



October 2018

INSTRUCTIONS TO TENDERERS
FOR
ELECTRICAL SERVICES INSTALLATIONS
FOR
**STREAT MARKETS LTD
LINK BUILDING, CENTRE POINT
LONDON WC1A 1DD**

This document shall be read in conjunction with the Main Contractors Preliminaries as attached.
Any conflicts shall be brought to the attention of the Consulting Engineer, in writing, prior to the tender return date.

1. General

The accompanying documents describe the requirements of the above project.

2. Acknowledgement

Tenderers shall acknowledge receipt of the Tender documents and confirm that they shall submit a Tender in accordance therewith. This confirmation shall be forwarded by facsimile to the originator of the cover letter within 48 hours of receipt of the Tender documents.

Should a Tenderer decide not to submit a Tender then within 48 hours of receipt of the Tender documents they shall advise by facsimile the originator of the cover letter. The Tender documents including drawings shall be returned forthwith.

3. Submission of Tenders

The Tenderer shall submit two copies of his submission in a sealed package marked on the top left-hand corner with the above description. Tenders shall be returned to the address given in the cover letter so as to be received not later than the date and time specified in the cover letter. Where labels have been provided these must be used to identify the returned Tender.

4. Conditions of Contract

The Contract Conditions shall be those given in these documents and supplemented by the item details included in the following sections.

5. Form of Tender

The Employer requires the Tenderer to summarise his bid in the Form of Tender provided and the Tender shall be supplemented by all other information requested in this Tender enquiry document.

The information requirements are summarised in the Appendices to the Form of Tender.

6. Remuneration

No adjustment shall be made to the Contract sum for fluctuations in price whether caused by variations in the cost of labour, materials or plant.

All sums entered into the Form of Tender and Appendices thereto shall be exclusive of VAT which shall be claimed at the prevailing rate at the time of invoice.

7. Price Submission

All blank spaces in the Form of Tender and Appendices shall be completed by the Tenderer and the complete Form of Tender including all Appendices shall be submitted. Should the Form of Tender not be fully completed the Tender submission may be rejected.

The price is to be submitted broken down in the format shown on the price schedules included in the Appendices to the Form of Tender. The price is to be calculated to include for any premium working hours which may be required to complete the works as described.

The Employer at its absolute discretion may decide to undertake part of the works specified in these documents.

Tenderers shall ensure that the prices quoted in the schedules reflect the content of each phase of the works. Should it be decided to undertake part of the works the prices in the Appendices shall be used to award the Contract.

The Contractor is to specify the time period from Contract award to final completion of all of the specified works.

8. Notes on Pricing

Where applicable the following notes on pricing shall apply:-

The Tenderers' man-hour rates shall include for all payroll burdens including but without limitation, salary, overtime allowance, bonus, National Insurance and Graduated Pensions, Employers Liability Insurance, Contributions by Employer to superannuation or pension funds or other retirement benefit schemes, annual and public holidays with pay, transport, travel time and expenses, subsistence, non-contributory sick pay scheme, supervision and management, site establishment and administration, site and head office overheads, profit, industrial training levy, redundancy payment and compliance with Contracts of Employment Act for all personnel that may be required in connection with the works. The rates shall include for working at all heights and all depths in all locations within the site and for all handling and distribution costs associated with the movement of material, tools and equipment from workshop, vendor, allocated storage or safe working areas to the erection site.

The Lump Sum prices and unit rates entered by the Tenderer in the Form of Tender and Appendices shall be deemed to be the fully inclusive lump sum prices and/or unit rates for the finished work related thereto as are described in, or may be inferred from this Tender enquiry. This Tender document shall be read in conjunction with the Conditions of Contract, Scope of Work, Technical Specifications and General Requirements attached hereto.

9. Alterations

Alterations or erasures in the Tender documents shall be initialled in the margin by the Tenderer. In the event this that instruction is not complied with The Employer reserves the right to disqualify the Tender.

10. Sufficiency of Tender

The Tenderer shall be deemed to have satisfied himself before submitting his Tender as to the correctness and sufficiency of the rates and prices stated by him in his bid which shall (except in so far as it is otherwise provided in the Contract) cover all his obligations under the Contract.

11. Arithmetical Errors

The Employer reserves the right to correct minor arithmetical errors in the way it considers suitable. The Tenderer shall be advised of the discrepancy and will be required to confirm his agreement to the modification.

