a contractor on the List and/or the Specialist List within the prescribed time;
 - (v) misconduct or suspected misconduct;
 - (vi) winding-up, bankruptcy or other financial problems;
 - (vii) poor site safety record;
 - (viii) failure or refusal to implement an accepted tender;
 - (ix) poor environmental performance;
 - (x) court convictions, such as contravention of site safety legislation and Employment Ordinance and employment of illegal workers;

- (xi) failure to employ the minimum number of full time management and technical personnel;
- (xii) violation of laws;
- (xiii) poor integrity of his employees, agents and sub-contractors in relation to any public works contract unless the misconduct is not within the control of the contractor;
- (xiv) public interest;
- (xv) public safety and public health;
- (xvi) serious or suspected serious poor performance or other serious causes in any public or private sector works contract;
- (xvii) failure to comply with any of the Rules for Administration of the List or the Specialist List giving rise to reasonable suspicions as to the capability or integrity of the contractor.
- 5.1.4 The following Sub-sections set out the guidelines for administration and the circumstances under which regulating action against contractors may be warranted. They apply to contractors/suppliers on both the List and the Specialist List. In the event that special circumstances of a particular case arose which warrant taking of regulating action but do not fit into any of the guidelines, the Secretary for the Environment, Transport and Works may nonetheless take regulating action in the particular case as she deems proper.

5.2 Removal, Suspension, Downgrading or Demotion of Contractors

- 5.2.1 Letters notifying contractors of their removal, suspension, downgrading or demotion from the List and/or the Specialist List will be issued only by Environment, Transport and Works Bureau and be signed by the Deputy Secretary for the Environment, Transport and Works (Works)2.
- 5.2.2 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 public works, his tender will not be considered unless the suspension is lifted by the Works Department or the Environment, Transport and Works Bureau by the date set for the close of tender, or if this has been extended, the extended date. 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 public works at the date of tender invitation but subsequently revokes the voluntary suspension without agreement in writing from either the Works Department or Environment, Transport and Works Bureau, his tender will not be considered.

- 5.2.3 The following guidelines shall be adopted by heads of departments in deciding whether to recommend to Environment, Transport and Works Bureau that a contractor on the List and/or the Specialist List should be removed, suspended, downgraded or demoted. Such a recommendation, which shall be personally endorsed by the Director, Deputy Director or an equivalent D3 officer of the department concerned, will normally be initiated by the Managing Department of the relevant category of the List and/or the Specialist List after consultation with any other departments which may be affected by the action proposed. The guidelines shall be treated as indicating the normal sanction to be imposed in given circumstances. It is open to heads of departments to recommend a more severe or less stringent action if particular circumstances warrant it.
 - (a) Circumstances warranting removal from all categories in which the contractor is listed
 - (i) Misconduct.
 - (ii) Complicity in the misconduct of an employee, agent or sub-contractor.
 - (iii) Removal by the Registered Contractors' Disciplinary Board from the Contractors' Register maintained under the Buildings Ordinance. If a contractor is disciplined by the Registered Contractors' Disciplinary Board, the Director of Buildings shall inform Environment, Transport and Works Bureau so that consideration may be given to the imposition of an appropriate penalty (removal, suspension, downgrading or demotion) in respect of the contractor's position on the List and/or the Specialist List. When a contractor, who is also on the Contractors' Register kept by the Building Authority, is removed from the List and/or the Specialist List for misconduct, Environment, Transport and Works Bureau may refer the case to the Building Authority who may then decide under the Buildings Ordinance whether or not to refer the case to the Registered Contractors' Disciplinary Board.
 - (iv) Bankruptcy and winding up of business.
 - (v) Poor performance or other serious causes which is/are considered by the Secretary for the Environment, Transport and Works as serious in any public or private sector works contract.
 - (b) Circumstances warranting removal from a particular category
 - (i) Failure to submit a competitive tender within a period of three years in any category despite being eligible to do so, or submission of non-conforming tenders on three or more occasions within a period of three years in any category; provided that such practice gives rise to reasonable suspicions as to the capability or integrity of the contractor concerned. For the purpose of this sub-paragraph, tenders withdrawn after the tender closing date shall be considered as non-submission of tender and where the provision of certain information is an "essential requirement" of a tender, the tender without giving such information or

giving incomplete information stipulated as essential requirement shall be considered as non-conforming. A competitive tender is defined as a conforming tender which is capable of being accepted under the Government's procurement guidelines, rules and procedures and the tender price does not exceed 25% of the average tender price of all tenders received under the tender exercise. Any tender which is non-conforming or is not capable of being accepted under the Government's procurement guidelines, rules and procedures shall not be considered as a competitive tender. A warning letter shall be sent by the Managing Department, copied to Environment, Transport and Works Bureau at least six months but not more than one year before the expiry of the three-year period, to any contractors who appear likely to fall into this situation. If, at the expiry of the period, no tenders have been submitted, a further letter seeking explanation shall be sent. Managing Departments should take all reasonable explanations into account before recommending removal. A contractor who tenders for a project open to contractors in more than one category shall be credited with having tendered in each of those eligible categories for which he is listed. Records of contractors' tenders, whether accepted or not, are to be maintained by the Managing Department of the When a department other than the Managing relevant category. Department calls tenders in a category, the tenders shall be reported to the Managing Department after acceptance by the Central Tender Board or Public Works Tender Board.

- (ii) Withdrawal of tenders in a category within the tender validity period therefor on two or more occasions within a 12-month period as stipulated under Sub-section 5.13 below.
- (iii) Poor site safety record in a category.
- (iv) Poor performance in a category, normally but not necessarily on more than one contract.
- (v) Failure to obtain Quality Management System certification after having been suspended for three years (including voluntary and mandatory suspension).
- (vi) Failure to submit a tender in a category within a period of three years despite being eligible to do so.
- (vii) Failure/continued failure to satisfy requirements on the management and technical capability after having been suspended from tendering in a particular category under sub-paragraph 5.2.3(d)(v) below.

Removal or suspension from the List and/or the Specialist List or from a particular category thereof will not normally prohibit a contractor from acting as a sub-contractor on a public works project, provided that the Reporting

Department is satisfied that the contractor is suitable for acting as the sub-contractor for the public works project in question.

- (c) <u>Circumstances warranting mandatory suspension from tendering in all categories</u>
 (A time limit for review to be set in all cases but should not be longer than six months)
 - (i) Suspected misconduct.
 - (ii) Indications of cash flow problems (care must be taken that suspension on these grounds will not aggravate the problems).
 - (iii) Poor performance, where it is desirable to ensure that the contractor completes his current commitments before undertaking further projects. Guidelines for monitoring of performance in Sub-section 5.4 below should be followed prior to a recommendation for suspension.
 - (iv) Suspected serious poor performance or other serious causes in any public or private sector works contract.
 - (v) Poor environmental protection record.
 - (vi) Poor site safety record.
- (d) <u>Circumstances warranting mandatory suspension from tendering in a particular category (A time limit for review to be set in all cases but should not be longer than six months)</u>
 - (i) Poor performance in a contract. Guidelines for monitoring of performance given in Sub-section 5.4 below should be followed prior to a recommendation for suspension. While poor performance in a particular category will generally warrant suspension only in that category of work, departments may consider recommending to Environment, Transport and Works Bureau for suspension to be extended to other categories if the contractor repeatedly shows poor performance in aspects, such as poor management ability, which are likely to adversely affect other categories.
 - (ii) Poor site safety record in a category.
 - (iii) Failure to comply with the provisions for employment of Technician Apprentices and Building and Civil Engineering graduates as required.
 - (iv) Failure to comply with the provisions for mandatory employment of Qualified Tradesmen and Intermediate Tradesmen as required.

- (v) Failure to submit information and/or satisfy requirements on the management and technical capability.
- (vi) Failure to obtain Quality Management System certification as required.
- (vii) Withdrawal of tenders in a category within the tender validity period therefor on two or more occasions within a 36-month period as stipulated under Sub-section 5.13 below.
- (viii) Failure to submit Sub-contractor Management Plans as required.
- (ix) Failure to comply with the provisions for employment of sub-contractors registered from the Voluntary Sub-contractor Registration Scheme as required.
- (e) <u>Circumstances warranting downgrading or demotion in a particular category</u>
 - (i) Poor performance, normally but not necessarily on more than one contract (in the case of probationary contractors in the lowest groups, this will normally warrant removal from the List and/or the Specialist List).
 - (ii) Failure/continued failure to satisfy the requirements on the management and technical capability after having been suspended from tendering in a particular category under sub-paragraph 5.2.3(d)(v) above but the management and technical capability satisfies the requirements of a probationary contractor in the same group or a lower group within a specified category.
- 5.2.4 In determining for the purpose of paragraphs 5.1.3(v), 5.2.3(a)(i) and 5.2.3(c)(i) whether a contractor has committed acts of misconduct or suspected misconduct, the acts or omissions of:
 - (a) a director of a company (incorporated or unincorporated) or a partner in a partnership or a participant/shareholder of a joint venture;
 - (b) any person who, under the immediate authority of the board of directors, exercises managerial functions; and
 - (c) any employees, agents or sub-contractors of the contractor including persons referred to in (a) or (b) above shall be deemed to be the acts or omissions of the contractor unless the contractor has no knowledge (actual or implied) or ought not to have known or not being reckless as to the misconduct or suspected misconduct.
- 5.2.5 For the purpose of paragraphs 5.1.3(v), 5.2.3(a)(i), 5.2.3(a)(ii) and 5.2.3(c)(i), "misconduct" means any unlawful behaviour involving corruption or fraud or breach of faith whether or not the person charged with an offence is convicted for offence involving the

unlawful behaviour but a conviction of a criminal offence shall be conclusive for the requirement of misconduct. "Suspected misconduct" shall be construed accordingly but if the person is charged with any offence involving corruption, fraud or breach of faith, it shall be conclusive for the requirement of suspected misconduct.

- 5.2.6 The Secretary for the Environment, Transport and Works may additionally initiate regulating actions on contractors under the following circumstances:
 - (a) Persistent convictions pertaining to site safety and other construction activities;
 - (b) Repeated failure to submit accounts and supplementary information and satisfy retention requirements in force at the time;
 - (c) Be convicted of illegal worker offences for more than two times within a rolling 12-month period;
 - (d) Contravention of the Employment Ordinance.
- 5.2.7 The measures referred to Sub-section 5.2 are cumulative and not mutually exclusive. The Secretary for the Environment, Transport and Works may take one or more measures where the circumstances of the case warrant so.

5.3 Uplifting of Mandatory Suspension

5.3.1 Contractors suspended on a mandatory basis by Environment, Transport and Works Bureau for whatever reason are required to meet the normal entry criteria including submission of the latest audited or management accounts where appropriate for a financial check before consideration can be given to their reinstatement on the List and/or the Specialist List. Failure to meet these requirements may result in downgrading to probationary status, demotion to a lower group or removal from a category of the List and/or the Specialist List.

5.4 Contractors Given Adverse Reports on Performance

- 5.4.1 The purpose of removal, suspension, downgrading or demotion of contractors from the List and/or the Specialist List following an Adverse report is to ensure that: -
 - (a) only suitable competent contractors are allowed to tender for contracts;
 - (b) pressure is put on the contractor to improve his performance; and
 - (c) contractors are all treated alike: firmly, but with consistency and fairness.
- 5.4.2 Please note sub-paragraph 4.6.4(c) above for the requirement of sending an advance copy of the Report on Contractor's Performance to the contractor.
- 5.4.3 For tenders invited without the exact category of work having been specified, the department managing the contract will act as the Managing Department for the purpose of performance reporting and taking appropriate regulating actions.

- 5.4.4 Government must act fairly when taking regulating actions. Contractors must, therefore, be provided with the gist of Government's case and be given adequate warning of proposed actions so that they may have the opportunity to present their view of the matter. Full consideration must be given to any points raised by contractors before action is taken.
- 5.4.5 Because the circumstances of contracts and contractors vary greatly, the following actions to be taken for consecutive Adverse reports are not rigid requirements, but if they are not followed, written justification is required on file.

(a) 1st Adverse report: -

- (i) Warning Letter The Chairman of the Reporting Review Committee (RRC) shall write on behalf of his Director to the contractor within two weeks of the reporting date advising him that the report is Adverse and the reasons for the Adverse report, and warning him of the need to improve (standard letter at **Appendix 5A**). The Managing Department will be advised of the same.
- (ii) Interview The Chairman of the RRC or his representative shall interview the contractor within three weeks of the reporting date to discuss the shortcomings in his performance, the seriousness of the situation, and the need to suspend him from further tendering should there be a consecutive Adverse report. The Chairman shall write on behalf of his Director to the contractor confirming the points made. It is particularly important to include the warning of possible suspension in the letter to the contractor. The Managing Department will be advised of the same.

(b) 2nd consecutive Adverse report: -

(i) Voluntary Suspension - The Chairman of the RRC or his representative shall write to the Managing Department for approval to interview the contractor with the aim of seeking the contractor's agreement to voluntary suspension i.e. to refrain from tendering. Upon receipt of the approval from the Managing Department, the Chairman of the RRC will then interview the contractor explaining that his continuing poor performance requires action to protect Government's interests by ensuring that the contractor is not awarded any further contracts in the category until confidence in his performance is restored. The Chairman of the RRC will invite the contractor to agree to voluntary suspension and to confirm this in writing to the Director of the Managing Department. The contractor should be warned that failure to agree could lead to mandatory suspension which will result in gazetting of the suspension. The Chairman should also confirm other points made at the interview and warn the contractor that at the end of the contract his performance will be assessed and if the overall assessment is Adverse, he may be downgraded, demoted or removed. He is also to be informed that he will be placed on a six weekly reporting schedule.

- (ii) On receipt of confirmation of voluntary suspension in writing, the Director of the Managing Department will circulate this confirmation to all Works Departments, Housing Authority, Environment, Transport and Works Bureau and Central and Public Works Tender Boards under restricted cover. The start date of the voluntary suspension shall be the date a contractor agrees to the suspension in writing or the date the Managing Department receives the written confirmation from the contractor concerned, whichever is the later. The period of voluntary suspension should continue until the suspension has been uplifted by the Managing Department. Uplifting of the voluntary suspension should be considered when the contractor has performed satisfactorily for a minimum of six months or until and in any event an overall review of the situation should be carried out at the first quarterly review after substantial completion/satisfactory completion of the contract (or de facto completion where certificates of substantial completion/satisfactory completion have not been issued). If voluntary suspension was made during the maintenance period or defects liability period, uplifting of the voluntary suspension should be considered when the contractor has performed satisfactorily for a minimum period of three months. The Chairman of the RRC shall write to the Director of the Managing Department recommending uplifting of voluntary suspension who shall then consult all other Works Departments to ensure that there are no objections to the uplifting. Confirmation of the uplifting of suspension shall then be made by the Managing Department to all Works Departments, Housing Authority, Environment, Transport and Works Bureau and the Central and Public Works Tender Boards under restricted cover.
- If the contractor does not agree to voluntary suspension, the Chairman of (iii) the RRC shall write to the Managing Department recommending that the contractor be suspended on a mandatory basis. If the Managing Department agrees to the recommendation, a proposal for mandatory suspension of the contractor shall be made to Environment, Transport and Works Bureau and copied to the RRC. The Managing Department should only disagree with the recommendation of the Chairman of the RRC if there is a possibility that suspension of the contractor could adversely affect other contracts held by the contractor. The Chairman of the Managing Review Committee (MRC) shall write under restricted cover to all Works Departments, Housing Authority, Environment, Transport and Works Bureau and secretaries of the Central and Public Works Tender Boards advising why the recommendation for mandatory suspension of the contractor has not been supported. suspension of a contractor will be actioned by Environment, Transport and Works Bureau and published in both the Government Gazette and ETWB web site.
- (iv) Six Weekly Reporting This shall be introduced after the second consecutive Adverse quarterly report and continued until a Not Adverse report is received. Thereafter normal quarterly reports apply. If the six

weekly reports on a contract have been discontinued and the contractor subsequently receives a further Adverse report, the six weekly reports should be immediately reintroduced until a Not Adverse report is received. Six weekly reports carry the same weight as quarterly reports and should be completed and processed in exactly the same manner. The RRC should normally review the six weekly reports shortly after they have been received, to ensure the effectiveness of the more intense monitoring system.

(c) Continuing Adverse reports: -

Six weekly reporting should continue. Further interviews with the contractor shall be at the discretion of the Reporting and Managing Department.

(d) End of contract: -

At the first quarterly review after substantial completion/satisfactory completion of the contract (or de facto completion where certificates of substantial completion/satisfactory completion have not been issued) for which any Adverse report has been received, an overall review should be carried out by the RRC to decide whether or not a recommendation should be made to downgrade, demote or remove the contractor from the List and/or the Specialist List. The Managing Department should be informed of the RRC decision.

- (e) More than one contract receiving Adverse reports in a category: -
 - (i) If a contractor receives 1st Adverse reports simultaneously in several contracts in a category, the Managing Department may consider stronger regulating action than those recommended in sub-paragraph 5.4.5(a) above.
 - (ii) At the stage when voluntary suspension is proposed, if the contractor has Adverse reports in contracts under two Reporting Departments, but in the same category, the Director of the Managing Department may decide to interview the contractor personally.

(f) Adverse reports in several categories: -

At the stage when voluntary suspension is proposed, within the general framework of the guidelines, Managing Departments of the several categories involved should agree as to who should interview the contractor and to which category or categories the suspension should apply. If this cannot be resolved, the matter should be referred to Environment, Transport and Works Bureau for a decision.

5.4.6 Departments may consider recommending suspension to be extended to other categories if a contractor consistently shows poor performance in aspects, such as poor management ability, which are likely to affect other categories of work. In such cases, the Chairman of the RRC shall write to the Chairman of the MRC recommending suspension in

more than one category. The Chairman of the MRC will assess the reasons given by the RRC and make a follow-up recommendation to Environment, Transport and Works Bureau.

- 5.4.7 Notwithstanding the provisions given in paragraph 5.4.5 above for consecutive Adverse reports, the RRC should consider recommending suspension in cases of repeated Adverse reports which are not consecutive. The procedure shall be similar to that set out in sub-paragraph 5.4.5(c) above.
- 5.4.8 In the case of contracts being carried out by joint venture, partnerships or consortia, the regulating actions arising from poor performance on a contract shall be applied equally to all individual members of the joint venture.

5.5 Non-submission of Accounts and Information

- 5.5.1 Failure to submit accounts, answer queries or provide information within the prescribed time will warrant: -
 - (a) mandatory suspension from tendering; or
 - (b) removal from the List and/or the Specialist List.
- 5.5.2 Contractors failing to submit accounts within the following time limits shall be suspended automatically from tendering.

Submission	Contractors	Time Limit
Annual Audited Accounts	Contractors on the List of Approved Contractors for Public Works - Groups A, B & C	6 months after the end of the accounting period
	Contractors/Suppliers on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works	6 months after the end of the accounting period
Half-yearly Management Accounts	Contractors on the List of Approved Contractors for Public Works - Group C	6 months after the end of the accounting period

- 5.5.3 Within two months but not less than one month before the prescribed time limit, a letter shall be sent by registered post to contractors to warn them that they will be suspended unless accounts are submitted within the time limit. Under no circumstances would extension of the due date be granted.
- 5.5.4 A contractor suspended under paragraph 5.5.2 above will not be reinstated automatically upon submission of accounts. The reinstatement shall only be considered after

the contractor has submitted all his omitted accounts and has proved to the satisfaction of the Finance Section of Environment, Transport and Works Bureau that his financial position meets all the criteria appropriate to his group and status.

- 5.5.5 If a contractor ignores the requirements to answer queries or provide information within the specified time for financial assessment, he shall be suspended from tendering automatically until he has proved that his financial position meets all the criteria appropriate to his group and status.
- 5.5.6 Should the contractor fail to submit two consecutive audited accounts within 6 months after the end of the last accounting period, or be suspended for one full year under paragraph 5.5.2 or 5.5.5 above, and yet no actions have been taken by him in good faith to uplift himself from the suspension status, he shall be removed automatically from the List and/or the Specialist List.
- 5.5.7 These procedures will be applied by Environment, Transport and Works Bureau. Works Departments will not be consulted prior to taking action but will immediately be informed.
- 5.5.8 If any member of a joint venture or consortium is suspended from tendering under these procedures, then the joint venture or consortium shall be ineligible to tender.

5.6 Failure to Meet the Financial Criteria

- 5.6.1 Failure to meet the financial criteria or requirements as established by Environment, Transport and Works Bureau within the prescribed time will warrant:-
 - (a) mandatory suspension from tendering (a time limit for review to be set and the contractor will be subject to a financial vetting before being considered for reinstatement); or
 - (b) downgrading to probationary status or demotion to a lower group of the List and/or the Specialist List; or
 - (c) removal from the List and/or the Specialist List.
- 5.6.2 If a contractor ignores the requirements to make good the shortfall in employed and/or working capital within the specified time for retention purpose, he shall be suspended automatically from tendering for a minimum period of six months or until the shortfall is rectified, whichever is later.
- 5.6.3 Should the contractor fail to make good the shortfall within one year from suspension, he shall be removed automatically from the List and/or the Specialist List.
- 5.6.4 The following regulating actions shall be applicable to the contractors on the List and/or the Specialist List and be imposed against those contractors incurring substantial loss in their business: -

- (a) If any contractor suffers from an average loss rate greater than 20% in any one year, a warning letter shall be sent by the Finance Section of Environment, Transport and Works Bureau (copied to SEO(PS), ETWB and all works departments) reminding the contractor that should the average loss rate exceed 30% based on the audited accounts of the subsequent financial year, the contractor may be downgraded, demoted or removed from all the categories in which he is listed. Upon notification, the Works Departments shall increase their general vigilance in supervising the contractor's works.
- (b) If any contractor suffers from an average loss rate greater than 30%, the contractor shall be:
 - (i) downgraded to probationary status if he holds a confirmed status in any group or category; or
 - (ii) demoted to confirmed status of a lower group if he holds a probationary status in the higher group; or
 - (iii) demoted to a lower group if he is under a category in the Specialist List which has no probationary status; or
 - (iv) suspended from tendering if he holds a probationary status in the lowest group or category or is under a category in the Specialist List which has no probationary status.
- (c) For contractors regulated under sub-paragraph (b) above, if their average loss rates continue to be above 30% based on the audited accounts for the following two financial years, the regulating actions in sub-paragraph (b) above shall be imposed again. A contractor who has been suspended from tendering under sub-paragraph (b)(iv) above will be removed from the List and/or the Specialist List.
- (d) Provided that the contractor has not been removed from the List and/or the Specialist List, if his latest audited accounts show that the average loss rate is less than 30%, the regulating action imposed under sub-paragraph (b) or (c) above could be uplifted and the contractor could reinstate his status to that just before the latest regulating action subject to meeting all the criteria including financial requirements appropriate to his group and status.
- (e) If the contractor's accounts show that the average loss rate exceeds 30%, the contractor can inject capital to strengthen the shareholder' funds or net worth, which will be taken into account in determining the revised loss rate for the year under review.
- (f) A contractor who is regulated under the Profitability Trend Analysis (PTA) may apply to waive the application of PTA upon the provision of full justification. In this regard, approval will be granted only under special circumstances.

5.6.5 These procedures will be applied by Environment, Transport and Works Bureau. Works Departments will not be consulted prior to taking action but will immediately be informed

5.7 Contractors Convicted of Contraventions of the Employment Ordinance (Cap. 57)

- 5.7.1 Any contractors convicted of three or more offences under the Employment Ordinance (Cap. 57), in respect of separate incidents in a rolling 12-month period, shall be compulsorily and automatically suspended from tendering for public works for six months. The suspension shall take effect from the date of the last conviction. Convictions in respect of all public and private contracts shall be counted.
- 5.7.2 On expiry of the six-month suspension period, if there have been no further convictions as defined in paragraph 5.7.1 above under the Employment Ordinance (Cap. 57) during the suspension period, the suspension shall be lifted. If there have been any further conviction/convictions as defined in paragraph 5.7.1 above during the suspension period, the suspension shall automatically continue for six months from the date of the last conviction until there is no further conviction during the extended period or further extended period.
- 5.7.3 The date of conviction, not the date of commission of the offence, shall be used in determining action under these procedures.
- 5.7.4 These procedures will be applied by Environment, Transport and Works Bureau. Works Departments will not be consulted prior to taking action but will immediately be informed.
- 5.7.5 The General Condition of Tender in relation to the statement of convictions under the Employment Ordinance (Cap. 57), as shown in the web site of ETWB, shall be included in all tender documents.
- 5.7.6 A tender will not be considered if, by the date set for the close of tender, or the extended date if this has been extended, 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 suspended from tendering under the provisions of this Sub-section.
- 5.7.7 Departments shall include in the tender reports submitted to the relevant Tender Board a statement stating that the recommended tenderer is not suspended from tendering under the provisions of this Sub-section.
- 5.7.8 A conviction against each participant of the partnership or unincorporated joint venture or shareholder of the incorporated joint venture shall be counted as a conviction against a partnership or an unincorporated joint venture or incorporated joint venture with different participants for the partnership or unincorporated joint venture or different shareholders for the incorporated joint venture for which the conviction was made.
- 5.7.9 For a limited company which substituted a partnership or sole proprietor or a limited company which substituted another limited company as defined in ETWB TCW No.

18/2003, the limited company shall disclose the name of the entity prior to the substitution, where such substitution takes place within the 12-month period prior to the tender closing date. Convictions of the limited company including convictions of the entity (which includes partnership or sole proprietorship or limited company) before substitution, which fall within the 12-month period prior to the tender closing date, shall be taken into account in the tender assessment.

5.7.10 Where the tenderer is a partnership or an unincorporated or incorporated joint venture, the provisions of paragraph 5.7.9 above shall apply to participants of the partnership or unincorporated joint venture or shareholders of the incorporated joint venture who is/are limited company/companies.

5.8 Contractors Convicted of Employing Illegal Workers or of Having Illegal Workers on Sites under their Control

- Ordinance (Cap. 115), for employing illegal workers or for having illegal workers on sites under their control in respect of separate incidents in a rolling 12-month period, either as main contractors or sub-contractors (whether nominated, specialist or domestic) or otherwise as persons/companies who have control over or are in charge of the construction sites, shall be compulsorily and automatically suspended from tendering for public works for six months. Illegal workers shall mean any persons on construction sites who are illegal immigrants; or any persons who, being not lawfully employable by virtue of Section 17G(2) of the Immigration Ordinance, have committed an offence under Section 41 by contravening the conditions of stay in force in respect of them. The suspension shall take effect from the date of the last conviction. Convictions in respect of all public and private contracts shall be counted.
- 5.8.2 On expiry of the six-month suspension period, if there have been no further convictions as defined in paragraph 5.8.1 above under the Immigration Ordinance (Cap. 115) during the suspension period, the suspension shall be lifted. If there have been any further conviction/convictions as defined in paragraph 5.8.1 above during the suspension period, the suspension shall automatically continue for six months from the date of the last conviction until there is no further conviction during the extended period or further extended period.
- 5.8.3 The date of conviction, not the date of commission of the offence, shall be used in determining action under these procedures.
- 5.8.4 These procedures will be applied by Environment, Transport and Works Bureau. Works Departments will not be consulted prior to taking action but will immediately be informed.
- 5.8.5 The General Condition of Tender in relation to the statement of convictions under the Immigration Ordinance (Cap. 115), as shown in the web site of ETWB, shall be included in all tender documents.
- 5.8.6 A tender will not be considered 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 suspended from tendering under the provisions of this Sub-section, unless the suspension is lifted by the date set for the close of tender, or if this has been extended, the extended date.

- 5.8.7 Departments shall include in the tender reports submitted to the relevant Tender Board a statement stating that the recommended tenderer is not suspended from tendering under the provisions of this Sub-section.
- 5.8.8 A conviction against each participant of the partnership or unincorporated joint venture or shareholder of the incorporated joint venture shall be counted as a conviction against a partnership or an unincorporated joint venture or incorporated joint venture with different participants for the partnership or unincorporated joint venture or different shareholders for the incorporated joint venture for which the conviction was made.
- 5.8.9 For a limited company which substituted a partnership or sole proprietor or a limited company which substituted another limited company as defined in ETWB TCW No. 18/2003, the limited company shall disclose the name of the entity prior to the substitution, where such substitution takes place within the 12-month period prior to the tender closing date. Convictions of the limited company including convictions of the entity (which includes partnership or sole proprietorship or limited company) before substitution, which fall within the 12-month period prior to the tender closing date, shall be taken into account in the tender assessment.
- 5.8.10 Where the tenderer is a partnership or an unincorporated or incorporated joint venture, the provisions of paragraph 5.8.9 above shall apply to participants of the partnership or unincorporated joint venture or shareholders of the incorporated joint venture who is/are limited company/companies.
- 5.9 Contractors Convicted of Site Safety or Environmental Offences or Incurring Serious Incidents on a Construction Site
- 5.9.1 Please refer to ETWB TCW Nos. 2/2003, 2/2003A and 2/2003B for details.
- 5.10 Non-compliance with the Provisions for Employment of Technician Apprentices and Building & Civil Engineering Graduates
- 5.10.1 Please refer to ETWB TCW No. 12/2003 for details.
- 5.11 Non-compliance with the Provisions for Mandatory Employment of Qualified Tradesmen and Intermediate Tradesmen
- 5.11.1 Please refer to WBTC No. 13/2002 for details.

5.12 Failure to Obtain Quality Management System Certification as Required

5.12.1 Please refer to WBTC No. 13/2001 and ETWB TCW No. 13/2001A for details.

5.13 Withdrawal of Tenders within the Tender Validity Period

- 5.13.1 A tenderer shall exercise reasonable care in preparing his tender. A tenderer who engages in any of the following inappropriate conducts, some of which may involve breaches of contract, may find himself the subject of regulating action:
 - (a) withdrawal of his tender within the tender validity period;
 - (b) refusal to comply with the Conditions of Tender;
 - (c) refusal to withdraw a tender qualification or post-tender qualification irrevocably and unconditionally unless such qualification is explicitly permitted in the Conditions of Tender; and
 - (d) refusal to make good the shortfall in working capital within the specified time required for the award of the tender.
- 5.13.2 Refusal may be by way of positive refusal or failure to respond to requests or enquiry from the Employer or his agent. Failure to respond in the specified manner or by the specified deadline may also be regarded as failure to respond. The inappropriate conducts listed in paragraph 5.13.1 above are regarded as withdrawals of tenders in a particular category within the tender validity period.
- 5.13.3 Upon becoming aware of the inappropriate conduct as described in paragraph 5.13.1 above, the procuring department shall seek legal advice from the Legal Advisory Division (Works) of Environment, Transport and Works Bureau on whether legal action is recommended.
- 5.13.4 The Government may take legal action against a tenderer to recover damages where there has been a breach of an implied contract by the tenderer. In any event, withdrawal of a tender by the tenderer under any of the situations mentioned in paragraph 5.13.1 above and which gives rise to reasonable suspicions as to the capability or integrity of the tenderer shall result in regulating action being taken against the tenderer unless the tenderer can offer an acceptable explanation for such conduct.
- 5.13.5 Where it is established that a tenderer engages in conduct as described in paragraph 5.13.1 above and which gives rise to reasonable suspicions as to his capability or integrity, the procuring department shall notify the Chairman of the related Managing Review Committee (MRC) within one week enclosing copies of the relevant correspondence with a copy to the Secretary for the Environment, Transport and Works (Attn: PAS(W)4) advising him of the name of the defaulting tenderer, the tender closing date, the contract number, the contract title, the predominant category of works and the type of conduct as described in paragraph 5.13.1 above.

- 5.13.6 Upon receipt of the said notification from the procuring department, the Chairman of the MRC shall take the following actions:
 - (a) If the notification is the first one in a rolling 36-month period, the following actions should be taken.
 - (i) The MRC Chairman shall write on behalf of his Director to the tenderer preferably within two weeks from the date of receipt of the notification from the procuring department, seeking an explanation from the tenderer as to the reasons for the inappropriate conduct (using the standard letter at **Appendix 5B**).
 - (ii) If the MRC Chairman is satisfied with the tenderer's explanation, the tenderer shall be advised (using the standard letter at **Appendix 5C**) that the inappropriate conduct will be recorded but will not be counted for the purposes of taking regulating actions.
 - (iii) If the tenderer has failed to respond or if the MRC Chairman is not satisfied with the tenderer's explanation and considers that the inappropriate conduct could have been reasonably avoided, the tenderer should be warned (using the standard letter at **Appendix 5D**) that should he engage in further inappropriate conduct as described in paragraph 5.13.1 above either in the next 12-month period or 36-month period, regulating actions will be taken in accordance with sub-paragraphs (b) or (c) below unless the tenderer can offer an acceptable explanation for such conduct.
 - (b) If the notification is the second one in respect of the same category of work in a rolling 12-month period, the following actions should be taken.
 - (i) The MRC Chairman shall follow the same procedures laid down in sub-paragraphs (a)(i) and (a)(ii) above.
 - (ii) If the tenderer has failed to respond or despite the tenderer's explanation the MRC Chairman is satisfied that the inappropriate conduct gives rise to reasonable suspicions as to the capability or integrity of the tenderer, he shall recommend to the Secretary for the Environment, Transport and Works to remove the tenderer from that particular category. The Secretary for the Environment, Transport and Works will give a further opportunity to the tenderer to present his case before determining whether the tenderer's inappropriate conduct gives rise to reasonable suspicions as to his capability or integrity. If the Secretary for the Environment, Transport and Works makes a determination against the tenderer then the tenderer shall be removed from that particular category of the List or the Specialist List.
 - (c) If the notification is the second one in respect of the same category of work in a rolling 36-month period, the following actions should be taken.

- (i) The concerned MRC Chairman should follow the same procedures laid down in sub-paragraphs (a)(i) and (a)(ii) above.
- (ii) If the tenderer has failed to respond or despite the tenderer's explanation the MRC Chairman is satisfied that the inappropriate conduct gives rise to reasonable suspicions as to the capability or integrity of the tenderer, the MRC Chairman shall recommend to the Secretary for the Environment, Transport and Works to suspend the contractor from tendering for public works contracts in that category for six months. The Secretary for the Environment, Transport and Works will give a further opportunity to the contractor to present his case before deciding whether to take regulating action against him as recommended by the MRC Chairman.
- 5.13.7 If the Secretary for the Environment, Transport and Works decides to take regulating action against a tenderer in accordance with this Sub-section 5.13 and the tenderer is a joint venture, then each and every participant (in the case of an unincorporated joint venture) or shareholder (in the case of an incorporated joint venture) shall be subject to the same regulating action.
- 5.13.8 For the purpose of counting the number of tender withdrawal and taking regulating action, the date of withdrawal shall be taken as the tender closing date of the contract concerned. In the event that there is uncertainty as to which date is the date of withdrawal, the decision of the Secretary for the Environment, Transport and Works in this connection is final.
- 5.13.9 The Note to Tenderers in relation to regulating actions on inappropriate conducts, as shown in the web site of ETWB, shall be included in all tender documents.
- 5.14 Contractors Convicted of Contraventions of Section 27 of the Public Health and Municipal Services Ordinance (Cap. 132)
- 5.14.1 Please refer to ETWB TCW No. 22/2003 and 22/2003A for details.
- 5.15 Non-compliance with the Provisions for Engagement of Sub-contractors Registered from Voluntary Sub-contractor Registration Scheme
- 5.15.1 Please refer to ETWB TCW No. 13/2004 for details.

SECTION 6 CHANGE OF COMPANY NAME, SUBSTITUTION AND TRANSFER OF BENEFITS AND OBLIGATIONS OF CONTRACTS

6.1 Notification of Change of Name

- 6.1.1 When the company name of a contractor has been changed, the contractor shall notify the Secretary for the Environment, Transport and Works in writing of the change in name and submit:
 - (a) a copy of the Business Registration Certificate in the new name;
 - (b) (i) in the case of a company incorporated in Hong Kong, a copy of the Certificate of Incorporation on Change of Name issued under Section 22 of the Companies Ordinance (Cap. 32); or
 - (ii) in the case of an overseas company, a copy of the Certificate of Registration of Oversea Company in the new name issued by the Registrar of Companies, Hong Kong under Section 333(3) of Part XI of the Companies Ordinance (Cap. 32), and a legal opinion (original copy) from a lawyer practising in the country in which the company was incorporated confirming that under the law of that country a change of name by a company does not affect any rights or obligations of the company, or render defective any legal proceedings by or against it, and any legal proceedings that could have been commenced or continued against it by its former name may be commenced or continued against it by its new name. The authenticity of the lawyer's professional qualifications also needs to be certified correct by a government or related establishment;
 - (c) a list of all current contracts with any and all of the works group of departments; and
 - (d) change of bank accounts, if any.

6.2 Actions to be Taken by Environment, Transport and Works Bureau

- 6.2.1 Subject to the receipt of the above documents from the contractor, Environment, Transport and Works Bureau will :
 - (a) register the change of name in the List and/or the Specialist List and category in which the contractor was previously listed under the former company name; and notify the Managing Department(s) of the change.

- 6.2.2 Contractors are required to: -
 - (a) submit the original or certified true copy of their latest audited accounts after the aforesaid change; and
 - (b) answer all reasonable enquiries from Environment, Transport and Works Bureau

to ascertain that the financial criteria and requirements for both retention and tendering purposes are met. Alternatively, a contractor's audited accounts immediately before the change and his most up-to-date management accounts after the change would be accepted in lieu of the latest audited accounts after the change if the contractor's auditors can confirm to Environment, Transport and Works Bureau that there is no impact on the contractor's financial position arising from the change.

6.3 Actions to be Taken by Managing Departments

- 6.3.1 Upon the notification of Environment, Transport and Works Bureau, the corresponding Managing Department for the category or categories in which the contractor is listed shall consider whether the changes will affect the ability of the contractor to perform satisfactorily and collect from the contractor all the necessary documents in relation to his technical ability in the new name such as copy of Quality Management System certificate and the Certificate of Registration of General/Specialist Contractor. The Managing Departments shall investigate if necessary and recommend to Environment, Transport and Works Bureau whether there should be any change in the contractor's status within one calendar month from the date of referral by Environment, Transport and Works Bureau. The procedures of submitting a recommendation are the same as those given in paragraph 2.4.3 above. Regardless of the outcome of the action taken, existing contracts with the contractor will remain unaffected. The contractor will continue to be allowed to tender for contracts under the appropriate category or categories in which the contractor is listed unless the Managing Department recommends to Environment, Transport and Works Bureau that the contractor should be suspended from tendering.
- 6.3.2 Managing Departments should note that a change of name only does not affect the legal status, or any of the rights or obligations of the company. It is therefore not necessary to initiate procedures such as the issue of questionnaires, as if it were a request by a new contractor for admission to the List and/or the Specialist List. The contractor should simply be addressed by the new name in the administration of all current contracts.

6.4 Notification to Departments

6.4.1 Environment, Transport and Works Bureau will inform all relevant departments of the change of name and any consequential changes in the contractor's status under the List and/or the Specialist List.

6.5 Substitution

6.5.1 No application for substitution will be considered/allowed after 18 September 2003. Please refer to ETWB TC(W) No. 18/2003 for details.

6.6 Transfer of Benefits and Obligations of Contracts

- 6.6.1 A contractor may apply to transfer his benefits and obligations under a contract with the Government to a third party only if he is winding up, will no longer be in existence, or is unable to complete the contract. Under such circumstances, the Government may, on balance and in the interest of the Government and public fund, agree to a novation instead of terminating the contract. In that event, the contractor will normally be removed from the List and/or the Specialist List in accordance with Section 5 above. In all the aforementioned cases, a novation agreement is required. Approval to the novation is subject to and conditional upon the Government's agreement to the terms of the novation agreement.
- 6.6.2 Other than the cases mentioned above, the transfer of a contractor's benefits and obligations under a contract with the Government to a third party, including a sister company, holding company or a subsidiary company having a separate legal status, will not be permitted. This is to uphold the principle of open and fair competition as the award of a contract to a contractor is based on the combined assessment of his tender price and technical score or performance rating. If the third party were to submit a tender in place for the contractor, the third party might not have been awarded the contract.

6.7 A Novation Agreement

- 6.7.1 For public works contracts, a novation agreement is a tripartite agreement entered into by the Employer (Government), the contractor and a third party, whereby the contractor is released from and the third party assumes all the Contractor's obligations and rights under the stated contract(s). The two standard forms of novation agreement are shown at **Appendices 6A&B**. More than one contract may be included in a novation agreement.
- 6.7.2 For all novation, advice from the Legal Advisory Division (Works) of Environment, Transport and Works Bureau must be sought on any proposed change to the standard forms of novation agreement.
- 6.7.3 The departments concerned must check to ensure that the third party taking over the contract has the technical, management and financial capability and is a fit substitute for the outgoing contractor. One of the basic requirements is that the party must be an approved contractor under the relevant category/categories of works in the List and/or the Specialist List. In the event that the contractor has assigned the financial benefit of his contract with the Government to a financial institution, the contractor is required to resolve matters relating to the financial assignment to the satisfaction of the Government before the Government considers agreeing to the proposed novation (see also Sub-section 6.8 herein below).

- Before a novation agreement is executed, departments concerned should first confirm the financial capability of the third party with the Finance Section of Environment, Transport and Works Bureau. They should then apply to the Secretary for the Environment, Transport and Works (Attn: PAS(W)4), with a copy of confirmation memo from the Finance Section of Environment, Transport and Works Bureau, for approval in principle before the execution of the novation agreement. In the application, the details of the contract, the parties involved in the novation agreement and the expected time required for the completion of the novation agreement should be indicated. Environment, Transport and Works Bureau will monitor the progress of the arrangement.
- 6.7.5 All three parties shall execute the agreement on the same date. In the case where the contract to be novated is made between the Government and the contractor together with other person or persons trading as an unincorporated joint venture, such other person or persons shall also join in the execution of the agreement. Copies of the executed novation agreement shall be sent to the Secretary for the Environment, Transport and Works (Attn: PAS(W)4) and the Secretary for Financial Services and the Treasury within 3 working days from the date of execution.

6.8 Performance Bond, Joint Venture Guarantee and/or Insurance

- 6.8.1 Where any performance bond, any guarantee and/or any insurance is required for a contract and if the contract is to be novated then a substituting performance bond, guarantee and/or insurance policy must be provided by the third party, in the contractually required form, prior to the execution of the novation agreement. The outgoing company shall be required to clear the following outstanding issues for each contract with the Government which requires novation, if applicable, at least 2 weeks before execution of novation agreement:
 - (a) The outgoing company must provide documentary proof that any insurance policy required under the contract also covers the new company to the same extent as that for the outgoing company. If the original insurance policy(ies) includes other parties in joint names, the new policy(ies) should cover these parties as well.
 - (b) In the event that an existing contract involves a Nominated Sub-contract, the outgoing company, the new company and the relevant Nominated Sub-contractor should novate the Nominated Sub-contract. The original and a copy of the novated Nominated Sub-contract should be produced to the relevant Works Department for inspection and, if found acceptable to the Works Department, the original novated Nominated Sub-contract will be returned to the applicant and the copy thereof shall be retained for record. The novated Nominated Sub-contract should have a clause to the effect that the novated Nominated Sub-contract shall take effect only on the date when the novation agreement in respect of main contract is executed.
 - (c) The outgoing company must provide documentary proof that any Professional Indemnity Insurance required for the contract also covers the new company to the same extent as that for the outgoing company. If the

- original insurance policy(ies) includes other parties in joint names, the new policy(ies) should cover these parties as well.
- (d) The outgoing company must provide documentary proof that any bond(s) and surety(ies) required for the contract also covers the new company to the same extent as that for the outgoing company. Alternatively, new bonds and surety(ies) acceptable to the Government may be furnished. In the event that a substituting bond and/or surety(ies) cannot be made available at the date of the novation agreement, a supplementary agreement in the format of **Appendix 6C** should be executed immediately after the execution of the novation agreement for that particular contract.
 - (e) The outgoing company must provide documentary proof that he has resolved matters relating to the financial assignment if he has assigned the financial benefit of his contract with the Government to a financial institution.
 - (f) The outgoing company must provide other documents as specified and required by the Secretary for the Environment, Transport and Works.
- 6.8.2 Where the third party is a limited liability joint venture company, each shareholder of the company will be required to execute a Joint Venture Guarantee prior to the execution of the novation agreement.

