

# Wokingham Borough Council

# Invitation to Tender Installation of new hot flow and return

# Pipework at Meachen Court, Wokingham

**Civic Offices**

**Shute End**

**Wokingham**

# RG40 1WN

**HS-AM 01003**

**Date: 14th February 2018**

## 

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## Form of Tender

## Wokingham Borough Council

**Tender for the installation of new hot flow and return pipework at Meachen Court, Wokingham.**

To: Wokingham Borough Council

I/We have perused the Wokingham Borough Council Specification and Conditions of Contract for the above work and noted the areas of operation as necessary.

Should this tender be accepted, I/we hereby undertake to execute all the works comprised in the said Specification in accordance with the aforesaid Conditions of Contract, and to the entire satisfaction of Wokingham Borough Council, based on the pricing model, for the sum (exclusive of Value Added Tax) of:

Amount in figures: £ (Excluding VAT)

Amount in words: pounds

(Excluding VAT) pence

Should this tender be accepted, I/we hereby undertake that I/we will enter a Contract to be prepared by Wokingham Borough Council and executed as a Deed for the due performance of the said works, and agree that until such a Contract is executed the said Specification, Conditions of Contract and this Tender, together with the acceptance thereof in writing by Wokingham Borough Council shall be the Contract.

I/We declare that the amount of this tender has not been calculated by agreement or arrangement with any person other than the Council and has not been communicated to any person other than the Council and will not be so communicated until after the closing date for the submission of tenders.

I/We hereby submit this tender in accordance with the Notes below.

Date Signature

Full name of Tenderer

Address

Company Registration Number

### Partners

In the case of a firm not being a limited company, the full name and addresses of each of the Partners must be given in the space below. (This is to enable the necessary Contract to be prepared in the event of the Contractor’s tender being accepted).

1.

2.

3.

4.

(include in each case the County in which the address is situated)

NOTES

1. The completed tender is to be returned using the label provided which is addressed to Wokingham Borough Council and marked ‘Meachen Court, Installation of new hot flow and return pipework’ and is to be returned to that address no later than **12.00 noon on Monday 16th April 2018**.

No tender will be accepted unless it is addressed to Wokingham Borough Council and returned using the tender submission label provided and shall not have any other mark, name or postal franking indicating the sender.

2. Wokingham Borough Council reserves the right not to accept the lowest priced tender or any of the tenders submitted.

3. The price submitted must be a firm price, subject only to the review provided for in the Contract.

# 4. All prices and rates given must be exclusive of Value Added Tax and Value Added Tax (if applicable) should be shown on your invoice as a separate item.

# Appendix to Tender Form submitted under Wokingham Borough Council Conditions

# of Contract

1. Date of Commencement/Licence to access works: 21st May 2018.

2. Contract Period: Six weeks.

3. Date for Completion: 30th June 2018.

4. The Contractor is to enter below details of his Employers Liability Insurance.

The minimum cover required by the Council is Ten Million Pounds

Insurance Company

Policy Number

Expiry Date

Amount of Cover

5. The Contractor is to enter below details of his Public Liability Insurance.

The minimum cover required by the Council is Ten Million Pounds

Insurance Company

Policy Number

Expiry Date

Amount of Cover

6. The Contractor is to enter below details of his Damage to Property Insurance.

The minimum cover required by the Council is Five Million Pounds

Insurance Company

Policy Number

Expiry Date

Amount of Cover

7. The Contractor is to enter below details of his Professional Indemnity Insurance.

The minimum cover required by the Council is Five Million Pounds

Insurance Company

Policy Number

Expiry Date

Amount of Cover

**Statement Relating to Good Standing**

GROUNDS FOR OBLIGATORY EXCLUSION (IN ELIGIBILITY) AND CRITERIA FOR REJECTION OF CANDIDATES IN ACCORDANCE WITH REGULATION 57 OF THE PUBLIC CONTRACTS REGULATIONS 2015

**We confirm that, to the best of our knowledge, the Contractor is not in breach of the provisions of Regulation 57 of the Public Contracts Regulations 2015 and in particular that:**

**Grounds for mandatory rejection (ineligibility)**

1. **The Potential Provider (or its directors or any other person who has powers of representation, decision or control of the named organisation) has not been convicted of any of the following offences:**
2. conspiracy within the meaning of section 1 or 1A of the Criminal Law Act 1977 or article 9 or 9A of the Criminal Attempts and Conspiracy (Northern Ireland) Order1983 where that conspiracy relates to participation in a criminal organisation as defined in Article 2 of Council Framework Decision 2008/841/JHA on the fight against organised crime;
3. corruption within the meaning of section 1(2) of the Public Bodies Corrupt Practices Act 1889 or section 1 of the Prevention of Corruption Act 1906;
4. the common law offence of bribery;
5. bribery within the meaning of sections 1, 2 or 6 of the Bribery Act 2010, or section 113 of the Representation of the People Act 1983;
6. where the offence relates to fraud affecting the European Communities’ financial interests as defined by Article 1 of the Convention on the protection of the financial interests of the European Communities:
7. the common law offence of cheating the Revenue;
8. the common law offence of conspiracy to defraud;
9. fraud or theft within the meaning of the Theft Act 1968, the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;
10. fraudulent trading within the meaning of section 458 of the Companies Act 1985), article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;
11. fraudulent evasion within the meaning of section 170 of the Customs and Excise Management Act 1979 or section 72 of the Value Added Tax Act 1994;
12. an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;
13. destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969;
14. fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006; or
15. the possession of articles for use in frauds within the meaning of section 6 of the Fraud Act 2006, or the making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of that Act;
16. any offence listed
17. In section 41 of the Counter Terrorism Act 2008; or
18. in Schedule 2 to that Act where the court has determined that there is a terrorist connection;
19. any offence under sections 44 to 46 of the Serious Crime Act 2007 which relates to an offence covered by subparagraph (f);
20. money laundering within the meaning of sections 340(11) and 415 of the Proceeds of
21. Crime Act 2002;
22. an offence in connection with the proceeds of criminal conduct within the meaning of section 93A, 93B or 93C of the Criminal Justice Act 1988 or article 45, 46 or 47 of the Proceeds of Crime (Northern Ireland) Order 1996;
23. an offence under section 4 of the Asylum and Immigration (Treatment of Claimants, etc.) Act 2004;
24. an offence under section 59A of the Sexual Offences Act 2003;
25. an offence under section 71 of the Coroners and Justice Act 2009;
26. an offence in connection with the proceeds of drug trafficking within the meaning of
27. section 49, 50 or 51 of the Drug Trafficking Act 1994; or
28. any other offence within the meaning of Article 57(1) of the Public Contracts Directive—
29. as defined by the law of any jurisdiction outside England and Wales and Northern Ireland; or
30. created, after the day on which these Regulations were made, in the law of England and Wales or Northern Ireland.
31. **The Potential Provider (or its directors or any other person who has powers of representation, decision or control of the named organisation) is not**
32. in breach of its obligations relating to the payment of taxes or social security contributions which has been established by a judicial or administrative decision having final and binding effect in accordance with the legal provisions of the country in which it is established or with those of any of the jurisdictions of the United Kingdom, or
33. has fulfilled its obligations by paying, or entering into a binding arrangement with a view to paying, the taxes or social security contributions due, including, where applicable, any interest accrued or fines.

|  |  |
| --- | --- |
| **Organisation’s name** |  |
| **Signed** |  |
| **Position** |  |
| **Date** |  |

**Discretionary grounds for rejection**

1. **(For Central Government contracts and others over £5M)**

**The Potential Provider (or its directors or any other person who has powers of representation, decision or control of the named organisation) confirms that it:**

1. is not in breach of its obligations relating to the payment of taxes or social security contributions that can be demonstrated by the contracting authority by any appropriate means, or
2. has fulfilled its obligations by paying, or entering into a binding arrangement with a view to paying, the taxes or social security contributions due, including, where applicable, any interest accrued or fines.
3. **The Potential Provider (or its directors or any other person who has powers of representation, decision or control of the named organisation) confirms that it:**
4. is not in violation of applicable obligations in the fields of environmental, social and labour law established by EU law, national law, collective agreements or by the international environmental, social and labour law provisions listed in Annex X to the Public Contracts Directive as amended from time to time, which can be demonstrated by the contracting authority by any appropriate means;
5. is not in bankrupt or is not the subject of insolvency or winding-up proceedings, where its assets are being administered by a liquidator or by the court, where it is in an arrangement with creditors, where its business activities are suspended or it is in any analogous situation arising from a similar procedure under the laws and regulations of any State;
6. is not guilty of grave professional misconduct, which renders its integrity questionable which can be demonstrated by the contracting authority by appropriate means;
7. has not entered into agreements with other economic operators aimed at distorting competition which the contracting authority has sufficiently plausible indications to conclude;
8. in a conflict of interest within the meaning of regulation 24;
9. was not involved in the preparation of the procurement procedure, as referred to in regulation 41;
10. has not shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions;
11. has not been guilty of serious misrepresentation in supplying the information required for the verification of the absence of grounds for exclusion or the fulfilment of the selection criteria or has not withheld such information or is not able to submit supporting documents required under regulation 59;
12. has not undertaken to unduly influence the decision-making process of the contracting authority or to obtain confidential information that may confer upon it undue advantages in the procurement procedure;
13. has not negligently provided misleading information that may have a material influence on decisions concerning exclusion, selection or award.

|  |  |
| --- | --- |
| **Organisation’s name** |  |
| **Signed** |  |
| **Position** |  |
| **Date** |  |

