

# Short Contract

A contract between

The Secretary of State for Health and Social Care, as part of the Crown, acting through the Medicines and Healthcare products Regulatory Agency

and



For

LTHW Biotech System Leak Repairs – Phase 1

Reference

C148992

	<b>Page</b>
<b>Contents</b>	
<b>Contract Forms</b>	
Contract Data	2
The Contractor's Offer	4
The Employer's Acceptance	4
Price List	5
Works Information	6
Site Information	9
<b>Conditions of Contract</b>	CC1

Notes about this contract are printed in boxes like this one. They are not part of the contract.

# CONTRACT DATA

The *Employer* is

Name **Medicines and Healthcare products Regulatory Agency**

Address **Blanche Lane, South Mimms, Potters Bar, Hertfordshire, EN6 3QG.**

Telephone **01707 641 000**

E-mail address **[purchasing@mhra.gov.uk](mailto:purchasing@mhra.gov.uk)**

The *works* are **LTHW Biotech System Leak Repairs – Phase 1**

The *site* is **Blanche Lane, South Mimms, Potters Bar, Hertfordshire, EN6 3QG.**

The *starting date* is **20th March 2023**

The *completion date* is **31st March 2025**

The *period for reply* is **2** weeks.

The *defects date* is **52** weeks after Completion.

The *defect correction period* is **2** weeks.

The *delay damages* are **0** per day.

The *assessment day* is the **1st** of each month.

The *retention* is **3** %.

Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply? **No**

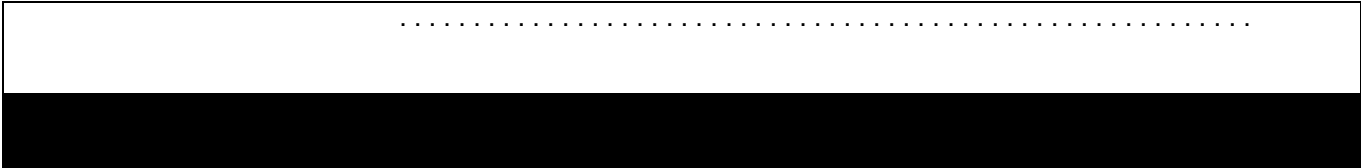
The *Adjudicator* is

Name .....RICS (provided all informal dispute resolution options by the parties has been exhausted) .....

Address .....

Telephone .....

E-mail address ..... Fax .....



# Contract Data

The interest rate on late payment is ..... % per complete week of delay.

**Insert a rate only if a rate less than 0.5% per week of delay has been agreed.**

The Contractor is not liable to the Employer for loss of or damage to the Employer's

property in excess of **£2,000,000.00** for any one event.

The Employer provides this insurance

**Only enter details here if the Employer is to provide insurance.**

.....  
.....

The minimum amount of cover for the third insurance stated in the Insurance Table is **£2,000,000.00**

The minimum amount of cover for the fourth insurance stated in the Insurance Table is **£2,000,000.00**

The Adjudicator nominating body is ..... See above.....

The tribunal is ..... Arbitration .....

If the tribunal is arbitration, the arbitration procedure is .....

The conditions of contract are the NEC3 Engineering and Construction Short Contract April 2013 and the following additional conditions

**Only enter details here if additional conditions are required.**

**Z1 Official Secrets and confidentiality**

- Z1.1 The Official Secrets Act 1989 and, where appropriate, the provisions of section 11 of the Atomic Energy Act 1946 apply to this contract from the starting date until the Defects Certificate or a termination certificate has been issued.
- Z1.2 The Contractor notifies his employees and his Subcontractors of their duties under these Acts.
- Z1.3 The Contractor does not use or disclose information concerning the contract obtained either by the Contractor or by any person employed by him except for the purposes of the contract.