APPENDIX 2A Financial Criteria for Retention on the List and Requirements for Acceptance of a Tender

Introduction

- 1. The financial criteria for retention on the List of Approved Contractors for Public Works (List) and requirements for acceptance of a tender are established by Environment, Transport and Works Bureau. Contractors are required to:
 - (i) submit the original or a certified true copy of their latest audited accounts and latest half-yearly management accounts in case the contractor is a Group C contractor on the List of Approved Contractors for Public Works;
 - (ii) submit certified statements of outstanding workload;
 - (iii) provide supplementary information; and
 - (iv) answer all reasonable enquiries from Environment, Transport and Works Bureau

to ascertain that these financial criteria and requirements are met.

2. In accordance with the Rules for Administration of the List of Approved Contractors for Public Works, a contractor applying for admission, confirmation or promotion must meet and maintain the financial criteria applicable to his appropriate group and status. The financial information required to be submitted by the contractors for such purposes is set out in **Annex to Appendices 2A & 3B**.

Financial Criteria for Retention on the List

3. For retention on the List, a contractor is required to maintain certain minimum levels of employed and working capital applicable to the appropriate group and status. The minimum levels are periodically adjusted and are currently set as follows:

		Minimum Employed Capital (Note 3)	Minimum Working Capital
(i)	For Group A	HK\$	HK\$
	(a) Probationary	1,800,000	1,800,000 or 15% on annualized outstanding works, whichever is higher
	(b) Confirmed	3,400,000	3,400,000 or 15% on annualized outstanding works, whichever is higher

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(;;)	For Group D	Minimum Employed Capital (Note 3) HK\$	Minimum Working Capital HK\$
(ii)	For Group B		
	(a) Probationary	4,200,000	4,200,000 or 10% on annualized outstanding works, whichever is higher
	(b) Confirmed	8,600,000	8,600,000 or 10% on annualized outstanding works, whichever is higher
(iii)	For Group C		
	(a) Probationary	12,600,000 plus \$2 million for every \$100 million of annualized outstanding works or part thereof above \$800 million	12,600,000 or 8% on the first \$800 million of annualized outstanding works and 10% on remainder, whichever is higher
	(b) Confirmed	16,000,000 plus \$2 million for every \$100 million of annualized outstanding works or part thereof above \$800 million	16,000,000 or 8% on the first \$800 million of annualized outstanding works and 10% on remainder, whichever is higher

- Note: (1) The above revised financial criteria shall take effect on 12 June 2009. However, in order to facilitate the existing contractors on the List to maintain their present listing status, the existing contractors will be given a 12-months' grace period to adjust to the above new financial criteria. In other words, all management accounts or audited accounts with accounting periods ending on or after 11 June 2010 will be subject to the above new financial criteria.
 - (2) As regards applications for admission, confirmation or promotion in the List, contractors shall meet the above new financial criteria applicable to the specific group in question for applications made on or after 12 June 2009. Applications made prior to 12 June 2009 shall be subject to the financial criteria applicable at the time of application and the successful applicants shall meet the above new financial criteria within the same deadline as the existing contractors aforesaid. For the purpose of tender evaluation, contractors shall be subject to the above revised financial criteria if the tenders are invited on or after 12 June 2009.
 - (3) The issued and paid up capital and shareholders' funds should both meet the level of minimum employed capital applicable to his highest group and status.

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- 4. A contractor in more than one works category must maintain the minimum levels of employed and working capital applicable to his highest group and status.
- 5. The annualized outstanding works for retention purpose is defined as the combined annual value of uncompleted works on public works contracts, Housing Authority contracts and contracts with the private sector on a world-wide basis.
- 6. Public works contracts include all construction-related contracts and works-related maintenance contracts where Government of HKSAR is the employer.
- 7. Shortfall in employed capital can be rectified by an increase in share capital/partners' funds/proprietor's funds, while shortfall in working capital can be rectified by the following methods:
 - (i) increase in share capital/partners' funds/proprietor's funds to be paid up in cash; or
 - (ii) arrangement of a bank loan that is not repayable within 12 months; or
 - (iii) deferment in repayment of outstanding loan to directors or related companies by means of a deferred loan agreement in an acceptable legal format.

Bank overdraft facility can be a method to rectify the shortfall in working capital only for shortfall relating to outstanding workload.

- 8. If a contractor's business is at a loss, the average loss rate shall not be greater than 30% for the purpose of retention on the existing group status. All audited accounts submitted by the contractors shall be subject to the Profitability Trend Analysis, which is an analysis of the financial performance of a contractor with reference to its profit or loss over the past three consecutive years.
- 9. The average loss rate is defined as the weighted average of the net loss as a percentage of the opening balance of the shareholders' funds or net worth over the past 3 years with weights of 3:2:1. The net loss and the opening balance of the shareholders' funds or net worth will be extracted from the audited accounts. Subsequent capital injection by a contractor to strengthen the shareholders' funds or net worth will be taken into account in determining the revised loss rate for the year under review.
- 10. For a newly formed company with only two years' operations, the average loss rate is defined as the weighted average of the net loss as a percentage of the opening balance of the shareholders' funds or net worth over the past two years with weights of 3:2.
- 11. For a newly formed company with only one year's operation, the average loss rate is defined as the net loss as a percentage of the shareholders' funds or capital at the start of business.
- 12. Contractors are required to provide additional financial information as and when required to enable Environment, Transport and Works Bureau to carry out ad hoc financial assessment.

Financial Requirements for Acceptance of a Tender

13. In order to be recommended for the award of a contract of whatever value in any category of work, a contractor's employed and working capital, as assessed from the accounts, should amount to at least the level required for retention on the List. In this

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regard, the employed and working capital requirement would base on the latest statement of outstanding workload and would take into account the annual value of the new tender. The financial information required to be submitted in the tender by the contractors is set out in **Annex to Appendices 2A & 3B**.

- 14. In the case of a joint venture, each participant shall be assessed on his own financial capability in taking up his share of the tender. However, if any of the participants cannot meet the required capital level for undertaking his share but the other participant(s) of the joint venture has met the financial criteria for undertaking the whole contract, the joint venture may still be regarded as satisfying the financial requirements collectively.
- 15. If a contractor's average loss rate is greater than 30%, he will not be recommended for tender award for contracts in his prevailing group.
- 16. Rectification in shortfall for employed and working capital for tendering purpose follows the same methods adopted for retention purpose.

Certified Statements of Outstanding Workload

- 17. Each contractor submitting audited or management accounts and/or tendering for contracts of whatever value will be required to submit with his accounts/tenders a statement certified by his Managing Director or by a person authorized to sign Government contracts on the tenderer's behalf giving the following information:
 - (i) a list of current contracts held with Government and the private sector including the Housing Authority, both as main contractor or subcontractor;
 - (ii) the approximate value of uncompleted works on each of the contracts at (i); and
 - (iii) the approximate time required to complete each of the contracts at (i).

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ANNEX TO APPENDICES 2A & 3B

Financial Information Required to be Submitted for Financial Assessment

- (1) Contractors shall provide the following documents if they have not already been submitted to the Finance Section of Environment, Transport and Works Bureau before:
 - (a) the original or copies of annual unconsolidated financial statements for the last three accounting years audited and certified by certified public accountants;
 - (b) unconsolidated financial statements covering the period between the latest set of audited financial statements up to a date not earlier than 3 months before the date of submission;
 - (c) financial statements of Hong Kong Branch or Office covering periods mentioned in (a) and (b) above, if the contractor is not incorporated in Hong Kong;
 - (d) a statement giving details of significant events which occurred after the year end date of the latest audited financial statements which would affect the contractor's financial position;
 - (e) a statement giving details of any off-balance sheet liabilities, including contingent liabilities, if not covered in the audited financial statements;
 - (f) a statement listing current or outstanding contracts in hand with total and outstanding contract sums, contract period and time required to complete the outstanding portion of the contract;
 - (g) bank letters or agreements on existing banking facilities such as term loans and overdraft;
 - (h) any other additional financial information if considered necessary.

Copies of audited financial statements submitted under paragraph (a) and all documents under paragraphs (b) to (h) above shall be certified true and correct by independent auditors or directors of the company.

- (2) All statements submitted should be prepared in English or Chinese.
- (3) Audited financial statements include auditors' report, balance sheets, profit and loss accounts and cash flow statements together with relevant notes showing details of accounting policies, shareholders' fund, non-current assets and liabilities, investments, current assets and current liabilities.
- (4) The latest audited financial statements must be for a period ending no more than 18 months before the submission date.
- (5) In the case of a joint venture, financial and supplementary statements as mentioned under paragraph (1) above for each participant must be submitted.

APPENDIX 2B Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the List

Group/Status	Buildings	Port Works	Roads & Drainage	Site Formation	Waterworks
Entry on probation to Group A	Registration with the Building Authority's Register of Contractors. Satisfactory completion of at least two contracts within the past 5 years. Each contract shall be representative in size and complexity of Arch SD projects, and value over 50% of the Group A limit. sub-contract work must cover the whole range of building trades.	There are no Group A contractors for the Port Works category.	Satisfactory completion of Government Roads and Drainage works, within the past 5 years, to a total value of not less than 50% of the Group A limit. Experience as a sub-contractor may count. Private sector experience may also be accredited.	There are no Group A contractors for the Site Formation category.	Possession of adequate waterworks construction experience either acquired as contractor or sub-contractor for Government contracts. Mainlaying experience is a pre-requisite. Normally expected to have undertaken works of a waterworks nature with a total value of over \$10 million in the past 10 years.
Confirmation to Group A	1) Satisfactory completion of at least one Government building contract within the past 5 years, after inclusion in the Group, of value over 50% of the Group A limit and covering the whole range of building trades.		Satisfactory completion of at least one Government Roads and Drainage contract of value over 50% of the Group A limit after inclusion in Group A on probation. Experience as a sub-contractor may count.		Satisfactory completion of at least one mainlaying contract in the waterworks category of value over 75% of the Group A limit or two or more mainlaying contracts in the waterworks category with a total value of not less than \$20 million, after inclusion in Group A on probation.

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Group/Status	Buildings	Port Works	Roads & Drainage	Site Formation	Waterworks
Entry on Probation to Group B	 A. Direct Entry Registration with the Building Authority's Register of Contractors. Satisfactory completion of at least two contracts within the past 5 years as the main contractor. Each contract shall be representative in size and complexity of Arch SD projects, and value over 50% of the Group B limit. B. By Promotion Satisfactory completion of at least one Government building contract within the past 5 years, after confirmed in Group A, of value over 75% of the Group A limit and of considerable scope and complexity and covering the whole range of building trades. 	1) Satisfactory completion of two contracts of predominantly port works nature within the past 5 years, of which one contract should be completed within 3 years preceding the application for inclusion and the value of works carried out for each of the two contracts should exceed 75% of the Group A limit; experience as a sub-contractor may be accredited.	 A. Direct Entry Satisfactory completion of Government Roads and Drainage works, within the past 5 years, to a total value of not less than the Group B limit. Experience as a sub-contractor may count. Private sector experience may also be accredited. B. By Promotion Satisfactory completion of at least one Government Roads and Drainage contract of value not less than 75% of the Group A limit after confirmation in Group A. Experience as a sub-contractor may count. 	1) Satisfactory completion, within the past 5 years, one contract or contracts involving total earthworks quantity not less than 100,000 m³, of which one contract would involve earthworks quantity not less than 50,000 m³ in one or more of the following:- i) bulk excavation and filling (excluding quarrying and maintenance of spoil dumps); ii) sanitary landfill; iii) slope stabilization. 2) Experience as a sub-contractor may be accredited.	 A. Direct Entry Possession of waterworks construction experience either acquired as contractor or sub-contractor for private sector contracts, or as sub-contractor for government contracts. Mainlaying experience is a pre-requisite. Satisfactory completion of three or more contracts of a waterworks nature of totally not less than \$75 million in value in the past 10 years. If in the capacity of a sub-contractor, the applicant must prove to have a major involvement in the works. By Promotion Satisfactory completion of three or more contracts in the waterworks category of totally not less than \$25 million in value after confirmation in Group A. Private sector experience may be accepted to supplement public sector experience.

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Group/Status	Bu	ildings	Por	t Works	Roa	nds & Drainage	Site	e Formation	Wa	terworks
Confirmation to Group B	1)	Satisfactory completion of at least one Government building contract within the past 5 years, after inclusion in the Group, of value over 75% of the Group B limit.	1)	Satisfactory completion of at least one Government Group B port works contract within the past 5 years of value not less than 50% of the Group B limit. Experience as a sub-contractor is not accredited.	1)	Satisfactory completion of at least one Government Roads and Drainage contract of value not less than 75% of the Group B limit after inclusion in Group B on probation. Experience as a sub-contractor may count.	1)	Satisfactory completion of at least one Government Site Formation contract within the past 5 years of value not less than 50% of the Group B limit, or one Government contract with earthworks quantity not less than 200,000 m³ since inclusion. Experience as a sub-contractor is not accredited.	1)	Satisfactory completion of at least one contract in the waterworks category of value over 75% of the Group B limit or an aggregate value of work of at least \$50 million with at least one contract in Group B value, after admission to Group B on probation.
Entry on	A.	Direct Entry	A.	Direct Entry	A.	Direct Entry	A.	Direct Entry	A.	Direct Entry
probation to Group C	2)	Registration with the Building Authority's Register of Contractors. Satisfactory completion of at least two contracts within the past 5 years as the main contractor. Each contract shall be representative in size and complexity of Arch SD projects, and value over the probationary limit of Group C.	1) B.	Satisfactory completion of at least two contracts within the past 5 years in the Port Works category, each of value not less than 75% of the Group B limit. Experience as a sub-contractor is not accredited. By Promotion	1)	Satisfactory completion in the past 10 years of a sufficient number of Roads and Drainage contracts of a total value not less than two times the probationary Group C limit. The value of each contract shall be over 75% of the Group B limit. Experience as a sub-contractor is not accredited.	1) B.	Satisfactory completion in the past 5 years of at least two contracts in the works category, each of value over 75% of the Group B limit. Experience as a sub-contractor is not accredited. By Promotion	 2) 3) 	Possession of waterworks construction experience either acquired as contractor or sub-contractor for private sector contracts, or as sub-contractor for Government contracts. Mainlaying experience is a pre-requisite. Satisfactory completion of four or more contracts of at least two different types of work totally valued at not less than \$180
		man of Group C.	В.	•	В.	By Promotion		•		million with at least one contract
		By Promotion	1)	Satisfactory completion of at least one Government Group B port works contract,	1)	Satisfactory completion of at least one Government Roads and Drainage contract of value	1)	completion of at least one Government Group B site		of Group C value in the past 10 years. If in the capacity of a sub-contractor, the applicant must prove to have a major
	1)	Satisfactory completion of at least two		after confirmation to Group B, of value not		not less than 75% of the Group B limit after		formation contract within the past 5		involvement in the works.

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Group/Status	Buildings	Port Works	Roads & Drainage	Site Formation	Waterworks
	Government building contracts within the past 5 years, after confirmed in Group B, of value over 75% of the Group B limit.	less than 75% of the Group B limit. Experience as a sub-contractor is not accredited. 2) Private sector experience may be accepted to supplement public sector experience.	confirmation to Group B. Experience as a sub-contractor is not accredited.	years, after confirmation to Group B, of value not less than 75% of the Group B limit, or one Government contract involving earthworks quantity not less than 300,000 m³. Experience as a sub-contractor is not accredited. 2) Private sector experience may be accepted to supplement public sector experience.	 By Promotion Satisfactory completion of three or more contracts in the waterworks category of at least two different types of work totally valued at not less than \$60 million with at least one contract of Group B value, after confirmation to Group B. Private sector experience may be accepted to supplement public sector experience.
Confirmation to Group C	1) Satisfactory completion of at least one Government Building contract within the past 5 years of value over \$90 million and of considerable scope and complexity.	Satisfactory completion of at least one Government Group C Port Works contract within the past 5 years of value over \$90 million. Experience as a sub-contractor is not accredited.	Satisfactory completion of at least one Government Roads and Drainage contract of value over \$90 million. Experience as a sub-contractor is not accredited	1) Satisfactory completion of at least one Government Group C site formation contract within the past 5 years of value over \$90 million. Experience as a sub-contractor is not accredited.	Satisfactory completion of two Group C contracts in the waterworks category of two different types of work totally valued at not less than \$120 million after admission to Group C on probation.

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Remarks:

- #1. Group A limit and Group B limit mean the Group Tender Limits for Group A and Group B respectively.
- #2. Probationary Group C limit means the total value of Group C contracts in any one category for which a probationary Group C contractor is eligible to be awarded.
- 3. Where the relevant experience as a sub-contractor is counted for Buildings, Port Works, Site Formation or Waterworks category, it shall be that of a first tier sub-contractor, except that the relevant experience as a second tier sub-contractor for the contract of other category under entrustment arrangement, incorporating waterworks elements that were required to be carried out by a contractor under the Waterworks category in the capacity as a sub-contractor, may also be counted for the Waterworks category.
- 4. Where the relevant experience as a sub-contractor is counted for Roads & Drainage category only, it shall be the relevant experience as a principal sub-contractor, which is defined as a first tier sub-contractor who has completed at least 70% of the value of the works relevant to the Roads & Drainage category.
- 5. All Group B and Group C contractors must meet the Quality Management System Certification requirements as stipulated in WBTC No. 13/2001 and ETWB TCW No. 13/2001A.
- # The new tender limits and probationary Group C limit effective as from 12 June 2009 will not affect the group limits and the minimum contract value referred in the contract experience requirement set out in this Appendix until further notice.

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APPENDIX 2C Minimum Number and Qualifications of Full Time Management and Technical Personnel to be Employed by the Contractors for the List before Admission, Retention, Confirmation or Promotion

Group/Status	Buildings	Roads and Drainage, Waterworks (Note 1)
Group A	Top management (Notes 2, 3 and 6):	Top management (Notes 2, 3 and 6):
(probationary or confirmed)	At least one member of the resident top management shall have a minimum of one year local experience in managing a construction firm obtained in the past three years.	At least one member of the resident top management shall have a minimum of one year local experience in managing a construction firm obtained in the past three years.
	Technical staff (Notes 3 and 6)	Technical staff (Notes 3 and 6):
	At least one person with one or more of the following qualifications:	At least one person with one or more of the following qualifications:
	(i) Higher Certificate in Building Studies/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and one year local working experience in building works; or	(i) Higher Certificate in Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and one year local working experience in the relevant category of works; or
	(ii) Ordinary Certificate in Building Studies/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and two years local working experience in building works; or	(ii) Ordinary Certificate in Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and two years local working experience in the relevant category of works; or
	(iii) at least ten years local working experience in building works.	(iii) at least ten years local working experience in the relevant category of works.

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Group/Status	Buildings	Port Works, Roads and Drainage, Site Formation, Waterworks		
Group B	Top management (Notes 2, 3 and 6):	Top management (Notes 2, 3 and 6):		
(probationary or confirmed)	At least one member of the resident top management shall have a minimum of three years local experience in managing a construction firm obtained in the past five years.	At least one member of the resident top management shall have a minimum of three years local experience in managing a construction firm obtained in the past five years.		
	Technical staff (Notes 3, 4 and 6):	Technical staff (Notes 3, 4 and 6):		
	At least one person with the following qualifications:	At least one person with the following qualifications:		
	(i) Higher Certificate in Building Studies/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and two years local working experience in building works; or	(i) Higher Certificate in Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and two years local working experience in the relevant category of works; or		
	(ii) Ordinary Certificate in Building Studies/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and three years local working experience in building works.	(ii) Ordinary Certificate in Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognised training institution or equivalent and three years local working experience in the relevant category of works.		
Group C	Top management (Notes 2, 3 and 6):	Top management (Notes 2, 3 and 6):		
(probationary or confirmed)	At least one member of the resident top management shall have a minimum of five years local experience in managing a construction firm obtained in the past eight years.	At least one member of the resident top management shall have a minimum of five years local experience in managing a construction firm obtained in the past eight years.		
	Technical staff (Notes 3, 5 and 6):	Technical staff (Notes 3, 5 and 6):		
	At least two persons with a relevant degree from a Hong Kong university or equivalent with at least five years post-graduate local working experience in building works.	At least two persons with a relevant degree from a Hong Kong university or equivalent with at least five years post-graduate local working experience in the relevant category of works.		

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Minimum Number and Qualifications of Full Time Management and Technical Personnel to be Employed by the Contractors for the List before Admission, Retention, Appendix 2C Confirmation or Promotion

Notes:

- 1. There are no Group A contractors for the Port Works and Site Formation categories.
- 2. Top management shall be the President, Chairman, Director, Managing Director, Executive Director, or General Manager etc.
- 3. The top management and the technical staff must be two individual persons.
- 4. For Group B contractors, if the technical staff does not have the required academic qualifications, he will be required to have at least 11 years of proven local experience in the relevant category of works.
- 5. For technical staff of Group C contractors, the following degrees are considered relevant :

Buildings	Port Works, Roads and Drainage, Site Formation, Waterworks			
Structural Engineering	Civil Engineering			
Engineering (in the structural engineering	Engineering (in the civil engineering			
stream)	stream)			
Architecture				
Quantity Surveying				
Building Technology				

Other degrees such as those in Mechanical Engineering, Electrical Engineering and Management Studies are <u>not</u> considered as relevant degrees. A relevant professional qualification is equivalent to a relevant degree. The academic standard of the Associateship in Civil and/or Structural Engineering of Hong Kong Polytechnic is equivalent to a Bachelor Degree in Civil and/or Structural Engineering.

Degrees from universities or polytechnics outside Hong Kong are acceptable.

6. For admission, retention, confirmation or promotion in more than one category, the contractor is required to employ one top management with qualifications and experience appropriate to the highest Group only instead of one for each category. However, he is required to employ a minimum of one experienced technical staff for each category regardless of the number specified in the above table. The experience and qualifications of the technical staff shall be as specified for the appropriate group and category in the above table.

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APPENDIX 3A Category, Class and Group in the Specialist List

	Categories	Suppliers of Materials	Specialist Contractors	Managing Departments (Note)
1	Air-conditioning Installation Group I – Contracts/Sub-contracts up to \$5.7 million Group II - Contracts/Sub-contracts of unlimited value		X	Arch SD
2	Audio Electronics Installation		X	Arch SD
3	Broadcast Reception Installation		X	Arch SD
4	Burglar Alarm and Security Installation		X	Arch SD
5	Catering Equipment Installation		X	Arch SD
6	Design, Manufacture and Installation of Glass (or Fibre) Reinforced Plastic Units		X	Hy D
7	Diesel Generator Installation		X	Arch SD
8	Electrical and Mechanical Installation for Sewage Treatment and Screening Plant		X	Arch SD
9	Electrical Installation Group I – Contracts/Sub-contracts up to \$2.3 million Group II – Contracts/Sub-contracts up to \$5.7 million Group III – Contracts/Sub-contracts of unlimited value		X	Arch SD
10	Electronic Timing and Display Installation		X	Arch SD
11	Fabrication of Steel Pipe Specials		X	WSD
12	Fabrication of Unfired Pressure Vessels		X	WSD

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	Categories	Suppliers of Materials	Specialist Contractors	Managing Departments (Note)
13	Fire Service Installation Group I – Contracts/Sub-contracts up to \$2.3 million Group II – Contracts/Sub-contracts of unlimited value		X	Arch SD
14	Fountain Installation		X	Arch SD
15	Ground Investigation Field Work Group I – Contracts/Sub-contracts up to \$2.3 million Group II – Contracts/Sub-contracts of unlimited value		X	CEDD
16	Industrial Type Electrical Installation		X	Arch SD
17	Land Piling Group I – Contracts/Sub-contracts up to \$3.4 million Group II – Contracts/Sub-contracts of unlimited value		X	Arch SD
18	Land, Engineering and Hydrographic Survey Services		X	LD
19	Landscaping Class I - General Landscape Work Class II - Hydroseeding Group I - Contracts/Sub-contracts up to \$2.3 million Group II - Contracts/Sub-contracts of unlimited value		X	Arch SD
20	Landslip Preventive/Remedial Works to Slopes/Retaining Walls		X	CEDD
21	Lift, Escalator and Passenger Conveyor Installation		X	Arch SD
22	Liquefied Petroleum Gas Installation		X	Arch SD

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	Categories	Suppliers of Materials	Specialist Contractors	Managing Departments (Note)
23	Low Voltage Cubicle Switchboard Installation		X	Arch SD
24	Mechanical Handling and Lifting Installation		X	Arch SD
25	Mechanical Plant and Equipment Installation Group I – Contracts/Sub-contracts up to \$1.1 million Group II – Contracts/Sub-contracts of unlimited value		X	Arch SD
26	Motor Vehicle Body-building and Painting		X	Arch SD
28	Prestressed Concrete Works for Highway Structures Class I – Supply and Installation of Prestressing Systems Class II – Supply of Prestressed Concrete Units	X	X	Ну D
29	Radio Electronics Installation		X	Arch SD
30	Repair and Restoration of Historic Buildings		X	Arch SD
31	Repair of Motors, Transformers and Switchgear		X	WSD
32	Road Marking		X	Hy D
33	Soil and Rock Testing		X	CEDD
34	Space Frame Systems	X	X	Arch SD

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	Categories	Suppliers of Materials	Specialist Contractors	Managing Departments (Note)
35	Specialized Operations for Highway Structures Class I – Guniting Class II – Waterproofing of Concrete Surfaces Class III – Repair of Cracked Concrete by Resin Injection Class IV – Non-destructive Testing of Welds Class V – Hot Dip Galvanising		X	Hy D
36	Steam and Compressed Air Installation		X	Arch SD
37	Structural Steelwork		X	Hy D
38	Supply and Installation of Bearings for Highway Structures Class I – Mechanical Bearings Class II – Elastomeric Bearings		X	Hy D
39	Supply and Installation of Expansion Joints for Highway Structures		X	Hy D
40	Supply and Installation of Pumpsets and Associated Pipework		X	WSD
41	Supply and Installation of Water Treatment Plant		X	WSD
42	Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing	X	X	Hy D
43	Survey of Government Land Pressure Receivers subject to Steam and Air Pressure (but excluding Steam Boilers)		X	Arch SD
44	Survey of Government Land Steam Boilers		X	Arch SD

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	Categories	Suppliers of Materials	Specialist Contractors	Managing Departments (Note)
45	Survey of Lifting Appliances and Lifting Gear		X	Arch SD
46	Swimming Pool Water Treatment Installation		X	Arch SD
27	Transparent Panels for Noise Barriers on Highways [formerly named as "Prefabricated Architectural Walls and Finishes (Screens, Sound Barriers and Retaining Walls)"]	X		HyD
47	Turn-key Interior Design and Fitting-out Works Group I – Eligible to be awarded one contract as a Trade Test Group II – Eligible to be awarded more than one contract at any time		X	Arch SD
48	Uninterruptible Power Supply Installation		X	Arch SD
49	Video Electronics Installation		X	Arch SD

Note:

Arch SD : Architectural Services Department

CEDD : Civil Engineering and Development Department

Hy D : Highways Department

LD : Lands Department

WSD : Water Supplies Department

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APPENDIX 3B Financial Criteria for Retention on the Specialist List and Requirements for Acceptance of a Tender

Introduction

- 1. The financial criteria for retention on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works (Specialist List) and requirements for acceptance of a tender are established by Environment, Transport and Works Bureau. Contractors are required to:
 - (i) submit the original or a certified true copy of their latest audited accounts and latest half-yearly management accounts in case the contractor is also a Group C contractor on the List of Approved Contractors for Public Works;
 - (ii) submit certified statements of outstanding workload;
 - (iii) provide supplementary information; and
 - (iv) answer all reasonable enquiries from Environment, Transport and Works Bureau

to ascertain that these financial criteria and requirements are met.

2. In accordance with the Rules for Administration of the List of Approved Suppliers of Materials and Specialist Contractors for Public Works, a contractor applying for admission, confirmation or promotion must meet and maintain the financial criteria applicable to his appropriate category and group. The financial information required to be submitted by the contractors for such purposes is set out in **Annex to Appendices 2A & 3B**.

Financial Criteria for Retention on the Specialist List

3. For retention on the Specialist List, a contractor should generally possess at least a positive capital value. In addition, a contractor is required to maintain certain minimum levels of employed and working capital applicable to the appropriate category and group. The minimum levels are periodically adjusted and are currently set as follows:

			Minimum	Minimum
			Employed	Working
			Capital	Capital
	Category	Group	(Note 3)	
			HK\$	HK\$
(i)	Air-conditioning	I	570,000	570,000
	Installation	II	4,700,000	3,400,000
(ii)	Electrical and Mechanical Installation for Sewage Treatment and Screening Plant	-	3,400,000	3,400,000

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	Category	Group	Minimum Employed Capital (Note 3)	Minimum Working Capital
	<u> </u>		HK\$	HK\$
(iii)	Electrical Installation	I II III	570,000 570,000 4,700,000	570,000 570,000 3,400,000
(iv)	Ground Investigation Field Work	I II	570,000 4,700,000	570,000 3,400,000
(v)	Land Piling	I II	570,000 9,300,000	570,000 8,600,000
(vi)	Landslip Preventive/Remedial Works to Slopes/Retaining Walls	-	8,600,000	8,600,000
(vii)	Prestressed Concrete Works for Highway Structures	-	1,140,000	1,140,000
(viii)	Road Marking	-	1,140,000	1,140,000
(ix)	Specialized Operations for Highway Structures	-	1,140,000	1,140,000
(x)	Structural Steelwork	-	1,140,000	1,140,000
(xi)	Supply and Installation of Bearings for Highway Structures	-	1,140,000	1,140,000
(xii)	Supply and Installation of Expansion Joints for Highway Structures	-	1,140,000	1,140,000
(xiii)	Supply and Installation of Pumpsets and Associated Pipework	-	3,400,000	3,400,000
(xiv)	Supply and Installation of Water Treatment Plant	-	3,400,000	3,400,000
(xv)	Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing	-	3,400,000	3,400,000

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	Category	Group	Minimum Employed Capital (Note 3)	Minimum Working Capital
			HK\$	HK\$
(xvi)	Swimming Pool Water Treatment Installation	-	3,400,000	3,400,000
(xvii)	Turn-key Interior Design and Fitting-out Works (Note)	I/II	14,800,000	14,800,000
(xviii)	Categories other than those listed above and under para 3.4.6 in Section 3	Any	570,000	570,000

Note: The contractor under this category and group is also required to have a minimum annual turnover of HK\$50 million in each of the immediate past three years.

4. If a contractor has outstanding contracts in hand, his working capital for retention purpose should amount to at least the following:

Condition	Level of Working Capital required
(i) Contractor has either employed or working capital under HK\$4.2 million	15% of the combined annual value of uncompleted works on outstanding contracts both in the public and private sectors including the Housing Authority or the minimum working capital specified in paragraph 3 above, whichever is higher
(ii) Contractor has both employed and working capital not less than HK\$4.2 million respectively	10% of the combined annual value of uncompleted works on outstanding contracts both in the public and private sectors including the Housing Authority or the minimum working capital specified in paragraph 3 above, whichever is higher
(iii) Contractor is also a Group C contractor on the List of Approved Contractors for Public Works	8% on the first \$800M and 10% on the remaining combined annual value of uncompleted works on outstanding contracts both in the public and private sectors including the Housing Authority as required under paragraph 3(iii) of Appendix 2A or the minimum working capital specified in paragraph 3 above, whichever is higher

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- Note: (1) The above revised financial criteria shall take effect on 17 July 2009. However, in order to facilitate the existing contractors on the Specialist List to maintain their present listing status, the existing contractors will be given a 18-months' grace period to adjust to the above new financial criteria. In other words, all audited accounts with accounting periods ending on or after 16 January 2011 will be subject to the above new financial criteria.
 - (2) As regards applications for admission, confirmation or promotion in the Specialist List, contractors shall meet the above new financial criteria applicable to the specific category, group and status in question for applications made on or after 17 July 2009. Applications made prior to 17 July 2009 shall be subject to the financial criteria applicable at the time of application and the successful applicants shall meet the above new financial criteria before the end of the same grace period as the existing contractors aforesaid. For the purpose of tender evaluation, contractors in the relevant categories, groups and status of the Specialist List shall be subject to the above revised financial criteria if the tenders are invited on or after 17 July 2009.
 - (3) The issued and paid up capital and shareholders' funds should both meet the level of minimum employed capital applicable to his highest group and status.
- 5. A contractor in more than one category must maintain the minimum levels of employed and working capital applicable to his highest category, group and status including those classified for retention on the List of Approved Contractors for Public Works. The financial criteria for each group and status to be retained on the List of Approved Contractors for Public Works are set out in **Appendix 2A**.
- 6. Shortfall in employed capital can be rectified by an increase in share capital/partners' funds/proprietor's funds, while shortfall in working capital can be rectified by the following methods:
 - (i) increase in share capital/partners' funds/proprietor's funds to be paid up in cash; or
 - (ii) arrangement of a bank loan that is not repayable within 12 months; or
 - (iii) deferment in repayment of outstanding loan to directors or related companies by means of a deferred loan agreement in an acceptable legal format.

Bank overdraft facility can be a method to rectify the shortfall in working capital only for shortfall relating to outstanding workload.

- 7. If a contractor's business is at a loss, the average loss rate shall not be greater than 30% for the purpose of retention on the existing group status. All audited accounts submitted by the contractors shall be subject to the Profitability Trend Analysis, which is an analysis of the financial performance of a contractor with reference to its profit or loss over the past three consecutive years.
- 8. The average loss rate is defined as the weighted average of the net loss as a percentage of the opening balance of the shareholders' funds or net worth over the past 3 years with weights of 3:2:1. The net loss and the opening balance of the shareholders' funds or net worth will be extracted from the audited accounts. Subsequent capital injection by a contractor to strengthen the shareholders' funds or net worth will be taken into account in determining the revised loss rate

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for the year under review.

- 9. For a newly formed company with only two years' operations, the average loss rate is defined as the weighted average of the net loss as a percentage of the opening balance of the shareholders' funds or net worth over the past two years with weights of 3:2.
- 10. For a newly formed company with only one year's operation, the average loss rate is defined as the net loss as a percentage of the shareholders' funds or capital at the start of business.
- 11. Contractors are required to provide additional financial information as and when required to enable Environment, Transport and Works Bureau to carry out ad hoc financial assessment.

Financial Requirements for Acceptance of a Tender

- 12. In order to be recommended for the award of a contract of whatever value in any category of work, a contractor's employed and working capital, as assessed from the accounts, should amount to at least the level required for retention on the Specialist List. In this regard, the employed and working capital requirement would base on the latest statement of outstanding workload and would take into account the annual value of the new tender. The financial information required to be submitted in the tender by the contractors is set out in **Annex to Appendices 2A & 3B**.
- 13. In the case of a joint venture, each participant shall be assessed on his own financial capability in taking up his share of the tender. However, if any of the participants cannot meet the required capital level for undertaking his share but the other participant(s) of the joint venture has met the financial criteria for undertaking the whole contract, the joint venture may still be regarded as satisfying the financial requirements collectively.
- 14. If a contractor's average loss rate is greater than 30%, he will not be recommended for tender award for contracts in his prevailing group or category.
- 15. Rectification in shortfall for employed and working capital for tendering purpose follows the same methods adopted for retention purpose.

Certified Statements of Outstanding Workload

- 16. Each contractor submitting audited or management accounts and/or tendering for contracts of whatever value will be required to submit with his accounts/tenders a statement certified by his Managing Director or by a person authorized to sign Government contracts on the tenderer's behalf giving the following information:
 - (i) a list of current contracts held with Government and the private sector including the Housing Authority, both as main contractor or subcontractor;
 - (ii) the approximate value of uncompleted works on each of the contracts at (i); and
 - (iii) the approximate time required to complete each of the contracts at (i).

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APPENDIX 3C Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List

Summary of Contents

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Managing Department: Architectural Services Department

Works Category: Air-conditioning Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$<u>5.7M</u>
Group II: Contracts/Subcontracts of unlimited value

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of air-conditioning installations comprising chillers, refrigeration systems, heat rejection plant, pipeworks, water handling equipment, air ducts, air handling equipment, thermal insulation, control and monitoring system, etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts provided that the total value of Group II works does not exceed \$20 million

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^{*} Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

Group I	Group II
A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience
	<u>General</u>
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
	(c) The air-conditioning installation shall be of central type, which shall include chiller, chilled water pipeworks, pumps, air-handling equipment, etc., and the cooling capacity of the chillers is not less than 1000kW; and
	(d) The contract shall be of a completely new building construction project or a whole building refurbishment project.
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Group I	Group II
	(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
	(d) The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work; and
	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
	(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Statutory Registration
	The applicant shall be
	Quality Management System Certification
	-
	Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong

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Group I	Group II	
	Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.	
	The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of air-conditioning installation".	
	If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.	
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	
	Qualified Engineer	
	Employ at least 1 no. qualified engineer (Mechanical or Building Services discipling with adequate and relevant project management experience.	e)
	Technical Support Staff	
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate ar relevant academic qualification and working experience.	ıd
	Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.	
	<u>Craftsman</u>	
	Employ adequate nos. of craftsman in the following trades	
	(A)Plumber/AC Mechanic40 marksMinimum score required40 marksQualified Plumber/AC Mechanic20 marksIntermediate Plumber/AC Mechanic15 marksOrdinary Plumber/AC Mechanic8 marks	
	(B) Electrician Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks	
	Statutory Registration	
	The applicant shall have staff meeting the following statutory registration requirements	:
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Group I	Group II
	 Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 − 2 nos. (minimum) Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 − 1 no. (minimum)
	The LP and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
	Qualified Welder
	Employ adequate nos. of Qualified Welder (QW)
	QW 2 nos.
	The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.
	4. Plant and Equipment**(See Note in Page No. 234)
	Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 2 for list of typical equipment/tools and testing instruments required.
	5. Office/Workshop Facilities
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 110 m² and the minimum workshop + storage area shall be 50 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
B. Confirmation	B. Confirmation
The following shall only be applicable to existing Group I probationary contractor:	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and
(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(3) The scope of work for this contract must fulfill all the following requirements:
(3) The scope of work for this contract must fulfill all the following requirements:	(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and
(a) Contract value of the work related to the category under application for confirmation exceeds 50% of Group I tender limit; and	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	(c) The air-conditioning installation shall be of central type, which shall include

Appendix 3C

		Cwarm I			Cwayn H
(4)	(c) (d) Subc follow (a) (b) (c)	Installation of window type air-conditioners will not be considered as valid job reference: and If the contract is a term contract, all of the above requirements 3 (a) to 3 (c) shall be fulfilled in one works order. ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements: The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	(4)	(e S f (a (b	chiller, chilled water pipeworks, pumps, air-handling equipment, etc., and the cooling capacity of the chillers is not less than 1000kW; and (d) The contract shall be of a completely new building construction or a whole building refurbishment; and (e) If the contract is a term contract, all of the above requirements 3 (a) to 3 (d) shall be fulfilled in one works order. Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and (c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the
	(d)	The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work.		(d	 which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work.
		C. Direct Entry			C. Direct Entry
1. Jo	1. Job Experience		Not	App	pplicable
Gene	<u>ral</u>				
(1)	The a	applicant shall have adequate experience in the type and size of work of the cory, with satisfactory quality of work compatible with Government standard; and			
(2)	categ	applicant shall have adequate experience in contract management of work of the cory, solely and fully, including coordination with building contractor and other ling services / electrical and mechanical contractors; and			
(3)	CME	ob experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the H must also be produced to the satisfaction of the Secretary for the Environment, sport and Works; otherwise, it will not be considered as a valid job reference.			
shall	Referer fulfill ence)	nce for Inspection (In addition to the above, every job submitted by the applicant all requirements set out below; otherwise, it will not be considered as a valid job			
(4)		applicant shall submit at least 2 contracts, which were completed within the past 3 s for site inspection; and			

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	Group I	Group II
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
(8)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
	(a) Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	
	(c) Installation of window type air-conditioners will not be considered as valid job reference.	
(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d) The aforementioned main contractor shall not be the air-conditioning installation contractor for the project work; and	
	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the	

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		G W
Group I		Group II
authenticity of the proof provided by the application concerned project.	ant from the relevant parties of the	
concerned project.		
2. Registration with relevant authorities in Hong Kong	(such as Quality Management	
System Certification, Building Authority etc.)	(such as Quality Wallingement	
Statutory Registration		
The applicant shall be		
a Registered Specialist Contractor in the Ventilati	on Sub-register under	
Buildings Ordinance, Cap. 123; and		
	r Electricity Ordinance, Cap.	
406; and		
have full time technical staff (meeting the relevant statutor	y registration requirement) of	
number not less than that described in the Section "Technic	cal Staff".	
3. Technical Staff (See Annex 1 for definition of Staff Qu	alification)	
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
<u>Technical Support Staff</u>		
Employ adequate nos. of technicians, site supervisors as	nd draftsmen with adequate and	
relevant academic qualification and working experience.	id draftsmen with adequate and	
Technician	2 nos.	
Site supervisor	2 nos.	
Draftsman	1 no.	
<u>Craftsman</u>		
Employ adequate nos. of craftsman with adequate relev	ant avnariance in the following	
trades	ant experience in the following	
(A) Plumber/AC Mechanic		
Minimum score required	20 marks	
Qualified Plumber/AC Mechanic	20 marks	
Intermediate Plumber/AC Mechanic	15 marks	
Ordinary Plumber/AC Mechanic	8 marks	
(D) Electrician		
(B) Electrician Minimum score required	20 marks	
Qualified Electrician	20 marks	
Intermediate Electrician	15 marks	
Ordinary Electrician	8 marks	
·		
Statutory Registration		
The applicant shall have staff meeting the following status	ory registration requirements:	

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Group I	Group II
Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap.	
406. Grade A2 − 1 no. (minimum) Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 − 1 no.	
(minimum)	
The LP and REW can be the Engineer, Technical Support Staff or Craftsman.	
Qualified Welder	
Employ adequate nos. of Qualified Welder (QW)	
QW 1 no.	
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.	
4. Plant and Equipment**(See Note in Page No. 234)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates where applicable for testing instruments shall be available. Refer Annex 2 for list of typical equipment /tools and testing instruments required.	
5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 50 m² and the minimum workshop + storage area shall be 30 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	

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Works Category: Audio Electronics Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of power amplifier, mixing amplifier, cassette tape deck, loudspeaker, microphone etc. commonly used for public address system, intercom system, language laboratory system, simultaneous interpretation system and audio system at different venues.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*}See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
1. Job Experience General	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	1. Job Experience General
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	 (3) The scope of work for this contract must fulfill all the following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and 	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	 (b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements (a) shall be fulfilled in one works 	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	order. (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	work.	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:(a) Contract value of the work related to the

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.2M; and			category under application for inclusion exceeds \$0.5M; and (b) The contract shall cover the nature of works as
(9)	refe	The contract shall cover the nature of works as described in the "Brief Scope of Category". contract will not be considered as valid job rence unless it can satisfy all of the following		(9)	described in the "Brief Scope of Category". Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		The subcontract shall include all the relevant work as described under the "Brief Scope of			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	Category" covered in the main contract; and The applicant shall have undertaken the full scope of work covered in the subcontract, solely			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	and fully, including contract management; and The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the audio electronics installation contractor for the project work; and
	(d)	work; and The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
2. Technical Staff (See Annex 1 for definition of Staff Qualification)		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
3. Plant and Equipment**(See Note in Page No. 234)		3. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 3 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 3 for list of typical equipment/tools and testing instruments required.
4. Office/Workshop Facilities		4. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
5. Others		5. Others

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department:	Architectural Services Department
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Works Category: Broadcast Reception Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of TV/FM aerials, pre-amplifiers, broadband/channel amplifiers, distribution amplifiers, combining units, tee-units, signal cables and TV/FM outlets, etc. for building and amenity projects.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	The following shall only be opplied by a victing	1. Job Experience
	The following shall only be applicable to existing probationary contractor:	<u>General</u>
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely
	(3) The scope of work for this contract must fulfill all the following requirements:	and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.1M; and	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	not be considered as a valid job reference.
	(c) If the contract is a term contract, all of the above requirements 3(a) and 3(b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	the direct contract by the employer of the concerned project, all shall not be the broadcast reception installation contractor for the project	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	work.	(a) Contract value of the work related to the

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		category under application for inclusion exceeds \$0.25M; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the broadcast reception installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
· ·		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Electrician/BS Mechanic/Electronics Craftsman
		Minimum score required 20 marks Qualified Electrician/BS Mechanic/ Electronics Craftsman 20 marks
		Intermediate Electrician/BS Mechanic Craftsman 15 marks Ordinary Electrician/BS Mechanic/ Electronics Craftsman 8 marks
		3. Plant and Equipment **(See Note in Page No. 234)
		Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 4 for list of typical equipment/tools and testing instruments required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m ² and the minimum workshop + storage area shall be 10 m ² . Documentary evidence (e.g. purchase/lease agreement) to prove right of use
Appendix 3C		Page 21 of 234

Minimum Technical & Management Criteria for Admission, Co	onfirmation and Promotion of Contractors for the Specialist List
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Appendix 3C

A. Entry on Probation	B. Confirmation	C. Direct Entry
		shall be produced.

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Managing Department:	Architectural Services Department

Works Category:	Burglar Alarm and Security Installation	Specialist Contractor
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Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of central control station consisting of computer and peripherals, communication network, UPS system, equipment console and rack, deterrent system consisting of card access control, exit control lock, duress push button, tamper switch, detection system comprising of motion detector, magnetic door contact, glass break detector, surveillance system comprising of closed circuit television, digital video motion detector, watchman tour system, etc. where applicable for building and amenity projects.

*Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry	
Not Applicable.	The following shall only be applicable to existing	1. Job Experience	
		General	
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely	
	(3) The scope of work for this contract must fulfill all the following requirements:	and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will	
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	not be considered as a valid job reference.	
	(c) If the contract is a term contract, all of the above requirements 3(a) and 3(b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
	(4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
	the direct contract by the employer of the concerned project, all shall not be the burglar alarm and security installation contractor for the	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
	project work.	(a) Contract value of the work related to the	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		category under application for inclusion exceeds \$1M; and
		(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(9) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the burglar alarm and security installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Statutory Registration
		The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Qualified Engineer
		Employ at least 1 no. qualified engineer (Electronics, Building Services or Electrical discipline) with adequate and relevant professional and project management experience. [This requirement may be waived with the applicant having adequate nos. of degree holder technicians stated below.]
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience. Degree holder Technician with minimum 5 years post-qualification experience. Nil for applicant with Qualified Engineer. Technicians of technicians, site supervisors and transfer of the supervisors and tran
		Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Electrician/BS Mechanic/Electronics Craftsman
		Minimum score required 20 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
v v		Qualified Electrician/BS Mechanic/ Electronics Craftsman 20 marks Intermediate Electrician/BS Mechanic/ Electronics Craftsman 15 marks Ordinary Electrician/BS Mechanic/ Electronics Craftsman 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: ♦ Security Personnel (SP) holding Security Personnel Permit (Cat. D) issued under Security
		and Guarding Services Ordinance, Cap 460 – 2 nos. (minimum) The SP can be the Qualified Engineer, Technical Support Staff or Craftsman. 4. Plant and Equipment **(See Note in Page No. 234)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 5 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others Authorized Agency Be an authorized agent/distributor in HKSAR for the major equipment to be offered. Documentary

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		evidence such as authorized agency/distributorship agreements shall be available.
		24-hour Emergency Service Centre Available for fault attendance. The service shall be effective, e.g. the fault call can be acknowledged immediately and maintenance personnel can arrive at the fault location within 1 hour.

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Architectural Services Department Architectural Services Department	Managing Department:	Architectural Services Department
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Works Category: Catering Equipment Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of full range of electrical and gas cooking equipment, sinks and fixtures, exhaust hood, steam and hot water equipment, refrigeration and food storage facilities, etc. for use in commercial kitchen, restaurant and canteen in buildings and associated serving area, including cooker, cooking range, food warmer, steamer, fryer, hot plate, oven, water heater, sink, hot cabinet, freezer, food rack, kitchen work-top, water wash hood, gas water heater connected to mechanical exhaust system etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	The following shall only be applicable to existing probationary contractor:	1. Job Experience
	 The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and This contract shall be direct contract, which was signed 	General (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	between the applicant and the employer of the concerned project; and (3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	 (4) The scope of work for this contract must fulfill all the following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and 	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	 (b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and (c) The contract shall be for new building project or 	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	for a completely renovated commercial kitchen in restaurant, canteen, etc. Partial renovation or fitting-out works in an existing commercial kitchen are not acceptable; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in one works order.	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(7) All statutory submissions to Gas Authority and statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job
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A. Entry on Probation	B. Confirmation	C. Direct Entry
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the	reference within normal office hours; and (9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	concerned project, all shall not be the catering equipment installation contractor for the project work.	(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
		(b) The contract shall cover major catering equipment installation related to the category; and
		(c) The contract shall be for new building project or for a completely renovated commercial kitchen in restaurant, canteen, etc. Partial renovation or fitting-out works in an existing commercial kitchen are not acceptable.
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the catering equipment installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and (e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be → a Registered Gas Contractor registered under Gas Safety Ordinance, Cap. 51; and → a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades (A) BS Mechanic/Mechanical Fitter/Electrician

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A. Entry on Probation B. Confirmation	C. Direct Entry Minimum score required 20 marks Qualified BS Mechanic/Mechanical Fitter/Electrician 20 marks Intermediate BS Mechanic/Mechanical Fitter/Electrician 15 marks
	Fitter/Electrician 20 marks Intermediate BS Mechanic/Mechanical Fitter/Electrician 15 marks
	Intermediate BS Mechanic/Mechanical Fitter/Electrician 15 marks
	Fitter/Electrician 15 marks
	Ordinary BS Mechanic/Mechanical
	Fitter/Electrician 8 marks
	Statutory Registration
	The applicant shall have staff meeting the following
	statutory registration requirements:
	♦ Registered Gas Installer (RGI) registered under
	Gas Safety Ordinance, Cap. 51. Gas
	Installation Work – 1 no. (minimum) (The
	RGI(s) shall hold licences covering gas
	installation work Class 1 to 7 collectively) ♦ Registered Electrical Worker (REW) registered
	under Electricity Ordinance, Cap. 406. Grade
	A2 – 1 no. (minimum)
	The DCI and DEW can be the Technical Support Stoff
	The RGI and REW can be the Technical Support Staff or Craftsman.
	4. Plant and Equipment**(See Note in Page No. 234)
	Adequate modern drafting and computing facilities;
	minimum 1 no. CAD terminal.
	Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation,
	maintenance and testing/commissioning services; valid
	calibration certificates for testing instruments shall be
	available. Refer Annex 6 for list of typical
	equipment/tools and testing instruments required.
	5. Office/Workshop Facilities
	Local office/workshop in Hong Kong SAR is required.
	Reasonably sized, suitably furnished office and
	workshop/storage areas. In general, the minimum office area shall be 40 m ² and the minimum workshop
	office area shall be 40 m ² and the minimum workshop
	+ storage area shall be 10 m ² . Documentary evidence
	(e.g. purchase/lease agreement) to prove right of use shall be produced.
	shan be produced.

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Managing Department : Highways Department

Brief Scope of Category:

The scope of work in this category covers the design, manufacture and installation of glass reinforced plastic units or plastic units reinforced with other fibre for highway structures works.

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Direct Entry

1. Job Experience

Satisfactory completion of at least 3 projects in the design, manufacture and installation of glass (or fibre) reinforced plastic products in highway structures in the past 3 years, each with a value of \$0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Design staff with at least 3 years experience in the field of glass (or fibre) reinforced plastic.

Local workforce capable of installing the glass (or fibre) reinforced plastic units.

5. Plant and Equipment **(See Note in Page No. 234)

- a. Mechanical fibre/resin mixer.
- b. Hoisting facility.
- c. Carpenter's equipment (saw, drill etc.).
- d. Heat curing chamber.
- e. Spray machine (chopped fabric, gelcoat etc.).
- f. Air compressor for spray gun.

6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a factory with equipment listed above and adequate testing and quality control facilities.

7. Training Facilities

NA

8. Others

Acceptable design, manufacturing and installation procedures and fully documented quality assurance system. Raw materials used must comply with relevant British Standards or other equivalent national standards. A certificate from an approved laboratory to confirm that the materials used meet the requirements stipulated in BS 2782 & BS 4549.

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Managing Department:	Architectural Services	Department
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Works Category: Diesel Generator Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of diesel generator and associated installations such as fuel tank, switchboard, cable, earthing etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	The following shall only be applicable to existing probationary contractor:	1. Job Experience
	(1) The configuration of few 21 constant is 21 to 4 cons	<u>General</u>
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard;
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and (2) The applicant shall have adequate experience in
		contract management of work of the category, solely
	(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(4) The scope of work for this contract must fulfill all the following requirements:	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be
	(a) The rating of the diesel generator of the job reference shall be 300kVA or higher; and	produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid
	(c) If the contract is a term contract, all of the above $\frac{1}{10}$	ob reference)
	requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	(4) The applicant shall submit at least 2 contracts, which
	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following	were completed within the past 3 years for site inspection; and
	requirements, in addition to all the above stated requirements:	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the diesel generator	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
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A. Entry on Probation	B. Confirmation	C. Direct Entry
	installation contractor for the project work.	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) The contract shall cover the scope of works as described in the "Brief Scope of Category"; and
		(b) The rating of the diesel generator of the job reference shall be 300kVA or higher.
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the diesel generator installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Qualified Engineer
		Employ at least 1 no. qualified engineer (Mechanical, Electrical or Building Services discipline) with adequate and relevant project management experience.
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades
		(A) Mechanical Fitter
		Minimum score required 20 marks Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
j		(B) Electrician Minimum score required 20 marks
		Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements: Registered Electrical Worker (REW) registered
		under Electricat Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum) The REW can be the Qualified Engineer, Technical
		Support Staff or Craftsman. 4. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 7 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others
		Authorized Agency Preferably being an authorized agent in HKSAR for essential equipment. Documentary evidence such as

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		authorized agency agreements shall be available.
		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Works Category: Electrical and Mechanical Installation for Sewage Treatment and Screening Plant Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers design, supply, installation and maintenance of electrical and mechanical plant for sewage pumping stations, sewage screening & degritting plant and primary/secondary sewage treatment works.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$34 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	A. Entry on Probation		B. Confirmation	C. Direct Entry		
1. Job Experience		(4) 77 1 1 1 1 1 1 1 1 1 1		1. Job Experience		
Gene		(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	Gene:		
(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	(3)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	
	mechanical contractors; and	(4)	The scope of work for this contract must fulfill all the following requirements:		mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.		(a) Contract value of the work related to the category under application for confirmation exceeds \$5M; and	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
job s set o	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)		 (b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in 	job s	Reference for Inspection (In addition to the above, every submitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5)	one works order. Subcontract will not be considered as valid job reference unless it can satisfy all of the following	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		requirements, in addition to all the above stated requirements: (a) The subcontract shall include all the relevant	(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		work as described under the "Brief Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		scope of work covered in the subcontract, solely and fully, including contract management; and	(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project.	(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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A. Entry on Probation		A. Entry on Probation B. Confirmation		C. Direct Entry			
(9)		scope of work for each of these 2 contracts must all all of the following requirements:		(9)		scope of work for each of these 2 contracts must l all of the following requirements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$5M; and			(a)	Contract value of the work related to the category under application for inclusion exceeds \$10M; and	
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category".			(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category".	
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	refer requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and			(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's			(d)	The aforementioned main contractor shall not be the electrical and mechanical installation contractor for sewage treatment and screening plant of the project work; and	
		authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and			(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which	
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or				must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
		confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Mechanical or Electrical discipline) with adequate and relevant project management experience.		Employ at least 1 no. qualified engineer (Mechanical or Electrical discipline) with adequate and relevant project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.		Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades
(A) Mechanical Fitter		(A) Mechanical Fitter
Minimum score required 30 marks		Minimum score required 30 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks	Di Commination	Qualified Mechanical Fitter 20 marks Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks
(B) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 − 1 no. (minimum) A Competent Person (CP) appointed under the Factory & Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces − 1 no. (minimum) Certified Worker (CW) appointed under the Factory & Industrial Undertakings (Confined Spaces)		(B) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 − 1 no. (minimum) A Competent Person (CP) appointed under the Factory & Industrial Undertakings (Confined Spaces) Regulations, Cap. 59 as Personnel for working in confined spaces − 1 no. (minimum) Certified Worker (CW) appointed under the Factory & Industrial Undertakings (Confined Spaces)
Regulations, Cap. 59 as Personnel for working in confined spaces – 2 nos. (minimum) The CP, CW and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		Regulations, Cap. 59 as Personnel for working in confined spaces – 2 nos. (minimum) The CP, CW and REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
Qualified Welder Employ adequate nos. of Qualified Welder (QW)		Qualified Welder Employ adequate nos. of Qualified Welder (QW)
QW 1 no.		QW 1 no. The QW can be the Qualified Engineer, Technical
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		Support Staff or Craftsman.
4. Plant and Equipment**(See Note in Page No. 234)		4. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 8 for list of typical		Adequate modern drafting and computing facilities, minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 8 for list of typical

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A. Entry on Probation	B. Confirmation	C. Direct Entry
equipment/tools and testing instruments required.		equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department: Architectural Services Department

Works Category: Electrical Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$2.3M
Group II: Contracts/Subcontracts up to HK\$5.7M
Group III: Contracts/Subcontracts of unlimited value

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of low voltage electrical installation comprising incoming electricity supply, main and sub-main distribution system, final circuits, power points, lighting points, lighting fittings, electrical appliances, lightning protection, earthing system, etc. for building and amenity projects.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Probation to Group I: Not probationary status

Probation to Group II: Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II contracts/subcontracts

Probation to Group III: Eligible for the award of any number of Group I and Group II contracts/subcontracts; and a maximum of two Group III

contracts/subcontracts provided that the total value of Group III work does not exceed \$20 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

Group I	Group II	Group III
A. Entry on Probation	A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience	1. Job Experience
	<u>General</u>	<u>General</u>
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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Group I			Group II		Group III
	(9)	The s	scope of work for each of these 2 contracts must l all of the following requirements:	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group II tender limit; and		(a) Contract value of the work related to the categor under application for inclusion exceeds 180% of Group II tender limit; and
		(b)	The main incoming switchgear shall have rating of not less than 800A; and		(b) The main incoming switchgear shall have rating of not less than 2500A or 1500 kVA; and
	(10)	(c)	The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits.		(c) The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building
	(10)	unles	contract will not be considered as valid job reference as it can satisfy all of the following requirements, in ion to all the above stated requirements:		services / electrical and mechanical contractors; and
		(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and		(d) The contract shall be of a completely new building construction or a whole building refurbishment; and
		(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		(e) At least one of these 2 contracts shall not be wor for residential development or engineering plant building.
		(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(d)	The aforementioned main contractor shall not be the electrical installation contractor for the project work; and		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and		(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
		(f)	Notwithstanding the above, the Managing Department may seek references on the		(d) The aforementioned main contractor shall not be the electrical installation contractor for the project work; and

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Group I	Group II	Group III
	applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
		(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Same requirements as stipulated for "Direct Entry"	Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		Quality Management System Certification
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of electrical installation".

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Group I	Group II	Group III
		If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Same requirements as stipulated for "Direct Entry"	Qualified Engineer
		Employ at least 1 no. qualified engineer (Electrical or Building Services discipline) with adequate and relevant project management experience
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 4 nos. Draftsman 2 nos.
		<u>Craftsman</u> Employ adequate nos. of draftsmen in the following trades:
		(A)Electrician80 marksMinimum score required80 marksQualified Electrician20 marksIntermediate Electrician15 marksOrdinary Electrician8 marks

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Group I	Group II	Group III
Group 1	4. Plant and Equipment**(See Note in Page No. 234) Same requirements as stipulated for "Direct Entry"	Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: ♦ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C0 − 1 no. (minimum) ♦ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 − 2 nos. (minimum) ♦ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 − 5 nos. (minimum) The REW can be the Qualified Engineer, Technical Support Staff or Craftsman 4. Plant and Equipment **(See Note in Page No. 234) Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals.
	5. Office/Workshop Facilities	Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 9 for list of typical equipment/tools and testing instruments required. 5. Office/Workshop Facilities
	Same requirements as stipulated for "Direct Entry"	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 100 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
B. Confirmation	B. Confirmation	B. Confirmation
Not Applicable	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and

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Group I		Group II		Group III
	betw	contract shall be direct contract, which was signed een the applicant and the employer of the erned project; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	Certi	tatutory forms such as the Work Completion ficate (i.e. Form WR1) shall be issued under the e of the applicant; and	(3)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and
	(4) The follo	scope of work for this contract must fulfill all the wing requirements:	(4)	The scope of work for this contract must fulfill all the following requirements:
	(a)	Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and		(a) Contract value of the work related to the category under application for confirmation exceeds Group II tender limit; and
	(b)	The main incoming switchgear shall have rating of not less than 800A; and		(b) The main incoming switchgear shall have rating of not less than 2500A or 1500 kVA; and
	(c)	The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building services / electrical and mechanical contractors; and		(c) The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building services / electrical and mechanical contractors; and
	(d)	The contract shall be of a completely new building construction or a whole building refurbishment; and		(d) The contract shall be of a completely new building construction or a whole building refurbishment; and
	(e)	If the contract is a term contract, all of the above requirements 4 (a) to 4 (d) shall be fulfilled in one works order.		(e) The contract shall not be work for residential development or engineering plant building; and
	refer	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated		(f) If the contract is a term contract, all of the above requirements 4 (a) to 4 (e) shall be fulfilled in one works order.
		rements: The subcontract shall include all the relevant	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		work as described under the "Brief Scope of Category" covered in the main contract; and		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		Category" covered in the main contract; and (b) The applicant shall have undertaken the full
	(c)	The subcontract shall be signed between the		scope of work covered in the subcontract, solely and fully, including contract management; and
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Group I	Group II	Group III
•	applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the electrical installation contractor for the project work.	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the electrical installation contractor for the project work.
C. Direct Entry	C. Direct Entry	C. Direct Entry
1. Job Experience	1. Job Experience	Not Applicable
<u>General</u>	<u>General</u>	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the	

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	Group I	Group II	Group III
	concerned project; and	concerned project; and	•
(7)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
(9)	The scope of work for each of these 2 contracts must fulfill all the following requirements:	(9) The scope of work for each of these 2 contracts must fulfill all the following requirements:	
	(a) Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	(a) Contract value of the work related to the category under application for inclusion exceeds 50% Group II tender limit; and	
	(b) The main incoming switchgear shall have rating of not less than 400A.	(b) The main incoming switchgear shall have rating of not less than 800A; and	
(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(c) The contract shall cover the entire electrical installation from the main incoming switchgear to the final circuits, comprising co-ordination with building contractor and other building	
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	and	
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	(d) The contract shall be of a completely new building construction or a whole building refurbishment.	
	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
	(d) The aforementioned main contractor shall not be the electrical installation contractor for the project work; and	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	contractor including a letter, which must be signed by the main contractor's authorized signatory to	(c) The subcontract shall be signed between the applicant and the main contractor which is the	

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Group I	Group II	Group III
confirm that the applicant has met the above requirements in the subcontract; and	company awarded with the direct contract by the employer of the concerned project; and	·
(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	 (d) The aforementioned main contractor shall not be the electrical installation contractor for the project work; and (e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and (f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project. 	
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	
Statutory Registration	Statutory Registration	
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	
3. Technical Staff (See Annex 1 for definition of Staff Qualification)	3. Technical Staff (See Annex 1 for definition of Staff Qualification)	
Technical Support Staff	Technical Support Staff	
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	

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Group I	Group II	Group III
Technician 1 no. Site supervisor 1 no. Draftsman 1 no. Craftsman Employ adequate nos. of craftsmen in the following trades: (A) Electrician	Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no. Craftsman Employ adequate nos. of craftsmen in the following trades: (A) Electrician	
Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks Statutory Registration	Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks Statutory Registration	
The applicant shall have staff meeting the following statutory registration requirements:	The applicant shall have staff meeting the following statutory registration requirements:	
♦ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 – 1 no. (minimum)	 Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B0 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 − 2 nos. (minimum) 	
The REW can be the Technical Support Staff or Craftsman	The REW can be the Technical Support Staff or Craftsman	
4. Plant and Equipment ***(See Note in Page No. 234)	4. Plant and Equipment ***(See Note in Page No. 234)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.	Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.	
Adequate nos. of calibrated testing instruments and equipment/ tools for carrying out installation, operation, maintenance and testing/ commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 9 for list of typical equipment/tools and testing instruments required.	Adequate nos. of calibrated testing instruments and equipment/ tools for carrying out installation, operation, maintenance and testing/ commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 9 for list of typical equipment/tools and testing instruments required.	

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Group I	Group II	Group III
5. Office/Workshop Facilities	5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 60 m² and the minimum workshop + storage area shall be 15 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	

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Managing Department: Architectural Services Department

Works Category: Electronic Timing and Display Installation

Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of electronic scoreboard, electronic timing system, time and temperature display system, electronic message system etc. at different venues.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry	
1. Job Experience	(4) 771 12 (1) (2) (1) (1) (1) (1)	1. Job Experience	
<u>General</u>	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	General	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(3) The scope of work for this contract must fulfill all the following requirements:(a) Contract value of the work related to the category under application for confirmation	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	exceeds \$0.2M; and (b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	requirements 3 (a) and 3 (b) shall be fulfilled in one works order. (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage.	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and (c) The party by which the applicant is awarded	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	timing and display Installation contractor for the project work.	fulfill all of the following requirements:	
(a) Contract value of the work related to the		(a) Contract value of the work related to the category under application for inclusion exceeds	

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	A. Entry on Probation	B. Confirmation		C. Direct Entry
	category under application for inclusion exceeds \$0.2M; and			\$0.5M; and
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".		(0)	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:		(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and display installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the electronic timing and display installation contractor for the project work; and
	(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
2. Technical Staff (See Annex 1 for definition of Staff Qualification)		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required Qualified Electronics Craftsman Ordinary Electronics Craftsman 10 marks
3. Plant and Equipment**(See Note in Page No. 234)		3. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 10 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 10 for list of typical equipment/tools and testing instruments required.
4. Office/Workshop Facilities		4. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
5. Others		5. Others
Authorized Agency Preferably be an authorized agent in HKSAR for		Authorized Agency Preferably be an authorized agent in HKSAR for

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A. Entry on Probation	B. Confirmation	C. Direct Entry
essential equipment. Documentary evidence such as authorized agency agreements shall be available.		essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department :	Water Supplies Department	
0 0 1	water Supplies Department	

Works Category : Fabrication of Steel Pipe Specials Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers fabrication of mild steel pipe specials of a size up to that shown below with protective coatings as specified in **Annex 11** for large waterworks projects:-

- a. 1200 mm dia. x 1200 mm dia. x 45° branch
- b. 1200 mm dia. x 2000 mm length
- c. 1200 mm dia. x 1000 mm taper
- d. 1200 mm dia. blank flange

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Direct Entry

1. Job Experience

The contractor should possess at least 5 years experience in the fabrication of steel pipe specials for large Waterworks projects including provision of their internal and external protections. The contractor must provide supporting documents to show that steel pipe specials meeting WSD's requirements have been manufactured in his previous projects.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management *(See Note in Page No. 234)

One of the managers should possess minimum qualification of a Higher Certificate in Mechanical/Production Engineering, or equivalent with at least 5 years relevant experience.

4. Technical Staff

A minimum of 2 principal technical persons and 10 skilful workers for carrying out the fabrication work. At least one of the technical persons should possess minimum qualification of a Higher Certificate in Mechanical/Production Engineering or equivalent and with at least 5 years relevant experience.

5. Plant and Equipment **(See Note in Page No. 234)

NA

6. Office/Workshop Facilities

The contractor should have a workshop in Hong Kong equipped with sufficient and well maintained machinery, equipment, tools and lifting facilities for fabricating, testing and handling steel pipe specials up to 1200mm in diameter. The contractor should allow inspection of all workshop facilities by Government representatives.

7. Training Facilities

NA

8. Others

The contractor should provide full details of his previous fabrication work to demonstrate his experience and capability.

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Managing Department :	Water Supplies Department

Works Category : Fabrication of Unfired Pressure Vessels Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers design, supply, manufacture, inspection & testing, painting and delivery to the site of steel unfired pressure vessels and associated fittings.

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Direct Entry

1. Job Experience

Possess at least 5 years experience in the fabrication of unfired pressure vessels for large Waterworks projects including provision of their internal and external protection. The contractor must provide supporting documents to show that unfired pressure vessels meeting WSD's requirements have been manufactured in his previous projects.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management *(See Note in Page No. 234)

One of the managers and principal technical staff should possess minimum qualification of Higher Certificate in Mechanical / Production Engineering or equivalent with at least 5 years relevant experience.

4. Technical Staff

Minimum of 2 qualified technical persons as well as sufficient skilful workers for carrying out the fabrication work. At least one of the qualified technical persons should possess minimum qualification of Higher Certificate in Mechanical/Production Engineering or equivalent with at least 5 years relevant experience.

5. Plant and Equipment **(See Note in Page No. 234)

NA

6. Office/Workshop Facilities

A workshop in Hong Kong equipped with sufficient and well maintained machinery, equipment, tools and lifting facilities for fabricating, testing and handling unfired pressure vessels up to 3500mm in diameter as detailed in the **Annex 12**. The contractor should allow inspection of all workshop facilities by Government representatives.

7. Training Facilities

NA

8. Others

The contractor should provide full details of his previous fabrication work to demonstrate his experience and capability.

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Managing Department: Architectural Services Department

Works Category: Fire Service Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$2.3M
Group II: Contracts/Subcontracts of unlimited value

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of fire service installations comprising sprinkler system, FH/HR system, manual and automatic fire alarm system, etc. for building and amenity projects.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts provided that the total value of Group II works does not exceed \$8.2 million

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^{*} Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

Group I	Group II
A. Entry on Probation	A. Entry on Probation
Not Applicable	1. Job Experience
	<u>General</u>
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	(7) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and
	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
	(c) The contract shall be of a completely new building construction project or a whole building refurbishment project.

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Group I	Group II
	(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
	(d) The aforementioned main contractor shall not be the fire service installation contractor for the project work; and
	(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
	(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Statutory Registration
	The applicant shall be ♦ a Registered Fire Service Installation Contractor Class 1 & 2 registered under Fire Service Ordinance, Cap. 95; and ♦ a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and have full time technical staff (meeting the relevant statutory registration requirement) of
	number not less than that described in the Section "Technical Staff".
	Quality Management System Certification
	Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong

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Group I	Group II
•	Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
	The scope of certification shall be relevant to the contractor list being applied for, e.g. "supply, installation and maintenance of fire service installation".
	If the scope of certification does not include "maintenance", the manual shall have relevant sections for maintenance work that shall include not only post contract service but also service for separate maintenance contract.
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Qualified Engineer
	Employ at least 1 no. Qualified Engineer (Mechanical, Building Services or Electrical discipline) with adequate and relevant professional and project management experience.
	Technical Support Staff
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience. Technician 2 nos.
	Site supervisor 4 nos. Draftsman 2 nos.
	<u>Craftsman</u>
	Employ adequate nos. of craftsman in the following trades
	(A)Plumber/FS Mechanic40 marksMinimum score required40 marksQualified Plumber/FS Mechanic20 marksIntermediate Plumber/FS Mechanic15 marksOrdinary Plumber/FS Mechanic8 marks
	(B) Electrician Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
	Statutory Registration
	The applicant shall have staff meeting the following statutory registration requirements: Class 3 Registered Fire Service Installation Contractor (RFSIC) registered under
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Group I	Group II
	Fire Service Ordinance, Cap. 95 – 1 no. (minimum) Registered Electrical Worker (REW) registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum) Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102. –1 no. (minimum) The LP, REW and RFSIC can be the Qualified Engineer, Technical Support Staff or Craftsman. 4. Plant and Equipment**(See Note in Page No. 234) Adequate modern drafting and computing facilities; minimum 2 nos. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 13 for list of typical equipment/tools and testing instruments required. 5. Office/Workshop Facilities Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 25 m². Documentary
	evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
B. Confirmation	B. Confirmation
The following shall only be applicable to existing probationary contractor:	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and
(1) The applicant has satisfactorily completed, within the past 12 months, at least one p works contract let by a Works Department; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	he (3) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and
(3) All statutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be issued under the name of the applicant; and	(4) The scope of work for this contract must fulfill all the following requirements:
(4) The scope of work for this contract must fulfill all the following requirements:	(a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and
(a) Contract value of the work related to the category under application for confirmation exceeds 50% of Group I tender limit; and	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
(b) The contract shall cover major scope of works as described in the "Brief Sco of Category"; and	(c) The contract shall be of a completely new building construction or a whole building refurbishment; and
(c) The contract shall be of a completely new building construction or a whole building refurbishment; and	(d) If the contract is a term contract, all of the above requirements 4 (a) to 4 (c) shall

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be fulfilled in one works order. Sub-contract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements: (a) The sub-contract shall include all the relevant work as described under the "Brief Scope of Category" covered in the min contract; and (b) The applicant shall have undertaken the full scope of work covered in the sub-contract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The applicant shall have undertaken the full scope of work covered in the sub-contract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the fire service installation contractor for the project work. (e) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and 2.1 The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and 3. For job experience outside the HKSAR, evidences as sipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference. (b) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		Group I	Group II
Not Applicable Not Applicable	(5)	 (d) If the contract is a term contract, all of the above requirements 4 (a) to 4 (c) shall be fulfilled in one works order. Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and (c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the fire service installation 	be fulfilled in one works order. (5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and (c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and (d) The aforementioned main contractor shall not be the fire service installation
Not Applicable Not Applicable		C Direct Entry	C Direct Entry
The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference. The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and These 2 contracts shall be direct contract, which was signed between the applicant and	1. Jo		
Transport and Works; otherwise, it will not be considered as a valid job reference. Sob Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and These 2 contracts shall be direct contract, which was signed between the applicant and	(1) (2) (3)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the	
	shall refer (4) (5)	Transport and Works; otherwise, it will not be considered as a valid job reference. Reference for Inspection (In addition to the above, every job submitted by the applicant I fulfill all requirements set out below; otherwise, it will not be considered as a valid job rence) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
	(6)	, , , , , , , , , , , , , , , , , , , ,	Page 74 of 224

		Group I	Group II
	the en	nployer of the concerned project; and	•
(7)	All sta	atutory forms such as Form FSI 314, Form FSI 501, Form FSI 251, etc. shall be d under the name of the applicant; and	
(8)	exami	pplicant shall be able to arrange joint site inspections for the government's ination of the quality and workmanship of the submitted job reference within al office hours; and	
(9)		cope of work for each of these 2 contracts must fulfill all of the following rements:	
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
	(c)	The contract shall be of a completely new building construction project or a whole building refurbishment project.	
(10)	Subco	ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and	
	(d)	The aforementioned main contractor shall not be the fire service installation contractor for the project work; and	
	(e)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and	
	(f)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	

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Group I		Group II
2. Registration with relevant authorities in Hong Kong (such as System Certification, Building Authority etc.)	s Quality Management	
Statutory Registration		
The applicant shall be		
a Registered Fire Service Installation Contractor Class 1 & Service Ordinance, Cap. 95; and	2 registered under Fire	
a Registered Electrical Contractor registered under Electrici and	ty Ordinance, Cap. 406;	
have full time technical staff (meeting the relevant statutory reginumber not less than that described in the Section "Technical Statutory regions are not less than that described in the Section".	istration requirement) of aff".	
3. Technical Staff (See Annex 1 for definition of Staff Qualificati	ion)	
Technical Support Staff		
Employ adequate nos. of technicians, site supervisors and drafts relevant academic qualification and working experience.	smen with adequate and	
Technician Site supervisor	2 nos. 2 nos.	
Draftsman	1 no.	
<u>Craftsman</u>		
Employ adequate nos. of craftsman with adequate relevant expe	erience in the following	
trades (A) Plumber/ FS Mechanic		
Minimum score required	20 marks	
Qualified Plumber/FS Mechanic Intermediate Plumber/FS Mechanic	20 marks 15 marks	
Ordinary Plumber/FS Mechanic (B) Electrician	8 marks	
Minimum score required	20 marks	
Qualified Electrician Intermediate Electrician	20 marks 15 marks	
Ordinary Electrician	8 marks	
Statutory Registration		
The applicant shall have staff meeting the following statutory regis	stration requirements:	

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Group I	Group II
♦ Class 3 Registered Fire Service Installation Contractor (RFSIC) registered under	
Fire Service Ordinance, Cap. 95 – 1 no. (minimum)	
Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap.	
406. Grade A2 − 1 no. (minimum) Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102. − 1 no.	
(minimum)	
The LP, REW and RFSIC can be the Qualified Engineer, Technical Support Staff or	
Craftsman.	
**(C - N. (- ' D N - 224)	
4. Plant and Equipment **(See Note in Page No. 234)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates where applicable for testing instruments shall be available. Refer Annex 13 for list of typical equipment /tools and testing instruments required.	
5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 15 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	

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Managing Department:	Architectural Services Department	
Works Category:	Fountain Installation	_ Specialist Contractor
Brief Scope of Category:		
brief Scope of Category.		
	category covers the supply, installation and maintention, pH control, chemical treatment, fountain ligh	gs for water treatment of fountain pool such

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable	Not Applicable	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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A. Entry on Probation	B. Confirmation		C. Direct Entry
		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
			(b) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the fountain installation contractor for the project work; and
			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
		Craftsman
		Employ adequate nos. of craftsman in the following trades (A) Plumber/ BS Mechanic Minimum score required 20 marks Qualified Plumber/BS Mechanic 20 marks Intermediate Plumber/BS Mechanic 15 marks Ordinary Plumber/BS Mechanic 8 marks (B) Electrician Minimum score required 20 marks
		Qualified Electrician 20 marks
		Intermediate Electrician 15 marks Ordinary Electrician 8 marks
		Statutory Registration

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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation		The applicant shall have staff meeting the following statutory registered requirements: \$\(\) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum) \$\(\) Licensed Plumber (LP) registered under Waterworks Ordinance, Cap. 102 - 1 no. (minimum) The LP and REW can be the Technical Support Staff or Craftsman. 4. Plant and Equipment**(See Note in Page No. 234) Adequate modern drafting and computing facilities; minimum 1 no. CAD terminals. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 14 for list of typical equipment/tools and testing instruments required. 5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department: Civil Engineering and Development Department

Works Category : Ground Investigation Field Work Specialist Contractor

Group I : Contracts/Subcontracts up to HK\$ 2.3M

Group II : Contracts/Subcontracts of unlimited value

Brief Scope of Categories:

The scope of work in this category covers ground investigation field work for Government projects.

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Group I A. Direct Entry	Group II A. Direct Entry
1. Job Experience	

Must be able to provide references to ground investigation works (each of value exceeding HK\$0.5M) carried out by the applicant for at least 5 projects in Hong Kong in the 3 years preceding the application and receive no adverse reports, on enquiry by CEDD. These performance reports must be prepared by at least 3 different engineering consultants who have supervised the works.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System **Certification, Building Authority etc.**)

Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.

3. Top Management*(See Note in Page No. 234)

NA

4. Technical Staff

Must employ sufficient full-time approved personnel who satisfy the minimum requirements as given in **Annex 15**.

5. Plant and Equipment **(See Note in Page No. 234)

Must own at least four rigs in Hong Kong, and all of them shall be capable of drilling at least 40m through soil or rock.

Must own equipment capable of obtaining soil and rock samples, carrying out insitu tests (including SPT, GCO probing, impression packer, rising, falling and constant head permeability, packer (water adsorption), and vane shear) and installing standpipe piezometers (see the minimum requirements on equipment in Annex 16). All equipment should be calibrated and subject to periodic recalibration and maintenance.

Must be able to provide references to ground investigation works (each of value exceeding HK\$0.5M) carried out by the applicant for at least 5 projects in Hong Kong in the 3 years preceding the application and receive no adverse reports, on enquiry by CEDD. These performance reports must be prepared by at least 3 different engineering consultants who have supervised the works.

Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.

NA

Must employ sufficient full-time approved personnel who satisfy the minimum requirements as given in Annex 15.

Must own at least ten rigs in Hong Kong capable of drilling at least 40m through soil or rock, and at least two of them shall be capable of drilling vertical or inclined holes up to 150m through soil or rock.

Must own equipment capable of obtaining soil and rock samples, carrying out insitu tests (including SPT, GCO probing, impression packer, rising, falling and constant head permeability, packer (water adsorption), and vane shear) and installing standpipe piezometers (see the minimum requirements on equipment in **Annex 16**). All equipment should be calibrated and subject to periodic recalibration and maintenance.

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Group I	Group II
6. Office/Workshop Facilities	•
All applicants must possess or set up in Hong Kong a place of business.	All applicants must possess or set up in Hong Kong a place of business.
7. Training Facilities	
NA	NA
8. Others	
Must have the managerial, professional, technical and other support staff resources to carry out Government contracts on ground investigation. Must have adequate safety and health provisions and measures in accordance with the spirit of Chapter 3 of the Construction Site Safety Manual (CSSM) (Works Bureau). Proper documentation to illustrate this must be available. Must employ at least on a part-time basis one safety officer registered in accordance with the Factories and Industrial Undertakings (Safety Officers and Safety Supervisors) Regulation (FIU(SO&SS)R) with a minimum of 3 years of relevant experience. Must demonstrate competence in carrying out drilling, excavation, sampling, testing, recording of information, description of soil and rock and reporting to CEDD standards. Must maintain HOKLAS (Hong Kong Laboratory Accreditation Scheme) accreditation for selected tests and procedures of ground investigation when the accreditation for these is available from HOKLAS.	Must have the managerial, professional, technical and other support staff resources to carry out large Government contracts on ground investigation. Must have a proper safety management system and an adequate Safety Plan in accordance with the requirements of Chapter 3 of the CSSM. Must employ on a full-time basis at least one safety officer registered in accordance with the FIU(SO&SS)R and one safety supervisor, each with a minimum of 3 years of relevant experience. Must demonstrate competence in carrying out drilling, excavation, sampling, testing, recording of information, description of soil and rock and reporting to CEDD standards. Must maintain HOKLAS (Hong Kong Laboratory Accreditation Scheme) accreditation for selected tests and procedures of ground investigation when the accreditation for these is available from HOKLAS.
	B. Entry by Promotion
	Same as that required for "Direct Entry".

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Managing Department:	Architectural Services	Department
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Works Category: Industrial Type Electrical Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of electrical installations that are of high voltage or in specialized locations, typical installations include those in airport, highway, subway, tunnel, workshop, sewage treatment plant, pumping station, mechanical handling system etc., and in industrial environment.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry	
1. Job Experience General	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	1. Job Experience General	
(1) The applicant shall have adequate experience in the type and size of work of the category, including high voltage installation, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, including high voltage installation, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	 (3) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and (4) The scope of work for this contract must fulfill all the 	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and (b) The contract shall cover the nature of works as	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream	(7) All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and	
(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
(9)		scope of work for each of these 2 contracts must l all of the following requirements:	project work.	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
(10)	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category" and at least one of the 2 contracts shall include high
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements: The subcontract shall include all the relevant		(10)	voltage electrical installations. Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely
	(c) (d)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the project work; and The applicant must present documentary			and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the industrial type electrical installation contractor for the project work; and
	(e)	evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and Notwithstanding the above, the Managing			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities

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A. Entry on Probation	B. Confirmation	C. Direct Entry
confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer		Qualified Engineer
Employ at least 1 no. qualified engineer (Electrical discipline) with adequate and relevant professional and project management experience.		Employ at least 1 no. qualified engineer (Electrical discipline) with adequate and relevant professional and project management experience.
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
<u>Craftsman</u>		<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades		Employ adequate nos. of craftsman in the following trades

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A. Entry on Probation	B. Confirmation	C. Direct Entry
(A) Electrician		(A) Electrician
Minimum score required40 marksQualified Electrician20 marksIntermediate Electrician15 marksOrdinary Electrician8 marks		Minimum score required 40 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
Statutory Registration		Statutory Registration
The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:
 Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade H2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 − 3 nos. (minimum) The REW can be the Qualified Engineer, Technical 		 Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade H2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 − 3 nos. (minimum) The REW can be the Qualified Engineer, Technical
Support Staff or Craftsman		Support Staff or Craftsman
4. Plant and Equipment **(See Note in Page No. 234)		4. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 17 for list of typical equipment/tools and testing instruments		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 17 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m ² and the minimum workshop + storage area shall be 40 m ² . Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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	A. Entry on Probation	B. Confirmation	C. Direct Entry
6	. Others		6. Others
	Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
	Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department : Architectural Services Department

Works Category : Land Piling Specialist Contractor

Group I : Contracts/Subcontracts up to HK\$ 3.4 M : Contracts/Subcontracts of unlimited value

Brief Scope of Category

The scope of work in this category covers design, supply and installation of registered piling systems on land.

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	Group I	Group II
	A. Direct Entry	A. Direct Entry
1.	 Job Experience a) At least 3 small to medium size local projects (below \$3M each) for each system. b) The projects must be completed within the past 5 years. c) Experience as main contractor. 	 a) At least 3 medium/large size local projects (over \$3M each) for each system b) The projects must be completed within the past 5 years. c) Experience as main contractor.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) The applicant shall be a Registered Specialist Contractor in the Foundation Sub-register under Buildings Ordinance, Cap. 123.	The applicant shall be a Registered Specialist Contractor in the Foundation Sub-register under Buildings Ordinance, Cap. 123.
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the piling system under application.
3.	Top Management *(See Note in Page No. 234) At least one member of the resident top management shall have a minimum of three years local experience in managing a construction firm obtained in the past five years.	At least one member of the resident top management shall have a minimum of fiv years local experience in managing a construction firm obtained in the past eight years.
4.	Technical Staff At least one person with the following qualifications: a) Higher Certificate in Structural/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognized training institution or equivalent and two years local working experience in piling works; or b) Ordinary Certificate in Structural/Civil Engineering from a Hong Kong polytechnic, a Hong Kong recognized training institution or equivalent and three years local working experience in piling works.	At least two persons with a relevant degree from a Hong Kong university equivalent with at least five years post-graduate local experience in piling works.
5.	Plant and Equipment **(See Note in Page No. 234) Appropriate equipment for each system. (At least one set for each system).	Appropriate equipment for each system. (At least one set for each system).

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	Group I	Group II
6.	Office/Workshop Facilities Local office required. Yard facilities available.	Local office required. Yard facilities available.
7.	Training Facilities NA	NA
8.	Others Piling system to be registered a) Method statement. b) Typical calculations. c) Acceptable references. d) Satisfactory demonstration on site.	Piling system to be registered a) Method statement. b) Typical calculations. c) Acceptable references. d) Satisfactory demonstration on site.
		B. Entry by Promotion When the contractor has completed at least 3 numbers medium/large size local projects of value above \$3M each with good references.

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Appendix 3C
Specialist Contractor

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Direct Entry

1. Job Experience

No requirement.

Past experience on government projects is used as reference in tender evaluation and selection, but not for entry requirement.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

No requirement.

However, endorsement such as ISO 9001 Certification, will be used as reference in tender evaluation and selection.

3. Top Management*(See Note in Page No. 234)

At least one senior member of the firm's permanent full time staff should be a professional member of the HKIS (Land Survey Division) or approved equivalent, with minimum 2 years' post qualification local experience.