Schedule of Subcontractors

**and Service Providers**

Please enter details of sub-contractors which you intend to use in fulfilling the requirements of this contract, should you be successful in being awarded the contract. Tenderers should note that it is a condition of this tender and subsequent contract that no works can be sub-let unless previously approved by Wokingham Borough Council. Completion of this section of the tender provides such approval to the successful tenderer. Where it is intended to sub-let but a sub-contractor has not been selected, then enter “to be advised” under name.

|  |  |
| --- | --- |
| Work activity |  |
| Name |  |
| Address |  |
|  |  |
|  |  |
| Work activity |  |
| Name |  |
| Address |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| Work activity |  |
| Name |  |
| Address |  |
|  |  |
|  |  |

Please continue on separate sheet(s) if necessary:

**Certificate of Non-Collusion**

**RE: Meachen Court, Palmer School Road, Wokingham RG40 1TJ**

**(TENDERER):**

**TO: WOKINGHAM BOROUGH COUNCIL**

1. The essence of selective tendering is that the Client shall receive bona fide competitive tenders from all firms. In recognition of this principle, I/we certify that I/we have submitted a bona fide tender intended to be competitive and that I/we have not fixed or adjusted the amount of the Fees or other rates or prices by or under or in accordance with any agreement or arrangement with any other person.
2. I/we also certify that I/we have not done and I/we undertake that I/we will not at any time prior to the date of the return of tenders or any subsequently amended date for the return of tenders any of the following acts:
   1. Communicating to a person (other than the Housing Services Procurement Lead Officer in the manner specified in the tender documents) the amount or approximate amount of the Fees or other amounts to be inserted in the Form of Tender.
   2. Entering into any agreement or arrangement with any person that he will refrain from tendering or as to the amount of any tender to be submitted.
   3. Offering or paying or giving or agreeing to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the provision of the services any act or thing of the sort described above.
3. I/we acknowledge that if I/we have acted or shall act in contravention of this certificate the Wokingham Borough Council will be entitled to cancel the contract and recover from my/our firm the amount of any loss and expenses resulting from such cancellation.

Signed:

Date:

# Section 1

# of the Tender Documentation

# Instructions to Tenderers and Tender Evaluation Methodology

**Instructions to Tenderers**

1. Tenderers shall obtain at their own expense all information necessary for making a tender and must undertake an adequate consideration of the geographic areas of operation of the Council and examine and consider all matters referred to in the documents, including the preliminaries, preambles and specification, to be able to make an informed bid.
2. The return date for completed tender submissions is 12:00 (noon), Monday 16th April 2018**.**  Any tenders received after this time will not be considered.
3. Tenderers shall return their tender strictly in accordance with the instructions contained in this document. Any tender, which does not fully comply with the requirements of these instructions, will be rejected by the Council. Tenders shall be returned in duplicate using the supplied mailing label, and an electronic copy of the tender on a CD, DVD or USB format shall be included; the envelope must be sealed and shall bear no marking that may identify the sender (including the use of company franking marks).
4. Tenderers shall complete the Form of Tender together with the Contract sum (exclusive of VAT). No alterations shall be made by the Tenderer to any part of the Tender Documents other than the filling up of blanks intended to be filled by the Tenderer. Where additional space is needed (and within the limits on numbers of words to be used specified in the documentation) additional pages may be inserted properly cross referenced to the question to which they relate. Additional pages shall be on plain paper with no company logo printed or used as a watermark.
5. If any error should be made in completing the tender documentation, this should be lined through with a single line and be initialled.
6. The Council reserves the right to reject any tender which does not comply with the requirements of these instructions.
7. The tendered price submitted by tenderers will be fixed, and available for acceptance by the Council, for a period of 90 days following the return date for tenders.
8. The Council is not bound to accept the lowest, or any, tender, nor does it bind itself to consider a conditional tender.
9. The Council reserves the right to interview tenderers to discuss the areas covered within the method statements. This may result in the leading tenderer being interviewed to ensure full and proper understanding of the methods before any appointment. In such a case an appointment will be arranged for attendance of an interview on a particular day of the week.
10. Every tenderer, before making his tender, shall peruse and consider all tender documents and shall obtain for himself on his own responsibility and at his own expense all the information necessary for making a tender.
11. No claims will be entertained for any alleged deficiency, error or inaccuracy of the description or other information contained in the tender documents, which the tenderer could have reasonably been expected to confirm for himself.
12. Any doubt or obscurity as to the meaning or intentions of the tender documents shall be set out in writing within an email to the Council’s point of contact for this procurement (details at 24 below) and an explanation obtained prior to the submission of the tender. Such explanations by the Council’s point of contact shall be as a matter of assistance to the tenderer, but they shall not be construed as to add to, or take away from, or otherwise alter the meaning or the intent of the tender documents. Any material information so supplied to any tenderer by way of explanation will be supplied also to all other persons invited to tender for the contract. **Clarification requests of this nature will not be accepted in the last seven days before the tender return date and no clarifications will be issued within the last three days of the tender period;** tenderers are therefore recommended to read the documentation thoroughly allowing sufficient time to seek any clarifications before this deadline. If a tenderer considers an enquiry to be confidential, this should be made clear when submitting the enquiry; the Council reserves the right to determine whether any such enquiry is confidential and if it determines that such enquiry is not confidential, it shall offer the enquirer the option of having the enquiry answered with information being published to all tenderers, or the enquirer may withdraw their enquiry.
13. If it is found on examination of the tender that there is any arithmetic discrepancy between the total amount inserted in the summary page and the amount arrived at by valuing the items set out in the Schedule of Rates, then the value of the individual elements shall be taken as the tendered sum; where this is different to the total in the summary, the tenderer shall be invited to accept this revised total or withdraw their tender.
14. Tenderers must provide Method Statements as part of their tender submission on plain paper without watermarks or company logos. Diagrams, tables and appendices may be used but any elements that are required to be read shall contribute towards the word count indicated. Any wording over the word count limit, including wording in any embedded documents, diagrams, appendices etc., will not be evaluated and if excessive, may disqualify the tender. This is to ensure concise answers, to ensure consistency between potential providers and to assist in the management of the evaluation process.
15. Responses should not exceed the word count stated. Any wording in the document, or embedded document(s), over the limit will not be evaluated.

For this purpose, “word” shall be given its normal meaning, i.e. a single unit of language.

Please note each word (or number comprising individual numerals) should be separated by spaces and a string of words conjoined by slashes or any other punctuation mark or similar character will not be counted as a single word, (notwithstanding any automated word count facility) but will be counted as separate words.

Illustrative images will be allowed but those that contain text will be evaluated as described in the following example: If a newspaper/magazine article is included and it is apparent that the article is intended to be read, this would form part of the word count for that question. The word count is applied to the text in the order as it appears in the statement, regardless of whether the text is in the narrative or an image. When the word count limit is reached, all the following text will be redacted. Where an image does not include legible words and merely illustrates a concept that has been described in the typed text, this will be allowed and will not contribute towards the word count. The decision of the Council in this respect is absolute and will be applied consistently for all tenders and by all evaluators.

1. Tenderers must provide the following documentation/information as part of their Tender submission (unless stated otherwise, any services described in method statements will be understood to be at no additional cost)

**Installation of New Hot Flow and Return Pipework at Meachen Court**

**Method Statement Questions 1-5**

|  |  |  |
| --- | --- | --- |
| **FORM G** – **TECHNICAL ABILITY – SCORED** | | |
| **MS (1)** | Please provide a Method Statement detailing how your organisation has the ability to deliver the pipe works described in the specifications, the resources to be employed and programme management for successful delivery. (max 500 words)  **(12%)** | SCORE METHOD:  Exceptional standard of response exceeds requirements includes articulate examples detailing the ability to fully deliver required works/services = (10 points)  Competent standard of meets requirements and is supported by satisfactory level of evidence, response includes reasonable examples detailing the ability to deliver required works/services = (6 points)  No response provided and/or substantial omissions that gives WBC cause for major concern, includes poor/no assurances of the ability to meet the works/service requirements = Fail (zero points) |
| **MS (2)** | Please provide details of the technical abilities and experience of the individual employees and sub-contractors (if used) to be engaged during the installation of new pipework at Meachen Court, how the contractor will notify residents of commencement of works, monitors performance and communicates updates, progress and works information to the client. (max 500 words):  **(12%)** | SCORE METHOD:  Exceptional standard of response, exceeds requirements, response including a full set of appropriate skill sets and experience, fully monitoring performance and detailed reporting to WBC = (10 points)  Competent standard of response ,meets requirements, includes some relevant skills and experience with competent monitoring = (6 points)  No response and/or substantial omissions which gives WBC cause for major concern, includes little or no relevant skill sets or experience = Fail (zero points) |
| **MS (3)** | Please provide a Method Statement on addressing performance issues, such as, poor performance, non-delivery and delayed completion. What alternative or contingent plan/resources could be used to address the aforementioned issues? Examples of existing and previous contracts can be used to illustrate the approach taken. (max 500 words):  **(12%)** | SCORE METHOD:  Exceptional standard of response exceeds requirements, that addresses the issues of speed of response, alternative/additional resources to be assigned to solve problems, ,good client communication and cooperation = (10 points)  Competent standard of response that includes a reasonable speed of response, some communications and client service = (6 points)  No response and/or substantial ommissions that fails to adequately address the issues of speed of response, communications and/or customer service gives WBC cause for major concern = Fail (zero points) |
| **MS(4)** | Please provide a Method statement explaining the management of risk, identifying those elements that relate to the health and safety of employees, sub-contractors, residents and visitors, actions to be taken to reduce or mitigate the risks associated with the specified works. (max 500 words):  **(12%)** | SCORE METHOD:  Exceptional standard of response exceeds requirements, includes good stock holding, including van stocks, and stock control arrangements that are suitable for the WBC lift portfolio = (10 points))  Competent standard of response meets requirements, includes a response that provides assurance that most parts required for the WBC lift portfolio will be available from stock = (6 points)  No response provided and/or substantial ommissions, includes those which fail to give confidence that suitable stocks will be maintained = Fail (zero points) |
| **MS(5)** | As a contractor please provide details of your organisations ability to work with non-notifiable asbestos, explaining the management of risk, training and instruction given to employees and sub-contractors (if used) that may be engaged working on the installation of new pipework at Meachen Court. (max 300 words):  **(12%)** | SCORE METHOD:  Exceptional standard of response, exceeds requirwements, includes those which give assurance that the information will be relevant, comprehensive and available in a timely manner = Pass (10 points) (  Competent standard of response meets requirements, includes those which provide feedback on faults and actions to be taken to resolve them = (6 points)  No response provided and/or substantial ommissions includes those which fail to give confidence that timely and/or relevant information will be provided = Fail (zero points) |