**Z2 Security**

- Z2.1 The Contractor submits to the Project Manager details of people who are to be employed by him and his Subcontractors in connection with the works. The details include a list of names and addresses, the capacities in which they are employed, and other information required by the Project Manager.
- Z2.3 Employees of the Contractor and his Subcontractors are to carry an Employer's pass whilst they are on the parts of the Site stated in the Contract Data.
- Z2.4 The Contractor submits to the Project Manager for acceptance a list of the names of the people for whom passes are required. The Project Manager issues the passes to the Contractor. Each pass is returned to the Project Manager when the employee no longer requires access to that part of the Site or after the Project Manager has given notice that the employee is not to be admitted to the Site.
- Z2.5 The Contractor does not take photographs of the Site or the works or any part of them unless he has obtained the acceptance of the Employer.
- Z2.6 The Contractor takes the measures needed to prevent his and his Subcontractors' people taking, publishing or otherwise circulating such photographs.

**Z3 Payment of undisputed invoices within 30 days by contracting authorities [Employers], contractors and subcontractors – Public Contracts Regulations 2015, Regulation 113**

- Z3.1 That any payment due from the Employer to the Contractor under the contract is to be made no later than the end of a period of 30 days from the date on which the relevant invoice is regarded as valid and undisputed.
- Z3.2 Any invoices for payment submitted by the contractor are considered and verified by the Employer in a timely fashion and that undue delay in doing so is not to be sufficient justification for failing to regard an invoice as valid and undisputed.
- Z3.3 That any subcontract awarded by the contractor contains suitable provisions to impose, as between the parties to the subcontract—
- (i) requirements to the same effect as those which sub-paragraphs Z5.1 and Z5.2 require to be imposed as between the parties to the public contract; and
  - (ii) a requirement for the subcontractor to include in any subcontract which it in turn awards suitable provisions to impose, as between the parties to that subcontract, requirements to the same effect as those required by this sub-paragraph Z5.3.

**Z4 Orders and Invoicing**

- Z4.1 All orders for goods, requests for planned preventative maintenance, reactive maintenance and replacement parts must be subject to a purchase order from the Employer.
- Z4.2 All invoices must state the Employers purchase order number, otherwise the invoice will be returned to the supplier.
- Z4.3 A single invoice must only relate to a single purchase order (PO). The employer cannot process invoices against multiple POs.

**Z5 General Data Protection Regulation (Regulation (EU) 2016/679) – “GDPR”**

Z5.1 GDPR CLAUSE DEFINITIONS:

**Data Protection Legislation:** (i) the GDPR, the LED and any applicable national implementing Laws as amended from time to time (ii) the DPA 2018 [subject to Royal Assent] to the extent that it relates to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy;

**Data Protection Impact Assessment:** An assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data.

**Controller, Processor, Data Subject, Personal Data, Personal Data Breach, Data Protection Officer:** take the meaning given in the GDPR.

**Data Loss Event:** Any event that results, or may result, in unauthorised access to Personal Data held by the Processor under this Agreement, and/or actual or potential loss and/or destruction of Personal Data in breach of this Agreement, including any Personal Data Breach.

**Data Subject Request:** A request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data.

**DPA 2018:** Data Protection Act 2018

**GDPR:** the General Data Protection Regulation (Regulation (EU) 2016/679)

**Joint Controllers:** Where two or more Controllers jointly determine the purposes and means of processing

**LED:** Law Enforcement Directive (Directive (EU) 2016/680)

**Protective Measures:** Appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the Effectiveness of the such measures adopted by it including those outlined in Annex 2 (Security).