4. Technical Staff

A minimum of two survey technicians should possess ordinary certificate or higher qualification in land or engineering surveying or approved equivalent with minimum one year's local land survey experience.

5. Plant and Equipment**(See Note in Page No. 234)

The firm should possess some basic equipment such as theodolite, total station, level, EDM, computer system and transport facilities.

Special equipment such as echo sounder, laser level, GPS system etc. will be an asset in bidding tender for special survey services.

6. Office/Workshop Facilities

NA

7. Training Facilities

NA

8. Others

NA

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Managing Department : Architectural Services Department

Works Category : Landscaping Specialist Contractor

Class I : General Landscape Work

Group I : Contracts/Subcontracts up to HK\$2.3M
Group II : Contracts/Subcontracts of unlimited value

Brief Scope of Category/Class:

General Landscape Works includes all types of soft landscaping works (except Hydroseeding), including soiling, minor earthworks, turfing, sprigging, grass seeding and the planting of all types of plant material (including ground covers, tress, palms, shrubs, herbaceous, etc.) and subsequent establishment works; together with landscape hardworks such as paving, planters, dwarf walls, steps, fencing, furniture, pergolas and pavilions.

Definition of Probationary Status#

Probation to Group I : Eligible for the award of one contract at any one time of value up to \$2.3 million

Probation to Group II : Eligible for the award of any number of Group I contracts, plus one contract of value exceeding \$2.3 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	Group I	Group II
	A. Entry On Probation	A. Entry On Probation
1.	Job Experience Completed at least three relevant contracts/subcontracts of total value exceeding \$4M within the past 5 years	Completed at least three relevant government contracts/subcontracts of total value exceeding \$6M within the past 5 years
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA	NA
3.	Top Management *(See Note in Page No. 234) NA	NA
4.	Technical Staff Min. 1 No. trained horticulturist with appropriate education background and with 3 years relevant HK working experience.	Min. 1 No. trained horticulturist with appropriate education background and with 3 years relevant HK working experience.
5.	Plant and Equipment**(See Note in Page No. 234) All necessary equipment to carry out the required work.	All necessary equipment to carry out the required work.
6.	Office/Workshop Facilities Local office and a local holding nursery in HK of not less than 7,500m ² required.	Local office and a local holding nursery in HK of not less than 7,500m ² required.
7.	Training Facilities Have training scheme to internal staff to improve horticultural and safety practice.	Have training scheme to internal staff to improve horticultural and safety practice.
8.	Others Financial resources. Special skill, i.e. mature tree transplanting.	Financial resources. Special skill, i.e. mature tree transplanting.
	B. Confirmation	B. Confirmation
	Completed satisfactorily at least two government Group I contracts/subcontracts within the past 5 years, of total value exceeding \$2M.	Completed satisfactorily at least two government Group II contracts/subcontracts within the past 5 years, of individual value exceeding \$2M.
	C. Direct Entry	C. Direct Entry
	NA	NA
		D. Entry by Promotion
		Same as that required for "Entry on Probation".

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Managing Department: Architectural Services Department

Works Category : Landscaping

Specialist Contractor

Class II

Hydroseeding

Group I : Contracts/Subcontracts up to HK\$2.3M
 Group II : Contracts/Subcontracts of unlimited value

Brief Scope of Category/Class:

Hydroseeding is the application by high-pressure spraying of specified mixture of grass seeds, fertilizer, mulch and other additives in aqueous solution, including the supply of all materials and equipment necessary for the application and subsequent establishment of grass cover by the method described.

Definition of Probationary Status#

Probation to Group I : Eligible for the award of one contract at any one time of value up to \$2.3 million

Probation to Group I : Eligible for the award of any number of Group I contracts, plus one contract of value exceeding \$2.3 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	Group I	Group II
	A. Entry On Probation	A. Entry On Probation
1.	Job Experience Completed at least three relevant contracts/subcontracts of total value exceeding \$4M within the past 5 years.	Completed at least three relevant government contracts/subcontracts of total value exceeding \$6M within the past 5 years.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA	NA
3.	Top Management*(See Note in Page No. 234) NA	NA
4.	Technical Staff Min. 1 No. trained operator with 3 years relevant HK working experience.	Min. 2 Nos. trained operator with 3 years relevant HK working experience.
5.	Plant and Equipment **(See Note in Page No. 234) All necessary equipment to carry out the required work.	All necessary equipment to carry out the required work.
6.	Office/Workshop Facilities Local office in Hong Kong is required.	Local office in Hong Kong is required.
7.	Training Facilities Have training scheme to internal staff to improve hydroseeding and safety practice.	Have training scheme to internal staff to improve hydroseeding and safety practice.
8.	Others Financial resources	Financial resources

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Group I	Group II
B. Confirmation	B. Confirmation
Completed satisfactorily at least two government Group I contracts/subcontracts within the past 5 years, of total value exceeding \$2M.	Completed satisfactorily at least two government Group II contracts/subcontracts within the past 5 years, of individual value exceeding \$2M.
C. Direct Entry	C. Direct Entry
NA	NA
	D. Entry by Promotion
	Same as that required for "Entry on Probation"

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Managing Department: Civil Engineering and Development Department	Managing Department :	Civil Engineering and Development Department
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Works Category : Landslip Preventive/Remedial Works to Slopes/Retaining Walls Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers landslip preventive works, remedial works or formation works of slopes and/or retaining walls in areas immediately behind occupied structures, adjacent to railway lines or major trunk roads

Definition of Probationary Status#:

Contractors included in the Specialist List for "Landslip Preventive/Remedial works to Slopes/Retaining Walls (LPM)" but have not yet achieved confirmation status. A probationary contractor may take on not more than 2 government contracts tendered under the LPM category with total outstanding value of works of not greater than \$114M.

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	A. Entry On Probation	B. Confirmation
1.	Job Experience See paras.2.2, 2.3 and 2.4 of Annex 18	Satisfactorily completed, as main contractor, at least one Government Landslip Preventive Measures contract containing multiple sites and of value not less than \$40M and subject to a minimum probationary period of 24 months
2.	 Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) Contractors who wish to apply for inclusion should have obtained: The relevant Quality Management System Certification or if they do not have suitable works contracts in hand for certification auditing, a confirmation from a certification body accredited by the HKAS to issue the Certification or considered to be equivalent by the Environment, Transport and Works Bureau that a full review of the Quality Manual of their Hong Kong office has been carried out in Hong Kong by the certification body and such Quality Manual has been confirmed by the certification body as being in conformity with the requirements of the relevant standard. Registration on the Buildings Department's list of Registered Specialist Contractor for Site Formation Works. 	 i) Maintain the relevant Quality Management System Certification. ii) Maintain the Registration on the buildings Department's list of Registered Specialist Contractor for Site Formation Works.
3.	Top Management *(See Note in Page No. 234) See para. 2.5.1 of Annex 18	Employ/retain appropriate management staff
4.	Professional Staff See para. 2.5.3 of Annex 18	Employ/retain appropriate professional staff
5.	Technical Staff See para. 2.3.3 of Annex 18	Employ/retain appropriate technical staff
6.	Safety Staff See para. 2.5.4 of Annex 18	Employ/retain appropriate safety staff
7.	Plant and Equipment**(See Note in Page No. 234) See para. 2.6 of Annex 18	Possess appropriate plant and equipment
8.	Office/Workshop Facilities All applicants must posses or set up in Hong Kong a place of business.	NA

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9. Training Facilities

NA

NA

10. Others

(i) Performance on Government contracts under the R&D and SF categories and in landslip preventive works in the past 3 years – see para. 2.2, 2.3 and 2.4 of **Annex 18**

In all other ways being considered suitable for confirmation

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Works Category:	Lift, Escalator and Passenger Conveyor Installation	Specialist Contractor
Brief Scope of Category	y:	
	s category covers the supply, installation and maintenance of passenger liftinstallations, lifting platform for barrier free access, and associated motor nside lifts, etc.	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		General
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) All statutory submissions to EMSD and Buildings Authority shall be issued under the name of the applicant; and
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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A. Entry on Probation	B. Confirmation		C. Direct Entry
		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
			(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and
			(c) The contract shall be of a completely new building construction project or a whole building refurbishment project.
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
			(d) The aforementioned main contractor shall not be the lift, escalator and passenger conveyor installation contractor for the project work; and
			(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
			(f) Notwithstanding the above, the Managing

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be
		 ♦ a Registered Lift and/or Escalator Contractor registered under Lifts & Escalators (Safety) Ordinance, Cap. 327; and
		a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406; and
		have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		Quality Management System Certification
		Quality Management System certificates issued under the rules of the Hong Kong Certification Body Accreditation Scheme (HKCAS) operated by the Hong Kong Accreditation Service (HKAS); i.e. bearing the HKCAS Accreditation Mark, and Quality Management System certificates bearing the accreditation mark of other accreditation bodies which are considered as having an equivalent standard by the Environment, Transport and Works Bureau.
		The scope of certification shall be relevant to the contractor list being applied for, e.g. "Supply, installation and maintenance of lift and escalator installation".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)

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A. Entry on Probation	B. Confirmation	C. Direct Entry
· ·		Registered Lift Engineer (RLE) At least 2 nos. registered under Lifts and Escalators (Safety) Ordinance, Cap. 327 Registered Escalator Engineer (REE) At least 2 nos. registered under Lifts and Escalators (Safety) Ordinance, Cap. 327 The RLE and REE can be the same person
		Technical Support Staff Employ adequate nos. of site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Site supervisor 4 nos. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of craftsman in the following trades Lift Electrician/Mechanic
		Minimum score required 100 marks
		Qualified Lift Electrician/Mechanic 20 marks Intermediate Lift Electrician/Mechanic 15 marks Ordinary Lift Electrician/Mechanic 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		 Registered Lift and/or Escalator Engineer (RLEE) registered under Lifts & Escalators (Safety) Ordinance, Cap. 327 − 2 nos. (minimum) Competent Lift/Escalator Worker (CLEW) registered under Lifts and Escalators (Safety) Ordinance, Cap. 327 − 10 nos. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 − 1 no. (minimum)
		The RLEE, CLEW and REW can be the Technical

A. Entry on Probation	B. Confirmation	C. Direct Entry
		Support Staff or Craftsman.
		4. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 19 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 100 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced
		<u>Depot</u> At least two, preferably more and distributed over Hong Kong SAR.
		6. Others
		Authorized Agency Be an authorized agent/distributor in HKSAR for the lifts, escalators, and passenger conveyors. Documentary evidence such as authorized agency/distributorship agreements shall be available for checking.
		Type test certificates for escalators Required for steps, pallets, belts and handrails (handrail breaking strength).
		Type test certificates for lifts Required for landing door locking devices, landing doors, overspeed governors, safety gears, energy dissipation and/or energy accumulation type buffers with/without buffered return movement, ascending car

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		overspeed protection means, rupture valve/one way restrictor, and safety circuits containing electronic components.
		Permit to use and operate a new lift or escalator At least two installations for each model issued by Electrical & Mechanical Services Department. Applicant to submit a list of the models for use in Government projects. Only those models submitted and approved can be used in Government projects. New models to be offered after admission must be submitted for assessment and prior approval must be obtained before new models can be offered for use in Government projects.
		Harmonic distortion Comply with relevant standards; details of harmonic current distortion for each model to be submitted.
		Support from Manufacturer Sound technical support required, including provision of spare parts, training (record to be submitted), etc.
		Maintenance facilities 24-hour emergency service for fault attendance must be available. The 24-hour emergency service for fault attendance shall be effective, e.g. the fault call can be acknowledged immediately and maintenance personnel can arrive at the fault location within 1 hour for normal call (e.g. no trapping of passenger) and 30 minutes for urgent call (e.g. trapping of passenger). Applicant to provide evidence that such maintenance facilities are established in strategic locations in Hong Kong SAR with suitable communication network to meet the above requirements.

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Managing Department:	Architectural Services Depart	ment
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Works Category: Liquefied Petroleum Gas Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of fixed and piped liquefied petroleum gas (LPG) installations including bulk LPG storage vessels, LPG cylinders, vaporizers, piping and fittings, valves and accessories, LPG appliances, etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable		1. Job Experience
		General
	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully including coordination with huilding
	(3) All statutory submissions to Gas Authority shall be issued under the name of the applicant; and	and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	(4) The scope of work for this contract must fulfill all the following requirements:	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the
	(a) Contract value of the work related to the category under application for confirmation exceeds \$0.25M; and	Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	petroleum gas installation at least with cylinders	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
	(c) The contract shall be for new building project or new liquefied petroleum gas installation in an existing building. Partial renovation or fitting-out works for an existing installation are	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
	not acceptable; and (d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
	one works order. (5) Subcontract will not be considered as valid job	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
	reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	(7) All statutory submissions to Gas Authority shall be issued under the name of the applicant; and
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	reference within normal office hours; and (9) The scope of work for each of these 2 contracts must
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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation	B. Confirmation (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the liquefied petroleum gas installation contractor for the project work.	fulfill all of the following requirements: (a) Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and (b) The contract shall cover a complete liquefied petroleum gas installation at least with cylinders supply; and (c) The contract shall be for new building project or new liquefied petroleum gas installation in an existing building. Partial renovation or fitting-out works for an existing installation are
		not acceptable. (10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the liquefied petroleum gas installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be a Registered Gas Contractor registered under Gas Safety Ordinance, Cap. 51 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		Craftsman
		Employ adequate nos. of craftsman in the following trades (A) BS Mechanic/Mechanical Fitter
		Minimum score required 20 marks Qualified BS Mechanic/Mechanical
		Fitter 20 marks Intermediate BS Mechanic/Mechanical
		Fitter 15 marks

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A. Entry on Probation	B. Confirmation	C. Direct Entry
•		Ordinary BS Mechanic/Mechanical Fitter 8 marks
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		 Registered Gas Installer (RGI) registered under Gas Safety Ordinance, Cap. 51 − 2 nos. (minimum) (These RGIs shall hold licences covering gas installation work Class 1 to 7 collectively) The RGI can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 20 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 10 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department:	Architectural Services Departmen
Managing Department:	Architectural Services Departme

Works Category: Low Voltage Cubicle Switchboard Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of low voltage cubicle switchboard comprising main incoming switchgear, busbars and droppers/risers, outgoing switchgears, instruments and protection devices, etc. all in a type tested assembly.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation		B. Confirmation		C. Direct Entry
Not Applicable		following shall only be applicable to existing	l. Jo Genei	b Experience
	' '	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
		This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(2)	The applicant shall have adequate experience in contract management of work of the category, solely
	, ,	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
		The scope of work for this contract must fulfill all the following requirements:	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
		(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and	Ioh F	not be considered as a valid job reference. Reference for Inspection (In addition to the above, every
		(b) The rating of the main incoming switchgear is $\begin{bmatrix} \frac{1}{3} \\ s \end{bmatrix}$	job si set oi	ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)
		(c) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(d) If the contract is a term contract, all of the above requirements 4 (a) and 4 (c) shall be fulfilled in one works order.	(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(7)	All statutory forms such as the Work Completion Certificate (i.e. Form WR1) shall be issued under the name of the applicant; and
			(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job
		and fully, including contract management; and		reference within normal office hours; and

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A. Entry on Probation	B. Confirmation	C. Direct Entry
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the low voltage cubicle switchboard installation contractor for the project work.	 (9) The scope of work for each of these 2 contracts must fulfill all of the following requirements: (a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and (b) The rating of the main incoming switchgear is not less than 2500A or with power rating not less than 1500kVA; and
		(c) The contract shall cover major scope of works as described in the "Brief Scope of Category".
		(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
		(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
		(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the low voltage cubicle switchboard installation contractor for the project work; and
		(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
		(e) Notwithstanding the above, the Managing

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration
		The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		Craftsman
		Employ adequate nos. of Electrician/Mechanical Fitter
		Minimum score required 40 marks Qualified Electrician/Mechanical Fitter 20 marks Intermediate Electrician/Mechanical Fitter 15 marks Ordinary Electrician/Mechanical Fitter 8 marks
		Statutory Registration
		The applicant shall have staff meeting the following

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A. Entry on Probation	B. Confirmation	C. Direct Entry
·		statutory registration requirements:
		 Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade C2 − 1 no. (minimum) Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade B2 − 2 nos. (minimum)
		The REW can be the Technical Support Staff or Craftsman
		4. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 21 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/ storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 180 m². Documentary evidence (e.g. purchase/ lease agreement) to prove right of use shall be produced.
		6. Others
		Design IEC 60439 Applicant to prove that switchboard is designed to the relevant IEC or equivalent standard; A motor control centre alone shall not be acceptable.
		Type test certificates for switchboard as required by IEC 60439-1 • temperature-rise limit test • dielectric properties test • short-circuit withstand strength test • effectiveness of protective circuit test • clearances & creepage distance test

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		mechanical operation test
		degree of protection test
		Tests shall be on a whole switchboard and NOT simply on the busbar system; and the above type tests shall be certified by an internationally recognized testing organization, e.g. ASTA.
		Air circuit breakers Applicant to provide proof of compliance of relevant standards IEC 60947-2.
		Switchfuse/fuseswitch Applicant to provide proof of compliance of relevant standards IEC 60947-3.
		H.R.C. fuses Applicant to provide proof of compliance of relevant standards IEC 60269 or BS 88.
		Busbars Applicant to provide proof of compliance of relevant standards BS 1433.
		Permit to use in Government projects Only those configurations with type tests certificates and materials with poof of compliance with the above standards can be offered for Government projects.
		Authorized Agency Agreement between principals and applicant, including agreements proving applicant's rights to manufacture, etc. shall be provided.

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Managing Department:	Architectural Services Department
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Works Category: Mechanical Handling and Lifting Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of mechanical handling and lifting installation including crane, hoist, conveyor system, mechanical storage system, movable boarding facility etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	A. Entry on Probation B. Confirmation C. Direct Entry		C. Direct Entry		
1. Jol	Experience			1. Job Experience	
Gene	_	(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	Gene	
(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(3)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and The scope of work for this contract must fulfill all the	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and
	incenanical conductors, and	(.)	following requirements:		incenanical contractors, and
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.		(a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
	·		(b) The contract shall cover the nature of works as		
job s set o	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)		described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	job s set o	Reference for Inspection (In addition to the above, every submitted by the applicant shall fulfill all requirements out below; otherwise, it will not be considered as a valid reference)
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream	(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical handling and lifting installation	(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and

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		A. Entry on Probation	B. Confirmation			C. Direct Entry
(9)		cope of work for each of these 2 contracts must all of the following requirements:	contractor for the project work.	(9)		ope of work for each of these 2 contracts must ll of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			` ′	Contract value of the work related to the category under application for inclusion exceeds \$1M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".				The contract shall cover the nature of works as described in the "Brief Scope of Category".
(10)	refere requi	entract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	reference	tract will not be considered as valid job ce unless it can satisfy all of the following ments, in addition to all the above stated ments:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			()	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			S	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical handling and lifting installation contractor for the project work; and			t c t	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical handling and lifting installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			e r a r t	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or			I a f	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or

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		C. Direct Entry
confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	(su	egistration with relevant authorities in Hong Kong uch as Quality Management System Certification, uilding Authority etc.)
Statutory Registration	Sta	tatutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	Co 400 rele not	ne applicant shall be a Registered Electrical contractor registered under Electricity Ordinance, Cap. 06 and have full time technical staff (meeting the levant statutory registration requirement) of number of less than that described in the Section "Technical aff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer	Qu	ualified Engineer
Employ at least 1 no. qualified engineer (Mechanical discipline) with adequate and relevant project management experience.	dis	mploy at least 1 no. qualified engineer (Mechanical scipline) with adequate and relevant project anagement experience.
Technical Support Staff	<u>Tec</u>	echnical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	and	mploy adequate nos. of technicians, site supervisors ad draftsmen with adequate and relevant academic alification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.	Sit	echnician 2 nos. te supervisor 2 nos. raftsman 1 no.
<u>Craftsman</u>	Cra	raftsman_
Employ adequate nos. of craftsman in the following trades		mploy adequate nos. of craftsman in the following ades
(A) Mechanical Fitter Minimum score required 20 marks Qualified Mechanical Fitter 20 marks	Mi	A) Mechanical Fitter inimum score required 20 marks ualified Mechanical Fitter 20 marks

A. Entry on Probation	B. Confirmation	C. Direct Entry
Intermediate Mechanical Fitter 15 marks		Intermediate Mechanical Fitter 15 marks
Ordinary Mechanical Fitter 8 marks		Ordinary Mechanical Fitter 8 marks
(B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: ❖ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade		(B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: ❖ Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade
A0 – 1 no. (minimum) The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		A0 – 1 no. (minimum) The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
Qualified Welder		Qualified Welder
Employ adequate nos. of Qualified Welder (QW)		Employ adequate nos. of Qualified Welder (QW)
QW 1 no.		QW 1 no.
The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.		The QW can be the Qualified Engineer, Technical Support Staff or Craftsman.
4. Plant and Equipment**(See Note in Page No. 234)		4. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 22 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 22 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department: Architectural Services Department

Works Category: Mechanical Plant and Equipment Installation Specialist Contractor

Group I: Contracts/Subcontracts up to HK\$1.1M
Group II: Contracts/Subcontracts of unlimited value

Brief Scope of Category:

The scope of work in this category covers the general mechanical fabrication, supply, installation and maintenance of mechanical plants and equipment. Typical installations include laundry equipment, waste disposal equipment, vehicle examination facility, garage equipment, bulk fuel storage and dispensing system, pumping system etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

*Probation to Group I : Eligible for the award of a maximum of two Group I contracts/subcontracts

Probation to Group II : Eligible for the award of any number of Group I contracts/subcontracts; and a maximum of two Group II

contracts/subcontracts exceeding \$1 million provided that the total value of Group II works does not exceed \$3.4 million

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^{*} Not applicable for new application for admission. (Only applicable for existing Group I probationary contractor)

^{*} See Notes (1) and (2) on Page 234 of this Appendix

Group I	Group II		
A. Entry on Probation	A. Entry on Probation		
Not Applicable	1. Job Experience		
	<u>General</u>		
	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and		
	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and		
	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.		
	<u>Job Reference for Inspection</u> (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)		
	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and		
	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		
	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		
	(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		
	(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		
	(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:		
	(a) Contract value of the work related to the category under application for inclusion exceeds 180% of Group I tender limit; and		
	(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".		
	(10) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:		

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Group I	Group II
	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work; and
	(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
	Statutory Registration
	The applicant shall be a Registered Electrical Contactor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
	Qualified Engineer
	Employ at least 1 no. qualified engineer (Mechanical or Building Services) with adequate and relevant professional and project management experience.
	Technical Support Staff
	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
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Group I	Group II	
	Technician	2 nos.
	Site supervisor	4 nos.
	Draftsman	2 nos.
	<u>Craftsman</u>	
	Employ adequate nos. of craftsman in the following trades	
	(A) Electrician	40 1
	Mínimum score required Qualified Electrician	40 marks 20 marks
	Intermediate Electrician	15 marks
	Ordinary Electrician	8 marks
	(B) Mechanical Fitter	
	Minimum score required	40 marks
	Qualified Mechanical Fitter	20 marks
	Intermediate Mechanical Fitter	15 marks
	Ordinary Mechanical Fitter	8 marks
	Statutory Registration/Qualified Welder	
	The applicant shall have staff meeting the following statutory registration	ion requirements:
	 Registered Electrical Worker (REW) registered under Electricity 406. Grade A2 − 1 no. (minimum) 	Ordinance, Cap.
	The REW can be the Qualified Engineer, Technical Support Staff or the	e Craftsman.
	Qualified Welder	
	Employ adequate nos. of Qualified Welder (QW)	
	QW	1 no.
	The QW can be the Qualified Engineer, Technical Support Staff or Cra	aftsman.
	4. Plant and Equipment**(See Note in Page No. 234)	
	Adequate modern drafting and computing facilities; minimum 2 nos. C Adequate nos. of calibrated testing instruments and equipment/tools fo installation, operation, maintenance and testing/commissioning service calibration certificates for testing instruments shall be available. Refer of typical equipment/tools and testing instruments required.	r carrying out es; valid

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	Group I		Group II
		L ft be e e	Office/Workshop Facilities Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 80 m² and the minimum workshop + storage area shall be 70 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced. Others Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreement shall be available. Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.
	B. Confirmation		B. Confirmation
	be applicable to existing probationary contractor: isfactorily completed, within the past 12 months, at least one public	(1)	
works contract let by (2) This contract shall be	a Works Department; and direct contract, which was signed between the applicant and the	(2)	employer of the concerned project; and
employer of the conc (3) All statutory forms st Form WP1 (A) shell	erned project; and ach as the Work Completion (Part of an Installation) Certificate (i.e. be issued under the name of the applicant; and	(3)	Form WR1 (A)) shall be issued under the name of the applicant; and
` '	r this contract must fulfill all the following requirements:	(4)	The scope of work for this contract must fulfill all the following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds Group I tender limit; and
(a) Contract valu confirmation	e of the work related to the category under application for exceeds 50 % of Group I tender limit; and		(b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and
(b) The contract : Category"; ar	shall cover the nature of works as described in the "Brief Scope of Id		(c) If the contract is a term contract, all of the above requirements 4 (a) to 4 (b) shall be fulfilled in one works order.
be fulfilled in	t is a term contract, all of the above requirements 4 (a) to 4 (b) shall one works order.	(5)	
following requirement	be considered as valid job reference unless it can satisfy all of the ats, in addition to all the above stated requirements:		(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
(a) The subcontra	act shall include all the relevant work as described under the "Brief		,

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Group I	Group II
Scope of Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work.	 (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the mechanical plant and equipment installation contractor for the project work.
C. Direct Entry	C. Direct Entry
1. Job Experience	Not Applicable
<u>General</u>	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
(9) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
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		Group I	Group II
	(a)	Contract value of the work related to the category under application for inclusion exceeds 50% Group I tender limit; and	
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	
(10)		ontract will not be considered as valid job reference unless it can satisfy all of the wing requirements, in addition to all the above stated requirements:	
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the manufacture plant and equipment installation contractor for the project work; and	
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and	
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	
		tion with relevant authorities in Hong Kong (such as Quality Management Certification, Building Authority etc.)	
Sta	ıtutory	Registration	
Orego	dinanc	licant shall be a Registered Electrical Contractor registered under Electricity ee, Cap. 406 and have full time technical staff (meeting the relevant statutory on requirement) of number not less than that described in the Section "Technical	
3. Te	chnica	al Staff (See Annex 1 for definition of Staff Qualification)	

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Group I	
Technical Support Staff	
Employ adequate nos. of technicians, site supervirelevant academic qualification and working experience Technician Site supervisor Draftsman	sors and draftsmen with adequate and ience. 2 nos. 2 nos. 1 no.
<u>Craftsman</u>	
Employ adequate nos. of craftsman with adequate trades (A) Electrician Minimum score required Qualified Electrician Intermediate Electrician Ordinary Electrician	20 marks 20 marks 15 marks 8 marks
(B) Mechanical Fitter Minimum score required Qualified Mechanical Fitter Intermediate Mechanical Fitter Ordinary Mechanical Fitter Statutory Registration	20 marks 20 marks 15 marks 8 marks
The applicant shall have staff meeting the following	g statutory registration requirements:
Registered Electrical Worker (REW) registe 406. Grade A2 – 1 no. (minimum)	ered under Electricity Ordinance, Cap.
The REW can be the Technical Support Staff or Cra	aftsman.
4. Plant and Equipment **(See Note in Page No. 234)	
Adequate modern drafting and computing facilities Adequate nos. of calibrated testing instruments and installation, operation, maintenance and testing/corcertificates where applicable for testing instruments for list of typical equipment /tools and testing instru	equipment/tools for carrying out nmissioning services; valid calibration s shall be available. Refer Annex 23
5. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is requifurnished office and workshop/storage areas. In get 40 m ² and the minimum workshop + storage area storage area storage purchase/lease agreement) to prove right of us	neral, the minimum office area shall be hall be 40 m ² . Documentary evidence
Appendix 3C	

Group I	Group II
6. Others	
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreement shall be available.	
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.	

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Managing Department:	Architectural Services Department	<u> </u>
Works Category:	Motor Vehicle Body-building and Painting	Specialist Contractor
Brief Scope of Category	:	
	category covers design and building of general purpose/specialist ve ehicle modification, etc. and all vehicle related vehicle modification	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category on motor vehicle fleet, with satisfactory quality of work compatible with Government standard; and
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and
		(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
		(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:
		(a) The contract shall cover the major scope of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation		C. Direct Entry
		(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
			(c) The subcontract shall be signed between the applicant and the main contractor which is the company awarded with the direct contract by the employer of the concerned project; and
			(d) The aforementioned main contractor shall not be the motor vehicle body-building and painting contractor for the project work; and
			(e) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by the main contractor including a letter, which must be signed by the main contractor's authorized signatory to confirm that the applicant has met the above requirements in the subcontract; and
			(f) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2.	Technical Staff (See Annex 1 for definition of Staff Qualification)
		<u>Te</u>	echnical Support Staff
		Е	mploy adequate nos. of technicians, site supervisors

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of Craftsman in the following trades (A) Body Repairer/Builder Minimum score required 30 marks Qualified Body Repairer/Builder 20 marks Ordinary Body Repairer/Builder 10 marks
		(B) Vehicle Mechanic Minimum score required Qualified Vehicle Mechanic Ordinary Vehicle Mechanic 20 marks 10 marks
		(C) Vehicle Electrician Minimum score required 20 marks Qualified Vehicle Electrician 20 marks Ordinary Vehicle Electrician 10 marks
		(D) Vehicle Painter Minimum score required 20 marks Qualified Vehicle Painter 20 marks Ordinary Vehicle Painter 10 marks
		The craftsman can be the Technical Support Staff.
		3. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting facilities and minimum 1 computer, preferably with CAD. Adequate nos. of equipment, tools and testing instruments for carrying out installation, testing/commissioning and maintenance services. Refer Annex 24 for list of typical equipment / tools required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required.
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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 10 m², and the minimum workshop + storage area shall be 110 m² (minimum 50 m² of covered space). Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		5. Others
		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.

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Managing Department :	Highways Department	
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Works Category : Transparent Panels for Noise Barriers on Highways

Supplier

[formerly named as "Prefabricated Architectural Walls and Finishes (Screens, Sound Barriers and Retaining Walls)"]

Brief Scope of Category:

The scope of work in this category covers the supply of transparent panels for noise barriers on highways. The materials shall be of suitable mechanical and acoustic properties, and proven performance and durability. They shall functionally and aesthetically fit with the structural system of the noise barriers, and shall also perform safely in fire and traffic accidents and satisfactorily in glare reduction.

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Direct Entry

1. Job Experience

The transparent panels shall have successfully performed in at least 1 project for noise barriers on highways or similar works in Hong Kong in the past 3 years, each with a value of \$0.5M or more. References on these projects from consulting engineer (architects or clients if there is no consulting engineer) must be submitted, which may be verified by site visits.

2. Registration with relevant authorities in Hong Kong (such as ISO9000 Certification, Building Authority etc.)

The transparent panels shall be manufactured under a quality management system certified by an internationally recognized certifying body.

3. Top Management *(See Note in Page No. 234)

Top management shall possess relevant technical and managerial experience in the design and construction of noise barriers on highways.

4. Technical Staff

Professional and technical staff experienced in the design and construction of noise barriers on highways are required.

5. Plant and Equipment **(See Note in Page No. 234)

NA

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

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Direct Entry

8. Others

Satisfactory technical information, including testing reports from independent organizations, shall be submitted, to demonstrate that the transparent panels and their any accessories shall meet the principles and considerations given in the Bridges & Structures Division Practice Note No. BSTR/PN/003 – Noise Barriers with Transparent Panels, issued by the Highways Department or equivalent national standards.

The materials to be approved shall possess acceptable application history of at least 5 years in weathering conditions similar to Hong Kong climate, and be subject to a 10-year performance warranty.

Note: The Bridges & Structures Division Practice Note No. BSTR/PN/003 referred to in item 8 above is available on Highways Department's website at http://www.hyd.gov.hk.

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Direct Entry

1. Job Experience

Satisfactory completion of at least 3 projects in supply and installation of the prestressing system in the past 3 years, each with a value of \$1.0 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the prestressing systems shall be operating a quality management system certified by an internationally recognized certifying body.

3. Top Management *(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional (HKIE Corporate Member or equivalent) and technical staff experienced in the design of prestressed concrete bridges and the installation of prestressing systems. Local workforce capable of installing prestressing systems.

5. Plant and Equipment **(See Note in Page No. 234)

- a. Prestressing jack.
- b. Mechanical grout pump.
- c. Mechanical grout mixer.
- d. Strand feeder.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements. Works must comply with Section 17 of the General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the prestressing systems and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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imum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List	Appendix 3C
naging Department : Highways Department	
Works Category : Prestressed Concrete Works for Highway Structures	Supplier / Specialist Contractor
Class II : Supply of Prestressed Concrete Units	<u></u>
Brief Scope of Category/Class :	
The scope of work in this category and class covers the supply of prestressed concrete units for highway category and class for a particular prestressing system proposed in the application. The prestressing system may be a supply of prestressing system of the application.	
	1 1 71

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Direct Entry

1. Job Experience

Satisfactory completion of at least 3 projects in the fabrication of prestressed concrete units in the past 3 years, each with a value of \$2.0 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the prestressing systems shall be operating a quality management system certified by an internationally recognized certifying body.

3. Top Management *(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional (HKIE Corporate Member or equivalent) and technical staff experienced in the design of prestressed concrete bridges and the installation of prestressing systems. Workforce experienced in precast and prestressed concrete works.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Lifting crane.
- b. Prestressing jacks.
- c. Mechanical grout pumps.
- d. Mechanical grout mixer.
- e. Concrete mixer.
- f. Concrete vibrator.
- g. Necessary equipment to fabricate casting moulds complete with tendon/strand anchor fittings.
- h. Concrete batching plant.
- i. Equipment for testing concrete.
- j. Curing facilities.

6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a permanent casting yard with the equipment listed above and adequate storage space.

7. Training Facilities

NA

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Direct Entry

8. Others

Satisfactory technical information and method statements. Works must comply with Sections 14, 15, 16 & 17 of the General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the prestressing systems and the applicant must have established acceptable manufacturing procedures and fully documented quality assurance systems. Visit to the permanent casting yard may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Managing Department: Architectural Services Department

Works Category: Radio Electronics Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of VHF/UHF radio transceiver, basestation, repeater, microwave radio system and related ancillary equipment at hilltop site and different venues.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation		B. Confirmation		C. Direct Entry	
1. Job Experience				1. Job Experience	
General		past	applicant has satisfactorily completed, within the 12 months, at least one public works contract let Works Department; and	Gener	
(1) The applicant shall have adequ type and size of work of the ca quality of work compatible wi and	itegory, with satisfactory (betw	s contract shall be direct contract, which was signed ween the applicant and the employer of the terned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and
(2) The applicant shall have adequed contract management of work and fully, including coordinati	of the category, solely		scope of work for this contract must fulfill all the owing requirements:	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building
contractor and other building s mechanical contractors; and	services / electrical and	(a)	Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and		contractor and other building services / electrical and mechanical contractors; and
(3) For job experience outside the stipulated under para. 2.4.5 of produced to the satisfaction of Environment, Transport and W	the CMH must also be the Secretary for the	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category"; and	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will
not be considered as a valid jo	b reference.	(c)	If the contract is a term contract, all of the above requirements 3 (a) and 3 (b) shall be fulfilled in		not be considered as a valid job reference.
Job Reference for Inspection (In add job submitted by the applicant shall	ition to the above, every		one works order.	Job F	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements
set out below; otherwise, it will not l job reference)	pe considered as a valid	refe	contract will not be considered as valid job rence unless it can satisfy all of the following direments, in addition to all the above stated	set or	ut below; otherwise, it will not be considered as a valid eference)
(4) The applicant shall submit at lowere completed within the passinspection; and		requ (a)	The subcontract shall include all the relevant work as described under the "Brief Scope of	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and
(5) At least one of the above 2 cor			Category" covered in the main contract; and	(5)	At least one of the above 2 contracts shall be
completed within the past 12 n and	nonths or at final stage;	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely		completed within the past 12 months or at final stage; and
(6) These 2 contracts shall be dire signed between the applicant a		(.)	and fully, including contract management; and	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the
concerned project; and		(c)	The party by which the applicant is awarded with the subcontract, and the upstream		concerned project; and
(7) The applicant shall be able to a inspections for the governmen quality and workmanship of the reference within normal office	t's examination of the submitted job		contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project	(7)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and
(8) The scope of work for each of fulfill all of the following requ			work.	(8)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
(a) Contract value of the we	ork related to the				(a) Contract value of the work related to the

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
		category under application for inclusion exceeds \$0.2M; and			category under application for inclusion exceeds \$0.5M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(9)	refere requi	contract will not be considered as valid job ence unless it can satisfy all of the following irements, in addition to all the above stated irements:		(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the radio electronics installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry	
2. Technical Staff (See Annex 1 for definition of Staff Qualification)		2. Technical Staff (See Annex 1 for definition of Staff Qualification)	
Technical Support Staff		Technical Support Staff	
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.	
<u>Craftsman</u>		<u>Craftsman</u>	
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required Qualified Electronics Craftsman Ordinary Electronics Craftsman 10 marks	
3. Plant and Equipment**(See Note in Page No. 234)		3. Plant and Equipment**(See Note in Page No. 234)	
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 25 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 25 for list of typical equipment/tools and testing instruments required.	
4. Office/Workshop Facilities		4. Office/Workshop Facilities	
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.	
5. Others		5. Others	
Authorized Agency Preferably be an authorized agent in HKSAR for		Authorized Agency Preferably be an authorized agent in HKSAR for	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
essential equipment. Documentary evidence such as authorized agency agreements shall be available.		essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department : Architectural Services Department	
Works Category : Repair and Restoration of Historic Buildings	Specialist Contractor
Brief Scope of Category :	
The scope of work in this category covers the repair and restoration of historic buildings and structures.	

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1. Job Experience

At least 3 examples of relevant works carried out in Hong Kong within the past 5 years

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA

3. Top Management*(See Note in Page No. 234)

Adequate standard of administration and 1 no. of site foreman with more than 3 years of relevant conservation working experience

4. Technical Staff

Specialist craftsmen/tradesmen with adequate qualification and skill in timber carvings, decorative plasterworks, decorative painting and artworks

5. Plant and Equipment**(See Note in Page No. 234)

Adequate source of traditional material including fair face green bricks, Chinese roof-tile and ceramics etc

6. Office/Workshop Facilities

Adequate office, workshop and store. Local office and local workshop in Hong Kong are required.

7. Training Facilities

NA

8. Others

NA

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Minimum Technical & Managemen	t Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List	Appendix 3C
Managing Department :	Water Supplies Department	
Works Category :	Repair of Motors, Transformers and Switchgear	Specialist Contractor
D • 60		
Brief Scope of Categor	y :	
The scope of work in th	is category covers the repair of high and low voltage (up to and including	11 000 Volt) motors, transformers and switchgear and
	alled in Government installations.	11,000 voity motors, transformers and 5 witerigent and
7 1 1		

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1. Job Experience

The contractor should possess at least 5 years experience in repair of motors, transformers and switchgear. The electrical equipment required to be repaired in Water Supplies Department is listed in **Annex 26**.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

One of the managers should possess minimum qualification of a Higher Certificate in Electrical Engineering or equivalent with at least 5 years relevant experience.

4. Technical Staff

The Contractor shall have in their employment at least four supervising engineering staff and twenty competent tradesmen. The supervising staff shall possess a Higher Certificate in Electrical Engineering and be registered as a Class H Electrical Worker under the Electricity Ordinance.

5. Plant and Equipment **(See Note in Page No. 234)

As stated in item 6 (Office/Workshop Facilities) below

6. Office/Workshop Facilities

The contractor should have a well-maintained workshop in Hong Kong with equipment as listed in **Annex 27**. The Engineer may visit the Contractor's workshop to inspect the equipment and facilities before approval is granted.

7. Training Facilities

NA

8. Others

Contractor shall be in frequent trading with one or more reputable manufacturers who are able to supply specialized materials and provide technical support for repair work when required.

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Managing Department: Highways Department

Works Category : Road Marking Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the laying of the various road markings.

Definition of Probationary Status#

The probation period is 3 years, during which the probationary contractor shall only be allowed to work as a subcontractor in government contracts and shall be working on not more than 2 government contracts at any one time. At the end of the probationary period or when the probationary contractor has satisfactorily completed road marking works up to a total value of HK\$ 3.0 million, the performance of the probationary contractor will be assessed to determine whether the contractor is eligible to be confirmed, or remains as a probationary contractor, or is required to be removed from the List.

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

	A. Entry On Probation	B. Confirmation	C. Direct Entry	
1.	Job Experience Satisfactory completion of less than 3 projects in road marking works in the past 3 years, each with a value of HK\$ 1 million or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.	The performance of the probationary contractor will be assessed at the end of the probationary period or when he has satisfactorily completed road marking works up to a total value of HK\$ 3.0 million. The requirements are the same as those required for "Direct Entry".	Satisfactory completion of at least 3 projects in road marking works in the past 3 years, each with a value of HK\$ 1 million or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.	
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA		NA	
3.	Top Management *(See Note in Page No. 234) NA		NA	
4.	Technical Staff Technical staff and work force experienced in road marking works.		Technical staff and work force experienced in road marking works.	
5.	Plant and Equipment **(See Note in Page No. 234) Adequate equipment required for thermoplastic road markings: a. Spraying machine. b. Screeding machine. c. Grinding machine. d. Twin preheater.		Adequate equipment required for thermoplastic road markings: a. Spraying machine. b. Screeding machine. c. Grinding machine. d. Twin preheater.	
6.	Office/Workshop Facilities NA		NA	
7.	Training Facilities NA		NA	

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A. Entry On Probation	B. Confirmation	C. Direct Entry		
8. Others a. Satisfactory technical information and method statements. Works must comply with Section 12 of General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification.		a. Satisfactory technical information and method statements. Works must comply with Section 12 of General Specification for Civil Engineering Works. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification.		
b. Satisfactory site demonstration on laying various types of road marking materials to demonstrate that the laying techniques and workmanship comply with the specified requirements.		b. Satisfactory site demonstration on laying various types of road marking materials to demonstrate that the laying techniques and workmanship comply with the specified requirements.		

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Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List	Appendix 3C
Managing Department : Civil Engineering and Development Department	
Works Category : Soil and Rock Testing	Specialist Contractor
Brief Scope of Category:	
Contractors (or Laboratories) under this category shall provide services for testing of soil and rock	samples which originate from ground investigation
carried out in Hong Kong.	

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1. Job Experience

The Laboratory shall be able to provide at least the following services:

- (a) All soil tests included in Geospec 3 except the determination of particle size distribution by the pipette method (Test Methods 8.3 and 8.4), the determination of in-situ bulk density and in-situ dry density of soils by nuclear densometer method (Test Method 11.3), the determination of relative compaction of fill material (Test Method 11.4) and the direct shear test using large shear box apparatus (Test Method 16.2).
- (b) Preparation of soils from tube and block samples for examination, description and determination of bulk and dry densities, void ratio and degree of saturation.
- (c) Point load test on rock and the determination of water content, porosity and dry density of rock.
- (d) Determination of the direct shear strength of rock discontinuities.
- (e) Description of soil and rock to Geoguide 3.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The Laboratory must have a quality system which meets the requirements of the Hong Kong Laboratory Accreditation Scheme (HOKLAS) appropriate to the testing services being provided, and be accredited by Hong Kong Accreditation Service (HKAS) under the HOKLAS for the prescribed soil tests. The full scope of accreditation shall be maintained at all times. If any amendments to Geospec 3 are promulgated in whatsoever form, the Laboratory shall seek and obtain accreditation for the relevant tests incorporating the amendments.

3. Top Management*(See Note in Page No. 234)

All management staff below shall satisfy the minimum qualifications and training requirements prescribed below. Staff competence will be assessed.