1. Tenderers are advised that tenders will be evaluated under the following criteria, in order of priority:

**Price 40%**

**Quality**

**Delivery and resourcing of works (MS1) 12%**

**Technical ability and experience (MS2) 12%**

**Performance, monitoring and communication (MS3) 12%**

**Risk assessments and management during pipework   
at Meachen Court (MS4) 12%**

**Non-notifiable asbestos working (MS5) 12%**

**Quality Total**  **60%**

**100%**

1. The Council shall not be responsible for, or pay for, any expenses or losses incurred by tenderers in the preparation of their tender or by any tenderer who fails to tender.
2. Canvassing tenderers will face automatic disqualification if they canvass for the contract or if they make any approach to any employee, officer or Councillor of Wokingham Borough Council with the view to gaining more favourable consideration of their tender.
3. Tenderers must submit with the tender details/statement of the insurances which they intend to use to meet the requirements of the relevant clauses in the Conditions of Contract. Any policy shall cover the whole of the minimum amount stated in the contract.
4. The successful tenderer will be required to complete all forms of insurance after the acceptance of the tender by the Council and before the contract starts.
5. The levels of insurance required are:

£10,000,000 (Ten million) for public liability

£10,000,000 (ten million) for employers’ liability

£5,000,000 (five million) for professional indemnity

£5,000,000 (five million) for damage to property

1. These instructions shall be deemed to form part of the tender documents.
2. The main point of contact in this tendering process is:

Philip Harper-Oliver  
Contracts and Procurement Manager  
Housing Services  
Wokingham Borough Council  
PO Box 154, Shute End  
Wokingham  
Berkshire  
RG40 1WN

E-mail: [Philip.Harper-Oliver@wokingham.gov.uk](mailto:Philip.Harper-Oliver@wokingham.gov.uk);

Enquiries may be sent also at: [housingservicestenders@wokingham.gov.uk](mailto:housingservicestenders@wokingham.gov.uk)

Mobile: 07766 423997.

Jason Brunskill

Lead Electrical & Mechanical Surveyor

Housing Services

Wokingham Borough Council

PO Box 154, Shute End

Wokingham Borough Council

Berkshire

RG40 1WN

Email: [Jason.Bunskill@wokingham.gov.uk](mailto:Jason.Bunskill@wokingham.gov.uk)

Mobile: 07801 664535

**Checklist for return of Tenders**

Tenders shall comprise the following items:

* Form of Tender
* Appendix to the Form of Tender
* Statement Relating to Good Standing
* Schedule of Sub-Contractors (if to be used)
* Certificate of Non-Collusion
* Five method statements
* Total Works Price (excluding VAT)
* Declaration of Related Party Transactions

**The label below is to be printed, cut out and used to return the Tender Document**

****

**DEMOCRATIC SERVICES – TENDER RETURNS**

**WOKINGHAM BOROUGH COUNCIL**

**CIVIC OFFICES, SHUTE END**

**WOKINGHAM**

**BERKSHIRE**

**RG40 1BN**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TENDER**  Re-pipework Meachen Court  **To be returned NO LATER THAN:**  **(noon) 12-00 hours**  On **Monday 16th April 2018** | **OFFICIAL USE ONLY:**   |  |  | | --- | --- | | Date Received |  | | Time Received |  | | Received By (Print) |  | | Received By (Sign) |  | |

**THIS DOCUMENT IS ONLY TO BE OPENED BY AUTHORISED OFFICERS**

Office use:

Received by………………………………………………………….Date………………………………Time……………………………

**P**

Tender Evaluation Methodology

Tenders shall be evaluated on the basis of most economically advantageous tender. At high level the criteria shall be weighted:

Price 40%  
Qualitative 60%

**Price Evaluation**

Prices should be consistent across the schedule of rates with consistent treatment of those items in the pricing model and other items. Upon opening of tenders prices will be checked for consistency in this respect and an explanation may be sought for any apparent inconsistencies.

Price shall be evaluated on a comparative basis with the lowest priced tenderer being awarded 40% and other tenderers being awarded a reduced percentage on a comparative basis, for example:

|  |  |  |  |
| --- | --- | --- | --- |
| Contractor | Pricing Model Bid | Percentage of available score (40%) | Awarded Score |
| A | £600,000 | 100% | 40% |
| B | £630,000 | 95.2% | 38.10% |
| D | £675,000 | 88.9% | 35.56% |
| C | £700,000 | 85.7% | 34.28% |

**Qualitative Evaluation**

Qualitative elements shall be evaluated against a standard scheme of scores that rank method statements on a scale of 0 to 10, where 1 is the lowest score awarded and 10 the highest, with a score of five indicating a satisfactory answer

Scores will be based on the maximum possible score for each section and awarded on a pro-rata basis in the following manner:

Method Statement 1 (12% of overall score)   
Contractor is awarded 10 points – they will receive 10/10 x 12% = 12%

Method Statement 2 (12% of overall score)   
Contractor is awarded 7 points – they will receive 7/10 x 12% = 8.4%.

Method Statement 3 (12% of overall score)   
Contractor is awarded 4 points – they will receive 4/10 x 12% = 4.8%

Method Statement 4 (12% of overall score)   
Contractor is awarded 1 points – they will receive 1/10 x 12% =1.2%

Method Statement 5 (12% of overall score}

Contractor is awarded 0 points – they will receive 0/10 x 12% = 0.0%

The qualitative scores will be added to give a total qualitative score, in the example above this would be 26.4%.

**0-10 Scoring System**

|  |  |
| --- | --- |
| **Score** | **Rating of Response** |
| 0 | No response provided and/or substantial omissions which make the response fundamentally unacceptable and gives the Council cause for major concern. |
| 1 | Very poor standard of response; fails to meet nearly all requirements, Insufficient information provided or response generally not supported by evidence. Gives the Council cause for a very high level of concern. |
| 2 | Poor response; fails to meet the majority of requirements, insufficient information provided and/or response is generally not supported by evidence. Gives the Council cause for a high level of concern. |
| 3 | Inadequate response; fails to meet some requirements and is generally unsatisfactory and/or has omissions and/or is not supported by evidence. Gives the Council cause for serious concern. |
| 4 | Basic response; borderline in meeting requirements and has some satisfactory elements but is generally unsatisfactory and/or has several omissions. Gives the Council cause for concern in several areas. |
| 5 | Adequate response; generally meets requirements and is supported by a reasonable level of evidence but has a number of omissions which give the Council cause for some concerns in few areas. |
| 6 | Competent standard of response; meets requirements and is supported by a satisfactory level of evidence although there are a few issues which give the Council cause for some minor concerns. |
| 7 | Good standard of response; meets requirements and is supported by evidence although there are a few very minor omissions and/or very minor issues which gives the Council cause for some very minor concerns. |
| 8 | Very Good standard of response; meets requirements and is supported by comprehensive evidence which gives the Council a very good level of confidence. |
| 9 | Excellent standard of response; exceeds the requirements in a number of areas and is supported by strong evidence which gives the Council a high level of confidence. |
| 10 | Exceptional standard of response; exceeds requirements in most areas and is supported by very strong evidence which gives the Council a very high level of confidence. |

The Price score and the Qualitative score are then added together to give a total overall score, in this case for Contractor A that will be 40% (price score) + 26.4% (qualitative score) = 66-4%

As part of the evaluation process the right is reserved to interview tenderers to discuss the areas covered within the method statements; this may result in tenderers being interviewed to ensure full and proper understanding of their methods before any appointment.

If, following interview, the leading tenderer is re-ranked to a position lower than first position, or if the tenderer is disqualified, or should withdraw, the tenderers shall be re-ranked and the new highest ranked tenderer may be interviewed in a similar manner.

# Section 2

# of the Tender Documentation

# Conditions of Contract

**Schedule 1**

**Form of Contract**

**The Form of Contract to be applied is the JCT Minor Works Building Contract 2011 (MW2011). The following amendments are to be incorporated:**

**Articles of Agreement**

Date of Agreement to be inserted as appropriate

The Employer: Wokingham Borough Council

Registered Office: Delete the word ‘Registered’ append Civic Offices, Shute End, Wokingham RG40 1BN

The Contractor: *The name of the appointed contractor to be added*

Company Number: *To be added as appropriate*

Registered Office: *To be added as appropriate*

**Recitals**

First: The installation of new pipework to a sheltered housing scheme, consisting of one block of forty-four, one bedroom flats around a central courtyard, with one attached 2 bedroom house linked to one older 3 bedroom wardens house situated in the centre of Wokingham.