**Sub-processor:** Any third Party appointed to process Personal Data on behalf of that Processor related to this Agreement

- Z5.2 The Parties acknowledge that for the purposes of the Data Protection Legislation, the Customer is the Controller and the Contractor is the Processor unless otherwise specified in Annex 1. The only processing that the Processor is authorised to do is listed in Annex 1 by the Controller and may not be determined by the Processor.
- Z5.3 The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection Legislation.
- Z5.4 The Processor shall provide all reasonable assistance to the Controller in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Controller, include:
- Z5.4.1 a systematic description of the envisaged processing operations and the purpose of the processing;
  - Z5.4.2 an assessment of the necessity and proportionality of the processing operations in relation to the Services;
  - Z5.4.3 an assessment of the risks to the rights and freedoms of Data Subjects; and
  - Z5.4.4 the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- Z5.5 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Agreement:
- Z5.5.1 process that Personal Data only in accordance with Annex 1, unless the Processor is required to do otherwise by Law. If it is so required, the Processor shall promptly notify the Controller before processing the Personal Data unless prohibited by Law;
  - Z5.5.2 ensure that it has in place Protective Measures, which are appropriate to protect against a Data Loss Event, which the Controller may reasonably reject (but failure to reject shall not amount to approval by the Controller of the adequacy of the Protective Measures), having taken account of the:
    - Z5.5.2.1 nature of the data to be protected;
    - Z5.5.2.2 harm that might result from a Data Loss Event;
    - Z5.5.2.3 state of technological development; and
    - Z5.5.2.4 cost of implementing any measures;
  - Z5.5.3 ensure that:
    - Z5.5.3.1 the Processor Personnel do not process Personal Data except in accordance with this Agreement (and in particular Annex 1);
    - Z5.5.3.2 it takes all reasonable steps to ensure the reliability and integrity of any Processor Personnel who have access to the Personal Data and ensure that they:

- (a) are aware of and comply with the Processor's duties under this clause;
- (b) are subject to appropriate confidentiality undertakings with the Processor or any Sub-processor;
- (c) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Controller or as otherwise permitted by this Agreement; and
- (d) have undergone adequate training in the use, care, protection and handling of Personal Data; and

Z5.5.3.3 not transfer Personal Data outside of the EU unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:

- (a) the Controller or the Processor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Controller;
- (b) the Data Subject has enforceable rights and effective legal remedies;
- (c) the Processor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavors to assist the Controller in meeting its obligations); and
- (d) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the processing of the Personal Data;

Z5.5.3.4 at the written direction of the Controller, delete or return Personal Data (and any copies of it) to the Controller on termination of the Agreement unless the Processor is required by Law to retain the Personal Data.

Z5.6 Subject to clause 14.6, the Processor shall notify the Controller immediately if it:

Z5.6.1 receives a Data Subject Request (or purported Data Subject Request);

Z5.6.2 receives a request to rectify, block or erase any Personal Data;

Z5.6.3 receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation

Z5.6.4 receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Agreement;

Z5.6.5 receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or

Z5.6.6 becomes aware of a Data Loss Event.

Z5.7 The Processor's obligation to notify under clause Z5.6 shall include the provision of further information to the Controller in phases, as details become available.

Z5.8 Taking into account the nature of the processing, the Processor shall provide the Controller with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause Z5.6 (and insofar as possible within the timescales reasonably required by the Controller) including by promptly providing:

Z5.8.1 the Controller with full details and copies of the complaint, communication or request;

Z5.8.2 such assistance as is reasonably requested by the Controller to enable the Controller to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;

Z5.8.3 the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;

Z5.8.4 assistance as requested by the Controller following any Data Loss Event;

Z5.8.5 assistance as requested by the Controller with respect to any request from the Information Commissioner's Office, or any consultation by the Controller with the Information Commissioner's Office.

Z5.9 The Processor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Processor employs fewer than 250 staff, unless:

Z5.9.1 the Controller determines that the processing is not occasional;

Z5.9.2 the Controller determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; or

Z5.9.3 the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.