Should major errors or omissions be discovered in the Tender documents, The Employer may, at its absolute discretion, reject the Tender or require the Tenderer to correct the errors or omissions and to resubmit the Tender taking into account only those items which were in error.

12. Validity

The Tender shall remain valid for 90 days from the Tender closing date and all prices and unit rates shall remain fixed for the duration of the Contract.

13. Formal Response

The Tenderers successful response to this Tender shall be incorporated into any Contract Document resulting from this enquiry.

14. The Formal Contract

The successful Tenderer shall be expected to enter into a formal Contract with The Main Contractor which shall be on the same terms and subject to the same conditions as are contained in the Tender enquiry Documents. The Mechanical Contractor shall be a Domestic Contractor to the Main Contractor.

Tenderers should note that the various documents within this Invitation to Tender shall upon award of Contract be considered part of the Purchase Order to form the Contract Document.

The Employer shall have the right to disqualify any Tender not submitted on this basis.

15. Acceptance

The Employer shall not be bound to accept the lowest or any tender. All tenders shall be deemed to be the Tenderers only and final offer except in so far as The Employer may request any re-Tender. Any unsolicited re-Tenders, of any kind, shall not be considered and may result in disqualification.

It is a fundamental requirement of this enquiry that Tenderers shall submit a Tender strictly in accordance with the specification and associated documents.

However, Tenderers wishing to submit an alternative Tender in addition to that requested herein shall do so as a separate and identifiable package clearly stating the commercial or other benefits to the Company. Alternative tenders must be received by the date specified for the receipt of the main Tender and under the same cover.

16. Sub-Contracting and Personnel

The Tenderer shall give full details of third parties to whom they may sub-contract certain elements of the work. The Employer reserves the right to reject any such sub-contractors.

Tenderers are reminded that nominated personnel shall remain on the project throughout its duration unless agreed otherwise by The Employer in writing.

17. Site Knowledge

Tenderers shall visit the site by appointment to inspect the site and discuss access, site conditions, siting of temporary accommodation, power and water supplies, site regulations and any other relevant matters.

The Tenderer shall be deemed to be fully familiar with the nature and extent of the work and the conditions under which the work is to be carried out. The Tenderer shall take into account all conditions, including weather and Terminal operations, affecting the supply of labour and/or materials and any other matter which may affect his Tender.

In the event of the Contractor failing to comply with this instruction then no claim shall be considered arising from lack of information or knowledge which could have been offset by visiting the site.

All arrangements for site visits shall be made through the person named in paragraph 18 of these instructions.

18. Enquiries

Contact for enquiries is as follows: - Thomas Lehd Tel: 028 2827 7123

19. Tender Documents to be Confidential

The contents of this invitation to Tender, including specifications, designs, drawings or other related documents shall be considered confidential and shall not be divulged by the Tenderer, their servants or agents to any persons, firm or corporation except for the purpose of preparing the Tender. Any such specifications, designs, drawings or other documents shall remain the property of The Employer and shall be returnable on demand.

The Tenderer may be required to sign an Agreement of Confidentiality.

20. No Payment for Tenders

Tenders shall be delivered free of charge to The Employer, who shall not be liable to pay any of the Tenderers costs, including the situation where The Employer request any re-Tender or clarification, whether the Tenderer is successful or not.

21. Sub-Contractors Tax Exemption Certificate

The award of any Contract shall be subject to the successful Tenderer providing proof of the required tax certification.

Tenderer may wish to state the details of their current sub-contractor's tax certificate.

22. Safety

Tenderers shall provide the following information if their bid is successful. Failure to do so may result in disqualification.

- 1) Details of Safety/Accident Statistics for the last three years and the current year.
- 2) Health and Safety Policy index sheet (Full policy to be submitted on request).
- 3) An initial method statement which includes a description of their approach to the Contract works from a safety point of view. (The successful Tenderer will be required to provide detailed safety method statements as described elsewhere in these documents).
- 4) Details of safety arrangements on site with the nomination of a Site Safety Officer.
- 5) Details of their head office Senior Officer responsible for Safety and his communication with site staff.
- 6) The element of cost within a Contract which covers provision of safety measures or equipment. This can be shown as a proportion of overheads or an element within preliminary costs.
- 7) An organogram indicating the site organisation, off site line management and those with a visiting role such as company (group) safety personnel. Those personnel with duties and responsibilities directly relating to the management and implementation of Health & Safety matters should be clearly shown.
- 8) Copies of CV's of key personnel that will be carrying out or managing work.
- 9) Details of technical and managerial procedures to be adopted to ensure the development and implementation of the health and safety plan especially high-risk areas identified by designers.
- 10) Details of procedures to be adopted to ensure employees have a co-ordinated forum for the transferring of Health and Safety matters specific to the project.