At: Meachen Court, Palmer School Road, Wokingham RG40 1TJ.

Second 1) Mechanical Services Specification for the Communal Heating Plant

2) Leave blank

3) Leave blank

Third *To be added as appropriate*

Fifth Delete “2007” and insert “2015”

Sixth Delete ‘Framework Agreement” not applicable

**Articles**

Article 2 ***The tendered sum to be inserted***

Article 3 Insert: ‘Simon Horley’ of ‘Wokingham Borough Council’

Article 5 Delete: ‘or if he ceases to be the Principal Contractor, such other contractor as the Employer shall appoint pursuant to regulation 14(3) of those regulations’ and insert ‘or such replacement as the Employer at any time appoints to that role’

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**Contract Particulars**

|  |  |  |
| --- | --- | --- |
| Fourth Recital and Schedule 2 etc | Base Date |  |
| Fourth Recital and clause 4.2 |  | Delete: ‘/is not a contractor’ |
| Fifth Recital | CDM Regulations | Delete: ‘/is not notifiable’ |
| Sixth Recital | Framework Agreement | Insert ‘Not applicable’ |
| Seventh Recital | Supplemental Provisions |  |
|  | Collaborative working | Delete ‘/does not apply’ |
|  | Health and safety | Delete ‘/does not apply’ |
|  | Cost savings and value improvements | Delete ‘/does not apply’ |
|  | Sustainable development and environmental considerations | Delete ‘/does not apply’ |
|  | Performance Indicators and Monitoring | Delete: ‘/does not apply’ |
|  | Notification and negotiation of disputes | Delete: ‘/Does not apply’ |
|  | Employer’s Nominee | Insert: ‘Martin Forster’ |
|  | Contractor’s nominee | ***Insert as advised by the Contractor*** |
| Footnote [13] | Delete the existing text and insert the following:  ‘Under the CDM Regulations 2015 a project is notifiable if the construction work on a construction site is scheduled either to last longer than 30 working days and have more than 20 workers working simultaneously at any point in the project or to exceed 500 person days.’ | |
| Article 7 | Delete: ‘/do not apply’ | |
| Contract Particulars, 1·1 | Delete the entire entry on ‘CDM Planning Period’ and footnote [13] | |
| 2.2 Date for Commencement of the Works | Insert: ‘The work shall commence on 21st May 2018 or such other date as may be agreed between the parties’ | |
| 2.2 Date for Completion of the Works | Insert: ‘The work shall complete on 30th June 2018 or such date as may be agreed between the parties’ | |
| 2.8 Liquidated Damages | Insert: ‘£250’ per week”’. | |
| 4.11 and  Schedule 2 | Delete 4.11 and Schedule 2 in accordance with Note [17] due to the short duration of the contract | |
| 5.3.2 | Insert: ‘10,000,000 (ten million)’ | |
| 5.4A,5.4B and 5.4C | Delete 5.4A, 5.4B and 5.4C | |
| 7.2 | Insert ‘The Royal Institute of Chartered Surveyors’  Delete ‘Royal Institute of British Architects’, ‘constructionadjudicators.com’, ‘Association of Independent Construction Adjudicators’ and ‘Chartered Institute of Arbitrators’ to leave ‘The Royal Institute of Chartered Surveyors’ | |
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|  |  | |
| Schedule 1 | Delete ‘Royal Institute of British Architects’ and ‘Chartered Institute of Arbitrators’ to leave ‘The Royal Institute of Chartered Surveyors’ | |

**Conditions**

|  |  |
| --- | --- |
| Clause 1·1 | Delete the definitions of ‘CDM Co-ordinator’ and ‘CDM Planning Period’;  ‘CDM Regulations’: delete ‘2007’ and insert ‘2015’;  ‘Construction Phase Plan: Delete |
| Clause 2·1 | After ‘Construction Phase Plan’, delete ‘(where applicable) and other’ and insert ‘and’ |
|  |  |
| Clause 3·10 | Delete the clause heading, number and text |
| Clause 5 | Injury, damage and Insurance |
|  | The levels of insurance required by WBC are:  £10,000,000 (Ten million) for public liability  £10,000,000 (ten million) for employers’ liability  £5,000,000 (five million) for professional indemnity  £5,000,000 (five million) for damage to property |
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1. **Additional Contract items**
   1. All items contained in the Preliminaries and Preambles shall apply to the whole of the works.
   2. The headings of the clauses in this Tender Document shall not affect the interpretation thereof.
   3. **Compliance with all Acts**
      1. The contractor shall observe and perform the requirements of all Acts of Parliament subordinate legislation made under or by virtue of provisions of any Act of Parliament, and Regulations and Directives of the European Communities or the European Union for the time being in force and which relate to the Service.
      2. The inclusion in this contract of conditions requiring observance of specific legislation shall not prejudice the generality of this clause.
      3. Any reference in this contract to any Act of Parliament subordinate legislation or to any Regulation or Directive of the European Communities or the European Union shall be construed as including a reference to the same as applied amended or re-enacted by any subsequent such Act subordinate legislation Regulation or Directive as the case may be.
   4. **Data Protection**
      1. The Contractor shall take appropriate technical and organisational measures [including (but without prejudice to the generality of the foregoing) such specific measures as may be directed by (title of supervising officer)] against any authorised or unlawful processing of personal data (as defined in the Data Protection Act 1998) and against accidental loss or destruction of or damage to personal
      2. Data
         1. The measures taken must ensure a level of security appropriate to (a) the harm that might result from such unauthorised or unlawful processing or by accidental loss destruction or damage to such personal data and (b) the nature of such data to be protected
         2. The Contractor shall take reasonable steps to ensure the reliability of any employees of the Contractor, sub-contractors or agents who have access to such personal data.
         3. The Contractor shall in relation to this contract process personal data only under instructions given by or on behalf of the Council and by no other person.
         4. The Contractor shall indemnify Council against any consequences accruing to the Council arising directly or indirectly from any breach of this clause by the Contractor.
   5. **Equality**
      1. Not by any act or omission to directly or indirectly discriminate victimise harass or otherwise contravene any provision or provisions of the equality enactments (as defined in Section 33 of the Equality Act 2006) or cause suffer or permit (whether by any one or more employees of the Contractor or otherwise) any direct or indirect discrimination or victimisation or harassment to take place in connection with the business of the Contractor and the performance of the Service
      2. The Contractor shall adopt an appropriate and reasonable policy in its capacity as an employer for all matters relevant to the compliance by the Contractor with its obligations under the provisions of any of the said equality enactments and shall send a copy thereof to the Council forthwith after it shall have been adopted The Contractor shall comply with any code of practice issued under the provisions of any of the equality enactments insofar as any such code is relevant to this contract The Contractor shall not inhibit but shall give the Council all reasonable assistance in discharging its duties to promote equality and to have regard to the elimination of any discrimination victimisation or harassment prohibited by any of the said equality enactments where relevant to this contract

**Note:** The equality enactments deal with equal pay and with discrimination, and where relevant victimisation and harassment on grounds of, sex, race, disability, religion, sexual orientation, or age

* 1. **Freedom of Information**
     1. The Contractor hereby agrees with the Council as follows:-
        1. That the Contractor will render to the Council all necessary assistance to enable the Council to comply with its obligations in The Freedom of Information Act 2000 (“the Act”) or The Environmental Information Regulations 2004 (“the Regulations”)] including complying with any requirements of the Information Commissioner made pursuant to the Act or the Regulations where such assistance is required to enable the obligations to be complied with
        2. Without prejudice to the generality of the foregoing Sub-Clause that the Contractor will within 7 days of being required to do so in writing by [the Council the supervising officer or equivalent] supply to the Council such information belonging to the Council as may be held by the Contractor on behalf of the Council (as contemplated in Section 3 of the Act or as the case may be regulation 3 of the Regulations) where such information is required to enable the Council to comply with a request for information made pursuant to the Act or the Regulations and to indemnify the Council in respect of any costs and expenses which the Council may incur by reason of any failure of the Contractor to comply with the requirement contained in this sub-clause.
        3. Any information which the Council may lawfully be required to communicate to any person under the provisions of the Act or the Regulations may be communicated accordingly by the Council notwithstanding any provision in this Contract prohibiting the disclosure of any information or document on the grounds of confidentiality or otherwise and, accordingly, the Council shall incur no liability and the Contractor shall have no claim or remedy against the Council by reason of any such communication of information.
     2. The Contractor hereby further agrees with the Council as follows:
        1. The information identified in the Schedule hereto *[Schedule to be inserted as appropriate]* being information contained within this Contract or any preliminary Tender or other ancillary documentation is information which the Contractor regards as being a trade secret or information the release of which would or would be likely to prejudice the commercial interests of the Contractor or information disclosure. Of which would constitute an actionable breach of confidence within the meaning of the Freedom of Information Act 2000 ("the Act") or is commercially confidential or within the meaning of the Regulations
        2. In the event that a request for such information or involving the disclosure of such information is made to the Council under the provisions of the Act [or the Regulations] the Council will to the extent permitted by any code of practice issued under Section 45 of the Act for the time being in force [or to the extent permissible under the Regulations] notify the Contractor that the request has been made inviting the Contractor to make any representations to the Council on the question of whether or not the relevant information should be disclosed. The Council shall also advise the Contractor of the date by which pursuant to Section 10 of the Act [or the corresponding provision in the Regulations] it appears that the information should be communicated to the person making the request or disclosure refused (“the statutory deadline”).
        3. In determining whether or not in its opinion the information constitutes a trade secret or information disclosure of which would or would be likely to prejudice the commercial interests of the Contractor or is information disclosure of which will constitute an actionable breach of confidence or is legally protected as being commercially confidential for the purposes of the Regulations the Council shall take account of any representations made by the Contractor to the Council a reasonable time before the expiry of the statutory deadline but shall not be bound by any such representations. The Contractor acknowledges that the public interest test which falls to be performed in accordance with Section 2 of the Act (where relevant) [Regulation 12 of the Regulations] must be performed exclusively by the Council.
  2. **Health and Safety**
     1. The Contractor shall undertake to formulate and submit for the approval of the Council (such approval not be unreasonably withheld or delayed) the Contractor’s Health and Safety Policy and Plan which will set out how the Contractor intends to observe and carry out its responsibility for the health and safety of its employees and others pursuant to the Health and Safety at Work Act 1974 and all relevant subordinate legislation made thereunder.
     2. Performance of the contract shall not commence until the said Health and Safety Policy shall have been approved. The Contractor shall [at all times act in accordance with its approved Health and Safety policy and shall generally] observe and perform all of its obligations arising under the Health and Safety at Work Act 1974 and all relevant subordinate legislation made thereunder.
     3. The Contractor shall indemnify the Council against any consequences accruing to the Council arising from any breach or non-observance of any of the obligations of the Contractor set out in this clause.
  3. **Human Rights**
  4. The Contractor undertakes not to do or omit to do anything which may be incompatible with a Convention right (as defined by Section 1 of the Human Rights Act 1998) or otherwise act or omit to act in a manner entitling any person to institute any proceedings against the Council as a public authority for any remedy pursuant to the said Act and to indemnify the Council against any damages awarded or any other costs or expenses for which the Council shall become liable for pursuant to the said Act insofar as the same may be payable in consequence of the Contractors failure to observe the requirements of this clause.