- Z5.10 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- Z5.11 Each Party shall designate its own data protection officer if required by the Data Protection Legislation.
- Z5.12 Before allowing any Sub-processor to process any Personal Data related to this Agreement, the Processor must:
- Z5.12.1 notify the Controller in writing of the intended Sub-processor and processing;
- Z5.12.2 obtain the written consent of the Controller;
- Z5.12.3 enter into a written agreement with the Sub-processor which give effect to the terms set out in this clause
- Z5.13 such that they apply to the Sub-processor; and
- Z5.14 provide the Controller with such information regarding the Sub-processor as the Controller may reasonably require.
- Z5.15 The Processor shall remain fully liable for all acts or omissions of any of its Sub-processors.
- Z5.16 The Controller may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to this Agreement).
- Z5.17 The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Controller may on not less than 30 Working Days' notice to the Processor amend this agreement to ensure that it complies with any guidance issued by the Information Commissioner's Office.
- Z5.18 Where the Parties include two or more Joint Controllers as identified in Annex 1 in accordance with GDPR Article 26, those Parties shall enter into a Joint Controller Agreement based on the terms outlined in Annex 1 in replacement of Clauses Z5 for the Personal Data under Joint Control.
- Z6 Disclosure within Government**
- Z6.1 The Employer may disclose within Government any of the tenderer's documentation/information (including any that the Contractor considers to be confidential and/or commercially sensitive such as specific bid information) submitted by the tenderer to the agency during this procurement and any subsequent contract. The information will not be disclosed outside Government.
- Z7 Contract Implementation Condition**
- Z7.1 Contract will be executed in phases. The implementation phases are contingent on (a) The contractor's delivery effectiveness on preceding phase. (b) Funding provision made available to the Employer by the Employer's sponsor.

**Annex 1**

**Schedule of Processing, Personal Data and Data Subjects**

<b>Description</b>	<b>Details</b>
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the Employer is the Controller and the Contractor is the Processor in accordance with Clause Z5.
Subject matter of the processing	The processing is needed to ensure that the Processor can effectively deliver the contract to provide a service to the Agency.
Duration of the processing	The duration is for the length of the contract.
Nature and purposes of the processing	Recording of staff name, work contact details and location of the place of delivery of the contract.
Type of Personal Data being Processed	Staff name, work telephone number and email.
Categories of Data Subject	Agency Staff.
Plan for return and destruction of the data once the processing is complete  UNLESS requirement under union or member state law to preserve that type of data	Length of contract. The Agency does not require return of data at close of contract.



# Contract Data

## The Contractor's Offer

The Contractor is

Name [REDACTED]

Address [REDACTED]

Telephone [REDACTED]

E-mail address; [REDACTED]

The percentage for overheads and profit added to the Defined Cost for people is 0%.

The percentage for overheads and profit added to other Defined Cost is 0%.

The Contractor offers to Provide the Works in accordance with the *conditions of contract* for an amount to be determined in accordance with the *conditions of contract*.

[REDACTED]

Signed on behalf of the Contractor

[REDACTED]

Name:

Position:

Signature:

Date:

# The *Employer's* Acceptance

The *Employer* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Employer*

(Medicine and Healthcare products Regulatory Agency)

Name:

Position:

Signature:

Date:

## Contract Data

### Price List

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

[Please see supplier's proposal in Annex 2.](#)

[Redacted]

[Redacted]

# Contract Data

## Works Information

The Works Information should be a complete and precise statement of the Employer's requirements. If it is incomplete or imprecise there is a risk that the Contractor will interpret it differently from the Employer's intention. Information provided by the Contractor should be listed in the Works Information only if the Employer is satisfied that it is required, is part of a complete statement of the Employer's requirements and is consistent with the other parts of the Works Information.

### 1 Description of the *works*

Give a detailed description of what the Contractor is required to do and of any work the Contractor is to design.

As published and specified in ITT C139866. The published works specification document is herewith attached in Annex 3

### 2 Drawings

List the drawings that apply to this contract.

As published and specified in ITT C139866. The published works specification document is herewith attached in Annex 3

# Contract Data

## Works Information

### 3 Specifications

List the specifications which apply to this contract.