- (a) Quality Manager (1 no.) responsible for the quality system
- (b) Laboratory Manager (1 no.) responsible for the technical and administrative matters
- (c) Signatories (minimum 2 nos.) responsible for signing all test certificates and reports

Qualifications, Training and Experience Requirements:

(a) Quality Manager

The Quality Manager shall satisfy the minimum qualification requirements for Signatory Option A or B as set out below. In addition, he/she shall be fully conversant with the quality system of the Laboratory and shall have adequate knowledge and experience on laboratory quality management and internal quality audits.

(b) Laboratory Manager

The Laboratory Manager shall satisfy the minimum qualification and experience requirements for Signatory Option A, B or C as set out below. In addition, he/she shall have at least one year of experience in the management of a Laboratory, including the technical and administrative matters associated with the Laboratory's operation.

(c) Signatories of Test Certificates and Reports

The main and reserve Signatories shall possess a sufficient standard of English to understand the requirements of soil and rock testing standards and HOKLAS documents. They shall satisfy the minimum qualification and experience requirements given in either Option A, B or C below and shall also be a HOKLAS Approved Signatory for the prescribed soil tests included in Geospec 3:

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Option A

Be in possession of an educational qualification acceptable to HKIE for Corporate Membership (Civil or Geotechnical Discipline) (Non-mature candidates), and have a minimum of five years of post-qualification civil or geotechnical engineering experience, with at least one year of experience in supervising the relevant types of soil and rock tests.

Option B

Be in possession of a Hong Kong polytechnic or technical institute Ordinary Certificate in Civil Engineering, or equivalent approved by Government, and have a minimum of seven years of post-qualification experience in construction materials testing, with at least two years in the relevant types of soil and rock tests, one year of which shall be in a supervisory role.

Option C

Be in possession of Grade E or above in five subjects including Physics, Mathematics and English (Syllabus B) in the Hong Kong Certificate of Education Examination (HKCEE), or equivalent approved by Government, and have a minimum of ten years of post-qualification experience in construction materials testing, with at least two years in the relevant types of soil and rock tests, one year of which shall be in a supervisory role.

4. Technical Staff

All technical staff below shall satisfy the minimum qualifications and training requirements prescribed below. Staff competence will be assessed.

- (a) Senior Laboratory Technician (minimum 1 no.) responsible for organizing the testing operations
- (b) Laboratory Technicians (minimum 2 nos.) responsible for carrying out testing and reporting
- (c) Laboratory Assistants (minimum 2 nos.) responsible for simple tests under supervision
- (d) Semi-skilled Staff (adequate no.) responsible for assisting in all tests under supervision

Qualifications, Training and Experience Requirements:

(a) Senior Laboratory Technician

The person shall satisfy the minimum qualification and experience requirements given in either Option 1, 2 or 3 below:

Option 1

Be a qualified Laboratory Technician (Option 1) as defined in 4(b) below, and have a minimum of three years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

Option 2

Be a qualified Laboratory Technician (Option 2) as defined in 4(b) below, and have a minimum of six years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

Option 3

Be a qualified Laboratory Technician (Option 3) as defined in 4(b) below, and have a minimum of eight years of experience in construction materials testing, with at least two years in the relevant types of soil and rock tests. Records of such experience shall be certified as accurate by the Signatory.

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(b) <u>Laboratory Technicians</u>

The persons shall satisfy the minimum qualification and experience requirements given under Option 1, 2 or 3 below:

Option 1

Be in possession of a Hong Kong polytechnic or technical institute Ordinary Certificate in Civil Engineering, or equivalent approved by Government, and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

Option 2

Be in possession of Grade E or above in five subjects including Physics, Mathematics and English (Syllabus B) in the Hong Kong Certificate of Education Examination (HKCEE), or equivalent approved by Government, and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

Option 3

Be a qualified Laboratory Assistant as defined in 4(c) below, in possession of Grade E or above in English (Syllabus B) in the Hong Kong Certificate of Education Examination, or equivalent approved by Government, and have a minimum of two years of post-qualification experience in the relevant types of tests and adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out. Records of such experience shall be certified as accurate by the supervising Senior Laboratory Technician or Signatory.

(c) <u>Laboratory Assistants</u>

The persons shall be able to read and understand the work instructions of the Laboratory and have adequate on-the-job training on the practical and technical aspects of testing covering each of the tests to be carried out.

(d) Semi-skilled Staff

The persons shall have adequate training in the operations required to be performed in the Laboratory.

5. Plant and Equipment **(See Note in Page No. 234)

The laboratory shall possess the following minimum numbers of major items of equipment:

Triaxial compression machines (6 nos.), triaxial cells and all accessories (12 nos.), oedometer cells (6 nos.), and direct shear machine (1 no.).

6. Office/Workshop Facilities

All applicants must possess or set up a place of business in Hong Kong. Laboratory set-up, equipment and accommodation will be audited and assessed.

7. Training Facilities

Training records/competence log on technical staff are required.

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8. Others

The prescribed minimum numbers of management and technical staff shall be working full-time for the Laboratory. The Laboratory must have satisfactory accommodation and equipment to carry out the prescribed soil and rock tests to relevant testing standards. It must demonstrate that it continues to satisfy all the criteria through submission of documentary evidence and records, and during audit visits by Government representatives. It must also demonstrate satisfactory performance in proficiency testing arranged from time to time.

When applying to enter the List, the Laboratory shall provide copies of the following to the Government for assessment:

- (a) quality manuals (including test method manuals);
- (b) a test directory listing all soil and rock tests which the Laboratory can perform and the test methods (including the version of amendments to relevant test standards) adopted;
- (c) organization chart of the Laboratory;
- (d) a list of the names of the proposed main and reserve Signatories, Quality Manager and Laboratory Manager, and of the Laboratory's Technical Personnel, as well as curriculum vitae giving their qualifications and experience, together with self-declaration letters on their full-time employment status with the Laboratory;
- (e) a competence log sheet giving the tests/operations which each of the Technical Personnel is competent to perform/supervise;
- (f) a plan showing the layout and dimensions of the testing areas and sample storage and preparation areas of the Laboratory, with environment controls stated on it; and
- (g) a schedule giving the name of the manufacturer, model, identification marking, specification details of major equipment (including triaxial, direct shear, oedometer, CBR and point load tests equipment) and their calibration records required for carrying out the tests.

On acceptance on the List, whenever changes to any of the above items (including changes of staff) have taken place, the Laboratory shall provide updated copies of the item to the Government within one week of the change taking place. Also, in January and July each year, the Laboratory shall submit to the Government the latest organization chart of the Laboratory and a summary of the total number of tests carried out for each type of standard and non-standard tests in the preceding six months for both Government and other clients.

Government representatives may carry out quality or technical audits of the Laboratory at any time. The Laboratory shall provide every assistance to enable the audits to be carried out. During the audits, the Laboratory's records related to the tests carried out (including records of calibration and checking of equipment), as well as training records, internal audit records and proof of qualifications and experience of personnel may be examined. Laboratory Personnel may be interviewed and required to perform specific tests and calibrations in part or in full.

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Managing Department:	Architectural Services Department
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Works Category : Space Frame Systems Supplier / Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply and supervision of the erection of the space frames, and the design in the case of modification to suit the specified roof system.

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1. Job Experience

The system has been satisfactorily used in the past 5 years with good references.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA.

3. Top Management*(See Note in Page No. 234)

The top management includes the agent's director.

4. Technical Staff

Manufacturer's designer and site/erection supervisor.

5. Plant and Equipment **(See Note in Page No. 234)

As required by the system.

6. Office/Workshop Facilities

The agent of the system must have a local office in Hong Kong and local representative is needed.

7. Training Facilities

NA.

8. Others

Certified strength of nodal joints.

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nimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List	Appendix 3C
minum recommend a management entertaine recommendation and recommend of contractors for the opecianst List	Appendix 30
naging Department : Highways Department	
Works Category : Specialized Operations for Highway Structures Class I : Guniting	Specialist Contractor
Class · Guilding	
Brief Scope of Category/Class:	
The scope of work in this cotegory and class covers the quniting works for construction and/or ran	poir of concrete highway structures
The scope of work in this category and class covers the guilding works for construction and/of rep	oan of concrete nighway structures.
Brief Scope of Category/Class: The scope of work in this category and class covers the guniting works for construction and/or report of the scope of work in this category and class covers the guniting works for construction and/or report of the scope of work in this category and class covers the guniting works for construction and/or report of the scope of work in this category and class covers the guniting works for construction and/or report of the scope of work in this category and class covers the guniting works for construction and/or report of the scope of work in this category and class covers the guniting works for construction and/or report of the scope of the sc	pair of concrete highway structures.

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1. Job Experience

Satisfactory completion of at least 3 projects in guniting works for the construction and/or repair of concrete highway structures in the past 3 years, each with a value of \$ 0.1 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Local skilled workforce in guniting.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Air compressor.
- Gunite machine with necessary accessories.
- c. Concrete breaking hammer (pneumatic/electric).
- d. Scabbling hammer.
- e. Spray machine with spray gun.
- f. Water jet pump.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations. The applicant is also required to demonstrate procedures for the treatment of corroded reinforcement prior to guniting.

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B # 1 1 1	T L ! I O	NA	Oultrale from	A .l!!	A Clause - (1)	. D.,	A	for the Specialist List	
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Appendix 3C

Managing Department:	Highways Department
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Works Category	:	Specialized Operations for Highway Structures	Specialist Contractor
Class II	:	Waterproofing of Concrete Surfaces	

Brief Scope of Category/Class:

The scope of work in this category and class covers the waterproofing of surfaces of concrete highway structures, e.g. footbridge roofs or the like.

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1. Job Experience

Satisfactory completion of at least 3 projects in waterproofing of surfaces of concrete highway structures in the past 3 years, each with a value of \$ 0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Local skilled workforce in waterproofing works.

5. Plant and Equipment**(See Note in Page No. 234)

Equipment specified by the manufacturer of the proprietary waterproofing material.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations.

Works must comply with Section 20: Part 1 of the General Specification for Civil Engineering Works.

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B # 1 1 1	T L ! I O	NA	Oultrale from	A .l!!	A Clause - (1)	. D.,	A	for the Specialist List	
winimiim	i ecnnical &	Management	Criteria tor	Admission	Confirmation and	I Promotion of	Contractors to	or the Specialist List	
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Appendix 3C

Managing Department:	Highways Department	

Works Category	:	Specialized Operations for Highway Structures	_ Specialist Contractor
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Class III : Repair of Cracked Concrete by Resin Injection

Brief Scope of Category/Class:

The scope of work in this category and class covers the resin injection for repair of cracks in structural concrete for highway structures.

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1. Job Experience

Satisfactory completion of at least 3 projects involving resin injection for repair of cracks in structural concrete in the past 3 years, each with a value of \$ 15,000 or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Local workforce skilled in repair of concrete structures by resin injection.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Resin injection pump with pressure control.
- b. Mechanical mixer for resin.
- c. Air compressor.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements.

Satisfactory site demonstrations.

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Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List					

Managing Department : Highways Department

Works Category	:	Specialized Operations for Highway Structures	Specialist Contractor
Class IV	:	Non-destructive Testing of Welds	

Appendix 3C

Brief Scope of Category/Class:

The scope of work in this category and class covers the non-destructive weld-testing of structural steelworks for highway structures.

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1. Job Experience

Satisfactory completion of at least 3 projects in non-destructive weld-testing on structural steel works in the past 3 years, each with a value of \$ 0.1 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional and technical staff with relevant qualifications and experience in non-destructive testing of welds.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Penetrant (dye and fluorescent) flaw detection.
- b. Magnetic particle flaw detection.
- c. Radiological flaw detection, including dark room facilities.
- d. Ultrasonic flaw detection.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information, method statements and fully documented quality assurance system.

Satisfactory site demonstrations.

Works must comply with Clause 18.96(4) of the General Specification for Civil Engineering Works.

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Managing Department: Hig	nways Department
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Works Category	:	Specialized Operations for Highway Structures	Specialist Contractor
Class V	:	Hot Dip Galvanising	

Brief Scope of Category/Class:

The scope of work in this category and class covers the hot dip galvanising of structural steelworks for highway structures.

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1. Job Experience

Satisfactory completion of at least 3 projects in hot dip galvanising of structural steelworks in the past 3 years, each with a value of \$0.2 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Technical staff with relevant qualifications and experience.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Alkaline degreasing tank.
- b. Acid pickling tank.
- c. Rinsing tank.
- d. Fluxing tank.
- e. Drying tank.
- f. Zinc bath with temperature control.
- g. Water quenching/air cooling tank.
- h. Coating thickness gauge.
- i. Lifting cranes.
- j. Laboratory facilities for testing chemicals used in galvanising.

6. Office/Workshop Facilities

Local office in Hong Kong is required. The applicant must possess a galvanising facility with the equipment listed above.

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7. Training Facilities

NA

8. Others

Satisfactory technical information, method statements and fully documented quality assurance system. Satisfactory demonstrations.

Works must comply with Clause 18.53 to 18.60 and 18.61(2) of the General Specification for Civil Engineering Works.

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Managing Department:	Architectural Services Department
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Works Category: Steam and Compressed Air Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of steam and compressed air installation including laundry equipment, boiler, steam distribution system, compressed air plant etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation			B. Confirmation		C. Direct Entry	
1. Job Experience				1. Jo	1. Job Experience	
Gener		(1)	The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	Gene		
(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2)	This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1)	The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	(3)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and The scope of work for this contract must fulfill all the	(2)	The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	(4)	following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds \$0.5M; and (b) The contract shall cover the nature of works as	(3)	For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
job s set o	deference for Inspection (In addition to the above, every abmitted by the applicant shall fulfill all requirements at below; otherwise, it will not be considered as a valid eference)		described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements 4 (a) and 4 (b) shall be fulfilled in one works order.	job s set o	Reference for Inspection (In addition to the above, every ubmitted by the applicant shall fulfill all requirements ut below; otherwise, it will not be considered as a valid eference)	
(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	(5)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	(4)	The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and		requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(5)	At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and		Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(6)	These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and		and fully, including contract management; and (c) The party by which the applicant is awarded with the subcontract, and the upstream	(7)	All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and		contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and compressed air installation contractor for the	(8)	The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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A. Entry on Probation			B. Confirmation	C. Direct Entry	
(9)		scope of work for each of these 2 contracts must l all of the following requirements:	project work.	(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and			(a) Contract value of the work related to the category under application for inclusion exceeds \$1M; and
	(b)	The contract shall cover the nature of works as described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and compressed air installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the steam and compressed air installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or

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A. Entry on Probation	B. Confirmation C. Direct Entry
confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.	confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	2. Registration with relevant authorities in Hong Kor (such as Quality Management System Certification Building Authority etc.)
Statutory Registration	Statutory Registration
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".	The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)	3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Qualified Engineer	Qualified Engineer
Employ at least 1 no. qualified engineer (Mechanical or Building Serviecs discipline) with adequate and relevant project management experience.	Employ at least 1 no. qualified engineer (Mechanical or Building Serviecs discipline) with adequate and relevant project management experience.
Technical Support Staff	Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.	Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.	Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.
<u>Craftsman</u>	<u>Craftsman</u>
Employ adequate nos. of craftsman in the following trades	Employ adequate nos. of craftsman in the following trades
(A) Mechanical Fitter Minimum score required 20 marks Qualified Mechanical Fitter 20 marks	(A) Mechanical Fitter Minimum score required 20 marks Qualified Mechanical Fitter 20 marks
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A. Entry on Probation	B. Confirmation	C. Direct Entry
Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks		Intermediate Mechanical Fitter 15 marks Ordinary Mechanical Fitter 8 marks
(B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks		(B) Electrician Minimum score required 20 marks Qualified Electrician 20 marks Intermediate Electrician 15 marks Ordinary Electrician 8 marks
Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: Registered Electrical Worker (REW) registered
Registered Electrical Worker (REW) registered under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)		under Electricity Ordinance, Cap. 406. Grade A2 – 1 no. (minimum)
The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		The REW can be the Qualified Engineer, Technical Support Staff or Craftsman.
4. Plant and Equipment**(See Note in Page No. 234)		4. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 28 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 28 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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1. Job Experience

Satisfactory completion of at least 3 projects in the fabrication and erection of structural steelworks for permanent civil engineering or building structures in the past 3 years, each with a value of \$ 0.5 M or more. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

NA

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional and technical staff experienced in the design, fabrication and erection of structural steelwork.

Local workforce for erection of steelwork.

At least 3 qualified welders to BS 4570, BS EN287-1 or BS 4872: Part 1 as appropriate. Copies of their certificates are required.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Welding plant.
- b. Lifting crane.
- c. Drilling machine.
- d. Bending machine.
- e. Lathe.
- f. Shearing machine.
- g. Flame cutting machine.
- h. Plate rolling machine.
- i. Grit blasting equipment.
- j. Grinder.
- k. Planing, shaping and slotting machine.
- Milling machine.
- m. Boring and surfacing machines.
- n. Oven/cabinet with drying facilities for storing electrodes.

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6. Office/Workshop Facilities

Local office in Hong Kong is required. Fabrication yard with the equipment listed above. The applicant may be required to arrange for a visit to the fabrication yard.

7. Training Facilities

NA

8. Others

Satisfactory technical information, method statements and fully documented quality assurance and control system for fabrication and erection of steelwork. Works must comply with Section 18 of the General Specification for Civil Engineering Works.

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Managing Department :	Highways Department

Works Category	:	Supply and Installation of Bearings for Highway Structures	Specialist Contractor
Class I	:	Mechanical Bearings	

Brief Scope of Category/Class:

The scope of work in this category and class covers the supply and installation of mechanical bridge bearings for highway structures. The applicant will be included in this category and class for the supply and installation of a particular bearing proposed in the application. The bearing must be a proprietary product.

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1. Job Experience

Satisfactory performance of the bearing in service. A list of job references where the bearing has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of bearings installed in each project must not be less than 6. The applicant may be required to arrange site visits to verify the references.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the bearing shall be operating a quality management system certified by an internationally recognized certifying body.

3. Top Management *(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional and technical staff experienced in bridge design and installation of bearings.

Local workforce capable of installing the bearing. A mock-up installation may be required.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Equipment required for the installation of the bearing as specified by the manufacturer.
- b. Mechanical grout mixer.
- c. Mechanical grout pump.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 2 of the General Specification for Civil Engineering Works and Section 9 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the bearing and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Managing Department: Highways Department	
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Works Category	:	Supply and Installation of Bearings for Highway Structures	Specialist Contractor
Class II	:	Elastomeric Bearings	

Brief Scope of Category/Class:

The scope of work in this category and class covers the supply and installation of elastomeric bridge bearings for highway structures. The applicant will be included in this category and class for the supply and installation of a particular bearing proposed in the application. The bearing must be a proprietary product.

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Direct Entry

1. Job Experience

Satisfactory performance of the bearing in service. A list of job references where the bearing has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of bearings installed in each project must not be less than 6. The applicant may be required to arrange site visits to verify the references.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the bearing shall be operating a quality management system certified by an internationally recognized certifying body.

3. Top Management *(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional and technical staff experienced in bridge design and installation of bearings.

Local workforce capable of installing the bearing. A mock-up installation may be required.

5. Plant and Equipment **(See Note in Page No. 234)

- a. Equipment required for the installation of the bearing as specified by the manufacturer.
- b. Mechanical grout mixer.
- c. Mechanical grout pump.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 2 of the General Specification for Civil Engineering Works and Section 9 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted.

The manufacturer for the bearing and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost.

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Direct Entry

1. Job Experience

Satisfactory performance of the expansion joint in service. A list of job references where the expansion joint has been installed, together with at least 3 references from the clients or maintenance authorities for projects completed in the past 3 years, must be submitted. The number of expansion joints installed in each project must not be less than 3. The applicant may be required to arrange site visits to verify the references.

2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)

The manufacturer for the expansion joint shall be operating a quality management system certified by an internationally recognized certifying body.

3. Top Management*(See Note in Page No. 234)

Top management shall possess relevant professional and management experience and have sufficient commitment for control of the works.

4. Technical Staff

Professional and technical staff experienced in bridge design and installation of expansion joints.

Local workforce capable of installing the expansion joint. A mock-up installation may be required.

5. Plant and Equipment**(See Note in Page No. 234)

- a. Equipment required for the installation of the expansion joint as specified by the manufacturer.
- b. Pneumatic breaker with compressor.
- c. Oven for melting binder.
- d. Welding equipment.
- e. Concrete vibrator.
- f. Mechanical mortar mixer.
- g. Generator.
- h. Concrete cutter.
- i. Gas burner.
- j. Air blower.

6. Office/Workshop Facilities

Local office in Hong Kong is required.

7. Training Facilities

NA

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Direct Entry

8. Others

Satisfactory technical information and method statements. The design, manufacture and installation must comply with Section 20: Part 4 of the General Specification for Civil Engineering Works and Section 11 of the Structures Design Manual for Highways and Railways. Other equivalent national standards may be considered in lieu of the standards referred to in the Specification. Technical and testing report from an approved independent organisation to confirm compliance with the above standards must be submitted. The manufacturer for the expansion joint and the applicant must have established acceptable manufacturing and installation procedures and fully documented quality assurance systems. Visit to the factory may be required for this purpose. If such visits are not practicable, the applicant may be required to arrange for an independent report at his own cost. Trial installation on a private/Government work site may be required. For the latter case, the trial will be subject to the applicant accepting the liability for replacing the joint with an approved joint should the joint be found unsatisfactory. The assessment period of the trial is 12 months.

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to confirmation status.

Managing Department :	Water Supplies Department	
Works Category :	Supply and Installation of Pumpsets and Associated Pipework	Specialist Contractor
Brief Scope of Category :		
	ategory covers the supply, fabrication, installation, testing, and delivery to site of	pumpsets, pipework, fittings, valves and
Definition of Probationary	Status	

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Contractors complying with the criteria of 'Entry On Probation' will be admitted initially on probation and will then be promoted to confirmation status after having complied with the criteria of 'Confirmation'. Contractors complying with the criteria of 'Direct Entry' will be admitted directly

	A. Entry On Probation	B. Confirmation	C. Direct Entry
1.	Job Experience Possess at least five years experience in the supply and installation of large pumping plant (with an input power requirement not less than 250kW), either in the capacity of a contractor or sub-contractor in private sector or Government contracts. The contractor should either have an agency agreement with a reputable pump manufacturer or have a close-link relation with (such as a subsidiary company of) a contractor with sufficient experience in the supply and installation of large pumping plant (with an input power requirement over 500kW) for direct technical support and services.	Satisfactory completion of one contract without any adverse report for the duration (including the maintenance period) of the contract. The contract should consist of at least a large pumpset with an input power of 500 kW.	Possess at least five years experience in the supply and installation of large pumping plant (with an input power requirement of 500kW and over), either in the capacity of a contractor or sub-contractor in private sector or Government contracts.
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		
	NA	NA	NA
3.	Top Management *(See Note in Page No. 234) At least one of the managers and professional staff should possess minimum qualification of corporate membership of a recognized professional institution in mechanical engineering discipline i.e. MIMechE, MHKIE or equivalent with relevant experience.	The contractor can provide proof that the company's management capabilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	At least one of the managers and professional staff should possess minimum qualification of corporate membership of a recognized professional institution in mechanical engineering discipline i.e. MIMechE, MHKIE or equivalent with relevant experience.
4.	Technical Staff Minimum of three qualified technical and supervisory persons as well as 10 tradesmen/workers. The technical and supervisory staff should possess minimum qualification of Higher Certificate in Mechanical Engineering or equivalent with at least five years relevant experience.	The contractor can provide proof that the company's technical capabilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	Minimum of three qualified technical and supervisory persons as well as 10 tradesmen/workers. The technical and supervisory staff should possess minimum qualification of Higher Certificate in Mechanical Engineering or equivalent with at least five years relevant experience.
5.	Plant and Equipment***(See Note in Page No. 234) NA	NA	NA

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	A. Entry On Probation	B. Confirmation	C. Direct Entry
6.	Office/Workshop facilities A workshop in Hong Kong furnished with the necessary tools, specialised equipment and other supporting facilities.	The contractor can provide proof that the company's workshop facilities remain the same or have become better than that at the time when the company was admitted to the List on probation.	A workshop in Hong Kong furnished with the necessary tools, specialised equipment and other supporting facilities.
7.	Training Facilities NA	NA	NA
8.	Others The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.	The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.	The Contractor should provide full details of the equipment supplied and installed under previous contracts to demonstrate his capability of complying with WSD's standard technical specification.

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Managing Department: Water Supplies Department

Works Category : Supply and Installation of Water Treatment Plant

Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the design, manufacture and installation of water treatment plant in public supply systems for treating raw water to potable standard acceptable to the Water Supplies Department and for processing water treating effluent to a quality acceptable for disposal.

Definition of Probationary Status

Except in the most exceptional circumstances, a contractor will be admitted initially on probation.

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A. Entry On Probation	B. Confirmation
1. Job Experience The applicant should possess a minimum of 10 years experience in the design, manufacture and installation of water treatment plant in public supply systems for treating raw water to potable standard acceptable to the Water Supplies Department and for processing water treatment effluent to a quality acceptable for disposal. Also, they should have completed successfully 2 water treatment works each of capacity at least 150 Mld in the past 10 years.	The probationary contractor has satisfactorily completed one contract and he has not received any adverse report for the duration (including the maintenance period) of the contract.
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA	NA
3. Top Management*(See Note in Page No. 234) NA	NA
4. Technical Staff The applicant should have an established organization comprising qualified professional and technical staff from Civil, Electrical, Mechanical and Chemical Engineering fields with at least 5 years relevant experience.	see item (8)
5. Plant and Equipment**(See Note in Page No. 234) NA	NA
6. Office/Workshop Facilities The applicant should have local supporting workshop facilities and allow inspection of such facilities by Government representatives.	see item (8)
7. Training Facilities NA	NA
8. Others The applicant should have at least 3 years trading record with manufacturers who are able to supply specialized materials and equipment for the work and provide him with technical support when required.	The probationary contractor can provide proof that the company's financial, technical and management capabilities have remained the same or have become better than the time when he was admitted on the List on probation.

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Managing Department: Highways Department

Works Category : Supply of Bituminous Pavement Materials and Construction of

Supplier / Specialist Contractor

Special Bituminous Surfacing

Brief Scope of Category:

The scope of work in this category covers the supply of the bituminous pavement materials and the laying of the special bituminous surfacing as described in Works Branch Technical Circular No. 17/96.

Definition of Probationary Status

The probation period is 2 years. The probationary contractor will be assessed at the end of the probationary period on the basis of capability and performance locally to determine whether the contractor is eligible to be confirmed, or remains as a probationary contractor, or is required to be removed from the List.

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A. Entry On Probation	B. Confirmation	C. Direct Entry
1. Job Experience Satisfactory completion of 1 to 3 projects in supply of bituminous pavement materials and construction of special bituminous surfacing in the past 3 years or in lieu of which, satisfactory completion of trial production and laying of bituminous pavement materials and/or special bituminous surfacing. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.	The probationary contractor will be assessed at the end of the probationary period on the basis of capability and performance locally. The requirements are the same as those required for "Direct Entry".	Satisfactory completion of at least 3 projects in supply of bituminous pavement materials and construction of special bituminous surfacing in the past 3 years, demonstrating adequate management and technical support for a general supply of bituminous pavement materials to the local market. References on these projects from consulting engineers (architects or clients if there is no consulting engineer) must be submitted which may be verified by paying site visits.
 2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) NA 3. Top Management *(See Note in Page No. 234) NA 		NA NA
4. Technical Staff Professional, technical staff and work force experienced in the supply of bituminous pavement materials and construction of special bituminous surfacing.		Professional, technical staff and work force experienced in the supply of bituminous pavement materials and construction of special bituminous surfacing.
 5. Plant and Equipment **(See Note in Page No. 234) Adequate equipment required: a. Mixing plant having at least four separate cold feed bins, four hot storage bins, a rotary drum dryer, temperature monitoring devices, and sampling devices for taking samples of hot aggregates, fillers and bitumen before mixing. b. Heating and storage tank fitted with circulating pumps and thermostatically controlled heaters for bitumen. c. Heating and storage tank fitted with high shear mixer for pre-blended type of modified binder. d. Insulated surge bin fitted with heating devices to maintain temperature of the hot-mix. 		 Adequate equipment required: a. Mixing plant having at least four separate cold feed bins, four hot storage bins, a rotary drum dryer, temperature monitoring devices, and sampling devices for taking samples of hot aggregates, fillers and bitumen before mixing. b. Heating and storage tank fitted with circulating pumps and thermostatically controlled heaters for bitumen. c. Heating and storage tank fitted with high shear mixer for pre-blended type of modified binder. d. Insulated surge bin fitted with heating devices to maintain temperature of the hot-mix.

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A. Entry On Probation	B. Confirmation	C. Direct Entry
e. Measuring and weighing equipment for batching.	D. Commination	e. Measuring and weighing equipment for batching.
f. Vehicles for transportation of bituminous materials.		f. Vehicles for transportation of bituminous materials.
g. Self-propelled paving machine with a screw auger and attached screed.		g. Self-propelled paving machine with a screw auger and attached screed.
h. Smooth three-wheeled steel-wheeled roller with a mass of between 6 tonnes and 12 tonnes or vibratory tandem steel-wheeled roller with an effective mass of between 6 tonnes and 12 tonnes.		h. Smooth three-wheeled steel-wheeled roller with a mass of between 6 tonnes and 12 tonnes or vibratory tandem steel-wheeled roller with an effective mass of between 6 tonnes and 12 tonnes.
 Smooth pneumatic tyred-roller with a mass of between 12 tonnes and 25 tonnes, and with not less than seven overlapping wheels. 		i. Smooth pneumatic tyred-roller with a mass of between 12 tonnes and 25 tonnes, and with not less than seven overlapping wheels.
j. Tack coat spraying machine.		j. Tack coat spraying machine.
k. Mechanical rammers, vibrating plates and hand-tools for compaction work.		k. Mechanical rammers, vibrating plates and hand-tools for compaction work.
Equipment for testing related to the production and laying of bituminous materials.		Equipment for testing related to the production and laying of bituminous materials.
6. Office/Workshop Facilities NA		NA
7. Training Facilities NA		NA
8. Others		
a. Satisfactory technical information and method statements. Works including the design mix and details of composition of the materials must comply with Section 9 of General Specification for Civil Engineering Works and/or other specified requirements. Other equivalent national standards may be considered in lieu of the standards referred to in the Specifications.		a. Satisfactory technical information and method statements. Works including the design mix and details of composition of the materials must comply with Section 9 of General Specification for Civil Engineering Works and/or other specified requirements. Other equivalent national standards may be considered in lieu of the standards referred to in the Specifications

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A. Entry On Probation	B. Confirmation	C. Direct Entry
 b. Acceptable manufacturing details of the bituminous pavement material and quality control procedure during manufacture. The applicant is also required to arrange visits to inspect the facilities where the bituminous pavement material is manufactured. Where such facilities are overseas and if it is not practical to carry out an inspection, the applicant may be required to arrange for an independent report on these aspects at his own cost. c. Satisfactory site demonstration in construction of special bituminous surfacing to demonstrate that the techniques and workmanship comply with the specified requirements. d. Proof of meeting building requirements and showing the proper land use of the bituminous material mixing plant from Buildings Department, Lands Department and Planning Department are required. e. The applicant must also meet the environmental requirements of Environmental Protection Department for the production of bituminous materials. 		 b. Acceptable manufacturing details of the bituminous pavement material and quality control procedure during manufacture. The applicant is also required to arrange visits to inspect the facilities where the bituminous pavement material is manufactured. Where such facilities are overseas and if it is not practical to carry out an inspection, the applicant may be required to arrange for an independent report on these aspects at his own cost. c. Satisfactory site demonstration in construction of special bituminous surfacing to demonstrate that the techniques and workmanship comply with the specified requirements. d. Proof of meeting building requirements and showing the proper land use of the bituminous material mixing plant from Buildings Department, Lands Department and Planning Department are required. e. The applicant must also meet the environmental requirements of Environmental Protection Department for the production of bituminous materials.

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Managing Department:	Architectural Services Department
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Works Category: Survey of Government Land Pressure Receivers subject to Steam and Air

Specialist Contractor

Pressure (but excluding Steam Boilers)

Brief Scope of Category:

The scope of work in this category covers the carrying out of examination and test to ensure that the pressure vessels are in safe working order and comply with the Boiler and Pressure Vessels Ordinance, Cap. 56.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys should preferably be of various types and classes as mentioned in the Boilers and Pressure Vessels (Forms) Order; and
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the Certificate of Fitness of the inspected vessels signed by a Qualified Boiler Inspector or Qualified Air Receiver Inspector of the applicant, contract agreement, correspondence etc.; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference; and
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 5 surveys, which were completed within the past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality of the submitted job reference within normal office hours; and
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation		C. Direct Entry 2. Technical Staff (See Annex 1 for definition of Staff Qualification) Technical Support Staff Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience. Statutory Registration The applicant shall have staff meeting the following statutory registration requirements: ◇ Qualified Boiler Inspector (QBI) appointed as Boiler Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of boilers mentioned in the Boilers and Pressure Vessel (Forms) Order, with appointment not having been suspended - 1 no. (minimum); OR ◇ Qualified Air Receiver Inspector (QARI) appointed as Air Receiver Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of air receiver mentioned in the Boilers and Pressure Vessels (Forms) Order, with appointment not having been suspended − 1 no. (minimum). Documentary proof of the registration issued by the Boiler and Pressure Vessel Authority should be provided. 3. Plant and Equipment**(See Note in Page No. 234) Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer Annex 29 for list of typical equipment, tools and testing instruments required.
1		4. Office/Workshop Facilities

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m² and the minimum workshop + storage area shall be 20 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Minimum Technical & Management Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
		<u>General</u>
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys should preferably be of various types and classes as mentioned in the Boilers and Pressure Vessels (Forms) Order; and
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the Certificate of Fitness of the inspected vessels signed by a Qualified Boiler Inspector of the applicant, contract agreement, correspondence etc.; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall submit at least 5 surveys, which were completed within the past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours.
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
A. Entry on Probation	B. Confirmation	Technical Staff (See Annex 1 for definition of Staff Qualification) Technical Support Staff Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience.
		Statutory Registration The applicant shall have staff meeting the following statutory registration requirements:
		 ♦ Qualified Boiler Inspector (QBI) appointed as Boiler Inspector under the Boilers and Pressure Vessels Ordinance Cap. 56 and holding the Certificate of Competency in respect of all classes and types of boilers mentioned in the Boilers and Pressure Vessel (Forms) Order, with appointment not having been suspended – 1 no. (minimum)
		Documentary proof of the registration issued by the Boiler and Pressure Vessel Authority should be provided.
		3. Plant and Equipment**(See Note in Page No. 234)
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer Annex 30 for list of typical equipment, tools and testing instruments required.
		4. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m² and the minimum workshop + storage area shall be 20 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Minimum Technical & Manageme	ent Criteria for Admission, Confirmation and Promotion of Contractors for the Specialist List	Appendix 3C
Managing Department:	Architectural Services Department	
Works Category:	Survey of Lifting Appliances and Lifting Gear	Specialist Contractor
Brief Scope of Category	:	
	category covers the carrying out of examination and test to ensure that lifting and Industrial Undertakings (Lifting Appliances and Lifting Gear) Reg	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
Not Applicable.	Not Applicable.	1. Job Experience
Not Applicable.	Not Applicable.	General (1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and the surveys must be relevant and should preferably for various types of lifting appliances and lifting gear. Both thorough examination and proof load test should be included in the job records. Also at least one survey should be for crane with automatic safe load indicator.
		(2) The applicant shall provide documentary evidence to substantiate experience, such as copies of the certificate of test and thorough examination issued after the survey in the approved format under the Regulations signed by the Qualified Competent Examiner should be produced for inspection; and
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)
		(4) The applicant shall have at least 5 surveys, which were completed within past 3 years for site inspection; and
		(5) At least 2 of the above 5 surveys shall be completed within the past 12 months or at final stage; and
		(6) The applicant shall be able to arrange joint site inspections for the government's examination of the quality of the submitted job reference within normal office hours; and
		(7) The scope of work for each of these 5 surveys shall cover the nature of works as described in the "Brief Scope of Category".

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A. Entry on Probation	B. Confirmation	C. Direct Entry
· ·		2. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of inspectors with adequate and relevant academic qualification and working experience.
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:
		 ♦ Qualified Competent Examiner (QCE) for lifting appliances and lifting gear in accordance with the Factory and Industrial Undertakings (Lifting Appliances and Lifting Gear) Regulations Cap 59J (hereinafter referred to as the Regulations). The Competent Examiner should be a Registered Professional Engineer registered under the Engineers Registration Ordinance within the Mechanical or Marine discipline – 1 no. (minimum).
		Documentary proof of the registration issued by the Engineers Registration Board should be provided.
		3. Plant and Equipment**(See Note in Page No. 234)
		Adequate nos. of calibrated testing instruments and equipment/tools for carrying out examination and test; valid calibration certificates for testing instruments/equipment shall be available. Refer Annex 31 for list of typical equipment, tools and testing instruments required.
		4. Office/Workshop Facilities
		Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 20 m² and the minimum workshop + storage area shall be 20 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.

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Managing Department:	Architectural Services Department
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Works Category: Swimming Pool Water Treatment Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of equipment, piping and fittings for water treatment and distribution of swimming pool such as water circulation, pH control, chemical treatment, sterilization, disinfection, leisure pool, hydrotherapy pool, pool lighting installation, etc.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$34 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry
1. Job Experience General		Not Applicable.
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and	(3) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
mechanical contractors; and	(4) The scope of work for this contract must fulfill all the following requirements:	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will	(a) Contract value of the work related to the category under application for confirmation exceeds \$5M; and	
not be considered as a valid job reference. Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid	(b) The contract shall cover major scope of works as described in the "Brief Scope of Category"; and	
job reference) (4) The applicant shall submit at least 2 contracts, which	(c) If the contract is a term contract, all of the above requirements 4 (a) to 4 (b) shall be fulfilled in one works order.	
were completed within the past 3 years for site inspection; and	(5) Subcontract will not be considered as valid job reference unless it can satisfy all of the following	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	requirements, in addition to all the above stated requirements:	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall	(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
be issued under the name of the applicant; and (8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the	
	concerned project, all shall not be the swimming	

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		A. Entry on Probation	B. Confirmation	C. Direct Entry
(9)		scope of work for each of these 2 contracts must l all of the following requirements:	pool water treatment installation contractor for the project work.	
	(a)	Contract value of the work related to the category under application for inclusion exceeds \$10M; and		
	(b)	The contract shall cover major scope of works as described in the "Brief Scope of Category".		
(10)	refere requi	ontract will not be considered as valid job ence unless it can satisfy all of the following rements, in addition to all the above stated rements:		
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and		
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and		
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the swimming pool water treatment installation contractor for the project work; and		
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and		
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or		

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A. Entry on Probation	B. Confirmation	C. Direct Entry
confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.		
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)		
Statutory Registration		
The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		
Qualified Engineer		
Employ at least 1 no. qualified engineer (Mechanical and Building Services discipline) with adequate and relevant professional and project management experience.		
Technical Support Staff		
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		
Technician 2 nos. Site supervisor 2 nos. Draftsman 1 no.		
<u>Craftsman</u>		
Employ adequate nos. of craftsman in the following trades		

A. Entry on Probation	B. Confirmation	C. Direct Entry
(A) Plumber/BS Mechanic		
Minimum score required 20 marks		
Qualified Plumber/BS Mechanic 20 marks Intermediate Plumber/BS Mechanic 15 marks		
Ordinary Plumber/BS Mechanic 8 marks		
(D) Electrician		
(B) Electrician Minimum score required 20 marks		
Qualified Electrician 20 marks		
Intermediate Electrician 15 marks		
Ordinary Electrician 8 marks		
Statutory Registration		
The applicant shall have staff meeting the following		
statutory registration requirements:		
under Electricity Ordinance, Cap. 406. Grade		
B2 – 1 no. (minimum)		
(minimum)		
The LP or REW can be the Qualified Engineer, Technical Support Staff or Craftsman.		
reclinical support start of Craftsman.		
Qualified Welder		
Employ adequate nos. of Qualified Welder (QW)		
QW 1 no.		
The QW can be the Qualified Engineer, Technical		
Support Staff or Craftsman.		
4. Plant and Equipment**(See Note in Page No. 234)		
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal.		
Adequate nos. of calibrated testing instruments and		
equipment/tools for carrying out installation,		
operation, maintenance and testing/commissioning services; valid calibration certificates for testing		
instruments shall be available. Refer Annex 32 for list		
of typical equipment/tools and testing instruments		
required.		

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	A. Entry on Probation	B. Confirmation	C. Direct Entry
5	5. Office/Workshop Facilities		
	Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 30 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		

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Managing Department : High	vays Department
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Works Category : Transparent Panels for Noise Barriers on Highways

Supplier

Please refer to P. 143 – 145 of Appendix 3C for details.

Managing Department: Architectural Services Department

Works Category : Turn-key Interior Design & Fitting-out Works Specialist Contractor

Group I: Eligible to be awarded one contract as a Trade Test.

Group II : Eligible to be awarded more than one contract at any one time.

Brief Scope of Category:

The scope of work in this category covers the design and fitting-out works for Government department/bureaux.

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	Group I	Group II
	A. Direct Entry	A. Direct Entry
1.	Job Experience At least 3 major local projects in design and fitting-out works of value above \$5M completed in the past 5 years and one of which shall exceed \$15M.	NA
2.	Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) The applicant must be an approved contractor under Buildings category in the List of Approved Contractors for Public Works.	
3.	Top Management *(See Note in Page No. 234) NA	
4.	Technical Staff At least one qualified Architectural and Interior Designer (AP - List of Architects); one qualified Structural Engineer (RSE); one qualified Building Services Engineer as BS Coordinator (CIBSE or HKIE (BS)); one qualified contract manager with at least ten years' management experience in construction industry (Ordinary Certificate in Building Studies); four foremen each with at least five years' experience in construction industry; six carpenters/skill workers; three qualified quantity surveying staff (Ordinary Certificate in Building Studies); four accounting staff	
5.	Plant and Equipment**(See Note in Page No. 234) NA	
6.	Office/Workshop Facilities A design office and workshop suitable for the nature of work. Local office and local workshop in Hong Kong are required.	
7.	Training Facilities NA	
8.	Others - supporting facilities from suppliers/ manufacturers/agents - regular sub-contractors	

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Group II		
B. Entry by Promotion		
1. Job Experience Satisfactory completion of the Trade Test (satisfactory completion of at least one ArchSD project under this Works Category within the past 5 years and of value above \$10M) and have good result in the full Performance Assessment		
 Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.) The applicant must be an approved contractor under Buildings category in the List of Approved Contractors for Public Works. 		
3. Top Management*(See Note in Page No. 234) NA		
4. Technical Staff At least one qualified Architectural and Interior Designer (AP - List of Architects); one qualified Structural Engineer (RSE); one qualified Building Services Engineer as BS Coordinator (CIBSE or HKIE (BS)); one qualified contract manager with at least ten years' management experience in construction industry (Ordinary Certificate in Building Studies); four foremen each with at least five years' experience in construction industry; six carpenters/skill workers; three qualified quantity surveying staff (Ordinary Certificate in Building Studies); four accounting staff		
5. Plant and Equipment**(See Note in Page No. 234) NA		
6. Office/Workshop Facilities A design office and workshop suitable for the nature of work		
7. Training Facilities NA		
8. Others - supporting facilities from suppliers/ manufacturers/agents - regular sub-contractors		

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Architectural Services Department

Works Category: Uninterruptible Power Supply Installation Specialist Contractor

Brief Scope of Category:

Managing Department:

The scope of work in this category covers the supply, installation and maintenance of static-type, uninterruptible power supply (UPS) systems together with the associated batteries, control and monitoring accessories, which are mainly deployed to support computer operations.