# Schedule 2

# Contract Requirements

# Working Environment

**SITE SAFETY FOR CONTRACTORS, TENANTS AND LOCAL RESIDENTS:**

It is foreseeable that there could be the potential for overlap within occupied environments, despite any arrangements to ensure the project remains completely separate where possible.

**Guidance for dealing with specific issues or situations**

Safeguarding

We have a duty to make sure that everyone who lives in one of our properties or uses our services is protected and safe.

Safeguarding is about stopping a person from being harmed and promoting their welfare. We have a policy and guidance in place for recognising signs of abuse, or suspected abuse, of vulnerable adults and children.

If a contractor suspects that a tenant may be at risk of harm they should report their concerns to their line manager and to the Council.

Vulnerable People

Some tenants could feel nervous about having a stranger in their home. It is important for contractors to show their identification (ID), introduce themselves, their company and the reason for their visit before going into a tenant’s home.

If it is felt that a tenant is vulnerable, they should be given the opportunity to have another person present whilst the work is being in their home.

If a child under the age of 16 returns home when a contractor is working in the property, and there is not a responsible adult present, the contractor should contact the office immediately, and agree a course of action.

If, whilst working in a tenant’s home, the contractor witnesses something they fell uncomfortable about, they have a duty to report this immediately to the Council and to their line manager. Examples of this could be a parent abusing a child or an adult living on their own who appears to be not coping.

**Dealing with violence and difficult situations**

Violence at work

Situations may arise where there is verbal abuse, violence or a threat of violence. At all times contractors should try to minimise confrontations and not be drawn into arguments if the situation cannot be resolved, the contractor has the right to leave the property. The contractor’s safety comes first. If there is an incident it should be reported directly to the Council and the contractor’s line manager.

Difficult situations

Occasionally people may feel uncomfortable working in occupied homes depending on the circumstances or the behaviour of a tenant or their visitors. For example, if they are under the influence of drugs or alcohol. In these situations, the contractor should tell the tenant they are leaving, and report the problem to the Contract Administrator and their line manager.

**EQUALITY & DIVERSITY – Guidance for Contractors**

We recognise that the people who live in our homes and use our services come from diverse backgrounds. We are committed to ensuring that all people are treated fairly and without unlawful discrimination. Our equality and Diversity Strategy aims to address the inequality, disadvantage and discrimination that some of our tenants may face during their daily lives.

We need to recognise the individual rights of disabled people and their particular needs. Do not ask personal questions which have no relevance to the work and do not do anything you are not trained to do.

**Guidance for working with disabled people who may be the tenant or a member of the tenant’s family, or a guest**

Mobility problems

* Make sure a resident’s ability to move around their home is not restricted.

Deaf or hard of hearing

* Make sure you attract the resident’s attention before speaking.
* Face the resident when you talk to them, speak clearly and use your usual tones. Raising your voice may distort what you are saying and make it more difficult for them to understand you or lip read.
* Be prepared to write things down but be aware that the resident may not be able to read written text.
* Let the resident know if you will be making a lot of noise, for example drilling or hammering.
* Give clues about what you are saying in your face, your body language and the gestures you make.
* Let the resident know if you have to leave the property for any reason.

Visually impaired

* When you arrive introduce yourself using, where appropriate, an agreed password or your identification card.
* It is not possible to anticipate every resident’s needs but it is important to tell the resident what you will be doing, where you will be working and how the work will be done.
* If you think the resident needs your help ask first, don’t just assume they do.
* Use ordinary words and phrases and don’t be afraid of using works like ‘look’ and ‘see’.
* Explain where you will be working and what you will be doing.
* If you need to move items of furniture, ask the resident where you should put it and make sure you put it back in the same place when you finish work.
* Agree with the resident where you can safely leave work materials.
* If you have to leave the property for any reason let the resident know, and give them an idea of when you will be back.

# Requirements of Principal Contractor and Contractors

A Principal Contractor is the organisation or person that co-ordinates the work of the construction phase of a project involving more than one contractor so that it is carried out in a way that secures health and safety.

A Contractor can be an individual, a sole trader, a self-employed worker, or a business that carries out, manages or controls construction work as part of their business. This also includes companies that use their own workforce to do construction work on their own premises. The duties on contractors apply whether the workers under their control are employees, self-employed or agency workers.

The Wokingham Borough Council Approved Competency process must have been undertaken by any tendering Principal Contractor (and other duty holders) which assesses general skills, knowledge, and experience. For organisations this will also include review of the organisational capability necessary to carry out their role effectively given the scale and complexity of the project and the nature of the health and safety risks involved.

**Upon appointment, the Principal Contractor will be expected to produce a suitable and sufficient Construction Phase Plan for issue to the WBC nominated representative, for review prior to commencement on site.** The construction phase plan must set out the arrangements for securing health and safety for the period during which construction work in a project is carried out. These arrangements include site rules and any specific measures put in place to where work involves one or more of the risks listed in Schedule 3 (regulation 12(2)).

The Principal Contractor shall ensure that suitable and sufficient assessments of the risks and necessary precautions relating to materials and work activities are undertaken before work is carried out.

The Principal Contractor shall monitor the progress of their works, and in the event of any unforeseen eventualities, report to WBC and Principal Designer any matters which could affect the safe method or execution of the work or the resources required.

The Principal Contractor shall ensure that suitable risk assessments are prepared by sub-contractors under their control. All such sub-contractors will be required to demonstrate compliance with the Construction (Design and Management) Regulation 2015.

Where the designer input ceases during the construction phase, liaison will be undertaken to ensure the Principal Contractor has access to all information required to complete this phase, and the Principal Contractor will subsequently be required to complete the H&S File upon project completion.

# Site Management Arrangements

**The following Site Management Arrangements include details of expected minimum standards for all contractors/duty holders on site.**

**COMMUNICATION AND LIAISON:** All duty holders are obliged to ensure the ongoing communication and liaison between their team as well as other contracting parties, prior to, during and upon completion of the project. This is required to ensure the transparent sharing of information, communication regarding any potential overlap, and raising of any concerns that may arise. All duty holders are also obliged to report any safety-related concerns at any time during the project.

**FIRE RISK MANAGEMENT:** Contractors are expected to provide information relating to any activity or task that may increase fire risk within WBC buildings, to enable discussion prior to any commencement of works. This includes the potential for key access/egress routes being blocked; fire alarm systems requiring isolation; smoke detectors requiring bagging/protection in case activation by dust; increase in combustibles stored on the premises; use and storage of hazardous substances etc.

**PERMIT TO WORK SYSTEMS:** Where high risk activities are unavoidable, Permit to Work Systems will be expected to be adopted and agreed with WBC prior to commencement. This will ensure a formal management system is adopted to assess specific risks with clear management systems around control measures to minimise the risk. Such high risk activities may include hot works; work at height; work in confined spaces; isolation of services; lone working; excavations; working with high risk chemicals. This list is not exhaustive.

**SITE SECURITY:** Whether the works are external or internal within the building, during or outside key periods of operation - ongoing consideration must be given at all times to the absolute protection of those in the vicinity as well as contracting parties. Physical barriers as well as signage and communication may all be required to ensure adequate segregation is maintained. In addition, where overlap is anticipated with young persons, requirements for CRB/DBS clearance may be requested where absolute segregation cannot be assured. Discussion must be undertaken prior to commencement of works with the appointed WBC team to ensure clarification is established around responsibilities for implementing, maintaining and monitoring security during the works.

**CONTRACTOR TRANSPORT:** All contractors are expected to ensure familiarisation with the site area prior to commencement. This includes consideration of any impact of contractor vehicles with adjacent areas for deliveries, unloading/loading, parking and general highway use. Where the movement of vehicles is unavoidable in potentially occupied areas, this must be by prior arrangement only and such movements should be supervised and well managed.