Mainly, as published and specified in ITT C139866. The published works specification document is herewith attached in Annex 3

"Government Buying Standards", must be applied to any areas of the specification which fall under these standards. These standards have been endorsed by the Coalition Government and all central government departments and their related organisations must ensure that they meet these minimum mandatory specifications when buying products and services. The link to the standards is:

<https://www.gov.uk/government/collections/sustainable-procurement-the-government-buying-standards-gbs>

Article 6 of the Energy Efficiency Directive 2012/27/EU on energy-efficient public procurement must be applied to any areas of the specification which fall under these standards. These standards have been endorsed by the Coalition Government and all central government departments and their related organisations must ensure that they meet these minimum mandatory specifications when buying products and services. The link to the guidance is:

<https://www.gov.uk/government/publications/procurement-policy-note-0115-implementing-energy-efficiency-directive-article-6-further-information>

### 4 Constraints on how the Contractor Provides the Works

State any constraints on the sequence and timing of work and on the methods and conduct of work including the requirements for any work by the Employer.

A programme of works will be agreed with the supplier Project Manager during the post-contract mobilization stage.

# Contract Data

## Works Information

### 5 Requirements for the programme

State whether a programme is required and, if it is, state what form it is to be in, what information is to be shown on it, when it is to be submitted and when it is to be updated.

State what the use of the works is intended to be at their Completion as defined in clause 11.2(1).

A programme of works will be agreed with the supplier Project Manager during the post-contract mobilization stage.

### 6 Services and other things provided by the *Employer*

Describe what the Employer will provide, such as services (including water and electricity) and “free issue” Plant and Materials and equipment.

#### Isolations

The Employer will isolate all services as necessary; permits will be issued to cover all the scope of works.

#### Facilities

The site has toilets, power and water which will be provided to the Contractor with the Employer's permission. The site also has a staff restaurant that the Contractors staff may use subject to persons being properly dressed (no bare torsos or shorts) and in clean clothing.

# Contract Data

## Site Information

**Give information about the site such as the ground conditions and any other information which is likely to affect the Contractor's work such as limitations on access and the position of adjacent structures.**

### Location

Blanche Lane, South Mimms, Potters Bar, Hertfordshire EN6 3QG, UK. Ordnance Survey reference TL217003

Although not far from the M25-A1(M) South Mimms interchange, the site is in a substantially rural setting on a relatively steep slope facing south South East. There is a conservation area to the north and the natural topography drains down the fall slope to watercourses beyond the southern lower boundary. The site of approximately 13 acres (5.3 hectares) has been terraced to provide level building platforms.

### Permit to Work

The Employer operates a permit to work, areas covered by these permits include general permits, electricity working, hot works, working at height and decontamination certificates. All permits will be issued as necessary by the Employer. No work is to be commenced without the possession of the relevant permit to work.

There are no health risks to contractors' personnel from the Employers activities as long as the Employers controls are complied with fully. There is a site induction that every member of the Contractors staff must complete before working on site.

The Employer will continue to operate normally in the building. However, it will be necessary for some operational areas to be vacated for periods of time to allow works to be carried out. The Contractor will be required to liaise with the Employer so that a programme can be established to suit operational requirements. Access to all areas for Employer's personnel must be maintained at all times, unless alternative arrangements have been made with the client.

The Contractor must ensure that his operations do not pose any risk to the Employers personnel or visitors to the complex. Confirm you understand and will comply this requirement.

### Asbestos

An Asbestos Register for the site was compiled in 2003/2004, 2009 and updated 2010. This register is available on request. It should be noted that the asbestos survey may not have identified all the asbestos containing materials in the building and the Contractor's personnel must have received asbestos awareness training and proceed with caution

### Noise, dust, vibration

Due to the nature of the site, it is essential that full consultation with The Employer is carried out prior to a detailed forward planning schedule being drawn up. This is due to the sensitive nature of the Scientific work and equipment used / carried out on site.

**Storage**

Storage of materials and tools, The Employer is very limited on internal space and therefore all material and tools will need to be stored in an area designated by the Project Engineer, or external storage provided by the contractor.