The Employer reserves the right to request additional details on the above after Contract award.

23. Health and Safety Plan

The successful Tenderer shall prepare and maintain a fully developed Health and Safety Plan and provide Method Statements as soon as is practicable after the award of the Contract. The Health and Safety Plan and Method Statements shall be developed in conjunction with and with the agreement of the Planning Supervisor utilizing, and where appropriate incorporating, the information relating to the site and its surroundings etc. which is provided as part of the Tender documents.

Where it is not possible to prepare a fully developed Health and Safety Plan prior to commencement of construction, those sections of the Plan which have general or particular relevance to the initial elements of work shall be prepared initially. Prior to commencement of each subsequent element a fully developed Health and Safety Plan shall be in place.

All such documentation will be filed in the appropriate section of the CDM file for the project

24. Program

The Contractor shall submit an outline program with his Tender.

The Tenderer shall provide on award a manpower Program, including details of his labour force by trades or crafts and graphs showing total manpower on a week by week basis, and also a Site Organisation Chart.

25. Evidence of Insurance

The award of any Contract shall be subject to the successful Tenderer providing proof of the required insurances.

Tenderers may wish to submit details with their Tender.

26. Language

All details, data, information and correspondence associated with the Tender and subsequent works shall be in the English language.

27. Liability for Damage

The Contractor shall take all the necessary precautions in the execution of the work to prevent damage to either the buildings, fittings and equipment fitted and/or supplied under other Contracts and the Contractor shall bear the cost of any necessary making good.

28. Overtime

Where, owing to the default of the Contractor, it may be necessary for the work to be carried out at other than normal working hours, he shall so carry on the work without additional payment. If the Contractor is otherwise ordered in writing to work at other than normal working hours, he shall be allowed the nett additional cost incurred in respect of wages of tradesmen and labourers employed.

29. Variations

Variations to Contract shall only be carried out by the Contractor on receipt of written instructions or orders authorised by the Consulting Engineers and payment will not be made to the Contractor in respect of any such work carried out in the absence of such written instructions.

In the case of variations carried out as dayworks, the Contractor must ensure that duly prepared daywork sheets are signed by the Clerk of Works or other authorised representatives of the Employer and also by his own representative as payment in respect of any dayworks will not be made in the absence of signed sheets.

30. Value Added Tax - Increase of Contract Sum

Value Added Tax shall not form part of the tender price.

31. Metrication

The Contractor is hereby required to include for taking all reasonable measure immediately on acceptance of his Tender to ensure that all components and/or materials will be available at the time required in the size of measures referred to in the Contract Documents and this requirement is governed by the following conditions:-

- 31.01 Should it become apparent that because of the changeover to metric, any components or materials will not be so available the Contractor shall forthwith give written notice to the Consulting Engineers stating the sizes or measures in which such components or materials may be available and shall request their instructions. Such notice shall, where practicable, be given in sufficient time to enable the Consulting Engineers to consider and, if necessary, give effect to any design change that may be required and to avoid any unnecessary delay in completing the Contract Works. No departure from the original sizes or measures shall be made except with the written instructions of the Consulting Engineers.
- 31.02 Should the Consulting Engineers be satisfied that the Contractor has carried out the obligations set out above, the Consulting Engineers will issue the necessary instructions and any variations in cost arising there from will be added to or deducted from the Contract Sum and they will allow such extension of the Contract Period as may be considered necessary.
- 31.03 Should the Consulting Engineers not be so satisfied their instruction will require that any additional cost so incurred shall be borne by the Contractor and no extension of the Contract Period will be allowed.