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A. Entry on Probation	B. Confirmation	C. Direct Entry	
Not Applicable.	Not Applicable.	1. Job Experience	
		<u>General</u>	
		(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
		(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
		(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
		Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
		(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
		(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
		(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
		(7) All statutory forms such as the Work Completion (Part of an Installation) Certificate (i.e. Form WR1 (A)) shall be issued under the name of the applicant; and	
		(8) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	

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A. Entry on Probation	B. Confirmation	C. Direct Entry		
		(9)	The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
			(a) Contract value of the work related to the category under application for inclusion exceeds \$0.5M; and	
			(b) The UPS rating in at least one of the above 2 contracts should be of 80kVA or above; and	
			(c) The contract shall cover the nature of works as described in the "Brief Scope of Category".	
		(10)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:	
			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and	
			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and	
			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the uninterruptible power supply system contractor for the project work; and	
			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and	
			(e) Notwithstanding the above, the Managing Department may seek references on the	

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A. Entry on Probation	B. Confirmation	C. Direct Entry
		applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.
		2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
		Statutory Registration The applicant shall be a Registered Electrical Contractor registered under Electricity Ordinance, Cap. 406 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
		Technical Support Staff
		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
		Technician 1 no.
		Site supervisor 1 no.
		Draftsman 1 no.
		<u>Craftsman</u>
		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
		Statutory Registration
		The applicant shall have staff meeting the following statutory registration requirements:
		♦ Registered Electrical Worker (REW) registered

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A. Entry on Probation	B. Confirmation	C. Direct Entry
· ·		under Electricity Ordinance, Cap. 406. Grade C2 – 1 no. (minimum)
		The REW can be the Technical Support Staff or Craftsman.
		4. Plant and Equipment**(See Note in Page No. 234)
		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 33 for list of typical equipment/tools and testing instruments required.
		5. Office/Workshop Facilities
		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 40 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
		6. Others
		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

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Managing Department:	Architectural Services Department
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Works Category: Video Electronics Installation Specialist Contractor

Brief Scope of Category:

The scope of work in this category covers the supply, installation and maintenance of video cassette recorder, video camera, monitor etc. commonly used for closed circuit TV system, video recording/display system and visual system at different venues.

Definition of Probationary Status[#] (Para. 3.5.3 is not applicable for this category)

Eligible for the award of a maximum of two contracts/subcontracts provided that the total value of works in this category does not exceed \$3.4 million

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^{*} See Notes (1) and (2) on Page 234 of this Appendix

A. Entry on Probation	B. Confirmation	C. Direct Entry	
1. Job Experience	(4) 771 11 11 11 11 11 11 11	1. Job Experience	
<u>General</u>	(1) The applicant has satisfactorily completed, within the past 12 months, at least one public works contract let by a Works Department; and	General	
(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	(2) This contract shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	(1) The applicant shall have adequate experience in the type and size of work of the category, with satisfactory quality of work compatible with Government standard; and	
(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	 (3) The scope of work for this contract must fulfill all the following requirements: (a) Contract value of the work related to the category under application for confirmation exceeds \$0.2M; and 	(2) The applicant shall have adequate experience in contract management of work of the category, solely and fully, including coordination with building contractor and other building services / electrical and mechanical contractors; and	
(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	 (b) The contract shall cover the nature of works as described in the "Brief Scope of Category"; and (c) If the contract is a term contract, all of the above requirements 3 (a) and 3 (b) shall be fulfilled in 	(3) For job experience outside the HKSAR, evidences as stipulated under para. 2.4.5 of the CMH must also be produced to the satisfaction of the Secretary for the Environment, Transport and Works; otherwise, it will not be considered as a valid job reference.	
Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	one works order. (4) Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated	Job Reference for Inspection (In addition to the above, every job submitted by the applicant shall fulfill all requirements set out below; otherwise, it will not be considered as a valid job reference)	
(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	requirements: (a) The subcontract shall include all the relevant work as described under the "Brief Scope of	(4) The applicant shall submit at least 2 contracts, which were completed within the past 3 years for site inspection; and	
(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage.	Category" covered in the main contract; and (b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely	(5) At least one of the above 2 contracts shall be completed within the past 12 months or at final stage; and	
(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	and fully, including contract management; and (c) The party by which the applicant is awarded	(6) These 2 contracts shall be direct contract, which was signed between the applicant and the employer of the concerned project; and	
 (7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and (8) The scope of work for each of these 2 contracts must 	with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the video electronics installation contractor for the project	(7) The applicant shall be able to arrange joint site inspections for the government's examination of the quality and workmanship of the submitted job reference within normal office hours; and	
fulfill all of the following requirements: (a) Contract value of the work related to the	work.	(8) The scope of work for each of these 2 contracts must fulfill all of the following requirements:	
category under application for inclusion exceeds		(a) Contract value of the work related to the	

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		A. Entry on Probation	B. Confirmation		C. Direct Entry
	(b)	\$0.2M; and The contract shall cover the nature of works as			category under application for inclusion exceeds \$0.5M; and
(0)	(-)	described in the "Brief Scope of Category".			(b) The contract shall cover the nature of works as described in the "Brief Scope of Category".
(9)	refere requi	contract will not be considered as valid job ence unless it can satisfy all of the following irements, in addition to all the above stated irements:		(9)	Subcontract will not be considered as valid job reference unless it can satisfy all of the following requirements, in addition to all the above stated requirements:
	(a)	The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and			(a) The subcontract shall include all the relevant work as described under the "Brief Scope of Category" covered in the main contract; and
	(b)	The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and			(b) The applicant shall have undertaken the full scope of work covered in the subcontract, solely and fully, including contract management; and
	(c)	The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the video electronics installation contractor for the project work; and			(c) The party by which the applicant is awarded with the subcontract, and the upstream contracting parties up to and including the main contractor, which is the company awarded with the direct contract by the employer of the concerned project, all shall not be the video electronics installation contractor for the project work; and
	(d)	The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and			(d) The applicant must present documentary evidence to prove the above requirements are met and such evidence must be substantiated by all the relevant upstream contracting parties as mentioned at (c) above including letters from them, which must be signed by their authorized signatories to confirm that the applicant has met the above requirements in the subcontract; and
	(e)	Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.			(e) Notwithstanding the above, the Managing Department may seek references on the applicant's technical and managerial capabilities from the employer, the relevant parties of the concerned project and other sources or confirmation on the authenticity of the proof provided by the applicant from the relevant parties of the concerned project.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)	B. Commination	2. Registration with relevant authorities in Hong Kong (such as Quality Management System Certification, Building Authority etc.)
Statutory Registration		Statutory Registration
The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".		The applicant shall be a Licensed Security Company engaged in Type III Security Work under Security and Guarding Services Ordinance, Cap. 460 and have full time technical staff (meeting the relevant statutory registration requirement) of number not less than that described in the Section "Technical Staff".
3. Technical Staff (See Annex 1 for definition of Staff Qualification)		3. Technical Staff (See Annex 1 for definition of Staff Qualification)
Technical Support Staff		Technical Support Staff
Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.		Employ adequate nos. of technicians, site supervisors and draftsmen with adequate and relevant academic qualification and working experience.
Technician 1 no. Site supervisor 1 no. Draftsman 1 no.		Technician 1 no. Site supervisor 1 no. Draftsman 1 no.
Craftsman		<u>Craftsman</u>
Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks		Employ adequate nos. of Electronics Craftsman Minimum score required 40 marks Qualified Electronics Craftsman 20 marks Ordinary Electronics Craftsman 10 marks
Statutory Registration		Statutory Registration
The applicant shall have staff meeting the following statutory registration requirements:		The applicant shall have staff meeting the following statutory registration requirements:
Security Personnel (SP) holding Security Personnel Permit (Cat. D) issued under Security and Guarding Services Ordinance, Cap 460 – 1 no. (minimum)		 ♦ Security Personnel (SP) holding Security Personnel Permit (Cat. D) issued under Security and Guarding Services Ordinance, Cap 460 – 1 no. (minimum)
The SP can be the Technical Support Staff or Craftsman.		The SP can be the Technical Support Staff or Craftsman.

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A. Entry on Probation	B. Confirmation	C. Direct Entry
4. Plant and Equipment**(See Note in Page No. 234)		4. Plant and Equipment**(See Note in Page No. 234)
Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 34 for list of typical equipment/tools and testing instruments required.		Adequate modern drafting and computing facilities; minimum 1 no. CAD terminal. Adequate nos. of calibrated testing instruments and equipment/tools for carrying out installation, operation, maintenance and testing/commissioning services; valid calibration certificates for testing instruments shall be available. Refer Annex 34 for list of typical equipment/tools and testing instruments required.
5. Office/Workshop Facilities		5. Office/Workshop Facilities
Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.		Local office/workshop in Hong Kong SAR is required. Reasonably sized, suitably furnished office and workshop/storage areas. In general, the minimum office area shall be 40 m² and the minimum workshop + storage area shall be 25 m². Documentary evidence (e.g. purchase/lease agreement) to prove right of use shall be produced.
6. Others		6. Others
Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.		Authorized Agency Preferably be an authorized agent in HKSAR for essential equipment. Documentary evidence such as authorized agency agreements shall be available.
Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.		Support from Principal Technical support from principal(s) of relevant agency is desirable. Applicant to demonstrate scope and extent (such as design, backup on installation / maintenance etc.) of support.

<u>Note</u>

- * Top management shall be the President, Chairman, Director, Managing Director, Executive Director or General Manager etc.
- ** The plant and equipment requirements are subject to modification as technology advances and as new plant emerges. Furthermore, the type of materials and method of application that the contractors select will dictate the plant required.
- (1) Pursuant to a trial scheme applicable to tenders invited within a period of one year commencing on 17 July 2009, the outstanding value instead of the total value of works is to be used for checking compliance with the tender limits for probationary contractors. The outstanding value of works in an existing contract shall be the difference between the original contract sum and the aggregate of all payments certified under the contract up to and including the date set for the close of tender or, if this has been extended, the extended date for the contract being procured. The outstanding value shall be taken as zero if the original contract sum is less than the aggregate of all payments certified.
- (2) For the LPM category, the use of the outstanding value of works for checking compliance with the tender limit for probationary contractors is already an established rule and will not be affected by the above-mentioned trial scheme.
- (3) The new tender/contract limits effective as from 17 July 2009 will not affect the group limits and the minimum contract value referred to in the contract experience requirement set out in this Appendix for assessing applications for admission, confirmation or promotion of contractors in the relevant categories, groups and status of the Specialist List until further notice.

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ANNEX 1 Staff Qualification for 26 Categories

Works Categories: Air-conditioning Installation

Audio Electronics Installation

Broadcast Reception Installation

Burglar Alarm and Security Installation

Catering Equipment Installation

Diesel Generator Installation

Electrical and Mechanical Installation for Sewage Treatment &

Screening Plant

Electrical Installation

Electronic Timing and Display Installation

Fire Service Installation

Fountain Installation

Industrial Type Electrical Installation

Lift, Escalator and Passenger Conveyor Installation

Liquefied Petroleum Gas Installation

Low Voltage Cubicle Switchboard Installation

Mechanical Handling and Lifting Installation

Mechanical Plant and Equipment Installation

Motor Vehicle Body-building and Painting

Radio Electronics Installation

Steam and Compressed Air Installation

Survey of Government Land Pressure Receivers subject to Steam and Air Pressure (but excluding Steam Boilers)

Survey of Government Land Steam Boilers

Survey of Lifting Appliances and Lifting Gear

Swimming Pool Water Treatment Installation

Uninterruptible Power Supply Installation

Video Electronics Installation

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1. To count as staff, individuals must be full time employees of the applicant and must be resident Hong Kong ID Card holders or Works Visa holders, and the practice must constitute their principal source of employment. Documentary evidence such as self-declaration letter specifying full-time employment with the company, bank payroll statement, Mandatory Provident Fund (MPF) contribution record, Employer's Return of Remuneration and Pensions to Inland Revenue Department, etc. shall be produced.

2. The Qualified Engineer shall be

- a corporate member of the Hong Kong Institution of Engineers elected after 5 December 1975 with discipline relevant to category under application and with a minimum 2 years post-qualification experience in HKSAR, or
- a Registered Professional Engineer (Engineer Registration Ordinance, Cap. 409) with discipline relevant to category under application.

3. The Technician shall have

- an ordinary diploma or ordinary certificate of discipline relevant to the category under application from a Hong Kong polytechnic, technical college or technical institute, or equivalent, with 5 years' relevant experience in HKSAR, or
- a higher diploma or higher certificate of discipline relevant to the category under application from a Hong Kong polytechnic, technical college or technical institute, or equivalent, with 3 years' relevant experience in HKSAR, or
- a degree of discipline relevant to the category under application from a Hong Kong university, or equivalent, with 2 years' relevant experience in HKSAR.

The Site supervisor shall have a minimum of 2 years' relevant experience in site supervision in HKSAR.

The Draftsman shall have relevant experience in drawing preparation and use of CAD terminal. For the category of "Motor Vehicle Body-building and Painting" only, the Technician may be exempted from the above certificate/diploma/degree requirement should he have not less than 15 years' proven adequate experience.

- 4. The Draftsman can be the Qualified Engineer, Technician or Site supervisor, but in that case, the manpower resource for the respective rank of staff shall be increased accordingly, i.e. the total nos. of technical support staff required shall remain the same.
- 5. The Craftsman shall have a minimum of 2 years' working experience in HKSAR. The definitions of Qualified Tradesman and Intermediate Tradesman under the requirements of "Craftsman" shall refer to those specified in *Works Bureau Technical Circular (WBTC) No. 13/2002*. Ordinary Tradesman refers to experienced craftsman in the relevant trade not meeting the qualifications specified in the above-mentioned WBTC. For easy reference, the definitions of Qualified Tradesman and Intermediate Tradesman are extracted as follows. In case of deviations from future amendments, the latest version of the above WBTC shall prevail.
 - (i) Qualified Electrician means:
 - an electrician who has obtained the Trade Test Certificate of "Electrician" issued by VTC; or
 - an electrician who has obtained the Certificate of Completion of Apprenticeship of "Electrical / Electrician or Electrical Fitter" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR; or

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- an electrician who is a registered electrical worker registered under Electricity Ordinance (Cap. 406).
- (ii) Intermediate Electrician means:
 - an electrician who has obtained relevant Intermediate Trade Certificate of "Electrical Work" issued by VTC; or
 - a Qualified Tradesman as Lift Electrician.
- (iii) Qualified Plumber means:
 - a plumber who has obtained the Trade Test Certificate of "Plumber" issued jointly by VTC & CITA; or
 - a plumber who has obtained the Certificate of Completion of Apprenticeship of "Plumber" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR; or
 - a plumber who is a licenced plumber registered under Waterworks Ordinance, Cap. 102.
- (iv) Intermediate Plumber means a plumber who has obtained relevant Intermediate Trade Certificate of "Plumber" issued by CITA.
- (v) Qualified BS Mechanic means a mechanic who has obtained the Certificate of Completion of Apprenticeship of "Building Services Mechanic" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (vi) Intermediate BS Mechanic means:
 - a mechanic who has obtained Intermediate Trade Certificate of any one of "Electrical Work, Sheet Metal Work, Mechanical Fitting, Pipe Works (E&M) or Welding (E&M)" issued by VTC; or
 - a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Fire Services Mechanic, Lift Electrician, Lift Mechanic, Mechanical Fitter, Refrigeration/Air-Conditioning/Ventilation Mechanic or Sheet Metal Worker.
- (vii) Qualified AC Mechanic means:
 - a mechanic who has obtained the Trade Test Certificate of "Refrigeration/Air-Conditioning/Ventilation Mechanic" issued by VTC, or
 - a mechanic who has obtained the Certificate of Completion of Apprenticeship of "Air-Conditioning or Refrigeration/Air-Conditioning/Ventilation Mechanic" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (viii) Intermediate AC Mechanic means:
 - a mechanic who has obtained relevant Intermediate Trade Certificate of "Electrical Work, Sheet Metal Work, Mechanical Fitting, Pipe Works (E&M) or Welding (E&M)" issued by VTC; or
 - a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Building Services Mechanic, Fire Services Mechanic, Lift Electrician, Lift Mechanic, Mechanical Fitter or Sheet Metal Worker.
- (ix) Qualified FS Mechanic means a mechanic who has obtained the Certificate of Completion of Apprenticeship of "Fire Services Mechanic" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.

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- (x) Intermediate FS Mechanic means:
 - a mechanic who has obtained Intermediate Trade Certificate of any one of "Electrical Work, Mechanical Fitting or Pipe Works (E&M)" issued by VTC; or
 - a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Building Services Mechanic, Lift Electrician, Lift Mechanic, Mechanical Fitter, Refrigeration/Air-Conditioning/Ventilation Mechanic or Sheet Metal Worker.
- (xi) Qualified Lift Electrician means a mechanic who has obtained the Certificate of Completion of Apprenticeship of "Lift Electrician" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (xii) Intermediate Lift Electrician means:
 - a mechanic who has obtained Intermediate Trade Certificate of "Electrical Work" issued by VTC; or
 - a Qualified Tradesman as Electrician/Electrical Fitter.
- (xiii) Qualified Lift Mechanic means a mechanic who has obtained the Certificate of Completion of Apprenticeship of "Lift Mechanic" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (xiv) Intermediate Lift Mechanic means:
 - a mechanic who has obtained Intermediate Trade Certificate of "Mechanical Fitting" issued by VTC; or
 - a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Building Services Mechanic, Fire Services Mechanic, Lift Electrician, Mechanical Fitter, Refrigeration/Air-Conditioning/Ventilation Mechanic or Sheet Metal Worker.
- (xv) Qualified Mechanical Fitter means:
 - a fitter who has obtained the Trade Test Certificate of "Mechanical Fitter" issued by VTC, or
 - a fitter who has obtained the Certificate of Completion of Apprenticeship of "Mechanical or Mechanical Fitter" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (xvi) Intermediate Mechanical Fitter means:
 - a fitter who has obtained Intermediate Trade Certificate of "Mechanical Fitting" issued by VTC; or
 - a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Building Services Mechanic, Fire Services Mechanic, Lift Electrician, Lift Mechanic, Refrigeration/Air-Conditioning/Ventilation Mechanic or Sheet Metal Worker.
- (xvii) Qualified Sheet Metal Worker means a worker who has obtained the Certificate of Completion of Apprenticeship of "Sheet Metal Worker" issued under the Apprenticeship Ordinance (Cap. 47) or issued by the Government of the HKSAR.
- (xviii) Intermediate Sheet Metal Worker means:
 - a fitter who has obtained Intermediate Trade Certificate of "Sheet Metal Worker" issued by VTC; or

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- a Qualified Tradesman as any one of an Electrician/Electrical Fitter, Building Services Mechanic, Fire Services Mechanic, Lift Electrician, Lift Mechanic, Mechanical Fitter or Refrigeration/Air-Conditioning/Ventilation Mechanic.
- 6. Qualified welder means a welder who has certificate issued by a testing laboratory within the past 6 months conforming to the following standards for pipe weld:
 - BS EN 287 or other equivalent international standards for the approval testing of welders for fusion welding, or
 - BS EN 288 or other equivalent international standards for welding procedures of metallic materials.

7. Electronics Craftsman

A Qualified Electronics Craftsman is a craftsman who has obtained a relevant electronics certificate issued by recognized institutions e.g. VTC or CITA or has obtained relevant certificate of completion of apprenticeship issued by recognized organizations.

- 8. Craftsman for Motor Vehicle Body-building and Painting
 - (i) A Qualified Body Repairer/Builder is a craftsman who has obtained a relevant vehicle body repair/building certificate issued by recognized institutions e.g. VTC or CITA or has obtained relevant certificate of completion of apprenticeship issued by recognized organizations.
 - (ii) A Qualified Vehicle Mechanic is a craftsman who has obtained a relevant vehicle mechanic certificate issued by recognized institutions e.g. VTC or CITA or has obtained relevant certificate of completion of apprenticeship issued by recognized organizations.
 - (iii) A Qualified Vehicle Electrician is a craftsman who has obtained a relevant vehicle electrician certificate issued by recognized institutions e.g. VTC or CITA or has obtained relevant certificate of completion of apprenticeship issued by recognized organizations.
 - (iv) A Qualified Vehicle Painter is a craftsman who has obtained a relevant vehicle painting certificate issued by recognized institutions e.g. VTC or CITA or has obtained relevant certificate of completion of apprenticeship issued by recognized organizations.

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ANNEX 2 List of Tools / Equipment and Testing Instruments for Airconditioning Installation Category

Item of Assessment	Minimum Requirements		Remarks
	Group I	Group II	
Flow meters & pressure gauges	1	2	
Sound level meter	1	1	With full spectrum and complete with tester/frequency generator
Hydraulic pump with pressure gauges	1	2	
Hot wire anemometer	1	2	Accompanied with diffuser measuring hood
Welding machine	1	2	
Threading machine	1	2	
Bending machine	1	2	
Drilling machine	1	2	
Mercury manometers	1	2	
Tachometer	1	2	
Smoke generator	1	2	
Voltmeter	1	2	
Ammeter	1	2	One set can be tong tester
Air quality tester	1	1	"Andersen Sampler" or equivalent
Dial gauges	1	2	With appropriate scales
Refrigerant leakage tester	1	1	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 2 to Appendix 3C Page 1 of 1

ANNEX 3 List of Tools / Equipment and Testing Instruments for Audio Electronics Installation Category

Item of Assessment	Minimum Requirements	Remarks
Digital voltage meter (DVM)	1	
Oscilloscope	1	
Signal generator	1	
Sound level meter	1	
Audio signal level meter	1	
Distortion analyzer	1	
Test / Maintenance workbench	1	Suitably equipped with test equipment, power sockets, inspection lamp, etc. for ready set-up, testing, finetuning and maintenance of equipment
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 3 to Appendix 3C Page 1 of 1

ANNEX 4 List of Tools / Equipment and Testing Instruments for Broadcast Reception Installation Category

Item of Assessment	Minimum Requirements	Remarks
Multi-tester (AVO)	1	
Insulation tester	1	
Electric drill	1	
Basic workshop tools (electronics)	1 lot	
Basic testing instruments (electronics)	1 lot	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 4 to Appendix 3C Page 1 of 1

ANNEX 5 List of Tools / Equipment and Testing Instruments for Burglar Alarm and Security Installation Category

Item of Assessment	Minimum Requirements	Remarks
Multi-tester (AVO)	1	
Insulation tester	1	
Electric drill	1	
Basic workshop tools (electronics)	1 lot	
Basic testing instruments (electronics)	1 lot	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 5 to Appendix 3C Page 1 of 1

ANNEX 6 List of Tools / Equipment and Testing Instruments for Catering Equipment Installation Category

Item of Assessment	Minimum Requirements	Remarks
Hydraulic press	1	
Rolling machine	1	
Angle bender	1	
Welding machine	1	
Drilling machine	1	
Shaping machine	1	
Shearing machine	1	

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 6 to Appendix 3C Page 1 of 1

ANNEX 7 List of Tools / Equipment and Testing Instruments for Diesel Generator Installation Category

Item of Assessment	Minimum Requirements	Remarks
Continuity tester	2	
Earth loop impedance tester	2	
Earth resistance tester	2	
Insulation tester	2	
Multi-meter	2	
Clamp-on ammeter	2	
Sound level meter	2	
Synchronizing tachometer	2	
Phase sequence tester	2	
Resistor bank	1	
Hydraulic tester	2	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 7 to Appendix 3C Page 1 of 1

ANNEX 8 List of Tools / Equipment and Testing Instruments for Electrical & Mechanical Installation for Sewage Treatment and Screening Plant Category

Item of Assessment	Minimum Requirements	Remarks
Welding equipment	2	
Drilling machine	1	
Metal cutting machine	1	
Lathe	1	
Milling machine	1	
Shaping machine	1	
Abrasive wheels	1	
Pipe threading and bending machines	1	
Portable generator	1	
Sewage/sludge pump	1	
Gas detectors	2	Capable of measuring oxygen deficiency, explosive gas, hydrogen sulphide and carbon monoxide
Non-spark hand tools	1 set	The tools should be safe for working in gas risk areas
Portable air blower	1	Complete with portable air duct and the transformation piece
Metal scaffolding	1 set	The assembly should include the platforms, accessing ladders and guard railings
Non-contact thermometer	1	
Integrated sound level meter	1	
Paint thickness gauge	1	
Portable air flow meter	1	
Earth loop impedance tester	1	

Annex 8 to Appendix 3C Page 1 of 2

Item of Assessment	Minimum Requirements	Remarks
Earth resistance tester	1	
Insulation tester	1	500 V D.C. injection voltage
Multi-meter	2	
Clamp-on ammeter	2	
Voltmeter	2	
Conduit bender and cutter	1	
Continuity tester	1	
RCD tester	1	
Phase sequence tester	1	
Illumination meter	1	
D.C. voltage and current injection set	1	For the calibration of instruments (0 - 1 A D.C. and 0 - 10 V D.C.)
Hydraulic compression tool	1 set	Capable of jointing power supply cable to the cable lugs
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 8 to Appendix 3C Page 2 of 2

ANNEX 9 List of Tools / Equipment and Testing Instruments for Electrical Installation Category

Item of Assessment	Minimum Requirements			Remarks
	Group I	Group II	Group III	
Conduit bender	1	2	3	
Conduit cutter	1	2	3	
Continuity tester	1	2	3	
Earth loop impedance tester	1	2	3	
Earth resistance tester	1	2	3	
Insulation tester	1	2	3	
Multi-tester (AVO)	1	2	3	
Clamp-on ammeter	1	2	3	
RCD tester	1	1	2	
Ductor tester	-	-	1	
Applied voltage tester	1	1	1	
Electric hammer	1	2	3	
Welding equipment	1	1	1	
Lux meter	1	1	1	
Cable jointer	May be exempted	1	1	
Metal cutter	May be exempted	1	1	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	Required	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 9 to Appendix 3C Page 1 of 1

ANNEX 10 List of Tools / Equipment and Testing Instruments for Electronic Timing and Display Installation Category

Item of Assessment	Minimum Requirements	Remarks
Digital Voltage Meter (DVM)	1	
Oscilloscope	1	
Computer set or suitable test set for programming of display patterns	1	
Light meter	1	
Test/Maintenance workbench	1	Suitably equipped with test equipment, power sockets, inspection lamp, etc. for ready set-up, testing, fine-tuning and maintenance of equipment
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

Annex 10 to Appendix 3C Page 1 of 1

ANNEX 11 Specification for Protection of Pipework for Fabrication of Steel Pipe Specials Category

Prior to the application of paint or protection, the pipe fittings shall be tested in accordance with the Clause of Inspection to the satisfaction of the Engineer or his representative.

Unless otherwise specified, pipe fittings shall be protected internally and externally as specified below. They are intended for use in the tropics.

(a) Internal Protection

Internal protection shall be bitumen lining to BS 534:1990, Clause 27.2 or equivalent. The requirements of Clause 27.2 are amended to the extent that the tenderer may offer bitumen lining with or without filler, provided that the bitumen conforms in all other respects with Type 2 compounts of BS 4147:1980 or equivalent.

Alternatively, tenderers may quote prices for coal tar enamel lining to American Water Works Association Standards AWWA C203.

The lining at the ends of pipe fittings shall be omitted for a sufficient length to permit making welds without damaging the lining.

All lining will be checked for continuity as specified in clause 28.1 of BS 534:1990 or equivalent. Discontinuities and pinholes indicated shall be made good at no extra cost to Government. Before the adhesion test specified in BS 534:1990, Clause 28.2 or equivalent, the rings shall be heated to 170°F for 24 hours and the lining shall not show any tendency to creep or flow.

(b) External protection

All underground pipes shall be reinforced bitumen sheathed on the outside. This shall be bitumen sheathing as specified in Clause 26.2 of BS 534:1990 or equivalent with the addition of a spiral wrapping of woven glass cloth firmly embedded into the surface of the sheathing with an overlap of not less than 6.3mm.

Flange jointing surfaces need not be painted.

The applicant shall submit details of his quoted alternative standards for assessment.

Annex 11 to Appendix 3C Page 1 of 1

ANNEX 12 Standard Requirements for Waterworks Installations for Fabrication of Unfired Pressure Vessels Category

Contractors must be capable of fabricating manufacturing unfired pressure vessels (both vertical and horizontal) to BS 5500 and the requirements as detailed below:

Category of construction: 1& 2

Diameter of vessels: up to 3500mm

Materials of construction: steel

Working pressure of vessel: 1600 kPa

Hydraulic test pressure: 2400 kPa

Applications: salt water or potable water

Construction shall also provide accessories associated with the vessel, including:

Pressure relief valve

Anti-vacuum valve

Water level gauges, pressure gauges & isolating valves

Level electrodes and controller

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ANNEX 13 List of Tools / Equipment and Testing Instruments for Fire Service Installation Category

Item of Assessment	Minimum Requirements		Remarks
	Group I	Group II	
Hydrant flow & pressure gauges	1	1	Calibration is permanent, components to be replaced if damaged
Level measure meter (Gas system), optional	1	1	
Hydraulic pump with pressure gauge	1	2	
Smoke detector tester	1	2	
Insulation tester	1	2	
Multi-tester (AVO)	1	2	
Welding machine	1	2	
Threading machine	1	2	
Bending machine	1	2	
Drilling machine	1	2	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 14 List of Tools / Equipment and Testing Instruments for Fountain Installation Category

Item of Assessment	Minimum Requirements	Remarks
Flow meters & pressure gauges	1	
Hydraulic pump with pressure gauges	1	
Welding m/c	1	
Threading m/c	1	
Bending m/c	1	
Drilling m/c	1	
Conduit bender	1	
Conduit cutter	1	
Tachometer	1	
Multi-meter	2	
Continuity tester	1	
Clamp-on ammeter	1	
Earth fault loop impedance tester	1	
Insulation tester	1	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 15 Minimum Personnel Requirements for Ground Investigation Field Work Category

Position ^{(a) & (b)}	Academic Qualification	fication Experience		0.
		_	GP I	GP II
Site Agent	Ordinary Certificate in civil engineering or equivalent	10 years in civil or geotechnical engineering, of which at least 5 must be in ground investigation 7 years in civil or geotechnical engineering, of which at least 5 must be in ground investigation	1	1
Geotechnical Engineer/ Engineering Geologist	Degree ^(c) in civil engineering, geotechnical engineering or a geology-related subject	5 years of post-qualification experience in civil or geotechnical engineering, of which at least 3 must be in ground investigation	1	2
Logging Geologist	Degree ^(c) in geology ^(d) or a cognate subject ^(e) in which at least 50% of the course content comprises geological based subjects ^(g) Degree ^(c) in geology ^(d) or a cognate subject ^(e) in which at least 25% of the course content	3 years of post-qualification experience in ground investigation which must include logging of samples ^(f) 5 years of post-qualification experience in ground investigation which must	1	2
	comprises geological based subjects ^(g)	include logging of samples ^(f)		
Geotechnical Field Technician	Ordinary Certificate in civil engineering or equivalent Relevant Degree ^(c)	2 years in ground investigation 1 year in ground investigation	1	2
Ground Investigation Driller		Construction Industry Training Authority) Trade Test ate for Ground Investigation Operator		10
Safety Officer	Registered in accordance with the FIU(SO&SS)R	3 years in ground investigation	1 ^(h)	1
Safety Supervisor	-		0	1

Notes: (a) All except Ground Investigation Drillers must be able to speak English and understand instructions written in English.

- (b) An individual may fill only one of the positions at any one time.
- (c) The degree shall be up to degree level as assessed by the Hong Kong Council for Academic Accreditation (HKCAA).
- (d) Examples of degree in geology: Applied Geology, Earth Science, Engineering Geology, Geological Sciences, Geology, Mining Geology and Petroleum Geology.
- (e) Examples of cognate subjects: Environmental Science, Geography, Geomorphology, Geotechnical Engineering, Mining and Soil Science.
- (f) Applicants will be required to submit documentary evidence in support of their core logging experience (e.g. submission of logs that the applicant has produced, including a brief statement of 2-3 pages explaining the reasons for submitting those particular logs).

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- Examples of geological based subjects: Applied Geology, Earth Dynamics, Earth Systems, Economic/Mining Geology, Engineering Geology, Environmental Geology, Field Camp/Field School/Field Mapping, Geochemistry, Geomorphology, Earth/Surficial Landform/Quaternary Geology, Geophysics, Historical Hydrogeology, Mineralogy, Palaeontology, Petroleum Geology, Petrology (Igneous, Metamorphic & Sedimentary), Physical Geology, Physics of the Earth, Plate Tectonics, Regional Geology, Rock Mechanics, Sedimentology/Principles of Sedimentation, Stratigraphy, Soil Mechanics and Structural Geology. An applicant who holds a degree in geology or a cognate subject in which at least 25% but less than 50% of the course content comprises geological based subjects is considered to have topped up the geological based subjects in his or her degree to at least 50% if he or she has obtained a recognized relevant post-degree qualification (e.g. Post-graduate Diploma in Earth Sciences at the University of Hong Kong or equivalent).
- (h) The Safety Officer may be working part-time only for a Group I contractor.

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ANNEX 16 Minimum Equipment Requirements for Ground Investigation Field Work Category

		Number/Length/Set		
	Equipment		Group II	
Water Pumps		4	10	
Set of equipment for	or air-foam drilling	0	2	
Casings	NW & HW	160m for each size	600m for each size	
Cas	PW and SW	40m for each size	100m for each size	
Drilling rods	NW	160m	600m	
Dri	HW	40m	100m	
ırs	U100/U76	4	10	
Soil samplers	Piston	2	2	
sa	Mazier	4	10	
sk lers	Double tube (TNW & T2-101)	4 each	10 each	
Rock	Triple tube (NMLC, HMLC & 4C-MLC)	1 each	2 each	
s	SPT	4	10	
Equipment for insitutests	Impression packer, rising, falling and constant head permeability, packer (water absorption) and vane shear	1 each	2 each	
quipn	Dipmeters	4	10	
Щ	GCO probe	2	4	

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ANNEX 17 List of Tools / Equipment and Testing Instruments for Industrial Type Electrical Installation Category

Item of Assessment	Minimum Requirements	Remarks
Conduit bender	2	
Conduit cutter	2	
Continuity tester	2	
Earth loop impedance tester	1	
Earth resistance tester	1	
Insulator tester	1	
Multi-meter	2	
RCD tester	1	
Ductor tester	1	
Applied voltage tester	1	
Cable jointer	1	
HV insulator tester	1	
Injection tester	1	
Clamp-on ammeter	2	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 18 Technical Requirement for Landslip Preventive/Remedial Works to Slopes/Retaining Walls Category

1. Qualification Criteria

- 1.1 The applicant must be registered in the list of Registered Specialist Contractor for Site Formation Works of the Buildings Department.
- 1.2 The applicant must have obtained either ISO Certification or if they do not have suitable works contracts in hand for certification auditing, a confirmation from a certification body accredited by the HKAS to issue the Certification or considered to be equivalent by the ETWB that a full review of the Quality Manual of their Hong Kong office has been carried out in Hong Kong by the certification body and such Quality Manual has been confirmed by the certification body as being in conformity with the requirements of the relevant ISO standard. The scope of certification should include landslip preventive/remedial works to slopes/retaining walls.
- 1.3 The applicant must achieve the minimum passing scores for the aggregate mark of the assessment and for individual or combined sections of the assessment as detailed in Section 2 below in the following attributes:
- 1.3.1 Experience and performance on Government contracts on Roads & Drainage and/or Site Formation categories (Group B or above) in the past 3 years.
- 1.3.2 Experience and performance on landslip preventive, remedial or formation works of slopes and/or retaining walls in areas immediately behind occupied structures, adjacent to railway lines or public roads in the past 3 years.
- 1.3.3 Experience, availability and organization of managerial, professional, technical and site safety staff with particular emphasis on Landslip Preventive Measures (LPM) type works.
- 1.3.4 Availability of plant and equipment for LPM type works.

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2. Method of Assessment

2.1 Experience on Government contracts under the Roads & Drainage and/or Site Formation categories in the past 3 years

Criteria	Marks
Applicant is not on the Approved List under R&D or SF categories	0
Applicant is on the Approved List under R&D or SF categories at Group B	2
Applicant is on the Approved List under R&D or SF categories at Group C	5
Between 1 and 5 no. performance reports in either or both categories	Add 2
Between 6 and 8 no. performance reports in either or both categories	Add 4
Between 9 and 12 no. performance reports in either of both categories	Add 6
More than 12 performance reports in either or both categories	Add 10
	Maximum score 15 marks

2.2 <u>Performance on Government Contracts under Road & Drainage and/or Site</u> <u>Formation categories in the past 3 years</u>

Criteria	Marks
10% or more of performance reports adverse or no performance	0
reports	
More than 5% but less than 10% performance reports adverse	4
Up to 5% performance reports adverse	8
No adverse reports	12
No adverse and some very good reports	15
	Maximum
	score 15
	marks

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2.3 Experience and performance on landslip preventive, remedial or formation works of slopes and/or retaining walls in areas immediately behind occupied structures, adjacent railway lines or public roads in the past 3 years

	Criteria	Marks
No. of sites on which	Less than 3	0
LPM works were	3 to 6	5
completed by the applicant with satisfactory performance	More than 6	10
No. of sites each with value of LPM works higher than \$2M	2 to 3	Add 5
completed by the applicant with satisfactory performance	4 or more	Add 10
Multiple-site experience	The applicant completed LPM works with satisfactory performance on at least 6 simultaneously active sites with total value of works higher than \$7M	Add 5
	The applicant completed LPM works with satisfactory performance on at least 8 simultaneously active sites with total value of works higher than \$10M	Add 10
		Maximum score 30 marks

2.4 Overall experience and performance in works of Roads & Drainage, Site Formation and Landslip Preventive Works in the past 3 years

Criteria	Marks
Assessments in Sections 2.1, 2.2 and	Aggregate of marks scored in Sections 2.1,
2.3 above	2.2 and 2.3 above
	Maximum score 60 marks
	Minimum passing score (1) 30 marks

Note 1 - The application will be rejected if the mark achieved is below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved in this assessment is higher than the overall minimum passing score.

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2.5 Experience, availability and organization of managerial, professional, technical and safety staff with particular emphasis on experience for LPM type works

2.5.1 Management level staff

Criteria	Marks
No full-time member of management level staff has 5 years or more relevant local experience (gained within the past 10 years) in managing a construction firm	0
At least one full-time member ⁽¹⁾ of management level staff has a minimum of 5 years relevant local experience (gained within the past 10 years) in managing a construction firm	5
At least one full-time member ⁽¹⁾ of management level staff has a minimum of 5 years relevant local experience (gained within the past 10 years) in managing a construction firm Plus A minimum 2 years experience in managing multiple site contracts and LPM type works over the past 5 years	10
	Maximum score 10 marks Minimum passing score ⁽²⁾ 5 marks

Notes:

- (1) The member of staff must have worked full-time for the applicant for at least one year.
- (2) The application will be rejected if the marks achieved are below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved in this assessment is higher than the overall minimum passing score.

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2.5.2 Professional staff (excluding staff assessed in 2.5.1)

Criteria	Marks
No staff employed full-time who holds a relevant	0
degree from a HK university or equivalent and	
with a minimum of 5 years local experience in site	
formation or LPM-type works	
At least one full-time member of staff ⁽¹⁾ with a	5
relevant degree from a HK university or	
equivalent and with a minimum of 5 years local	
experience in site formation or LPM-type works	
At least one full-time member of staff ⁽¹⁾ with a	10
relevant professional qualification (RPE (G or C),	
MHKIE (G or C), etc.) and with a minimum of 5	
years local experience in site formation or	
LPM-type works	
	Maximum score 10 marks
	Minimum passing score ⁽²⁾ 5
	marks

Notes:

- (1) The member of staff must have worked full-time for the applicant for at least one year.
- (2) The application will be rejected if the marks achieved are below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved in this assessment is higher than the overall minimum passing score.

2.5.3 <u>Technical staff (excluding staff assessed in 2.5.1 and 2.5.2)</u>

Criteria	Marks
No full time member of technical staff has the	0
academic qualification and minimum local experience	
in site formation or LPM-type works of the 3	
combinations below	
At least one full-time member of staff ⁽¹⁾ with an	
Ordinary Certificate in Civil Engineering and with a	2
minimum of 5 years local experience in site formation	
or LPM-type works	
At least one full-time member of staff ⁽¹⁾ with a Higher	
Certificate in Civil Engineering and with a minimum	3
of 3 years local experience in site formation or	
LPM-type works	
At least one full-time member of staff ⁽¹⁾ with a	
relevant degree from a HK university or equivalent	5
and with a minimum of 3 years local experience in	3
site formation or LPM-type works	
	Maximum score 5 marks
	Minimum passing score ⁽²⁾ 2
	marks

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Notes:

- (1) The member of staff must have worked full-time for the applicant for at least one year.
- (2) The application will be rejected if the marks achieved are below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved is higher than the overall minimum passing score.

2.5.4 Safety Staff (excluding staff assessed in 2.5.1, 2.5.2 and 2.5.3)

Criteria	Marks
No Registered Safety Officer employed full time	0
One Registered Safety Officer ⁽¹⁾ employed full time	3
Two or more Registered Safety Officers ⁽¹⁾ employed full	5
time	
	Maximum score 5 marks
	Minimum passing score ⁽²⁾ 3
	marks

Notes:

- (1) The member of staff must have worked full-time for the applicant for at least one year.
- (2) The application will be rejected if the marks achieved are below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved in this assessment is higher than the overall minimum passing score.

2.6 Availability of plant and equipment for LPM type works

Criteria	Marks
The applicant owns less than 7 types of the following 10	0
types of plant:	
Drilling rig for soil nails, grout pump, shotcrete	
machine, excavator, hydraulic breaker, pneumatic	
drill, roller, crane truck, air compressor, generator.	
The applicant owns at least 7 types of the above plant.	5
The applicant owns all 10 types of the above plant and	10
more than one unit each of the following:	
Drilling rig for soil nails, grout pump, shotcrete	
machine, air compressor and generator.	
	Maximum score 10 marks
	Minimum passing score ⁽¹⁾ 5
	marks

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Note 1 – The application will be rejected if the marks achieved are below the minimum passing score in this section irrespective of whether the aggregate total of marks achieved in this assessment is higher than the overall minimum passing score.

3. Acceptance Criteria

- 3.1 The applicant will be recommended for acceptance if the aggregate total of marks achieved in Sections 2.4, 2.5.1, 2.5.2, 2.5.3, 2.5.4 and 2.6 is equal to or higher than 65, and the marks achieved in these sections are all higher than the minimum passing scores of the respective sections subject to compliance with the criteria stated in Sections 1.1 and 1.2.
- 3.2 Successful applicants will normally be accepted into the List on probation. Probationary contractors will be allowed to take on not more than two Government contracts with total outstanding value of works of not greater than \$100M tendered under the LPM Specialist Category.

4. Criteria for Confirmation

4.1 A probationary contractor may, subject to a minimum probationary period of 24 months, apply for confirmation to the Secretary for the Environment, Transport and Works in writing when they have satisfactorily completed, as main contractor, at least one Government Landslip Preventive Measures contract containing multiple sites and of value not less than \$40M. Confirmation will also be subject to the contractor being able to meet the financial criteria applicable to confirmed status, having the appropriate technical and management capabilities and in all other ways being considered suitable for confirmation.