**Annex 2**  
**Parker Air Condition Costing Proposal**



## **BIOTECH LOW TEMPERATURE HOT WATER PIPEWORK REPLACEMENT PROJECT SPECIFICATION**

### **Introduction**

The Medicines and Healthcare products Regulatory Agency is an Executive Agency of the Department of Health established on 1 April 2003. We have around 1,270 staff, with a total budget of approximately £150 million. We protect and improve the health of millions of people every day through the effective regulation of medicines and medical devices, underpinned by science and research.

### **Scope**

#### **National Institute for Biological Standards and Control (NIBSC)**

The institute is a world leader in assuring the quality of biological medicines through product testing, developing standards and reference materials, and carrying out applied research. The Biotech building has several laboratories and office suites, two containment level 3 laboratories that supports research to achieve the objectives set out in NIBSC's Science Strategy and Agency's Corporate Strategy 2018 – 2023. The building is supported by a central plantroom which houses all the air handling units, LTHW pipework, DHW supply to laboratories, steam supply and its ancillaries. This project is set out to replace the aged LTHW pumps and pipework and take the opportunity to upgrade LTHW system up to be compliant. This project is part of the infrastructure – site updating portfolio approved, by SMT as part of the 22/23 capital program to address priority issues at the South Mimms site.

### **Specification**

This project is ideally suitable for a contractor who has the knowledge of utilising TREND BMS system to monitor and control various flow rates with regards to air handling units within a facility and particularly working within a live operational facility. Within the Plant Room, there are seven air handling units each with LTHW heating coils, five of which also have LTHW frost coils. The system was recently recommissioned, and this identified problems with the existing valves and pipework, they could not be adjusted without leaking. It is, therefore, the proposal of this project to replace them. The other concern is that the main pipework is installed in carbon steel which has been drained down several times that could influence the degrading of the pipework. Thin wall carbon steel tubing is more susceptible to corrosion failure. Corrosion can progress to an advanced stage much more quickly than would normally be expected leading to unexpected failures in the pipework in as little as six months.

In a copper pipework system, the dissolved oxygen in the system water will rapidly be used up as it reacts with the large area of surface, the loss of metal thickness on thin-walled carbon steel can be significant. Due to problems within the system, we know that the system has been partially drained and left whilst emergency works have been carried out. As such, we need to eliminate the risk of failure of the system which could cause considerable damage to the laboratory area below. All carbon steel pipework is to be replaced with copper pipework and Xpress fittings. With respect to the heating pump this has also been an issue and does not provide the correct water flow. The pump set is to be replaced with a new pump set with run and standby pumps to be supported individually by the new Vacon Inverters which are our site standards. We do not allow integral inverters, but the pumps will be driven by Vacon 100 flow type inverters.

We also know that the UK stem cell building has a problem getting to temperature after the system has been isolated and, in the winter, this can be a problem as the main air handling units are operating on full fresh air. The hot water flow and return to this building has been poorly installed and made complicated through several leaks on the system. The new pump set is to select with a flow rate to meet the air handling unit and the radiator requirements, plus 15% flow and 10% pressure. The contractor will have the responsibility of ensuring the existing plate heat exchanger can supply the required volume of hot water at the right level of flow rate. All insulation is to be replaced with 40mm foil faced mineral fibre sections complete with aluminium cladding at levels below three meters. All valves are to have removable insulation bags fixed with Velcro and ties. Pipework is to be flushed and treated upon completion of the installation. Following flushing and venting, the system is to be re-commissioned.

The contractor shall also replace the flow and return hot water pipework from the Biotech plantroom supplying the UK stem cell building. There is always a massive leak when the system is turned off that regularly damages the ceiling tiles below the pipework. The mechanical contractor should allow for the BMS contractor to disconnect and reconnect all sensors, recommission upon completion. Operating and maintenance manuals must be updated and form part of the hand over documentation complete with all commissioning test sheets. Access to the Plant Room shall be via a scaffold to be erected at the back of the plantroom. This will allow the contractor to load all materials via the route without disturbing the staff access.