32. Design and Layout of Work

In the design and layout of the Contract Works, the Contractor shall exercise care and consideration, shall plan all runs of pipework, conduit, trunking and cables to fit into surroundings as neatly and unobtrusively as possible, and shall position all units, equipment and accessories with due consideration for appearance so that they shall not clash or interfere with other units, equipment or services. Generally, all runs of pipework, conduit, cable trunking or cables where not specifically indicated on drawings or described in the Contract Documents shall be agreed on site with the Consulting Engineers prior to any work being carried out, but where this is not feasible or practical,

the aforesaid care and attention shall be particularly exercised and the work so carried out shall entirely satisfy the Consulting Engineers when inspected by them or their representative.

It shall be borne carefully in mind at all stages of the Contract that all parts of the Contract Works must be so arranged as to facilitate inspection, testing, cleaning and repairing, the only exception to this being in the care of pipework, conduits, cable trunking or such like actually buried in building structures. In such cases arrangements shall be carefully made for access to, inspection of, testing, replacement etc., of all services installed with the pipework, conduit, cable trunking or such like.

The possibility of fire occurring in any apparatus, equipment or part of the installations shall be borne in mind and extreme care shall be taken to ensure that all electrical connections are efficiently made and all electrical terminals adequately separated one from another and from earthed metal. Generally, the installations shall incorporate every reasonable precaution and provision for the safety of all concerned in the operation and maintenance thereof.

Drawings may be inspected at the Office of the Consulting Engineers.

33. Contract Drawings and Specification

The drawings and specification are the property of the Employer and are loaned to the Building Services Tender solely for the purpose of completing their Building Services Tenderers for the works involved.

The drawings and specification are to be interpreted as being complementary to each other and anything that is shown upon the drawings but is not specifically mentioned in the Specification and vice-versa, is to be included for just as though it has been fully illustrated and described. Should a divergence of information within the Specification and Drawings become apparent to Tenderers such divergence should be made known to the Engineers without delay.

34. Workmanship, Articles and Materials Generally

All goods and materials, if not otherwise specified, shall comply with British Standard which is applicable. Where no B.S. exists the goods and materials shall be of quality consistent with the performance required. Preference shall be given to the use of products manufactured in the local area provided they comply with the terms of the Specification and are readily available at competitive prices.

35. Alternative Equipment

Where a manufacturers or suppliers name is quoted in this Specification against any item of equipment, and no reason is given for the exclusive use of such equipment, it shall be clearly understood by the Contractor that this is for the purpose of making clear the nature and quality of equipment required and does not imply that the Contractor shall use the named equipment to the exclusion of equipment of other manufacture, provided that such is of equal nature and quality, and is approved in writing by the Consulting Engineers before the submission of the Contractors Tender.

If the Consulting Engineers shall convey their approval in writing to the successful Tenderer to the use of alternative items of equipment to those on which his contract price was based it shall be clearly understood that cost variation shall be dealt with as follows:-

- (a) If the substituted equipment costs more than the scheduled equipment, the Contractor may not claim any additional cost.
- (b) If the substituted equipment costs less than the scheduled equipment, the Contractor will be required to credit the Employer with the nett reduction in cost.

The tender documentation shall be priced on the basis of the specified equipment. Alternatives may be offered but identified in a separate section of the Form of Tender. Alternatives offered shall be the sole responsibility of the contractor and must meet the requirements identical to the specified items.

36. Patented Articles

The Contractor shall save and indemnify the Employer and the Main Contractor against all claims, costs or expenses in connection with any patented, copyrighted or protected articles supplied by him or his Sub-Contractors and used on or in connection with the Works, and any payments or royalties payable in one sum or by instalments shall be included in the contract price and paid by the Contractor to whomsoever they may become due. In the event of any claim being made on the Employer or the Main Contractor in connection with such patented or protected articles, they shall immediately notify the Contractor who shall at his own expense conduct any negotiations or litigation in connection with such a claim.

37. Manufacturers Tests

The Contractor on taking delivery of major or specially constructed items of equipment shall obtain from the manufacturer copies of Test Certificates, copies of layout and wiring drawings and copies of instruction and maintenance manuals, all in triplicate, and shall forward these immediately to the Consulting Engineers.

In the event of any of these items not being received by the Consulting Engineers by the time the equipment is due to be taken over and no acceptable reason has been given for such delay, the equipment will not be taken over and outstanding payment will be withheld pending the receipt of the items.

Should the Consulting Engineers wish to witness testing of any items of equipment at manufacturers works and notifies the Contractor accordingly, the Contractor shall ascertain the date of testing and shall give the Consulting Engineers at least 14 days notice of such date.