**UNAUTHORISED AREAS:** Contractors will be expected to refrain from accessing any areas not agreed at the pre-construction stage. Works should be confined to approved areas only and permission requested from the WBC should any variation be required at any time.

**WELFARE PROVISIONS:** An outline of welfare provisions for the on-site contracting team is required from the Principal Contractor, showing consideration of requirements detailed within Schedule 2 of The CDM Regulations 2015. No assumption should be made that existing facilities can be adopted, unless these are agreed in writing. Minimum provisions should therefore be relative to numbers on site, include consideration of procedures for maintenance and include suitable and sufficient sanitary conveniences; washing facilities; drinking water; changing rooms/lockers (where special clothing is required for the purpose of construction work); and facilities for rest.

**Smoking on site** or around the surrounding premises is not permitted at any time.

# 

# Environmental Restrictions and Existing On Site Hazards

The premises will naturally require clear consideration for access, deliveries, storage, waste collection, as aforementioned. Any key decisions will require formal consultation prior to the commencement of works to ensure visibility of agreements between the contracting team and WBC.

All contractors will be expected as a minimum requirement, to adhere to highway rules and regulations in addition to those set specifically for the vicinity of the premises.

Any temporary arrangements are expected to be reviewed upon project completion, to ensure the premises are not damaged upon completion of the project, and where required, arrangements in place to make good any such issue that may arise.

**Asbestos Management:** Information relating to the type and location of asbestos containing materials (either positive or suspected) is available at the WBC offices and should be accessed by arrangement via the key project contact.  Where this information requires further clarification or additional investigation, the Principal Contractor and Contractors are expected to make immediate contact with WBC to discuss.

All information provided should be perused in detail and shared with other contractors, to ensure adequate consideration can be given to any removals or segregated areas, for the purpose of the works.

Any removals must be undertaken in strict compliance with The Control of Asbestos Regulations 2012, by competent persons. Such removals must be undertaken following direct liaison with WBC and in line with the agreed procedures.

Any documentation generated as a result of removals such as Air Clearance Certification and Waste Consignment Notes, must be provided to WBC upon completion.

Any residual concerns should also be made known to the WBC upon completion.

### 

### Asbestos information

ASBESTOS PROCEDURE

Prior to the start of any works Wokingham Borough Council (WBC) will instruct their own Asbestos Management Contractor to carry out an Asbestos Refurbishment/ Management survey of the specified property. The refurbishment survey will take place to any area where there are proposed refurbishment works; a management survey will be undertaken within the remainder of the property.

The results of the asbestos survey will then dictate whether any removal or encapsulation works are required. WBC will agree the asbestos remedial works with the Contractor for the specified property. The Contractor shall be required to undertake working with and when required the removal of non-notifiable asbestos.

HSE guidance, available from [www.hse.gov.uk](http://www.hse.gov.uk), shall be followed.

In all other cases the Contractor shall be required to liaise with the Council’s asbestos removal specialist to book in the appropriate asbestos works to fit in with the overall works programme. The Council’s specialist shall undertake the removal of notifiable asbestos.

The contractor shall provide details of what was removed, its removal location and quantity. The contractor shall provide within 7 days the consignment note and an independent air quality / clearance test. The format of the notification is to be agreed.

The contractor will be required to demonstrate:

* Staffs have adequate asbestos awareness training and have procedures in place for dealing with any suspect/suspicious materials found.
* The asbestos survey has been checked and procedures are in place that demonstrates remedial works have been completed prior to the start of any other works.

Adequate supervision is in place to ensure the above procedures are implemented and followed.

**Schedule 3**

**of Contract Documents**

**Meachen Court Works Specifications**

|  |  |
| --- | --- |
| **Wokingham Borough Council**  Housing Services  PO Box 154  Shute End  Wokingham  Berks RG40 1WN | WBC logo colour compact |

Mechanical Services Specification for the Communal Heating Plant

At

Meachen Court

Palmer School Road

Wokingham RG40 1TJ

December 2017

|  |  |
| --- | --- |
| **Gas Contract Services Ltd**  Suite 2, Taunton House  Waterside Court  Neptune Way  Rochester  ME2 4NZ | GCS Logo 2016 blue CMYK pc |

**Wokingham Borough Council** 

Meachen Court

Palmer School Road

Wokingham RG40 1TJ

Mechanical Services Specification for the Communal Heating Plant

|  |  |  |  |
| --- | --- | --- | --- |
| Author: | Brian Issom | Gas contract Supervisor | - GCS |
| Approved by: | Geoff Golding | Technical Director | - GCS |
| Prepared for: | Jason Brunskill | Lead Mechanical & Electrical Surveyor | -Wokingham Borough Council |
| Report Number: |  | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rev No | Comments | Author | Approved | Date |
| 1 |  |  |  |  |
| 2 |  |  |  |  |

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Clause

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[1.2 Workmanship and Materials 45](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984200)

[1.3 British Standards 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984201)

[1.4 Or Equivalent and Approved 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984202)

[1.5 Continuity of Service 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984203)

[1.6 Design Criteria 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984204)

[1.7 Drawings & Installation Specification 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984205)

[1.8 Temporary Heating and Hot Water Plant Hire 46](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984206)

[1.9 Boiler Plant 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984207)

[1.10 Heating Circulation Pumps 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984208)

[1.11 Automatic Pressurisation Unit 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984209)

[1.12 Air & Dirt Separator 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984210)

[1.13 Magnetic System Filter 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984211)

[1.14 Chemical Dosing Pot 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984212)

[1.15 System Flushing 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984213)

[1.16 Hot Water Generation 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984214)

[1.17 Secondary Hot Water Circulation Pump 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984215)

[1.18 Water Conditioner 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984216)

[1.19 Cold Water Storage Tanks 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984217)

[1.20 Hot and Cold Water Booster Sets 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984218)

[1.21 Heating Expansion Vessel 47](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984219)

[1.22 Heating Pipework 48](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984220)

[1.23 Domestic Pipework 48](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984221)

[1.24 Gas Pipework 48](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984222)

[1.25 Pipe Supports 48](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984223)

[1.26 Pipe Grading 49](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984224)

[1.27 Sleeves 49](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984225)

[1.28 Draining and Venting of Pipework 50](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984226)

[1.29 Low Pressure Heating Valves 50](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984227)

[1.30 Domestic Services Mains and Hot & Cold Water Valves 50](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984228)

[1.31 Gas Valves 50](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984229)

[1.32 Safety Valves 51](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984230)

[1.33 Automatic Air Vents 51](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984231)

[1.34 Draincocks 51](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984232)

[1.35 Aircocks 51](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984233)

[1.36 Strainers 51](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984234)

[1.37 Pipework Pressure Tests 52](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984235)

[1.38 Expansion on Pipework 52](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984236)

[1.39 Protection of Pipework 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984237)

[1.40 Plugs for Open Pipes 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984238)

[1.41 Valve and Equipment Labels 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984239)

[1.42 L.P.H.W. Pipework Insulation 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984240)

[1.43 Hot Water Service Pipework Insulation 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984241)

[1.44 Mains and Cold Water Services Pipework Insulation 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984242)

[1.45 Foil faced insulation to Pipework 53](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984243)

[1.46 Schedule of Insulation Thickness 54](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984244)

[1.47 Painting 54](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984245)

[1.48 Chlorination 54](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984246)

[1.49 Description of equipment 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984247)

[1.50 Electrical Wiring 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984248)

[1.51 Electrical Earthing 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984249)

[1.52 Boiler House Ventilation 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984250)

[1.53 Commissioning 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984251)

[1.54 Operating and Maintenance Manual 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984252)

[1.55 Record Drawing 55](file:///C:\Users\phihar\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\NQAYQNYP\Meacham%20court%20Tender%20doc%20%20%20%20%20%20%20%2012-2017.docx#_Toc478984253)

1.56 List of materials………………………………………………………………………………………………………………………..…18

**Appendix A** – Schedule of British Standards & Reference Documents

Mechanical Services Specification

## Scope and Description of Works

Meacham Court is a housing scheme for clients with advanced age comprising of 44 flats, the scheme incorporates shared communal areas such as lounges, a kitchen and a laundry room and WCs, along with the scheme manager’s office.

* The heating plant room energy centre is located at the rear of the building. The gas meter is installed outside of the plant room in its own cupboard
* The buildings heating energy is supplied via 3 x Vaillant Eco Tec Boilers, wall mounted
* The heating system is commercial by nature and is a pressurised system
* The Hot water for the scheme is supplied via one Calorifier installed in the boiler room

**Description of works**

Fully re-pipe the DHW supply and secondary return from plant room to point of entry to 44 flats throughout the building. At the Point of entry flow and return isolation vales will be fitted in 22mm. The pipework to the ground floor is to be surface mounted and run at high level through the communal corridors. The pipework is to be lagged and boxed in, with inspection hatches added to allow access to isolation valves. Pipework to the 1st floor is to be run in the loft space with isolation valves added at point of entry to the flats. Pipework shall be supported using the existing angle steel frames with rubber lined clips. Pipework should be sized to deliver 15L/min to each flat at a minimum. TMV’s are to be fitted to each individual flat within the dwelling, TMV 3’s are to be fitted with isolation valves fitted to the hot and cold inlets to the valve to allow isolation of the unit. All pipework shall have high level AAV’s at various points within the first floor ceiling fitted with isolation valves allowing valve to be changed without draining. Following installation each flat shall be fully commissioned with both flow and temperature readings recorded using calibrated equipment.

The existing plant room is to be left with no work to be done in there except to join onto the outgoing Hot water flow and return pipes as above.

Valves, flanges, fittings and components shall be insulated using lace on insulated bags and all pipework shall be insulated to at least the current British Standards.