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ANNEX 19 List of Tools / Equipment and Testing Instruments for Lift, Escalator and Passenger Conveyor Installation Category

Item of Assessment	Minimum Requirements	Remarks
Equipment & instruments for examinations and tests under the Lifts & Escalators (Safety) Ordinance, such as tachometer, dead weight, walkie-talkie etc.	2 sets	
Tools & equipment recommended by the lift/escalator manufacturer for:		
(a) the installation of lifts & escalators	1 set	
(b) the servicing, maintenance and repair of lifts & escalators.	2 sets	
Basic workshop tools such as conduit bender, conduit cutter, electric drill/hammer, grinder etc.	1 lot	
Basic testing instruments such as multi-tester (AVO), insulation tester, clamp on ammeter, light meter, sound meter etc.	1 lot	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 20 List of Tools / Equipment and Testing Instruments for Liquefied Petroleum Gas Installation Category

Item of Assessment	Minimum Requirements	Remarks
Detect gas leaking gauge	1	
Welding machine	1	
Grinding machine	1	
Drilling machine	1	
Vacuum pump, compressor	1	
Chain block	1	
Shearing machine	1	
Edging machine	1	
Water pump with gauge	1	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 21 List of Tools / Equipment and Testing Instruments for Low Voltage Cubicle Switchboard Installation Category

Item of Assessment	Minimum Requirements	Remarks
Multi-tester (AVO)	2	
Insulation tester	2	
Ductor tester	1	
Continuity tester	1	
Primary injection test set	1	
Secondary injection test set	1	
Dielectric strength test set, 2kV	1	
Busbar bending machine	1	
Busbar cutter	1	
Sheet metal cutter	1	
Sheet metal press	1	
Electric drilling machine	1	
Basic workshop tools	1 lot	
Basic testing instruments	1 lot	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 22 List of Tools / Equipment and Testing Instruments for Mechanical Handling and Lifting Installation Category

Item of Assessment	Minimum Requirements	Remarks
Welding equipment	1	
Drilling machine	1	
Metal cutting machine	1	

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 23 List of Tools / Equipment and Testing Instruments for Mechanical Plant and Equipment Installation Category

Item of Assessment	Minimum Requirements	
	Group I	Group II
Welding equipment	1	2
Lathe	1	1
Drilling machine	1	2
Metal cutting machine	1	1
Abrasive wheels	1	1
Milling machine	-	1
Shaping machine	-	1
Pipe threading and bending machines	1	2

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 24 List of Equipment / Tools for Motor Vehicle Body-building and Painting Category

Item of Assessment	Minimum Requirements	Remarks
Welding equipment		
Oxy-acetylene	1	
• MIG	1	
• TIG	1	
Sheet metal cutting machine	1	
Sheet metal shaping machine	1	
Hydraulic lift/jib crane (1000 kg)	1	
Vehicle jack		
• 1000 kg	2	
• 3000 kg	2	
Compressed air supply	2 outlets	
Spray-painting equipment	Clean, force-ventilated, enclosed area for 1 vehicle	
Digital camera of resolution not less than 1200 X 1024	1	
Vehicle trade licence plate	1	Proof of availability from third party is acceptable

Note: All equipment/tools should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 25 List of Tools / Equipment and Testing Instruments for Radio Electronics Installation Category

Item of Assessment	Minimum Requirements	Remarks
Digital Voltage Meter (DVM)	1	
Oscilloscope	1	
Radio frequency signal generator	1	
Signal level meter	1	
Spectrum analyzer	1	
Field test antennae	1	
Frequency counter	1	
Test/Maintenance workbench	1	Suitably equipped with test equipment, power sockets, inspection lamp, etc. for ready set-up, testing, fine- tuning and maintenance of equipment
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 26 List of Electrical Equipment for Repair in Water Supplies Department for Repair of Motors, Transformers and Switchgear Category

High Voltage Equipment

- 1. Bulk oil or SF6 circuit-breaker switchgear panel rated up to 2000A 11kV.
- 2. Squirrel cage induction motors up to 3000kW 11kV.
- 3. Variable speed motors up to 650kW 6.6kV.
- 4. Power factor correction capacitors up to 11kV.
- 5. Bulk oil power transformers up to 16000kVA 33kV.
- 6. Resin encapsulated power transformers up to 1000 kVA 11kV.
- 7. Cabling work up to 11kV including PILC, XLPE, Raychem, compound and resin filled cable jointing.

380V Equipment

1. Switchboard

- 1.1 FBA switchboard of rating up to 3150A 2-bus section arrangement.
- 1.2 Air circuit-breaker switchgear panel up to 2500A.
- 1.3 Bulk oil circuit-breaker up to 2500A.
- 1.4 Fuse switchgear and isolators up to 2000A.
- 1.5 Pump motor starters including direct-on-line, auto-transformer, star-delta, liquid resistor starters and contactors up to 780A.
- 1.6 Panel fabrication and painting work.

2. Control and Protection

- 2.1 Protection systems including relay repair and calibration.
- 2.2 Control panel for power supply, auto pump control and associated instrumentation equipment.

3. Rotating Machines

- 3.1 Squirrel cage induction motors up to 480kW 380V 50Hz.
- 3.2 Slip-ring induction motors up to 360kW 380V 50Hz.
- 3.3 Emergency generators up to 1000kVA.

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4. Plant Auxiliaries

- 4.1 Power factor correction capacitor banks.
- 4.2 Electric valve actuators, drainage pumps and ventilation fans.
- 4.3 24-110V d.c. battery and charger equipment, UPS and frequency converters.
- 4.4 Electric overhead cranes and hoists.
- 4.5 Cathodic protection equipment.
- 4.6 Electro-chlorinator.
- 4.7 Cabling work up to 1000mm², PVC, PILC, XLPE, Raychem, compound and resin cable jointing.

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ANNEX 27 Typical Equipment for High Voltage and 380 Volt Equipment for Repair of Motors, Transformers and Switchgear Category

1. Equipment for General Use

1.1 Typical Workshop Equipment

- Guillotine for insulation sheet cutting.
- Oxy-acetylene, T.I.G. or other welders.
- Band saw, circular saw etc. for insulation board cutting.
- Solvent tank for components cleaning.
- Bench and pedestal drill e.g. 25mm diameter hole.
- Paint spray equipment and booth, if any.
- Compressed air ring main for pneumatic tools and components cleaning.
- Overhead crane, fork lift truck etc.

1.2 Typical Test Equipment

- Precision voltmeter, ammeter and voltmeter.
- High voltage phasing rod and meters.
- R, L, C bridge.
- 5kV & 10kV Megger.
- Electrical appliance tester as Thorn EMI Model Part 2.
- Earth loop tester as Thorn EMI Model LT5.
- Digital Earth tester as Thorn EMI Model DET2.

2. Switchgear Repair and Testing Equipment

2.1 Typical Workshop Equipment for Switchgear Repair

- Oil filtration plant for O.C.B. oil re-cycling.
- Cabling drum jacks rollers etc. for cable laying.
- Cable termination and jointing equipment.
- Portable SF₆ gas detector, pressure gauge and topping up device.

2.2 Typical Switch gear Test Equipment

- High voltage 50Hz. and d.c. output test set up to 30kV 2kVA for switchboard and power cable testing.
- Low resistance Ductor set. (for contact resistance testing)
- 60kV Oil tester for transformer/OCB oil.
- Primary injection test set up to 3000A with integral meters.

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- Secondary injection test set up to 100A with integral timer and meters.
- Switchgear test control board.

3. Typical Motor Repair and Testing Equipment

3.1 Typical Workshop Equipment for Motor Repair

- Air conditioned room for H.V. motor rewinding.
- Dryout oven e.g. 2400X 2400 X 3600 mm (b x d x h) for motor after repair.
- Winding burnt-out oven.
- Motorised winding overhang cutter & coil puller.
- Coil winding machine for stator coil rewinding.
- Milling machine for slot wedge cutting.
- Induction current motor heater.
- T.I.G. welder for motor rotor repair.
- Commutator under-cutting tool.
- 30 ton & 150 ton hydraulic extractor for bearings and couplings.
- Varnishing tank.
- Thermal setting insulation storage cabinet.
- Steam cleaner.
- Motor stool for supporting vertical motor for repair.

3.2 Typical Motor Test Equipment

- High voltage 50 Hz. Test set for dielectric properties testing, up to 30 kV 60kVA.
- Tangent Delta tester for British Standard tests.
- Dielectric Loss Analyser for motor insulation testing.
- Double beam storage CRO for motor starting characteristics display and/or transient display.
- X-Y plotter for transient record (or CRO camera; portable recorder).
- Dynamic balancing machine for rotor balancing for up to 6000kg.
- Noise meter for motor characteristics analysis to BS 4999.
- Vibrameter for vibration measurement.
- Bearing analyzer for analysis of bearing condition.
- Winding high frequency surge tester with waveform display by CRO.
- Motor test bed.
- Power Supply for testing at 380V, 3.3kV, 6.6kV and 11kV.

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ANNEX 28 List of Tools / Equipment and Testing Instruments for Steam and Compressed Air Installation Category

Item of Assessment	Minimum Requirements	Remarks
Welding equipment	2	
Hydraulic tester	2	
Workbench with vice	1	
Drilling machine	2	
Pipe threading and bending machine	2	
Pressure gauge	2	
Temperature Gauge	2	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 29 List of Tools / Equipment and Testing Instruments for Survey of Government Land Pressure Receivers subject to Steam and Air Pressure (but excluding Steam Boilers) Category

Item of Assessment	Minimum Requirements	Remarks
Hydraulic test pump & accessories	1	
Ultrasonic thickness tester	1	
Dye penetrant tester	1	
Magnetic particle tester	1	
Megger tester	1	
Multimeter / AVO meter	1	
Personnel safety devices (e.g. helmet, eye goggles, safety belt & shoes, heat resistant gloves & overall)	3	
Miscellaneous tools (e.g. screw driver, spanner, drill, hammer, inspection mirror, sealing chipper, lead chip & wire)	2	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 30 List of Tools / Equipment and Testing Instruments for Survey of Government Land Steam Boilers Category

Item of Assessment	Minimum Requirements	Remarks
Hydraulic test pump & assessories	1 set	
Ultrasonic thickness tester	1 set	
Dye penetrant tester	1 set	
Magnetic particle tester	1 set	
Megger tester	1 set	
Multimeter / AVO meter	1 set	
Miscellaneous tools (e.g. screw driver, spanner, drill, hammer, inspection mirror, sealing chipper, lead chip & wire)	2 sets	
Personnel safety devices (e.g. helmet, eye goggles, safety belt & shoes, heat resistant gloves & overall)	3 sets	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 31 List of Tools / Equipment and Testing Instruments for Survey of Lifting Appliances and Lifting Gear Category

Item of Assessment	Minimum Requirements	Remarks
Weighscale, measuring tape, level gauge, callipers, deflection scale, etc.	1 set	
Dead weight	1 set (10,000 kg minimum)	
Lifting appliance and gear	1 set	
Crane Lorry	1 set	
Handtools (e.g. screw driver, spanners, electric drill, hammer, etc.)	2 sets	
AVO meter / multimeter	1 set	
Megger tester	1 set	
Personnel safety device (e.g. helmet, eye goggles, safety belt, shoes and overall, etc.)	3 sets	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 32 List of Tools / Equipment and Testing Instruments for Swimming Pool Water Treatment Installation Category

Item of Assessment	Minimum Requirements	Remarks
Flow meters & pressure gauges	1	
Hydraulic pump with pressure gauges	1	
Welding m/c	1	
Threading m/c	1	
Bending m/c	1	
Drilling m/c	1	
Conduit bender	1	
Conduit cutter	1	
Tachometer	1	
Multi-meter	2	
Continuity tester	1	
Clamp-on ammeter	1	
Earth fault loop impedance tester	1	
Insulation tester	1	
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the testing instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 33 List of Tools / Equipment and Testing Instruments for Uninterruptible Power Supply Installation Category

Item of Assessment	Minimum Requirements	Remarks			
Digital voltage meter (DVM)	1				
Oscilloscope	1				
Clamp-on ampere meter	1				
Phase meter	1				
Distortion analyzer	1				
Dummy load	1				
Test/Maintenance workbench	1	Suitably equipped with test equipment, power sockets, inspection lamp, etc. for ready set-up, testing, fine-tuning and maintenance of equipment			
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt			

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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ANNEX 34 List of Tools / Equipment and Testing Instruments for Video Electronics Installation Category

Item of Assessment	Minimum Requirements	Remarks
Digital voltage meter (DVM)	1	
Oscilloscope	1	
Video signal/pattern generator	1	
Video waveform monitor	1	
Light meter	1	
Test charts	1	
Test/Maintenance workbench	1	Suitably equipped with test equipment, power sockets, inspection lamp, etc. for ready set-up, testing, fine-tuning and maintenance of equipment
Proof of regular calibration (for instrument only), e.g. calibration certificates issued by HOKLAS accredited laboratory or equivalent institutions	Required	At least yearly and as requested when the instrument is in doubt

Note: All equipment should be verified that they are all at sight or with other form of proof of ownership.

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REPORT ON CONTRACTOR'S PERFORMANCE												
PART I - SUMMARY OF PERFORMANCE												
DEPART	MENT/OFFICE :						REPORTING PERIOD :					
		(
	FOR QUARTER :) Quarter	/Period/iv	Tamu./Fma			From	: To:			
A Contractor's Details												
Contractor's Ref. :												
Contractor's Name:												
Contract No.: PWP No.:												
Contract 7	Contract Title:											
Type of C	ontract:	Civil / Building / Ter	rm / Spec	ialist / Ma	aintenance	*						
Predomina	ant Category of Wo	ork :										
	ivited from											
		C-+ C- 1-				D1:6		/N.T. 🕹				
List/Group	-	Cat Code:				Prequalif	iea: Y	/N *				
	r's Classification											
List : AC/	SPEC*	Cat Code:				Group/C	lass:					
В	Contract Stage ar	nd Duration										
Commenc	ement Date:											
Original C	Contract Completion	n Date :				Contract Stage *						
Original C	Contract Period:			months		1. Desigr 2. Under	Design & Submission of Drawings Under Manufacture					
		Completion Dates+				3. Under	Construct	tion/Site	Work Under Progress			
Section	Original	Extended	Antic	ipated/Ce	rtified	4. Substa	ntial Com	pletion	(excluding Establishment I ability Period	Period)		
									cate Issued			
							nance Cert					
						8. Final F	Payment C	Certificat	e Issued			
WHOLE												
С	Contract Value					U						
Original c	ontract sum				\$M							
Estimated	value of work don	e for this quarter			\$M			_				
	value of work don				\$M			-				
	value of work outs				\$M			-				
	ters allowed for in	•			\$M			-				
	final contract sum	iliai contract sum			\$M			-				
	Performance				Ψ1.1			•				
D	1 er formance		VG	G	S	P	VP	NA	VG : Very Good			
1 Workma	nship								G : Good	Performance Score		
2 Progress	•								S : Satisfactory	of this report:		
3 Site safe									P : Poor			
4 Environmental pollution control									VP : Very Poor			
5 Organisa									NA:Not Applicable Note :			
7. Industry everyones							1. A "Very Poor" in any one o	oor" in any one of sections 1,2,3,4 will be a				
7 Industry awareness 8 Resources						 			mandatory "Very Poor" in t	-		
9 Design						 			and the report will be rated at 2. If the performance score is 1			
	nce to emergency								performance" will be a man	datory" Very Poor" and the		
Overall per									report will be rated as "Adve	erse".		

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E Claims #	No.	Claimed	Assessed	Awarded	Awarded/Assessed	Unresolved
EOT claims	I			I	1	
Up to last period		days	days	days	%	days
Total to-date		days	days	days	%	days
Monetary claims						
Up to last period		\$M	\$M	\$M	%	\$M
Total to-date		\$M	\$M	\$M	%	\$M
	contractor	r's overall progress corojects) should entire			re Section 2 of GN. The Chie adequate documented evidence	f Engineer/Architect/Head of e to prove that an Adverse
Report NOT ADVERSE Reported by	E / ADVE	RSE * Agreed b	y		Endorsed by	
() et's	(Senior Er for the C	ngineer/Engineer/An ontract) rchitect/Others*	(
Date		Date			Date	
	ntina D				Dutt	
G Remarks by Reporting The Chairman of the Reporting report is warranted before end This report is endorsed/has by Remarks (only if Engineer/A	ng Reviev lorsement been amen	v Committee should (amendment.) ded * by the Reporting	ng Review Commit		re is adequate documented ev	idence to prove that an Advers
Appeal received: Yes/No* Result of appeal: Unfounded Complaint against Appeal M Report NOT ADVERSE	echanism	: Yes/No*		Chairma) an, Reporting Review Commit	tee
Number of site instructions iss						

(*) Delete as appropriate

- $(+) \qquad \text{All dates to be shown as dd/mm/yyyy e.g. } 31/10/1993 \text{ (add suffix (A) or (C) after "Anticipated/Certified")}$
- (#) 1. Claims for monies for measured or varied work, star rates, omitted items etc. should not be treated as a claim.
 - 2. The number of claims entered should not be the number of notices of claims received but should be the number of claims quantified.

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REPORT ON CONTRACTOR'S PERFORMANCE

PART II - INDIVIDUAL ASPECTS OF PERFORMANCE

	T						
ITEM	ASPECTS OF PERFORMANCE	Very Good	Good	Satisfactory	Poor	Very Poor	Not Applicable
Section 1	Workmanship						
1.1	Standard of temporary works						
1.2	Standard of materials/equipment supplied						
1.3	Standard of workmanship, earthworks						
1.4	Standard of workmanship, structural						
1.5	Standard of workmanship, finishes						
1.6	Standard of workmanship, conduit/pipe/duct works						
1.7	Standard of workmanship, equipment and plant						
1.8	Standard of workmanship, testing and commissioning						
1.9	Standard of workmanship, others						
	Overall rating						
G 43 2	In					ı	ı
Section 2	Progress						
2.1	Adequacy of programme						
2.2	Adherence to programme						
2.3	Updating of programme						
2.4	Suitability of method and sequence of working						
2.5	Achievement in period						
2.6	Action taken to mitigate delay/catch up with programme						
	Overall rating						
Section 3	Site safety						l
3.1	Provision and maintenance of plant						
3.2	Provision and maintenance of working environment						
3.3	Provision of information, instruction and training						
3.4	Provision and implementation of safe systems of work						
3.5	Employment of safety officer/supervisor						
3.6	Site accident record						
	Overall rating						
Section 4	Environmental pollution control						
	-						
4.1	Adequacy of water pollution mitigation measures						
4.2	Adequacy of noise pollution mitigation measures						
4.3	Adequacy of air pollution mitigation measures						
4.4	Adequacy of waste pollution avoidance measures						
4.5	Compliance with environmental enactments						
4.6	Action taken to remedy non-compliance						
4.7	Implementation of waste management plan						
4.8	Implementation of Trip-ticket System to control disposal of						
	construction & demolition materials						
	Overall rating						
Section 5	Organisation						
5.1	Adequacy of organisation structure						
5.2	Support by head office						
5.3	Adequacy of planning of work						
5.4	Adequacy of delegation of authority						
5.5	Control of supervisory staff by Site Agent						
5.6	Management of sub-contractors by Site Agent						
5.7	Adequacy of site supervisory staff						
5.8	Identification of and responsiveness to problems						
5.9							
J. J	Compliance with provisions in SCC on sub-contracting and						
	submission of the SMP						
1	Overall rating	1 1				Ī	Ī

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	KES 11	RICTED				1	<u> </u>
ITEM	ASPECTS OF PERFORMANCE	Very Good	Good	Satisfactory	Poor	Very Poor	Not Applicable
Section 6	General obligations						
6.1	Cleanliness of site						
6.2	Care of works						
6.3	Compliance with insurance requirements						
6.4	Coordination of utilities and other authorised contractors						
6.5	Compliance with conditions on road openings						
6.6	Care of utilities						
6.7	Compliance with enactments other than environmental						
6.8	Adequacy/submission of operational and maintenance manuals						
6.9	Training of employer's personnel						
6.10	Adequacy of notice for inspection of works						
6.11	Payment of nominated sub-contractors						
6.12	Compliance with particulars related to sub-contracting						
6.13	Attention to site security						
6.14	Attention to records						
6.15	Attention to submission of accounts/valuations	1		1			
6.16	Control of materials supplied by Government						
	Overall rating	i i					
	<u> </u>			-		!	
Section 7	Industry awareness						
7.1	Employment of technician apprentices and building & civil						
	engineering graduates						
7.2	Training of technician apprentices and building & civil	1					
	engineering graduates						
7.3	Care and welfare of workers						
7.4	Care of the general public						
7.5	Employment of qualified tradesmen and intermediate tradesmen						
7.6	Employment of subcontracotrs registered from the Voluntary						
	Sub-contractor Registration Scheme						
7.7	Anti-mosquito breeding						
	Overall rating						
	O Votali Tatilig						
Section 8	Resources						
8.1	Adequacy of plant resources	1		1			
8.2	Adequacy of labour resources	1		1		1	1
8.3	Adequacy of material resources	1		1			
0.5	Overall rating	<u> </u>		1		<u> </u>	<u> </u>
	Overall fatting						
Section 9	Design						
9.1	Collection & appreciation of information (e.g. design codes,			1			
J.1	design parameters)						
9.2	Adequacy and quality of design solutions	1		1		+	+
9.3	Environmental friendliness, health & safety, innovation,	1		1		+	+
9.3	energy efficiency and life cycle costs						
9.4	Consultation with relevant government departments	1		1		+	+
J. .	and utility undertakers						
9.5	Quality and promptness of design submissions	 		+ -			
9.6	Quality and timely submission of as-built drawings,	 		+		1	1
7.0	maintenance manuals and warranties						
	Overall rating	<u>. </u>				<u> </u>	<u> </u>
	-			1	<u> </u>	1	<u> </u>
Section 10	Attendance to emergency (term contracts)						
10.1	Response to call	† †				1	1
10.2	Attendance to on-call emergency repairs	†				1	1
							1
10.3	Speed of emergency repairs						
	Overall rating						<u> </u>

Note

Mark appropriate box of performance for each item with "X".

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APPENDIX 4B Guidance Notes for Completion of Reports

PART A GENERAL EXPLANATORY NOTES FOR ASSESSMENT

- 1. The report is for the performance in the period under review only. Previous poor performance which has led to adverse consequences in the period under review, such as poor progress resulting in the deduction of Liquidated Damages in the period under review, should not in itself be taken into account. The contractor should be assessed on how he has dealt with the situation on site as it was at the commencement of the period under review. However, if, for example, the poor quality of previous workmanship only comes to light during the period under review, then this should be reflected in the assessment.
- 2. It is not expected that the weighting given to each section or individual aspect of performance will be uniform for all types of contracts or for any group of contracts. The Reporting Officer (RO) and the Engineer/Architect for the contract are to use their knowledge of the contract in question to reach a conclusion, recognising that the reporting system is administrative and commercial but not contractual.
- 3. Reporting Officers should note that as a result of the weightings given to each aspect of performance within a section, a contractor may still be given an overall rating of "Poor" or "Very Poor" for the section despite "Satisfactory" or possibly "Good" or "Very Good" marks for all items except one or two for which a "Poor" or "Very Poor" mark is given.
- 4. In contracts where the RO considers one or two aspects of performance to be of paramount importance such as, for example, the contractor's compliance with road opening conditions for a waterworks contract, the RO should consider assigning an adequate weighting to this item of performance such that an "adverse" report will result if the contractor is assessed to be "Very Poor" in this aspect notwithstanding his performance in the remaining sections of the report.
- 5. Reporting of Building, Specialist and Term Contracts will be made on the same standard performance report Part I Summary of Performance, but departments may revise Part II Individual Aspects of Performance, to suit their own needs. However, departments should as far as possible adopt the standard items of reporting to facilitate comparison of performance. Domestic sub-contractors and minor works will not be included in the performance reporting system but departments may maintain their own records of sub-contractors' performance and if necessary, recommend to ETWB for any follow up action in cases of poor performance.
- 6. In cases where a nominated sub-contractor has been specified for the contract, the performance of the nominated sub-contractor shall be reported separately in addition to reporting of the main contractor. However, the RO should be in no doubt that the responsibility for the performance of the contract lies wholly on the main contractor and not the nominated sub-contractor.

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- 7. Every effort should be made by the RO to ensure that the assessment is objective for all sections of the Report.
- 8. Should any aspect of the Report be considered "Poor" or "Very Poor" (as defined in Appendix 4B Part B) by the RO, then such assessment must be supported by relevant evidence.
- 9. The Report is assigned a performance score in accordance with ETWB TCW No. 3/2007. The Report will be rated as "Adverse" if its performance score is <40.
- 10. The GCC clauses referred to in the following guidance notes follow the numbering system of the General Conditions of Contract for Civil Engineering Works (1999 Edition) and may have different numbers in the GCC for other types of contracts.

PART B <u>DEFINITION OF PERFORMANCE GRADING</u>

Very Good The performance of the contractor is significantly and

consistently better than that required by the Contract.

Good The performance of the contractor attains and is

occasionally better than that required by the Contract

Satisfactory The performance of the contractor attains that required by

the Contract.

Poor The performance of the contractor is considered to be

below that required by the contract though without serious deficiencies; or where instructions have to be repeatedly issued and the work has consistently to be redone in order to attain a satisfactory level; or the performance of the contractor could only attain that required by the Contract through enhanced supervision effort from the RO or the

Engineer/Architect.

Very Poor The performance of the contractor is considered to be

significantly below that required by the contract; or where instructions have to be repeatedly issued and the work has consistently to be redone but is still unable to attain a

satisfactory level.

PART C GUIDANCE NOTES FOR PART I - SUMMARY OF PERFORMANCE

The following quarters and dates for the reporting periods shall be adopted in all performance reports:

Quarter Reporting Period

[year]/1Q From: 1/12/[year] To: 28/2/[year] [year]/2Q From: 1/3/[year] To: 31/5/[year]

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[year]/3Q From: 1/6/[year] To: 31/8/[year] [year]/4Q From: 1/9/[year] To: 30/11/[year]

Where shorter reporting periods are used, the periods should be consecutive and should be timed to fall entirely within one quarter.

Section A Contractor's Details

Contractor's Ref: Contractor's computer reference code.

Contractor's name Exact name as given by the list of reference codes

circulated by ETWB must be used.

Predominant category of work Put category, i.e. BD, PW, RD, SF, WW, that is

predominant by value for the whole of the works. Up to

two categories of work can be input.

Section B Contract Stage and Duration

Completion dates Where there are more than seven sections in a contract,

the seven most critical sections (possibly those carrying the highest Liquidated Damages) should be recorded.

"Extended" completion date

This should be the original contract completion date plus

those extensions of time that have actually been awarded

at the time of preparing the report.

"Anticipated/Certified" The anticipated completion date should be a realistic

estimate of the likely completion date based on an assessment of the contractor's actual progress and expected progress on uncompleted works. The certified completion date will be the date for which the section or the whole of the works was certified by the

Engineer/Architect as complete.

Section C Contract Value

Other matters allowed for in This

final contract sum

completion date

This should include all approved variations incurring

additional costs which were not included in the original

contract sum.

Section D Performance

Performance The rating should be the overall rating given in Part II for

each aspect of performance.

Section E Claims

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No.

Should be the number of claims submitted by the contractor with quantum included. Notifications of claim submitted by the contractor should not be included.

Claimed

Should be the aggregate amount of monetary or EOT claims submitted by the contractor. Claims for monies for measured or varied work, star rates, omitted items etc should not be treated as a claim. Inclement weather and/or its consequences should be included as claims for EOT.

Assessed

The claims entered as "assessed" should not be the number of notices of claims submitted by the contractor but should be the quantum claimed and which have been assessed by the Engineer/Architect. It is recognised that the amounts assessed may change as more information becomes available.

Awarded

Actual amount of the claim awarded to the contractor.

Unresolved

This is the value of claims or part-claims for which an assessment has not yet been made by the Engineer due to insufficient information or other reason. This will exclude those claims or part-claims which the Engineer/Architect/Surveyor has assessed, whether or not agreed by the contractor.

Attitude to claims

(a) Time of notification/application

- has the contractor submitted the notifications/applications within a stated time limit after an event which gives rise to the claim becomes apparent (GCC Clauses 50 & 64 refer)?
- have reasonable explanations or mitigating circumstances leading to the late submission of the notifications/applications been given?

(b) Justification

- has the contractor indicated clearly the justifications for submitting the claim (cause, consequences/damages reasonably estimated, link of how events lead to the claim and how the quantum of the claim is linked to the claimable events, etc.) and the contract provisions upon which the claim is based?
- are the applications supported by adequate records/evidence to substantiate the claim including programmes, site records, calculation and accounts etc?

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- are the submissions logically presented and the arguments based on factual information and not perceptions?
- is the contractor submitting the same claim repetitively without new grounds/information?
- has the contractor claimed EOT without breakdown of critical activities or overlapping periods?
- has the contractor claimed unreasonably high quantum without substantiation?
- does the claim show the contractor's lack of understanding of what consists of a critical path activity or the contractor's contractual responsibilities?

(c) Responsiveness

- does the contractor respond timely to queries/additional information raised/ requested by the Architect/Engineer/Surveyor in respect of the claim?
- does the contractor provide the required information in his response?

(d) The attitude of the contractor in general

- is the contractor submitting irrelevant information just for argument sake?
- does the contractor use claims as an excuse for his slow progress or wrong pricing?
- does the contractor adopt a co-operative attitude in resolving claims with the Architect/Engineer?

Section F

Remarks by Reporting Officer (RO)

If the contractor has nominated the contract for participation in any construction-related award schemes and won any such awards during the reporting period, the RO should record the achievement in Section F.

The contents of the report should be agreed with the countersigning officer before finalising. The signatories for "Engineer's/Architect's Representative" and "Engineer/Architect" should be those designated as such in accordance with the contract. Endorsement is not needed for department-administered contracts and is only necessary when the contract is consultant-administered.

The Chief Engineer/Architect/Head of Office (for Consultants Administered Projects) should entirely satisfy himself/herself that there is adequate documented evidence to prove that an Adverse report is warranted before endorsement.

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Section G

Remarks by Reporting Review Committee (RRC)

The Chairman of the Reporting Review Committee should entirely satisfy himself/herself that there is adequate documented evidence to prove that an Adverse report is warranted before endorsement/amendment.

PART D <u>GUIDANCE NOTES FOR PART II - INDIVIDUAL ASPECTS OF PERFORMANCE</u>

The RO should note that for certain types of work, not all items of the performance report may be applicable. Where any items are clearly inapplicable, the RO should note "N.A." in the relevant item of the report.

Section 1 - Workmanship

An overall "Very Poor" rating in this section will result in an "Adverse" report.

Item 1.1 Standard of temporary works

- are all materials and components used for the works generally of good quality, free from significant corrosion and damage or excessive deterioration?
- where welds are present, have they been carried out in accordance with the Contract?
- if timber is used, is there evidence of physical damage, signs of attack by decay, rot or insect attack or the development of shakes or spits?
- is bamboo used for scaffolding relatively new and free from splits along its entire length? Are joints securely tied and the whole scaffold anchored to the workface?
- are temporary faces of excavations properly supported and maintained in a stable condition as required by the Contract prior to reinstatement?
- are earthworks final surfaces protected from damage due to water or other causes and from exposure to conditions which may adversely affect the surface prior to installation of permanent works in accordance with the Contract?
- are dewatering operations causing instability or settlement of adjacent land or structures?
- are temporary drainage facilities adequate for preventing flooding and surface erosion as required by the Contract?

Where details of temporary works have been requested by the RO to be submitted in accordance with GCC Clause 16(1),

- are the temporary works carried out in accordance with that submitted by the contractor?
- are the safety margins adequate against the risk of failure?
- does the contractor's design meet the contract requirements?

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Where the temporary works are of such importance that these have been specified to be independently checked in accordance with WBTC No. 3/97.

- have the temporary works been designed with the factor of safety appropriate to the risk involved or as specified?
- are the works constructed according to the certified design?

Item 1.3 Standard of workmanship, earthworks

- do lines and levels for filling, excavation and dredging comply with the tolerances given in the Specification?
- are the materials used for backfilling in accordance with the Contract?
- are degrees of compaction adequate in accordance with the Contract?
- is the stockpile of excavated material suitable for backfilling adequately protected as per the Contract?

Item 1.4 Standard of workmanship, structural

In the case of structural concrete,

- is formwork generally rigidly fixed in place as per the Contract?
- is reinforcement clean and free from dirt, rust and other deleterious material before concreting commences?
- is reinforcement fixed with adequate numbers of tie wires, are laps of adequate length and located as designated?
- is concrete strength in compliance with the Contract as demonstrated by cube tests and does curing practice conform with that specified?

In the case of structural steelwork.

- has the steelwork been fabricated in accordance with submitted workshop drawings?
- are handling and storage procedures adequate?
- is good welding practice adopted throughout the installation and are welds of strength in accordance with the contract requirements as demonstrated by testing?
- are bolts installed and tightened in accordance with the Specifications?

Item 1.5 Standard of workmanship, finishes

- have all finishes been carried out such that the characteristics of finish specified on the drawings and tolerances given in the Specification are met?
- where trial panels have been specified, does the finished surface comply with the approved trial panel?
- for structural steelwork, has the contractor carried out all the relevant procedures specified for preparation of the steel surface

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prior to application of the next paint layer or coating?

Items 1.6 - 1.8 Standard of workmanship, conduit/pipe/duct works, equipment and plant and testing and commissioning

These items are to be used for reporting of Specialist contractors where such works may be the predominant works for that period.

Item 1.9 Standard of workmanship, others

Any other type of workmanship that are not covered in the preceding items should be assessed in this item. The RO's assessment should be based on whether the works are carried out in accordance with the Specification, the tolerances achieved, the quality of material used, the strength achieved where this may be required and whether repairs or reinstatement works have to be carried out in order for the works to attain an acceptable standard.

Section 2 - Progress

An overall "Very Poor" rating in this section will result in an "Adverse" report.

- 1. This section should be confined to reporting of the contractor's progress within the reporting period and his efforts in dealing with any delays caused by his previous slow progress.
- 2. The progress during the reporting period should be reported irrespective of his performance over previous periods.
- 3. The contractor's progress should be judged on the most updated programme which should have reflected any steps required to be taken during the reporting period to overcome previous delays. The RO should take into account the delays occurring within the reporting period for which it is obvious that extension of time (EOT) would be considered.
- 4. The contractor's performance can be rated "Satisfactory" or above despite possibly obtaining an adverse report during the previous quarter provided he has achieved or exceeded the progress anticipated from the programme agreed during the reporting period.
- 5. While all claims for extension of time for completion of the works (EOT) should be assessed, determined and granted within a reasonable time in accordance with GCC Clause 50, the RO should take into account the potential EOT for claims submitted by the contractor in assessing the progress, which had not yet been determined by the Architect/Engineer.

Item 2.1 Adequacy of programme

does the current programme adequately reflect the requirements of the whole contract, include other details requested by the Engineer/Architect, and, where applicable, fully describe all the principal activities to be undertaken by the contractor for completion on or before the currently established date of

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- completion of the contract?
- does the current programme adequately show his proposed works for the reporting period and all other details requested by the Engineer/Architect?
- does the current programme reflect the steps taken to overcome the delays caused by his previous slow progress in accordance with GCC Clause 51(1)?
- does the current programme continue to show any inadequacy in areas which the RO considers will unnecessarily delay the works?
- is the programme realistic in terms of the contractor's proposed achievement in the period?

Item 2.2 Adherence to programme

- has the contractor completed the works according to the programme agreed during the period?

Item 2.3 Updating of programme

- has the contractor revised his programme promptly as a result of EOT granted in accordance with GCC Clause 50(4) or due to other delays in the progress of the works in response to the Engineer's/Architect's notice under GCC Clause 51(1)?
- has the contractor responded promptly to the Engineer's/Architect's comments on the programme?
- does the revised programme affect the progress of other contractors/sub-contractors?

Item 2.4 Suitability of method and sequence of working

- has the contractor's progress been affected by the construction methods he has adopted?
- does the contractor demonstrate a logical approach to his sequence of works?
- are the contractor's proposed methods of working suitable for the types and the scale of work involved?
- does the contractor follow completely/closely the agreed method of working?

Item 2.5 Achievement in period

- has the contractor's progress exceeded the agreed targets?
- has the contractor completed in advance the agreed milestones or targets of work in his programme?
- has the contractor completed the value of work exceeding those expected to be done (based on the agreed programme)?

(The RO should consider giving a "Good" or "Very Good" rating to the contractor for the above achievement made.)

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Item 2.6 Action taken to mitigate delay/catch up with programme

- has the actions taken by the contractor to catch up with any delay due to his previous slow progress been effective?
- has he devoted more labour and equipment to the works and improved his method of working where necessary?

Section 3 - Site Safety

An overall "Very Poor" rating in this section will result in an "Adverse" report.

A 5-grade score card should be used for assessing the contractor's performance on site safety with reference to WBTC no. 26/2000 except for the maintenance period, defect liability period, or establishment period of the contract whereby the completion of score card is not required for the assessment. The score card has six sections which correspond with the performance aspects for the "Site Safety" section in the Report on Contractors' Performance (RCP). Hence, the scores of individual sections should be used to determine the performance rating of the contractor for the corresponding performance aspects in the RCP. A set of guidance notes is also given in the WBTC for marking the sub-items in the score card. Furthermore, the total score of the score card will form the basis to determine the overall performance rating of the contractor for "Site Safety" section in the RCP.

For RCP where the completion of score card is not required, the set of guidance notes in the WBTC should also be used to determine the performance rating of individual aspects for "Site Safety" section in the RCP.

Section 4 - Environmental Pollution Control

A "Poor" or "Very Poor" rating in Item 4.8 will result in "Poor" or "Very Poor" rating in this section respectively. An overall "Very Poor" rating in this section will result in an "adverse" Report.

It should be noted that any record of non-compliance or poor performance should be limited to those occurring during the reporting period. Records of convictions should not be used as a performance criteria as the contraventions would generally have occurred some months previously.

Item 4.1 Adequacy of water pollution mitigation measures

- has the contractor implemented effective and efficient water pollution mitigation measures as required by the contract?
- has the contractor monitored the requisite water pollution mitigation measures satisfactorily?
- has the contractor provided promptly the requisite boats/technicians/testing equipment for carrying out the water quality monitoring work?

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Item 4.2 Adequacy of noise pollution mitigation measures

- has the contractor implemented effective and efficient noise pollution mitigation measures as required by the contract?
- has the contractor monitored the requisite noise pollution mitigation measures satisfactorily?
- has the contractor provided promptly the requisite equipment/access for carrying out the noise level monitoring work?

Item 4.3 Adequacy of air pollution mitigation measures

- has the contractor implemented effective and efficient air pollution mitigation measures as required by the contract?
- has the contractor monitored the requisite air pollution mitigation measures satisfactorily?
- has the contractor provided promptly the requisite equipment/access for carrying out the air quality monitoring work?

Item 4.4 Adequacy of waste pollution avoidance measures

- has the contractor implemented effective and efficient waste pollution avoidance measures?
- has the contractor monitored the requisite waste pollution avoidance measures satisfactorily?

Item 4.5 Compliance with environmental enactments

- has the contractor taken all necessary measures to comply with environmental enactments?
- has the contractor been reluctant to comply with environmental enactments despite repeated warnings and reminders?
- has the contractor received any prosecutions for violations of environmental enactments?

Item 4.6 Action taken to remedy non-compliance

- has the contractor improved the method of working to remedy non-compliance with environmental enactments?
- have the actions taken by the contractor to remedy noncompliance with environmental enactments been effective?

Item 4.7 Implementation of waste management plan

- did the contractor submit the waste management plan in time?
- has the waste management plan been properly prepared to include the details required under the Contract?
- are the proposals in the waste management plan able to meet the target of avoidance, minimization and recycling and reuse of C&D material with particular reference to the nature of the

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Contract?

- did the contractor respond promptly to the Engineer's/Architect's comments on the waste management plan?
- has the contractor properly implemented the waste management plan during the reporting period?
- has the contractor updated or revised his waste management plan promptly if the situation warrants and/or so required by the Engineer/Architect?
- has the contractor kept adequate and proper records during the reporting period?
- has the contractor's report on the implementation of waste management plan been properly prepared?
- has the contractor submitted the monitoring proposal and is the proposal effective?

Item 4.8 Implementation of Trip-ticket System to control disposal of construction & demolition materials

- has the contractor taken any effective measures to ensure that every truckload of C&D materials bears a duly completed Disposal Delivery Form (DDF) before leaving the Site?
- has the contractor submitted the duly completed and stamped DDF and/or the transaction receipt (where relevant) within the time as stipulated in the Contract?
- has the contractor kept comprehensive and updated records of the DDF issued?
- has the contractor taken prompt corrective actions to rectify the non-compliance with the TTS requirements?
- Item 4.8 should be rated as "Very Poor" and overall "Very Poor" for Section 4 if illegal dumping of C&D materials or unauthorized disposal of C&D materials to private agricultural land occurs, or the number of Improper Disposal [see Clause (16) of Appendix A in ETWB TCW No. 31/2004] during the reporting period exceeds the limit as stipulated in Para. 21(b) of ETWB TCW No. 31/2004.

For contracts tendered on or after 1 February 2005, the following additional guidelines are relevant:

- has the contractor properly implemented the approved site management plan for implementation of the TTS?
- has the contractor informed the truck drivers, whom he has engaged for removal of C&D materials from the Site, the TTS requirements as stipulated in the Contract [see Clause (9) of Appendix A in ETWB TCW No. 31/2004]?
- has the contractor submitted the Daily Record Summary in accordance with the specification in the Contract?

For further details, project offices should refer to ETWB TCW No. 31/2004.

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Section 5 - Organisation

In completing the assessments, the following aspects should be considered in relation to the scope, value and technical complexity of the contract.

Item 5.1 Adequacy of organisation structure

- has an organisation chart been provided?
- does the chart reflect the actual situation?
- are lines of management and communication clear and effective?

Item 5.2 Support by head office

- does the contractor's head office have a representative who is aware of and actively monitoring site matters?
- are head office management responsive to giving support to site management?
- has the head office responded to the need for structural or staff changes in the site staff organisation to meet site conditions?
- has the head office responded promptly and effectively to overcome deficiencies?
- does the head office employ its own staff under a direct contract of employment to effectively manage and supervise the subcontractors?

(The Engineer/Architect should make the contractor aware of any of his concerns on the lack of support from the contractor's head office. These concerns should also be brought to the attention of the contractor's head office. Warnings in writing should be given to the contractor and copied to his head office if the situation has not been improved despite previous notifications. On the other hand, if the Engineer/Architect considers that the contractor's head office has provided better than average support on site matters, he should record his findings properly and rate this item as "Good' or above.)

Item 5.3 Adequacy of planning of work

- does the programme meet the requirements of the contract?
- is the programme adequate for work in hand?
- is the programme used effectively as a management tool?
- does the contractor plan his resourcing and procurement to meet the needs of the programme?
- have method statements been submitted?

Item 5.4 Adequacy of delegation of authority

- has the site agent been delegated authority to:
 - direct and control site activities?
 - manage sub-contractors' planning and execution?
- do sub-contractors accept the site agent's authority?
- has the contractor delegated his authority to his supervisory staff

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in supervising and managing the sub-contractors?

Item 5.5 Control of supervisory staff by site agent

- has a site organisation chart been drawn up?
- are lines of communication clear?
- are site staff delegated with authority that they can discharge their duties effectively?
- have site supervisors been briefed on agreed method statements and procedures?

Item 5.6 Management of sub-contractors by site agent

- has he exercised effective managerial control over subcontractors?
- has he exercised technical control over sub-contractors?
- has he exercised quality control over sub-contractors?
- has he coordinated the work of sub-contractors effectively?
- does he provide adequate support to sub-contractors?

Item 5.7 Adequacy of site supervisory staff

- are there adequate site supervisory staff?
- are there adequate contractor's staff to direct sub-contractors' work?
- do they have technical knowledge and experience appropriate to their level of responsibilities?
- do they take effective measures to monitor and maintain specified standards or are the Resident Site Staff required to intervene to achieve standards?

Item 5.8 Identification of and responsiveness to problems

- are there good communication channels between the contractor's site staff and the relevant resident site staff?
- does the site agent identify and recognise problem areas before they develop too far?
- are informal communication channels with the RO set up with a view of discussing and resolving potential problems?
- are corrective actions being initiated promptly?
- has the contractor maintained a good record in compliance with instructions?
- has the contractor reflected the situation to the RO if he finds it difficult to comply with any instructions?

Item 5.9 Compliance with provisions in SCC on sub-contracting and submission of the SMP

- did the contractor ensure that his sub-contractors have not sub-contracted the whole of the works assigned to them?
- did the contractor employ his own staff under a direct contract of

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- employment to manage and supervise his sub-contracting works?
- has the SMP been properly prepared as per the scope and contents stated in the Contract?
- did the contractor submit the SMP in time?
- has the contractor submitted the proposed measures and approaches as per the details stated in the contract?
- has the contractor updated and submitted his SMP to reflect his latest sub-contracting arrangement?