38. Lead Poisoning

The attention of the Contractor is directed particularly to the 'Lead Paint (protection against poisoning) as the Building Regulations'. The contractor shall be aware that lead pipework may exist on this site. The pipework will require removal and shall be carried out by a certified contractor.

39. 'As Installed' Drawings

The Contractor shall, as the work proceeds, make drawings showing clearly the Contract Works as erected. These 'As Installed' drawings in the form specified in Section I of the Standard Appendices shall be delivered to the Consulting Engineers prior to the date of issue of the Certificate of Practical Completion of the Works.

The cost of the preparation and submission of the 'As Installed' drawings shall be included in the Tender Price and the Contract Final Payment Certificate will not be issued until the drawings have been received and approved by the Consulting Engineers.

The drawings shall be prepared to a standard acceptable to the Consulting Engineers and include all information, dimensions etc., scheduled later in this Specification.

In addition to the requirements as set out in Appendix I, this Contract shall include for the supply of 'As Installed' drawings on CD to AutoCAD release 2005 format.

40. Facilities by Main Contractor

Although under the terms of the Main Contract, the Main Contractor shall give all reasonable facilities for the execution of the work to be carried out. Under this contract, equipment including the use of scaffolding, ladders, etc., shall be provided as part of this Contract. Any specialised plant or equipment required shall also be provided by the contractor for the proper and expeditious completion of this Contract.

41. Storage

The Contractor shall be fully and entirely responsible for the safe and dry storage of all equipment plant and materials required for the execution of the Contract and shall replace or completely make good any items damaged in any way as a result of poor storage. He shall also be responsible for ensuring that suitable storage accommodation is available to permit the taking of delivery of all materials and equipment as sent forward by manufacturers so that no delay in contract progress may result. Any workshop or offices required on site by the Contractor shall be provided and the foregoing requirements relating to location, subsequent removal etc., for storage accommodation shall apply.

42. Cleanliness of Site

The Engineering Contractor shall be responsible for clearing from the site, as soon as possible, all surplus materials, packaging, debris, etc., arising from work within the Contract, to the satisfaction of the Consulting Engineers.

43. Builders Work Drawings

The Contractor shall include in his Tender for supplying a complete set of Builders Work drawings (copies in triplicate) showing in detail all builders work required in respect of bases, plinths, trenches, bearers and the like and holes required to be cut through walls, floors and ceilings.

These drawings shall be submitted to the Consulting Engineers as soon as is practicable after completion of the Contract Documents and in any event in sufficient time to prevent undue delay in the progress of the building works.

44. Builders Attendances

Generally, all attendant builders work will be the responsibility of the Employer and will be provided by the Main Building Contractor. The Engineering Contractor shall however provide detailed drawings showing all such Builders Work as and when necessary.

Minor attendances may be set out on site and the Engineering Contractor shall be responsible for any additional work incurred due to inaccurate setting out.

All plugging and raw bolting and preparation for same shall be carried out by the Engineering Contractor.

Attendant builders works shall include all holes for pipes, brackets, etc., setting pipe sleeves, brackets or stay in brickwork or concrete, the forming of bases, ducts and duct covers, and generally all builders works as is reasonably required by this Contract and which does not form a part of the Contractors obligations.

Where the works include for the provision and installation of radiators the Contractor shall include in his Tender for the removal and re-erection on two occasions, of all such radiators to enable others to undertake and complete the painting of the premises and the radiators.

It shall be noted that all holes 50mmx50mm or below shall be formed under this contract. All larger holes shall be provided by the Main Contractor. It shall be under this contract that all holes be marked 5 working days prior to requirement.

45. Operation and Maintenance Manuals

The Contractor shall provide 2 bound copies of an Operation and Maintenance Manual, this shall be a condition precedent to the issue of any final Certificate or Valuation.