It is a requirement of this contract that TMV’s are to fitted in all of the flats

The system shall be fully vented of air and TMV’s commissioned on completion.

Unless otherwise indicated all materials and equipment to be provided within this specification are to include fixing, and the project shall be delivered to the client as a complete project all works necessary having been undertaken.

The contractor shall visit site to determine the whole extent of the project and no variations shall be entertained through lack of knowledge of the site or intent of the specification.

## Workmanship and Materials

**Please see list Equipment required in clause 1.56 at the end of this document.**

All workmanship and materials to be used in the Contract are to be the best of their respective kinds and in accordance with British Standard or Code of Practice as applicable, whether specifically noted or not, this shall be taken to denote the minimum acceptable standard of material or workmanship.

It is a requirement that all work shall be carried out in accordance with the best possible building and installation practice and methods.

Manufactured items referred to in the Specifications shall unless specified to the contrary mean manufacturer's standard products and installed in accordance with the manufacturer’s instructions.

## British Standards

All products, equipment, materials must comply with and installed in accordance with the relevant British Standard or Code of Practice. Products, equipment, materials may be substituted at the Contract Administrators discretion by a product complying with a grade or category within a European Community Standard or other international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, fitness for purpose and, where relevant, appearance.

A schedule of British Standards is included as Appendix A, this is not to be considered an exhaustive list, and all relevant and appropriate standards are deemed to be the minimum requirement.

## Or Equivalent and Approved

The specified products may be substituted if prior approval of the Contract Administrator has been obtained to use an alternative manufacturer’s product.

The Contract Administrator's decision on the use and continued approval of alternative materials goods and equipment is final. All such alternative goods, materials and equipment that is approved for use in the works shall be provided at no extra cost to the contract.

## Continuity of Service

The contractor will leave the properties with all services in safe and proper working order at the end of each working day. Under no circumstances shall residents be without the use of these services and facilities overnight.

*Ensure that an alternative form of heating is available for the residents during the period of works. The alternative form of heating will be a minimum of two portable electric convector heaters of 3kw max. Output with at least 3 heat settings and thermostat control.*

## Design Criteria

Not required at this time.

## Drawings & Installation Specification

This project is to be let by the client on a design and installation basis and given the size and complexity of the plant to be installed it is a specific requirement of the project that the contractor will submit for approval a full plant room layout and installation specification prior to commencement.

## Temporary Heating and Hot Water

Not Required - see clause 1.16 for Hot water Supply

## Boiler Plant

No work is required on this plant.

## Heating Circulation Pumps

No work is required on this plant.

## Automatic Pressurisation Unit

No work is required on this plant.

## Air & Dirt Separator

No work is required on this plant.

## Magnetic System Filter

No work is required on this plant.

## Chemical Dosing Pot

No work is required on this plant

## System Flushing

The hot water system will need to flushed and chlorinated upon completion of all works and test certificates issued to the client.

## Hot Water Generation

The existing 1 Calorifier is to remain,

**Note**

**At this time we believe there will be some pipework alterations carried out within the plantroom by the company that installed the Calorifier.**

## Secondary Hot Water Circulation Pump

**Note**

**At this time we believe there will be some pipework alterations carried out within the plantroom by the company that installed the Calorifier.**

## Water Conditioner

Not required

## Cold Water Storage Tanks

No works will be carried out to the existing Cold water storage tanks.

## Hot and Cold Water Booster Sets

There are no requirements to boost either hot or cold services and or to pressurize any of the domestic water systems.

## Heating Expansion Vessel

No works required.

## Heating Pipework

No works required.

## Domestic Pipework

All new hot water service pipework shall be installed in Matpress Copper, using Matpress tube and fittings.

The pipework for the ground floor is to be run at high level through the communal corridors and the support fixings to be rubber lined, and then all pipes are to be boxed in with inspection hatches added to allow for access to the isolation valves, and then decorated to match the existing décor.

The pipework for the first floor is to be run in the loft space and isolating valves added at the point of entry into the flats, The Pipework shall be supported using the existing angle steel frames with rubber lined clips.

## Gas Pipework

No extra work required.

## Pipe Supports

All pipework shall be adequately supported by means of Rubber lined clips so that no movement or distortion of the pipe takes place except that necessary to take up the expansion of pipework.

Straight pipework shall be supported at centres not less than those recommended by CIBSE or to the manufacturer's instructions.

Supplementary supports shall be provided at changes of direction, valves or similar pipeline equipment.

Pipework shall be supported as indicated on the drawings, or, if not specifically detailed, in accordance with the following:

Horizontal mains shall be supported on rollers and chairs or by standard mild steel hangers and clips from lengths of channel iron or `Unistrut' type channel either built-in or bolted to the structure.

Branch mains shall be supported as above or by means of standard rubber lined clips, built-in or screwed to the adjacent structure.

Vertical mains shall be supported from anchor points fixed rigidly to one intermediate floor slab with guide supports at the remaining floor slabs.

Small diameter runouts shall be supported by standard school-board pattern clips, built-in or screwed to the adjacent structure or by means of standard double saddle clips.

All ferrous brackets or parts thereof are to be painted with approved rust inhibiting primer, two undercoats and a finishing coat of aluminium paint before fixing.

Copper pipes shall be supported using rubber lined clips. Copper pipework adjacent to walls shall be supported using school board pattern brackets with screw fixings. Copper pipework positioned where the space is required around the pipes shall be supported using a split ring, nipple and plate. Brass brackets shall only be fixed using brass screws.

No structural steel shall be drilled for the passage of pipes unless instructed by the Structural Engineer. Patent type clips shall be used to fasten to the structural steel.

Toggle bolts shall be used to fasten to metal deck roofing systems. Supports shall be closer centres if warranted by the arrangement of pipework, joint changes of direction, fittings and valves.

Where one support carries more than one pipe of different sizes, the spacing shall be that specified for the smaller size of pipe. Vertical rising pipes shall be supported at a minimum of two point, and for 65mm and above, at the bad to withstand the total weight of the riser. Branches from risers shall not be used as a support for the riser.

Fixings into masonry shall be by screw into proprietary expanding plug, or by expanding bolt in preference to shot-fired fixings, which shall only be used by prior approval. Timber fixings shall be made with correct wood screw.

Fixings into thin partitions can use spring toggles where a stud cannot be located. Consideration should be given to arranging for additional battens to be installed as part of the builders work.

Pipe supports shall be positioned at intervals not more than those given in the following tables:

(Supports for Mild Steel Pipework)

|  |  |  |
| --- | --- | --- |
| **Nominal Bore**  **of Pipe** | **Intervals for**  **Horizontal Runs mm** | **Intervals for**  **Vertical Runs mm** |
| 15  20  25  32  40 & 50  65 & 80 | 1800  2000  2400  2500  3000  3700 | 2400  3000  3000  3000  3500  4500 |

(Supports for Copper Pipework)

|  |  |  |
| --- | --- | --- |
| **Nominal Bore**  **of Pipe** | **Intervals for**  **Horizontal Runs mm** | **Intervals for**  **Vertical Runs mm** |
| 15  22 & 28  35 & 42  54 | 1200  1800  2400  2700 | 1800  2400  3000  3000 |

## Pipe Grading

L.P.H.W. Heating

All pipes shall run horizontally to suit air vents and drain points.

Hot Water Supply, Mains and Drinking Water and Tank Cold Water Services

All lines shall be run uniformly so as to be self-venting to the draw-off points and air vents and allow drainage from the lowest points.

## Sleeves

All pipes passing through walls or floors shall pass through a sleeve cut from a length of mild steel pipe and butt into wall or floor.

The sleeves shall finish not less than 2 mm proud of the finished surface of the plaster.

The annular space between the pipes and sleeves shall be adequately filled with Rockwool or similar to reduce noise penetration, maintain fire integrity, whilst allowing free movement of the pipe. Sleeves for steel pipe shall be from galvanised material. Sleeves for copper pipes shall be in copper.

Sleeves shall be fixed in such a manner that will prevent them becoming detached from the building fabric and it shall be the Contractor’s responsibility to ensure that they are so fixed ant the they do not project beyond the finished surface.

Pipe sleeves where exposed to view in occupied areas shall be fitted with wall or floor plates.

## Draining and Venting of Pipework

Pipework shall be installed to be self-venting and self-draining where possible. Drain cocks are to be fitted at all low points and on the dead side of valves.

Pipework shall be run in such a manner that all pipes can be completed drained of water and no accumulation of air can occur.

Mains and risers shall be provided with drain cocks so that any section may be emptied with the isolating valves closed.

At all high points in water mains, where it is not possible to vent through apparatus, open vents or automatic air vents shall be provided.

## Low Pressure Heating Valves

Isolating valves 65 mm and over shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Isolating valves 50 mm and under shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Variable orifice double regulating valves 65 mm and over shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Variable orifice double regulating valves 50 mm and under shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Non-return valves 65 mm and over shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Non-return valves 50 mm and under shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

## Domestic Services Mains and Hot & Cold Water Valves

Isolating valves up to and including 100mm shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

For the isolation of all water draw-offs, either separately or in small ranges or groups, full bore quarter turn ball valves, shall be used, with ends appropriate to pipework and comply with current British Standards and installed in accordance with manufacturer’s instructions.

Regulating valves up to and including 100mm shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Non-return valves up to and including 100mm shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Mains water, Cold Water and Hot Water Service Valves shall be to the approval of the Local Water Supply Company and when required by their byelaws, shall be stamped.