Upon completion, the Plant Room shall be thoroughly cleaned and signed off by the NIBSC engineer. All waste material to be removed from site and waste transfer notes issued. The mechanical contractor shall ensure that all building penetration will be filled and certified with the right fire-retardant materials and all building fire compartmentation identified. The contractor shall quote and supply at

least two spare control valves, manual valves, actuators and strainers. Access to the building will be via the road and pathways, or through a designated corridor and up the integral stairs to the laboratory and corridor, up to the next level provides access to the plant room which is only accessible to approved personnel using the access card to be provided.

### Trend Controls

The BMS contractor shall update the graphics with the changes to the pumps, inverters and plate heat exchangers where required. New Vacon inverters to be driven and connected to Trend BMS. The contractor must be confident with working within an operational research facility with minimum disruption to operations during the execution stage of the project. The recommended contractor for the site BMS is:

Jon Kilpatrick  
07976 725853  
[jkilpatrick@detail-design.co.uk](mailto:jkilpatrick@detail-design.co.uk)

Detail Design Engineering  
Richmond House, Manchester  
M33 6BB

The list of the mandatory requirements is shown below, kindly note that this list is not exhaustive and additional requirements that will improve the performance of the system can be added but nothing can be SUBTRACTED from these requirements.

### Mandatory

- There are no strategic zone isolation valves on the system flow and return pipework. Every time there is a leak the entire system is affected, as individual legs cannot be isolated. The contractor shall ensure the introduction of strategic zone isolation valves within the system.
- The contractor must replace all pipework components, - isolation valves, regulating valves, control valves, strainers, non-return valves, drain cocks and binder points on all the air handling units.
- The plate heat exchanger, circulating pumps and pipework needs to be sized to suit the correct flow rates for the Biotech and UKSC buildings.
- The contractor shall ensure the Inverters supplied with the pumps are NOT integral but individual Vacon 100 flow type inverters.
- All insulation is to be replaced with 40mm foil faced mineral fibre sections complete with aluminium cladding at levels below two meters. All valves are to have removable insulation bags fixed with Velcro and ties.

- The mechanical contractor shall ensure that all building penetration will be filled and certified with the right fire-retardant materials and all building fire compartmentation identified.
- The contractor shall remove and replace the ceiling tiles and grid system along the glass walkway leading to the UKSC building after the replacement of the pipework and valves.
- The preferred building management system is TREND BMS. This is because all the current infrastructure within the Institute is fitted with TREND system and replacing them with another BMS will be an expensive expenditure.
- All redundant services are to be removed and the area left clean after the completion of the project. All plant and its subsidiary components must be easily accessible for routine servicing and maintenance. The new Installation should allow for a clear access route to and for maintaining the new plant.
- The contractor shall fill the attached risk assessment spreadsheet attached to the tender to identify possible risks in the project execution from the contractor's perspective.
- The winning contractor shall be sent the PPM spreadsheet to be filled before project completion and returned to the project engineer in charge.

#### **Additional Requirements**

In addition to the requirements stated above, kindly take note of the details about the following activities that are integral to the project.

- The proposed route of delivery into Biotech plantroom identified after the site visit must be clearly detailed within your proposal in the tender return.
- Kindly note that all new holes drilled through the slab between the plantroom and room must have a fireproof sealant sealing the hole where pipe or cable pass through.

#### **O & M Manual**

Electronic O and M manuals will be provided at the end of the works, showing as installed drawings, routine service parts and the frequency of maintenance. Electrical certificates along with information etc. on manufacturer's literature must also be included. Control panel drawings will include SET drawings for the Trend controllers.

#### **Method of Installation**

- The contractor must document the method statement that will be utilised for the execution of the project bearing in mind that the Biotech will not be vacated during the project works and out of hours work will not be encouraged.

- There will be a site visit organised for all the prospecting contractors for these works during the tendering period. The proposed site visit is scheduled for the Monday 20<sup>th</sup> of February 2023 between 10:00 – 11:00 am in the morning.