The manuals shall contain the following sections:-

- (a) An introduction to and general description of the installation, its plant and its operation;
- (b) Instruction for routine maintenance with charts showing the quantity and type of lubricant to be used together with the recommended frequency of application;
- (c) Instruction for the stripping, inspection, re-assembly testing and re-commissioning of the plant.
- (d) Where applicable, fault-finding charts to assist in locating faults;
- (e) Spare and replacement parts listed with names and addresses of suppliers and the procedures to be followed for the purchase of such parts;
- (f) A complete list of the equipment supplied with details of manufacturers, model, types and serial numbers and where applicable copies of manufacturers catalogues for each item.
- (g) Reduced copies of wiring schematics and pipework systems, plant layouts, etc. Reduced copies shall be reduced only to a size at which detail is still discernible;
- (h) Copies of all inspection and test certificates, pump performance curves, etc.
A collection of manufacturer's descriptive literature, instruction sheets, charts, lists, pamphlets, etc will not be acceptable in place of the Operation and Maintenance manuals but may be accepted as complementary thereto provided they are contained in suitable bindings and clearly marked with the name of the scheme.

As Installed Drawings, Brochures and Instruction Manuals shall also be provided in CD format, 3 CD's to be provided.

All manufactures details, certificates etc shall be scanned and included on the CD together with the Drawings.

Two paper copies of the Drawings, Brochures and Manuals are also to be provided.

46. Meaning of 'Approved' and 'Suitable'

Throughout the Contract Documents the works 'approved' and 'suitable' wherever they may occur, shall respectively have the special meaning 'approved in writing by the Consulting Engineers', and all 'suitable in the opinion of the Consulting Engineers', and all materials and equipment so described shall be submitted to the Consulting Engineers for their comments and/or approval.

47. Price Schedule

After the submission of tenders, and within five days of a request from the Consulting Engineers, selected tenderers shall be required to furnish a comprehensively priced schedule of materials (including erection) with each item priced separately. The total of this Schedule shall be the price tendered. Whilst this Schedule will not be binding relative to the Contract proper it will be used as a guide in the assessment of this valve of contract variations.

48. Provisional Sum for Contingencies

Where a Provisional Sum for Contingencies is included in the Contract, it shall be expended wholly or in part only as directed by the Consulting Engineers, and if no such directions are given it shall be wholly deducted from the Tender Price without having any effect on the rate of profitability of the remainder of the Accepted Contract Price to the Contractor.

49. Temporary Electricity Supplies and Charges

If the Conditions of the Main Contract include for the provision on site by the Main Contractor of a temporary supply of electricity for use by the Main Contractor and his Contractor, the Contractor shall be at liberty to make use of such supply of arrangement with the Main Contractor for the operation of temporary lighting, power tools etc.

The Contractor shall note however, that the temporary supply, will be provided at one point only by the Main Contractor and all wiring etc., from this point and all control equipment, sockets, lights etc., required by the Contractor shall be his own responsibility entirely to supply, install, maintain and subsequently remove and payment for all electricity consumed shall also be the responsibility of the Contractor.

Payment for electricity consumed shall be made to the Main Contractor by private arrangement with him and the method of ensuring or computing consumption and costs shall be as required by and arranged with the Main Contractor.

If the Main Contract Conditions do not include for the provision on site by the Main Contractor of a temporary supply of electricity and such a supply is required by the Contractor, then the Contractor shall himself make all the necessary arrangements and pay all costs concerned having included in his Tender accordingly.

50. Existing Services

Should there be existing services on the Contract site the Contractor shall not in any way interfere with them unless it is specifically instructed in the Specification or unless specific permission is obtained in writing from the Consulting Engineers.

In the event of any damage or disruption being caused by the Contractor to any such services either inadvertently or otherwise, the Contractor shall be fully responsible for their repair, reinstatement and any consequential action by the third party.

51. Notices and Fees

All Notices necessary in connection with this Contract in accordance with Bye-Laws and/or Local Authority, Electricity Supply Authority etc., Regulations shall be prepared by the Sub-Contractor and served on the body concerned, and the Sub-Contractor shall be fully responsible for the payment of the associated fees.

52. Nature of Electricity Supply

The Electricity Supply to which the complete Electrical and Mechanical Services Installation will be connected will be 400/230 Volts, 50 Hz. a.c., and will be made available by the local Electricity company at the Main Switchgear in the Main Switchroom.

53. Completion and Handing Over

On completion of the contract works the Sub-Contractor shall provide the Consulting Engineers with a Completion Certificate certifying the overall completion of the works in accordance with the Conditions of Contract, the Specification, Drawings and variation instructions. This Certificate shall be provided on the date agreed for completion but in the event of the works not being complete on that date a statement of outstanding work shall be provided stating the date on which the works will be completed, and the Completion Certificate shall be provided on the date the works are actually completed.