Section 6 - General Obligations

A "Poor" or "Very Poor" rating in Item 6.1 will result in "Poor" or "Very Poor" rating in this section respectively.

Item 6.1 Cleanliness of site

The rating of this item should be determined in accordance with the scoring method given in Annex 1 to Appendix 4B.

Item 6.2 Care of works

- has the contractor exercised due care in the care of the works including also construction plant, temporary works and materials on site?
- has the contractor always been difficult in care of the works despite repeated warnings?
- in case of damage, has the contractor made good the damage with reasonable speed?

Item 6.3 Compliance with insurance requirements

- has the contractor complied with the insurance requirements as stipulated in the contract?
- is the contractor reluctant in complying with the insurance requirements despite repeated reminders?

Item 6.4 Coordination of utilities and other authorised contractors

- have coordination meetings been held with the utility undertakings and other authorised contractors to work out an agreed works programme?
- has the contractor maintained close liaison with utility undertakings and other authorised contractors and informed the RO on the developments with respect to the agreed programme?
- has the contractor made reasonable allowance for time and provision of facilities and working space for utility undertakings and other authorised contractors in his programme?
- has the contractor taken reasonable steps to co-operate with the utilities and other authorised contractors?
- have the utilities and other authorised contractors being

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reasonable in co-operating with the contractor?

Item 6.5 Compliance with conditions for road openings

- has the contractor complied with the Code of Practice for Signing,
 Lighting and Guarding of Road Works?
- has the contractor complied with the conditions of the excavation permit?
- has the contractor properly removed surplus excavated material?
- has the contractor provided adequate alternative pedestrian facilities and information on notice boards?
- has the contractor complied with the Engineer's/Architect's instructions?

Item 6.6 Care of utilities

- has the contractor taken care not to cause damage to utilities?
- has the contractor a repeated record of causing damage to utilities?

Item 6.7 Compliance with enactments other than environmental

- has the contractor had a bad record of non-compliance with enactments?
- has the contractor taken all reasonable measures to comply with enactments?

Item 6.8 Adequacy/submission of operational and maintenance manuals

- have the manuals been submitted within the time stipulated in the contract?
- are the manuals clear and comprehensive?

Item 6.9 Training of employer's personnel

- has the contractor complied with requirements to train the employer's staff in the running and management of plant and other installations?

Item 6.10 Adequacy of notice for inspection of works

- does the notice clearly identify the work to be inspected?
- is the notice submitted in time as stipulated in the contract?

Item 6.11 Payment of nominated sub-contractors

- has the contractor paid the nominated sub-contractor and not withheld payment without reasonable cause?

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Item 6.12 Compliance with particulars related to sub-contracting

- has the contractor furnished the RO with reasonable particulars of the sub-contractors in the SMP?
- has the contractor ensured the necessary contract conditions and provisions be incorporated in the sub-contract?
- has the contractor provided the particulars of sub-contracting on site in his latest submission of the SMP?

Item 6.13 Attention to site security

- is the site generally secure?
- has the contractor fulfilled the site security requirements?
- are materials, including materials required for temporary works, stored in a secure manner?
- has the contractor reacted promptly to unsecured site conditions?

Item 6.14 Attention to records

- are contemporary records including plant, labour and work activities kept accurately and submitted promptly?
- is the site diary attended to on a timely and effective basis in accordance with GCC Clause 32?
- are daywork accounts kept accurately and submitted promptly?

Item 6.15 Attention to submission of accounts/valuations

- are accounts and valuations, if required by the contract submitted promptly?
- are accounts and valuations, if required by the contract accurate and sufficiently detailed?

Item 6.16 Control of materials supplied by Government

- has the contractor kept up-to-date records of the movements and locations of the material and equipment?
- has the contractor carried out physical stock taking?
- are the materials and equipment stored in a proper manner?

Section 7 - Industry awareness

A "Poor" or "Very Poor" rating in Item 7.7 will result in "Poor" or "Very Poor" rating in this section.

Item 7.1 Employment of technician apprentices and building & civil engineering graduates

In accordance with the requirements of ETWB TCW No. 12/2003

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- has the contractor employed the correct number of apprentices and graduates in relation to the size of the contract and within the stipulated time period of three months?
- has he demonstrated by written records his continued efforts in recruitment of the required staff if not immediately available?
- has he implemented valid contracts of apprenticeships as stipulated in the Apprenticeship Ordinance (Cap. 47)?

Item 7.2 Training of technician apprentices and building & civil engineering graduates

For technician apprentices, has the contractor

- demonstrated by providing records that he has provided the required training relevant to their respective trades;
- arranged for their attendance in an approved technical institute leading to the award of either a Higher Certificate in Building Studies, civil engineering or a comparable alternative.

For building and civil graduates, has the contractor

- provided experience training following established training guidelines for the various disciplines as far as possible;
- provided adequate professional supervision.

Item 7.3 Care and welfare of workers

- has the contractor provided sanitary latrine accommodation in accordance with the Contract and maintained it in a clean and sanitary condition?
- if provided, are canteen facilities maintained in a clean and sanitary condition?

Item 7.4 Care of the general public

- has the contractor taken reasonable steps to fulfill his obligations under GCC clause 22(1)? If not state why.
- has he carried out his works with due care and attention for the safety of the general public? If not state why.
- has he tried to minimise obstructions and other disturbances to the public? If not state why.
- has the contractor provided hoarding, fencing, covered walkways and the like, together with all necessary lighting and warning notices in English & Chinese, and maintained the whole in good and safe condition?
- has the contractor provided a flagman, signalling system or other practical means of controlling vehicles entering or leaving the site?
- has the contractor properly maintained wheel washing facilities to prevent mud from being carried onto public roads by vehicles leaving the site?

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- if required, has the contractor provided and properly maintained temporary traffic lights, or provided flagmen to control traffic on the public highway?
- has the contractor provided the watchmen/security guards as specified at all times of the day?

Item 7.5 Employment of qualified tradesmen and intermediate tradesmen

- has the contractor employed the minimum number of qualified tradesmen and intermediate tradesmen of each of the specified trades as specified in the Contract?
- has the contractor demonstrated from records his continued effort to recruit the minimum number if not immediately available?

Item 7.6 Employment of sub-contractors registered from the Voluntary Sub-contractor Registration Scheme

In accordance with the requirements in ETWB TCW No. 13/2004,

- has the contractor employed sub-contractors registered under the respective trades available under the Primary Register of the Voluntary Sub-contractors Registration Scheme?
- has the contractor ensured his sub-contractors to employ their further sub-contractors registered under the respective trades available under the Primary Register of the Voluntary Sub-contractors Registration Scheme?

In cases where separate performance report is made for the nominated sub-contractor (NSC), the following guidance notes should be added:

- has the NSC registered under the respective trades available in the Primary Register of the Voluntary Sub-contractors Registration Scheme?
- has the NSC employed his sub-contractors registered under the respective trades available in the Primary Register of the Voluntary Sub-contractors Registration Scheme?
- has the NSC ensured his sub-contractors to employ their further sub-contractors registered under the respective trades available in the Primary Register of the Voluntary Sub-contractors Registration Scheme?

Item 7.7 Anti-mosquito breeding

- has the contractor treated stagnant water on site and to take proper measures to guard against mosquito breeding?
- has the contractor reacted promptly to improve the control of mosquito breeding after written warning? A poor or very poor performance in this aspect will result in "Poor" or "Very Poor" rating in this item respectively.

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Section 8 - Resources

The level of resources provided by the contractor should be reviewed in monthly progress meetings and improvement, where needed, should be pointed out specifically by the RO. The contractor shall be rated "Very Poor" if he consistently fails to make improvement in the period and fails to achieve the targeted progress for the period or the standards of workmanship specified.

Item 8.1 Adequacy of plant resources

- has the contractor provided sufficient plant resources of suitable state and condition to achieve the planned progress?

Item 8.2 Adequacy of labour resources

- has the contractor provided sufficient labour resources of suitable levels of skill to achieve the planned progress and the specified workmanship?

Item 8.3 Adequacy of material resources

- has the contractor provided sufficient temporary and permanent material to achieve the planned progress and the specified quality requirement?

Section 9 – Design

The contractor is required to comply with the contract specification and/or Employer's Requirements and also, where applicable, any better offers in the contractor's Technical Proposal which forms part of the Contract in order to be awarded a "Satisfactory" grade.

Item 9.1 Collection and appreciation of information (e.g. design codes, design parameters)

- has the contractor collected all relevant data and interpreted them correctly?
- have sufficient site surveys and investigation been carried out?
- have comprehensive design notes (memoranda) been prepared to summarize design criteria?
- are design criteria appropriate?
- do the design criteria meet relevant design codes and regulations?
- are design checking procedures specified (in case they are not specified by the Employer and/or in the Contract)?

Item 9.2 Adequacy and quality of design solutions

(a) General

- is the design complete?
- can the design satisfy the contractual and/or Employer's Requirements and/or Technical Proposal where better offers have been included?
- are the design solutions cost effective and in compliance with the

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- contractual and/or Employer's Requirements and/or Technical Proposal where better offers have been included?
- have adequate consideration, allowance and provision been given for possible variation, if appropriate?

(b) Specific requirements

- has adequate attention been given to aesthetical design and overall appearance including landscaping?
- has the contractor taken into account all the functional and planning requirements specified in the contract in developing the design?
- has the contractor adequately addressed effectiveness, ease of construction and associated risks in developing the structural layout?
- are the buildings services and related systems designed and planned with sufficient efficiency and flexibility for future replacement, alteration and expansion?
- has the contractor provided satisfactory operation and maintenance facilities in terms of efficiency, user-friendliness and durability?

(c) Better design solutions

- has the contractor proposed and implemented successfully any design changes resulting in appreciable benefits to the client, such as saving in cost, reduction of construction time and/or enhanced quality?

Item 9.3 Environmental friendliness, health and safety, innovation, energy efficiency and life cycle costs

(a) Environmental friendliness, health and safety

- is the design satisfactory in terms of environmental friendliness with usage of non-renewable resources reduced, materials harmful to people and the environment avoided and sufficient green measures incorporated?
- are environmentally friendly materials, such as recycled and reusable materials and processes adequately incorporated in the design?
- has the contractor taken sufficient consideration of health and safety in developing the design and provided sufficient mitigation measures to minimize health and safety hazards?

(b) Innovation

- is adoption of innovative and intelligent building/structural design solutions and construction methods satisfactory?
- is adoption of innovative and intelligent designs of building service, mechanical and electrical equipment, electronic systems and other operation and maintenance facilities satisfactory?
- has the contractor adequately incorporated innovative green measures?
- Can the adopted innovative solutions enhance quality, optimize costs and minimize risks and impacts?

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- (c) Energy efficiency and life cycle costs
- has the contractor given sufficient consideration to energy efficiency in designing the general configuration of the structure/facility, e.g. orientation to optimize daylight utilization?
- have adequate energy saving measures been incorporated?
- has the use of energy efficient features and renewable energy technologies been sufficiently considered pursuant to ETWB TCW No. 16/2005?
- are design solutions sufficiently cost effective with due regards to the total cost over the project life to optimize the costs of construction, operation, maintenance, replacement and energy consumption?

Item 9.4 Consultation with relevant Government departments and utility undertakers

- have all relevant departments and utility undertakers been consulted?
- does the design reflect comments and views of relevant departments and utility undertakers?
- have statutory submissions as required under various ordinances and regulations been made in time?
- are the submissions in compliance with all the relevant statutory requirements?
- have timely and proper coordination been made with the relevant utility undertakers?
- have utility submissions been made promptly?

Item 9.5 Quality and promptness of design submissions

(a) General

- have design documents been submitted in time to meet the construction programme?
- is the design clearly and fully presented?
- have drawings been prepared and do they provide necessary information for the contractor's design to be assessed?
- have drawings incorporated the client's/SO's/Architect's/ Engineer's comments?
- have specified design checking procedures been followed?
- have the necessary procedures/schedule for verification of the design assumptions and the corresponding measures for catering for variations been clearly given in the design?
- has the contractor followed the procedures set out in the contract promptly and effectively to change design in response to variations to the Employer's Requirements which are necessary for the completion of the Works as ordered by the SO/Architect/Engineer?

(b) Additional considerations for D & B Contracts

- has Project Design Plan been submitted and updated within specified time frame?
- is the Project Design Plan clear, complete and in compliance with the contract requirements?
- have Approval in Principle submissions been made within

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- specified time frame?
- are the Approval in Principle submissions clear, complete and in compliance with the contract requirements?
- have Detailed Design Approval submissions been made within specified time frame?
- are the Detailed Design Approval submissions clear, complete and in compliance with the contract requirements?

Item 9.6 Quality and timely submission of as-built drawings, maintenance manuals and warranties

- has submission of warranties, maintenance manuals and as-built drawings met specified time frame?
- are the as-built drawings clear and comprehensive?
- do the as-built drawings incorporate all changes ordered or made?
- do the as-built drawings include relevant construction details?
- are the as-built drawings sufficient for future maintenance and alteration/extension?
- have all necessary recommendations on maintenance requirements of all elements of works been given in the maintenance manuals?

Note

This section is generally applicable to all contracts with design elements, instead of D&B contracts only. Please refer to Notes 2, 3 & 4 in Part A of Appendix 4B to the CMH for the weighting to be given for this section or individual aspect of performance.

Section 10 - Attendance to emergency (term contracts)

Item 10.1 Response to call

- does the contractor respond with appropriate promptness to emergency calls at all times of the day?

Item 10.2 Attendance to on-call emergency repairs

- is the contractor readily available when required to attend to repairs?
- does the contractor attend to on-call and emergency duties with due care and diligence?

Item 10.3 Speed of emergency repairs

- does the contractor carry out emergency repairs with adequate speed and promptness when instructed?
- are the emergency repair works of adequate standard?

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Annex 1 – Scoring Method for Item 6.1 Site Cleanliness in Section 6 on General Obligations

6.1 Site Cleanliness	Criteria	Max. Mark
Is the site generally tidy and clean?	 Adequate Number of rubbish bin provided Rubbish collection point provided Rubbish properly collected No scattered loose debris and materials No storage of materials on passageways Dust adequately suppressed No Dripping water Adequate and suitable lighting No projecting nails or sharp objects are used and left on site Passageways kept free of obstruction 	5
Has the contractor spent effort in keeping the site clean and tidy?	 Demarcated walkway and storage area provided as required Cleaning team provided Staff assigned for cleaning Arrangement or daily cleaning Records kept Housekeeping plan provided Toolbox training provided Pest control measures adopted Equipment is isolated prior to cleaning and routine maintenance operations Adequate toilet for employees, male/female toilets Hand washing facilities for employees, nature of work may require shower facilities 	3
Are materials, including materials required for temporary works, stored in an orderly manner?	 No unstable storage of materials (Height < 2m) Cylindrical materials wedged Chemicals properly labeled No obvious overloading of floor or structure DG / Chemical store provided Demarcated area for storage provided 	4
Has the contractor maintained all public access within the site tidy?	 Worker deploy to maintain the site entrance cleanliness No storage materials at the public access Dust suppression at the public access Hoarding provided Demarcated works area provided Sufficient warning and lighting provided Safe, approved methods for cleaning and/or maintaining equipment are used. Equipment and work areas are cleaned/maintained according to agreed safety, preventative maintenance schedules, and where applicable, manufacturer specifications. 	5

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Annex 1 – Scoring Method for Item 6.1 Site Cleanliness in Section 6 on General Obligations

6.1 Site Cleanliness	Criteria	Max. Mark							
Has the contractor reacted promptly to complaints on untidy site conditions?	 Rectify the complaints made within the time limit specified by the RO with written rectification report provide to the client Any complaint hotline established Compliant hotline easily reachable Designated person responsible for handling complaints Verification with Meeting minutes / Monthly report 	4							
Has the contractor reacted promptly to improve the tidiness and cleanliness on untidy site conditions after written warning? A poor or very poor performance in this aspect will result in "Poor" or "Very poor" rating in item 6.1.	 Rectify the complaints made within the time limit specified by the RO with written rectification report provide to the client Verification with Meeting minutes and Monthly Report 	5							
Score of this ma	Score of this main item = Sum of marks obtained for all relevant sub-items x 100% Sum of maximum marks for all relevant sub-items								
Rating of Item 6.1 : Very Good / Good / Satisfactory / Poor / Very Poor (>85% / >70-85% / >50-70% / >30-50% / 0-30%)									

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APPENDIX 4C Category Codes

The following category codes shall be used for the "Predominant category of work" in Section A Part I - Summary of Performance.

Category code	<u>Description</u>
AIR	Air-conditioning Installation
AUDI	Audio Electronics Installation
BD	Buildings
BEAR	Supply and Installation of Bearings for Highway Structures
BITU	Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing
BURG	Burglar Alarm and Security Installation
COAE	Broadcast Reception Installation
COKI	Catering Equipment Installation
DIES	Diesel Generator Installation
ELEC	Electrical Installation
ELME	Electrical and Mechanical Installation for Sewage Treatment and Screening Plant
ELTI	Electronic Timing and Display Installation
EXPA	Supply and Installation of Expansion Joints for Highway Structures
FABS	Fabrication of Steel Pipe Specials
FABU	Fabrication of Unfired Pressure Vessels
FIRE	Fire Service Installation
FOUN	Fountain Installation
GAS	Liquefied Petroleum Gas Installation
GLAS	Design, Manufacture and Installation of Glass (or Fibre) Reinforced Plastic Units
GROU	Ground Investigation Field Work
INDU	Industrial Type Electrical Installation
LAND	Land, Engineering and Hydrographic Survey Services
LANP	Landslip Preventive/Remedial Works to Slopes/Retaining Walls
LANS	Landscaping
LIAP	Survey of Lifting Appliances and Lifting Gear

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Category Codes Appendix 4C

<u>Category code</u> <u>Description</u>

LIFT Lift, Escalator and Passenger Conveyor Installation

LOVO Low Voltage Cubicle Switchboard Installation

MANU Mechanical Plant and Equipment Installation

MECH Mechanical Handling and Lifting Installation

MOTO Motor Vehicle Body-building and Painting

OTHE Others

PILE Land Piling

PREF Prefabricated Architectural Walls and Finishes (Screens, Sound Barriers and Retaining Walls)

PRES Prestressed Concrete Works for Highway Structures

PUMP Supply and Installation of Pumpsets and Associated Pipework

PW Port Works

RADI Radio Electronics Installation

RD Roads and Drainage

REHI Repair and Restoration of Historic Buildings

REMO Repair of Motors, Transformers and Switchgear

ROAD Road Marking

SF Site Formation

SOIL Soil and Rock Testing

SPAC Space Frame Systems

SPEC Specialized Operations for Highway Structures

STBO Survey of Government Land Steam Boilers

STEA Steam and Compressed Air Installation

STRU Structural Steelwork

SURV Survey of Government Land Pressure Receivers subject to Steam and Air Pressure (but excluding

Steam Boilers)

SWIM Swimming Pool Water Treatment Installation

TURN Turn-key Interior Design and Fitting-out Works

UNIN Uninterruptible Power Supply Installation

VIDE Video Electronics Installation

WATE Supply and Installation of Water Treatment Plant

WW Waterworks

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APPENDIX 4D Timetable for Reporting on Contractors'Performance

								No	of '	Wor	king	Dav	vs af	ter	the I	Repo	rting	g Da	v (S	Satur	rday	not	cou	nteo	d as	W	orki	ng (day)							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1 2	5	26	27	28	29	30	31	32	33	34	35
(1) RO to send report to RRC																																				
(2) Contractor to be sent an advance copy of the report																																				
(3) RRC to review all the reports																																				
(4) For reports where contractors have not	rais	ed aı	ny d	isagı	eem	ents	or R	RC	has	not p	ropo	sed	any	alte	ratio	ns				ı	ı	1		1			Į.		1		1				l	
(a) RRC to arrange uploading of reports and MRC to review Adverse reports										Adve c. fr			rts																							
(5) For reports where contractors have rais	sed o	disag	greer	nent	s																-1															
(a) Contractor to notify RRC of disagreements in advance																																				
(b) Contractor to submit representations to RRC																																				
(c) RRC to review representations and make decisions																																				
(d) RRC to arrange uploading of reports and MRC to review Adverse reports																					ceip MR						4									
(6) For reports where RRC has proposed a	ltera	ation	S																																	
(a) Contractor to notify RRC if they disagree with proposed alterations							Re	_		RRC ons l	_	-	sed actor	_																						
(b) Contractor to submit representations to RRC in case of disagreement																																				
(c) RRC to review representations and make decisions																																				
(d) RRC to arrange uploading of reports and MRC to review Adverse reports																					ceip MR				-		ts									

Note: Refer to paragraph 4.6.4 for details.

Appendix 4D Page 1 of 1

APPENDIX 5A Standard Warning Letter for Poor Performance

Appendix 5A Page 1 of 1

APPENDIX 5B Standard Letter for Withdrawal of Tender - Type A

Addressed to Contractor Sent by registered post

Dear Sir,

List of Approved Contractors for Public Works/
List of Approved Suppliers of Materials and Specialist Contractors
for Public Works*

[Category]

[Contract No.]
[Contract Title]
[Nature of the Conduct]

You are an approved contractor on the List of Approved Contractors for Public Works/List of Approved Suppliers of Materials and Specialist Contractors for Public Works* under the [works category concerned] category.

You have submitted a tender for the above contract. However, you have [state nature of the inappropriate conduct].

I draw your attention to paragraph 5.13.6 of the Contractor Management Handbook – Revision B (CMH) that [state nature of the inappropriate conduct] may warrant regulating action to be taken against you such as suspension from tendering or removal from the above category.

You are therefore required to present me with an explanation stating your reasons for [state nature of the inappropriate conduct] within two weeks from the date of this letter.

Appendix 5B Page 1 of 2

Should you fail to respond by the deadline stipulated in this letter or if your response fails to dispel any reasonable suspicions as to your capability or integrity arising from the inappropriate conduct aforementioned, the said conduct shall be counted for the purpose of taking regulating action outlined in sub-paragraph 5.13.6(b) or (c) of the CMH.

Yours faithfully,

([Name])
for Director of [Managing Department]

c.c. SEO(PS),ETWB

Appendix 5B Page 2 of 2

^{*} Delete as appropriate

APPENDIX 5C Standard Letter for Withdrawal of Tender - Type B

Addressed to Contractor Sent by registered post

Dear Sir,

List of Approved Contractors for Public Works/ List of Approved Suppliers of Materials and Specialist Contractors for Public Works* [Category]

[Contract No.]
[Contract Title]
[Nature of the Conduct]

I have considered your letter ref. [letter ref.] dated [date] setting out your reasons for [state nature of the conduct] and am satisfied on the basis of your letter that the [state nature of the conduct] do(es) not give rise to reasonable suspicions as to your capability or integrity.

Following the procedure set out in the Contractor Management Handbook – Revision B (CMH), this matter will be recorded but will not be counted for the purposes of the imposition of regulating action outlined in sub-paragraphs 5.13.6(b) and (c) of the CMH.

I trust you will continue to exercise reasonable care in preparing and submitting tenders for public works contracts.

Yours faithfully,

([Name]) for Director of [Managing Department]

c.c. SEO(PS), ETWB

* Delete as appropriate

Appendix5C Page 1 of 1

APPENDIX 5D Standard Letter for Withdrawal of Tender - Type C

Addressed to Contractor Sent by registered post

Dear Sir,

List of Approved Contractors for Public Works/ List of Approved Suppliers of Materials and Specialist Contractors for Public Works* [Category]

[Contract No.]
[Contract Title]
[Nature of the Conduct]

I note that you have failed to respond to my letter [letter ref.] dated [date] concerning the captioned [state nature of the conduct]./I have considered your letter ref. [letter ref.] dated [date] setting out your reasons for [state nature of the conduct] and am satisfied that the said conduct does give rise to reasonable suspicions as to your capability or integrity*. As such, the said conduct will be counted for the purpose of taking regulating action against you.

I must warn you that if you still engage in conduct as set out in paragraph 5.13.1 of the Contractor Management Handbook – Revision B (CMH) in the same category and which gives rise to reasonable suspicions as to your capability or integrity without a reason acceptable to us, I am obliged, in accordance with paragraph 5.13.6 of the CMH, to recommend to the Secretary for the Environment, Transport and Works to: -

- (a) remove you from the above category if the said conduct is committed within twelve months from [the tender closing date of the contract in question]; or
- (b) suspend you from tendering for public works contracts in the above category for six months if the said conduct is committed outside the twelve-month period but within thirty-six months from [the tender closing date of the contract in question].

Appendix 5D Page 1 of 2

In future please take reasonable care in preparing and submitting tenders for public works contracts.

Yours faithfully,

([Name]) for Director of [Managing Department]

c.c. SEO(PS), ETWB* Delete as appropriate

Appendix 5D Page 2 of 2

APPENDIX 6A Novation Agreement

THIS AGREEMENT is made on the

day of (month and year)

BETWEEN

(1) THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINSTRATIVE REGION (hereinafter called the "Employer")

of the first part, and

WHEREAS: -

(a) The Employer and the Contractor have entered into (an) agreement(s) including supplementary agreement(s) thereto if any (hereinafter called the "Contract(s)") for the execution of certain works described and known as

[GIVE DETAILS OF EACH CONTRACT TO BE NOVATED, GIVING CONTRACT NUMBER, DATE AND TITLE]

upon the terms, conditions and covenants therein specified.

(b) The Contractor wishes to be released and discharged from the Contract(s) and the Employer has agreed to release and discharge the Contractor upon the terms of the New Contractor's agreement to perform the Contract(s) and to be bound by the terms of the Contract(s) in place of the Contractor.

NOW IT IS HEREBY AGREED AS FOLLOWS: -

1. The Contractor hereby agrees to transfer absolutely to the New Contractor the Contract(s) and the full benefit thereof and all remedies for enforcing the same and the New Contractor undertakes to be bound by and observe and perform the terms, conditions and covenants of the Contract(s) on the part of the Contractor to be observed, performed and satisfied in every way as if the New Contractor were named a party to the Contract(s) in substitution for the Contractor and the New Contractor undertakes to assume all liabilities and to satisfy all claims and demands whatsoever arising out of or in respect of the Contract(s).

Appendix 6A Page 1 of 4

Novation Agreement Appendix 6A

2. The Employer hereby releases and discharges the Contractor from the further performance of the Contract(s) and from all claims and demands whatsoever arising out of or in respect of the Contract(s) and accepts the liability of the New Contractor to perform the Contract(s) in lieu of the liability of the Contractor.

- 3. The New Contractor hereby covenants with the Employer to fulfil and discharge the terms, conditions and covenants of the Contract(s) in every way as if the New Contractor were named a party to the Contract(s) in substitution for the Contractor and the Employer hereby covenants with the New Contractor to be bound to the New Contractor to observe and perform the terms, conditions and covenants of the Contract(s) on the part of the Employer to be observed and performed and hereby acknowledges that the New Contractor is entitled to the full benefit of the Contract(s).
- 4.^ The Contractor and the New Contractor shall jointly and severally, indemnify and keep indemnified the Government against all losses, damages, costs, expenses, claims or liabilities etc. and any legal or other professional costs (on a full indemnity basis) incurred or suffered (whether direct or indirect) arising out of or in connection with any challenge or meeting any challenge to this novation transaction, in particular under [section 266 of the Companies Ordinance Cap. 32] [section(s) 49 and/or 50 of the Bankruptcy Ordinance Cap. 6] [section 266 of the Companies Ordinance Cap. 32 and section(s) 49 and/or 50 of the Bankruptcy Ordinance Cap. 6 as appropriate]#.

IN WITNESS whereof this Agreement has been executed as a deed on the date first above written.

SIGNED SEALED AND DELIVERED)
for and on behalf of)
THE GOVERNMENT OF THE HONG KONG)
SPECIAL ADMINISTRATIVE REGION)
by (name and appointment of officer))
in the presence of : -)
)
)
)
)

Appendix 6A Page 2 of 4

Novation Agreement Appendix 6A

*THE COMMON SEAL ¹ of)
[insert name of the Contractor])
was affixed hereto)
in the presence of: -)
)
)
)
D.)
Director)
)
)
Dimentan/Connectors)
Director/Secretary)
OR	
OR	
*SIGNED, SEALED AND DELIVERED ²)
for and on behalf of and as lawful attorney)
of [insert name of the Contractor])
under power of attorney)
dated [] by [])
in the presence of : -)
)
)
)
[Name]	
[Occupation]	
o.p.	
OR	
*SIGNED, SEALED AND DELIVERED ³	,
by [insert name of the Contractor])
in the presence of: -)
in the presence of)
)
)
[Name]	,
[Occupation]	
=	

Notes (for the preparation of but not inclusion in the engrossment of this Agreement)

^ The department concerned should consider the need for this indemnity clause in cases of novation where there is doubt on the financial position of the outgoing contractor but winding up has yet to commence. The Government normally does not have much details or knowledge of the deal between the outgoing contractor and the new

Appendix 6A Page 3 of 4

Novation Agreement Appendix 6A

contractor behind the novation transaction, and there is a possibility of avoidance of transaction under section 266 of the Companies Ordinance Cap. 32 if the novation is made within 6 months before the commencement of the outgoing contractor's winding up or under section(s) 49 and/or 50 of the Bankruptcy Ordinance.

- # Choose the appropriate one, depending on whether the Contractor and the New Contractor are individuals or companies.
- * Repeat the appropriate form for execution by the New Contractor.
- 1. For use where the Contractor executes the agreement through its common seal.
- 2. For use where the Contractor executes through an attorney.
- 3. For use where the Contractor is an individual or a sole proprietorship.

Appendix 6A Page 4 of 4

APPENDIX 6B Novation Agreement For Unincorporated Joint Venture

THIS AGREEMENT is made on the day of (month and year)									
BETWEEN									
(1) THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINSTRATIVE REGION (hereinafter called the "Employer")									
of the first part, and									
(2) [Insert name of Company A] whose registered office is at [] and									
[Repeat the names and registered offices of the other participants of the unincorporated joint venture] (together trading as [insert the name of the unincorporated joint venture] and hereinafter called the "Contractor") of the second part, and									
(3) [Insert name of Company B] whose registered office is at [
[Repeat the names and registered offices of the other participants of the new unincorporated joint venture] (together trading as [insert name of the new unincorporated joint venture] and hereinafter called the "New Contractor") of the third part.									
WHEREAS: -									
(a) The Employer and the Contractor have entered into (an) agreement(s) including any supplementary agreement(s) thereto if any (hereinafter called the "Contract(s)") for the execution of certain works described and known as									
[GIVE DETAILS OF EACH CONTRACT TO BE NOVATED, GIVING CONTRACT NUMBER, DATE AND TITLE]									
upon the terms, conditions and covenants therein specified.									
(b) The Contractor wishes to be released and discharged from the Contract(s) and the									

Appendix 6B Page 1 of 4

Contract(s) in place of the Contractor.

Employer has agreed to release and discharge the Contractor upon the terms of the New Contractor's agreement to perform the Contract(s) and to be bound by the terms of the

NOW IT IS HEREBY AGREED AS FOLLOWS: -

- 1. The Contractor hereby agrees to transfer absolutely to the New Contractor the Contract(s) and the full benefit thereof and all remedies for enforcing the same and the New Contractor undertakes to be bound by and observe and perform the terms, conditions and covenants of the Contract(s) on the part of the Contractor to be observed, performed and satisfied in every way as if the New Contractor were named a party to the Contract(s) in substitution for the Contractor and the New Contractor undertakes to assume all liabilities and to satisfy all claims and demands whatsoever arising out of or in respect of the Contract(s).
- 2. The Employer hereby releases and discharges the Contractor from the further performance of the Contract(s) and from all claims and demands whatsoever arising out of or in respect of the Contract(s) and accepts the liability of the New Contractor to perform the Contract(s) in lieu of the liability of the Contractor.
- 3. The New Contractor hereby covenants with the Employer to fulfil and discharge the terms, conditions and covenants of the Contract(s) in every way as if the New Contractor were named a party to the Contract(s) in substitution for the Contractor and the Employer hereby covenants with the New Contractor to be bound to the New Contractor to observe and perform the terms, conditions and covenants of the Contract(s) on the part of the Employer to be observed and performed and hereby acknowledges that the New Contractor is entitled to the full benefit of the Contract(s).

4.	Each of [and]+ agrees
	to be jointly and severally bound by the	e terms of this Agreement.	
5.	Each of [and]++
	agrees to be jointly and severally bou	nd by the terms of this Agreeme	ent and by the
	terms of the Contract(s) as novated by t	this Agreement.	

6.^ The Contractor and the New Contractor shall, and each participant of the Contractor and the New Contractor as the case may be, jointly and severally, indemnify and keep indemnified the Government against all losses, damages, costs, expenses, claims or liabilities etc. and any legal or other professional costs (on a full indemnity basis) incurred or suffered (whether direct or indirect) arising out of or in connection with any challenge or meeting any challenge to this novation transaction, in particular under [section 266 of the Companies Ordinance Cap. 32] [section(s) 49 and/or 50 of the Bankruptcy Ordinance Cap. 63 [section 266 of the Companies Ordinance Cap. 32 and section(s) 49 and/or 50 of the Bankruptcy Ordinance Cap. 6 as appropriate]#.

IN WITNESS whereof this Agreement has been executed as a deed on the date first above written.

Appendix 6B Page 2 of 4

SIGNED SEALED AND DELIVERED)
for and on behalf of)
THE GOVERNMENT OF THE HONG KONG)
SPECIAL ADMINISTRATIVE REGION)
by (name and appointment of officer))
in the presence of : -)
•)
)
)
)
	,
*THE COMMON SEAL C	,
*THE COMMON SEAL ¹ of)
[insert name of the participant])
of the [insert name of the Contractor])
was hereunto affixed)
in the presence of: -)
)
)
)
D')
Director)
)
)
7. (9)
Director/Secretary)
*SIGNED, SEALED AND DELIVERED ²)
for and on behalf of and as lawful attorney)
of [insert name of the participant])
of the [insert name of the Contractor])
under power of attorney)
dated [] by []) \
in the presence of : -))
in the presence of) \
))
))
[Name]	,
[Occupation]	
L 1 1 1 1	

Appendix 6B Page 3 of 4

*SIGNED, SEALED AND DELIVERED ³)
by [insert name of the participant])
of the [insert name of the Contractor])
in the presence of: -)
)
)
)
[Name]	
[Occupation]	

Notes (for the preparation of but not inclusion in the engrossment of this Agreement)

- Insert the names of the participants comprising the Contractor.
- Insert the names of the participants comprising the New Contractor
- ^ The department concerned should consider the need for this indemnity clause in cases of novation where there is doubt on the financial position of the outgoing contractor but winding up has yet to commence. The Government normally does not have much details or knowledge of the deal between the outgoing contractor and the new contractor behind the novation transaction, and there is a possibility of avoidance of transaction under section 266 of the Companies Ordinance Cap. 32 if the novation is made within 6 months before the commencement of the outgoing contractor's winding up or under section(s) 49 and/or 50 of the Bankruptcy Ordinance.
- # Choose the appropriate one, depending on whether the Contractor and the New Contractor are individuals or companies.
- * Repeat the appropriate form for execution by each participant of the New Contractor.
- 1. For use where an individual joint venture participant which is an incorporated company executes under its common seal.
- 2. For use where an individual joint venture participant, whether a firm or an incorporated company, executes through an attorney.
- 3. For use where an individual joint venture participant of the Contractor is a sole proprietor or is a partnership itself. In the case of a partnership, all partners thereof shall execute.

Appendix 6B Page 4 of 4

APPENDIX 6C Supplementary Agreement

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

[Contract Title and Number]

SUPPLEMENTARY AGREEMENT NO. []

THIS	AGREEMENT is made and entered into this day of(month & year)_
	VEEN THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE ON (hereinafter referred to as "the Employer")
of the	one part, and
	name of new contractor] whose registered office is at [after referred to as "the Contractor") of the other part
to as 'Kong	supplemental to a contract known as [contract title and number] (hereinafter referred "the Main Contract") made on [
WHEI	REAS
(A)	By a novation agreement made on [] (hereinafter referred to as "the Novation Agreement") among the Employer, the Contractor and the Original Contractor, the Original Contractor's rights and obligations under the Main Contract have been novated from the Original Contractor to the Contractor.
(B)	The Employer and the Contractor are desirous of clarifying the parties' rights and obligations under the Main Contract (as novated in accordance with the Novation Agreement) as regards provision of the requisite duly executed [insert guarantee, performance bond etc where appropriate] in accordance with General Conditions of Contract Clause 12 and Special Conditions of Contract Clause [] for the due performance of the Main Contract by the Contractor.

Appendix 6C Page 1 of 8

NOW IT IS HEREBY AGREED BETWEEN THE EMPLOYER AND THE CONTRACTOR AS FOLLOWS:-

- 1. This Agreement is supplemental to the Main Contract and the provisions of the Main Contract shall apply to this Agreement except as provided to the contrary herein. Except as otherwise altered by this Agreement, the terms of the Main Contract shall remain unchanged in every respect. In the event of any inconsistency between the terms of the Main Contract and the terms of this Agreement, the latter shall take precedence. Subject to Clause 2 below, words and phrases appearing in this Agreement and defined in the Main Contract shall have the same meaning for the purposes of this Agreement as they have for the purposes of the Main Contract.
- 2. All references to "Contract" in the Main Contract and this Agreement shall mean the Main Contract and this Supplementary Agreement No. [].
- 3. The Contractor acknowledges and accepts that it has an obligation to provide to the Employer a duly executed [insert guarantee, performance bond etc where appropriate] in the form set out in the Appendix hereto and that it has not provided to the Employer the requisite duly executed [insert guarantee, performance bond etc where appropriate] as at the date of the Novation Agreement.
- 4. It is hereby agreed that submission by the Contractor of the requisite duly executed [insert guarantee, performance bond etc where appropriate] as referred to in Clause 3 above is a condition precedent to the Contractor's entitlement to any payment or any further payment as the case may be under the Contract and the Employer shall forthwith be entitled to withhold any payment or any further payment as the case may be to the Contractor under the Contract up to the amount of [specify the amount of the Bonded Sum] until the Contractor shall have provided to the Employer the requisite duly executed [insert guarantee, performance bond etc where appropriate] as referred to in Clause 3 above.
- 5. It is hereby further agreed that failure by the Contractor to provide the requisite duly executed [insert guarantee, performance bond etc where appropriate] as referred to in Clause 3 above within 45 days of this Agreement shall entitle the Employer either to suspend the Works or to terminate the Contract forthwith by notice in writing to that effect, notwithstanding that the Contractor may have been permitted to proceed with the Works, and the Contractor shall not be entitled to any compensation as a consequence of such suspension or termination.
- 6. Within 30 days of the provision by the Contractor to the Employer of the requisite duly executed [insert guarantee, performance bond etc where appropriate] as referred to in Clause 3 above, the Employer shall pay the Contractor the sum withheld in accordance with Clause 4 above.
- 7¹. Sub-clauses [], [] and [] of Clause [] of the Special Conditions of Contract are hereby deleted.

Appendix 6C Page 2 of 8

IN WITNESS whereof this Agreement has been executed as a deed on the day and year first above written.

SIGNED, SEALED AND DELIVERED for and on behalf of THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION by (name and appointment of the officer) in the presence of: -))))
THE COMMON SEAL ² of [insert name of the Contractor] was hereunto affixed in the presence of : -))))
Director	_′
Director/Secretary	_
OR SIGNED, SEALED AND DELIVERED ³ for and on behalf of and as lawful attorney of [insert name of the Contractor] under power of attorney)))
dated [] by [] in the presence of : -))))
[Name] [Occupation]	_/
OR OR	
SIGNED, SEALED AND DELIVERED ⁴ by [insert name of the Contractor])

Appendix 6C Page 3 of 8

in the presence of: -)
)
)
)
)
	_
[Name] [Occupation]	
[Occupation]	

Appendix 6C

Notes (for the preparation of but not inclusion in the engrossment of this Agreement)

1. Delete this Clause if not applicable.

Supplementary Agreement

- 2. For use where the Contractor executes the agreement through its common seal.
- 3. For use where the Contractor executes through an attorney.
- 4. For use where the Contractor is a sole proprietorship or a partnership. In the case of a partnership, all partners thereof shall execute.

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APPENDIX

FOR	M OF [GUARA	ANTEE, PE	ERFORMANCE	BOND et	c] ¹	
CON	TRACT NO					
BYT	T HIS BOND dat	ted the	day of	?[1
(toge ("the	and firmly boun ther with its suc Bonded Sum") successors and	nd to the Goccessors and for paymen	overnment of the lassigns, "the Ent of which sum	registered Hong Kon nployer") i	office/princip g Special Adn in the sum of actor and Sure	Contractor") and pal business is at ("the Surety") are ministrative Region
WHI	EREAS					
(A)	("the Original C	') made bety Contractor") as defined in	ween the Employ, the Original Co	yer and [In entractor ha	s agreed to exe	original contractor] ecute and complete rms and conditions
(B)		mployer, th ghts and obli	e Contractor and igations under the		riginal Contra	ation Agreement") ctor, the Original I from the Original
(C)	between the Enthe parties' right Novation Agree	mployer and nts and oblig ement) as re	gations under the	the Emplo Contract (a ion the [ins	yer and the Co as novated in a	n [] ontractor clarified ccordance with the performance bond
(D)					•	nentary Agreement obtain the [insert

Appendix 6C Page 5 of 8

guarantee, performance bond etc where appropriate] of a surety to be bound unto the

Employer for the due performance of the Contract by the Contractor.

NOW THE TERMS AND CONDITIONS of this Bond are as follows: -

- 1. Where applicable, words and expressions used in this Bond shall have the meaning assigned to them in the Contract.
- 2. In the event of default by the Contractor in respect of any of its obligations under the Contract the Surety shall satisfy and discharge any damages, losses, charges, costs or expenses sustained by the Employer thereby up to the amount of the Bonded Sum.
- 3. 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;
 - (f) the issue of any certificate of completion in respect of part of the Works;
 - (g)² the issue of any certificate of achievement of any Stage.
- 4. 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) expiry of the Maintenance Period or, where there is more than one Maintenance Period, expiry of the last Maintenance Period.
- 5. 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.
- 6. All documents arising out of or in connection with this Bond shall be served:

(a)	upon	the	Employer,	at	[],	marked	for	the	attention	of
	ſ		1:								

Appendix 6C Page 6 of 8

oleme	ntary Agreement	Appendix
	(b) upon the Surety, at [] Hong Kong ³ .
7.	± • • • • • • • • • • • • • • • • • • •	hange their respective nominated addresses for service Hong Kong but only by prior written notice to each ust be in writing.
8.	<u> </u>	d construed according to the laws for the time being in agrees to submit to the non-exclusive jurisdiction of
9.	In this Bond, "Hong Kong" means	the Hong Kong Special Administrative Region.
IN '	WITNESS whereof this Bond has be	en executed as a deed on the date first above written.
[ins	E COMMON SEAL ⁴ of ert name of the Contractor] hereunto affixed in the presence of:	-))))
Dire	ector))))
Dire	ector/Secretary)
OR		
for a	-	•
date	er power of attorney ed [] by [] ne presence of : -)))

[Name] [Occupation] Appendix 6C

Appendix 6C Page 7 of 8 **Notes:** (for preparation of but not inclusion in the engrossment of this [guarantee, performance bond etc where appropriate])

- 1. The Contractor must execute the bond as well as the Surety.
- 2. Delete if not applicable. Amend ";" at end of Clause 3(f) to "." accordingly if there is a deletion.
- 3. The address for service shall be in Hong Kong.
- 4. For use where the Contractor executes the agreement through its common seal.
- 5. For use where the Contractor or the Surety, whether a firm or limited company, executes through an attorney.

Appendix 6C Page 8 of 8