## Gas Valves

Isolating and regulating cocks 65 mm to 150 mm shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Isolating and regulating cocks 50 mm and under shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

A manual ECV for boiler room isolation will be installed in the gas supply. The manual gas valve for isolating the boiler house shall be clearly identifiable and readily accessible for operation and should be located as close to the entrance of the boiler room as possible. Where this is not possible or practical, than an Emergency stop button connected to an electronic control valve via the control panel can be installed.

Electronic ECV fitted in gas supply pipework shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

## Safety Valves

Safety Valves 50 mm and under shall have a bronze body with flat seating surfaces, precision lapped to give positive closure and screwed B.S.P.T. ends, and shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Safety Valves 65 mm and over shall have a bronze body with flat seating surfaces, precision lapped to give positive closure and flanges, and shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

Safety Valves shall have the appropriate springs fitted in accordance with the operating pressure and the outlets piped to a suitable discharge point at low level.

## Automatic Air Vents

Automatic Air Vents on this hot water system shall be of Flamco manufacture, fitted with an upstand of a minimum 12”and fitted with an isolating valve for ease of changing should the need arise.

## Draincocks

Draincocks 25 mm and under, type A bronze draw-off cocks, screw down pattern, lock-shield with loose key shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

## Aircocks

Air Cocks on air bottles on low pressure systems shall terminate with a 6 mm aircock, complete with loose key screwed, and shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

## Strainers

A new Y Strainers shall be supplied and installed in the pipe work on the return from the plate heat exchanger to the boiler header.

Isolating valves shall be provided on each side of the strainer or the strainers shall be fixed relative to equipment isolating valves so that the strainer can be opened up and cleaned without draining down the circuit.

65 mm and over shall be of the `Y' pattern with cast iron body, 2 mm stainless steel mesh screen and flanges to comply with current British Standards and installed in accordance with manufacturer’s instructions.

50 mm and under shall be of the `Y' pattern with pressed copper alloy body, 0.75mm stainless steel mesh screen and screwed B.S.P.T. ends, and shall comply with current British Standards and installed in accordance with manufacturer’s instructions.

## Pipework Pressure Tests

On completion of each pipework installation the system shall be pressure tested during which time they shall remain airtight.

Water tests shall be carried out by filling the system with water and raising to the figure specified below.

The section shall then be left with the test pump disconnected and all joints shall remain tight for a period of at least 2 hours.

Any fault discovered during such tests shall be at once remedied by the Sub-Contractor at his own cost and expense and the test reapplied until the consulting engineer is satisfied that the section under test is sound.

On completion of the test, the water is to be released and drained completely away as rapidly as possible, the system being then thoroughly sluiced through to ensure the removal of as much dirt and dross as possible before being refilled and put into service.

The test pressures to be supplied to the various services are as follows:

* L.P.H.W. Heating 7.0 bar
* Tank Cold Water Services 5.0 bar
* Cold Water Main 12.5 bar
* Gas Services 70 mbar

Any test carried out on the gas installation shall be an air test and shall be carried out with the burners disconnected at the gas cocks.

The pipework then being capped, in order to prevent damage to the burner gas controls. Excessive pressure will rupture the control diaphragms and possible other damage will occur.

## Expansion on Pipework

All pipework shall be erected, and on completion be left, in such a manner that expansion and contraction is taken up without excessive stress on the pipe or the building structure, and where this cannot be achieved with the normal run of pipework, special expansion loops or expansion joints shall be provided.

Expansion loops shall be made up from pipe of the same quality as the main, either with welded elbows or fabricated from a single length of pipe with pulled or fire-set bends.

Expansion joints shall be of the stainless steel bellows type adequately supported, in accordance with the manufacturer's instructions and with guides on the mains adjacent to the joints.

Expansion joints shall be installed as per manufacturer’s instructions. Anchors shall be provided at intervals to ensure expansion is absorbed at the determined places, and shall consist of a short length of pipe, flanged at each end and positively fixed to the building structure by heavy mild steel angle or channel iron.

`Cold draw' shall be applied, suitable to the pipework and service, by pulling up through long bolts on the expansion loop/joint flanges. The long bolts shall afterwards be replaced by normal or expansion unit bolts.

The provision for expansion shall be checked before and after any enclosure of the pipework.

## Protection of Pipework

All mild steel pipework whether insulated or not shall be thoroughly wire brushed and painted with red lead paint after pressure testing and again before the finishing treatment is applied.

## Plugs for Open Pipes

Any open ended pipe or duct left overnight or for any considerable period shall be protected from the entry of dust, or builders rubbish by the fixing of approved type plugs.

## Valve and Equipment Labels

All valves shall be clearly numbered with discs of laminated plastic. Each valve disc shall be attached to the respective valve by a length of chain with proprietary connectors.

All equipment shall be clearly labelled. The labels shall be of multi-layer, white and black plastic, front engraved, securely fixed to the equipment by means of stainless steel screws or blind rivets.

A valve chart indicating the duty and position of all valves shall be fixed into a glazed picture frame and fixed in the plantroom in an agreed position.

## L.P.H.W. Pipework Insulation

No Work required at this time.

## Hot Water Service Pipework Insulation

Shall be insulated in foil face sectional mineral wool with taped joints and formed bends,

**As per section 1.45**

## Mains and Cold Water Services Pipework Insulation

Shall be insulated as 1.42

## Foil faced insulation to Pipework

Subject to confirmation in the particular specification, pipework in plantrooms, maintenance areas and where specifically identified in the particular specification and/or drawings, the thermal insulation shall be as per 1.42 to 1.44 as appropriate and the entire insulation shall then be covered with foil faced insulation

The insulation shall be continuous except where insulation terminates at flanges, valves etc. Where this occurs the end shall be fitted with a polished aluminium end cap fixed over the insulation. These end caps shall be of sufficient size to extend from the outside of the insulation to the outside of the pipework.

Bends, tees and other junctions shall be formed using purpose made pattern cut sections.

Joints shall be hidden on the rear or underside of low level pipework and on the topside of high level pipework in order to present the cleanest possible aspects of the work. All traverse joints shall line up exactly with those joints on any parallel runs of pipework wherever practicable.

All valves, strainers, flanges and unions on all services shall then be enclosed with suitable formed insulation to suit the shape of the unit being insulated.

## Schedule of Insulation Thickness

The thickness of pipework insulation shall be in accordance with the following tables for various services. The thickness shall also apply to all vents, feeds and ancillary pipework, which is required to be insulated.

Low Pressure Hot Water Heating Pipework and Domestic Hot Water Circulation

|  |  |  |  |
| --- | --- | --- | --- |
| Nominal Pipe Bore | Thermal Conductivity (W/mK) | | |
| Up to 0.026 | 0.027 to 0.040 | 0.041 to 0.055 |
| mm | Minimum Thickness of Insulation | | |
| 15 | 15 | 32 | 72 |
| 20 | 20 | 38 | 72 |
| 25 | 20 | 38 | 72 |
| 32 | 20 | 38 | 72 |
| 40 | 20 | 50 | 72 |
| 50 | 25 | 50 | 72 |
| 65 | 25 | 50 | 72 |
| 80 | 25 | 50 | 80 |
| 100 | 25 | 50 | 80 |
| 125 | 30 | 50 | 80 |
| 150 | 30 | 50 | 80 |
| 200 | 30 | 50 | 80 |
| 250 | 30 | 50 | 80 |
| 300 | 50 | 50 | 80 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nominal pipe bore | Thermal Conductivity (W/mK) | | | |
| 0.02 | | 0.04 | |
| Indoor | Outdoor | Indoor | Outdoor |
| mm | Minimum thickness of insulation (mm) | | | |
| 15 | 20 | 25 | 32 | 38 |
| 20 | 20 | 25 | 32 | 38 |
| 25 | 20 | 25 | 32 | 38 |
| 32 | 20 | 25 | 32 | 38 |
| 40 | 20 | 25 | 32 | 38 |
| 50 | 20 | 25 | 25 | 32 |
| 65 | 20 | 25 | 25 | 32 |
| Flat Surfaces | 15 | 25 | 19 | 25 |

## Painting

All boxing and any disturbed finishes shall be painted to match the existing décor.

Gas pipework shall finally be painted yellow.

The boiler house shall be cleared of all arising and any rubbish from these associated works then shall be completely painted throughout with two coats of White Matt emulsion paint on the walls and one coat of Grey floor paint applied to the floor areas.

## 

## Chlorination

After testing of pipework and prior to making the connection between the site main and the incoming main, all hot water pipework will be satisfactorily cleaned and chlorinated, and a certificate provided.

Before chlorination all service pipes, tanks, and down services will be thoroughly flushed out to remove dirty water, debris etc. The flushed water shall be discharged to the foul water drainage system.

## Description of equipment

No work required at this time.

## Electrical Wiring

No work required at this time.

## Electrical Earthing

No work required at this time

## Boiler House Ventilation

No work required at this time.

## Commissioning

The hot water pipework and TMV;s are to be commissioned in accordance with the current British Standard, and a commissioning certificate issued to the client.

## Operating and Maintenance Manual

Not required at this time.

## Record Drawing

Record drawings of the installation shall be provided.

The Contractor shall provide an accurate set of as installed installation drawings on completion.

**1.56 List of materials to be used on this project.**

**Pipework and fittings.** Matpress copper,

**TMV’s** TMV 3,

**AAV’s** Flamco,

**Boxing** Boxing of pipework – To suit existing interior decoration,

**Lagging** Foil faced with identification,

**Pipework supports** Rubber lined supported via M10 thread,

**Isolation Valves** Colour coded lever ball valves,

**Wokingham Borough Council 14th February 2018**