54. Completion Period

The Contractor shall be required to schedule the delivery of materials and regulate the progress of erection in accordance with the requirement of the Main Contractor's Programme of Works referred to in the Conditions of Tendering. No variation of the Contract Price will be admissible in respect of overtime worked to this end. Since such charges shall be deemed to have been included in the original price tendered.

Tenderers shall clearly indicate all those materials specified, the extended delivery of which is likely to prevent the fulfillment of the completion requirements.

55. Maintenance

The contractor shall allow for full maintenance of all systems throughout the defects and liability period (12 months) providing full service certificates for relevant appliances. Agreements to be set up prior to handover, with completed documents within the O&M manual.

56. Demonstration

The contractor at the end of the contract shall allow for demonstrating all systems to the employer and intended users. This shall take place prior to handover. The contractor shall allow in his price for the return to site on 3 separate occasions to demonstrate all plant, equipment and controls to the engineer and client after the training period.

57. Training

The contractor shall allow for providing an experienced engineer to instruct the employer's staff in operating, maintaining and servicing the entire plant. The engineer is to give instructions for a minimum period of two weeks before the installation is handed over to the client.

58. Legionnaires Disease

The contractor shall take all necessary precautions to comply with the Water Service Statutory Requirements when carrying out his installation.

He shall ensure that the installation complies in every way with the above regulations and shall be responsible for taking any measures necessary to enable the water supply to be switched on to the building as per programme.

It is therefore in the contractor's interest to keep the Water Service Inspectors fully involved on this installation. Should the contractor become involved in any additional costs because his installation has not been carried out in line with the statutory requirements, then he will have to carry out this work at his own cost.

59. Contractors Queries

All queries from the contractor, whether at tender or installation stage, should be faxed through to the consultant's office at the earliest possible opportunity. Confirmation of the contractor's instructions shall then be issued by the consulting engineer.

Telephone queries should only be used where work on site would be delayed if an immediate answer was not given (with an appropriate reason for the late request).

60. Forward Planning

The contractor shall be responsible for forward planning of his installation. Any possible delays should be relayed to the consulting engineer as soon as possible, but no monetary or programme alterations will be accepted because of these delays.

61. General Pipework Information

It is the contractor's responsibility to position all pipework, ducts etc in ceiling spaces, vertical ducts, voids etc in such a way as to minimise crossovers.

Where a considerable number of pipes/ducts are installed in a vertical duct (builders) then the installation shall be carried out in such a way that maintenance is possible after completion of the installation on any of the plant installed.

Adequate supports must be provided both in the horizontal and vertical planes for all ducts and pipework.

Access must be available to all points of mechanical and electrical equipment which require maintenance from time to time or which may be susceptible to failure. Any plant or equipment installed in such a way that does not allow for ease of maintenance will be adjusted at the contractor's own expense.

62. Warranty

The Contractor shall provide 12 months full warranty cover on all Mechanical and Public Health Services as installed. The warranty shall run from date of practical completion as certified by the architect.

63. Co-ordination Drawings

The Contractor shall liaise with the other sub-contractors on site (i.e. Mechanical, Electrical, Air Conditioning or Sprinkler) regarding final routes of all services. Zones shall be agreed with all parties prior to work commencing on site. Final agreement shall be issued to the consulting engineer prior to the commencement.

Each contractor shall employ a common CAD technician for the site to prepare fully coordinated drawings, both in plan and section for issue to the consulting engineer for approval prior to work commencing. All fully coordinated drawings should be issued to the consulting engineer a minimum of three weeks before works commence in each zone.

64. Verification of orders

The Contractor shall ensure that all items of lighting, plant, sanitary ware, heating etc shall be counted and ordered to on-site requirements. Failure to do so will result in over spends or under spends being the responsibility of the contractor and will not be accepted as a variation to the contract. All other items shall be confirmed in writing with the Consulting Engineer prior to ordering.

65. Printing of Drawings

The Contractor shall be aware that all drawings for this contract will be issued electronically. The Contractor must print all tender drawings in colour and full size. The contractor will also be responsible for the printing of all drawings and associated costs shall be included in the tender for onsite requirements. The contractor shall review the magnitude of the project and ensure that adequate allowances of costs are included within the tender.

END OF INSTRUCTIONS TO TENDERERS