

## **Committee: Cabinet**

**Date: 19 February 2024**

Wards: All

**Subject:** Civic Centre – Installation services and project management of a Variable Refrigerant Flow (VRF) System and Electrical Intake Works

Lead officer: Lucy Owen, Executive Director of Housing and Sustainable Development

Lead member: Councillor Andrew Judge, Cabinet Member for Housing and Sustainable Development

Contact officer: Nick Layton, Interim Head of Facilities Management

### ***Exempt or confidential report***

*The following paragraph of Part 4b Section 10 of the constitution applies in respect of information within the appendix and it is therefore exempt from publication:*

*Information relating to the financial or business affairs of any particular person (including the Authority holding that information).*

*Members and officers are advised not to disclose the contents of the appendix.*

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### **Recommendations:**

- A That Cabinet approve that a contract is entered into for the provision of a new VRF system at the Civic Centre, along with remedial works to the electrical power network ,with the preferred bidder listed in Appendix A.

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## **1 PURPOSE OF REPORT AND EXECUTIVE SUMMARY**

- 1.1 On the 15 January 2024 Cabinet approved the delegation of authority to award a contract to the preferred bidder, by the Executive Director for Housing and Sustainability and the Cabinet portfolio holder. This was following a competitive tender exercise for the replacement heating system at the Civic Centre, together with remedial works to the electrical power supply and lighting replacement over a number of floors.
- 1.2 The approval to award was subject to a successful value engineering exercise to bring the costs within the current budget envelope. This exercise has not generated the savings envisaged and costs still exceed those originally available.
- 1.3 Salix have been approached and asked whether there is more grant available. Whilst they sympathise with the Council's predicament and acknowledge that many other projects have also come in significantly over budget due to market conditions, all grant monies have been allocated and there is no additional funding available.
- 1.4 Appendix A illustrates the differences between tendered costs, value engineered costs and original estimates / approvals.

## **2 DETAILS**

- 2.1 The gas boilers at the Civic Centre are 42 years old and well past their estimated life span.
- 2.2 A consultant was engaged during late 2020 to carry out a feasibility study regarding the most appropriate replacement option bearing in mind Merton's climate emergency declaration and its wish to move away from gas as a means of heating its buildings.
- 2.3 It was concluded that the best option, in terms of reduction in carbon emissions and flexibility in use was the abandonment of the gas fired boilers and replacement with a Variable Refrigerant Flow (VRF) system. This will enable heating in the winter and comfort cooling in the summer. Computer simulation indicated there will be little impact in terms of carbon emissions in having cooling in the summer where there is currently none.
- 2.4 In 21/22 the Council was successful in obtaining a £3,136,593 grant under the government's decarbonisation programme to replace the boilers with a VRF system. A condition of the grant is that the Council provides the funds equivalent to the like for like replacement of the gas boilers, equating to £1,061,982.
- 2.5 A building services consultant, Butler & Young, was engaged following an open tender exercise in early 2023 to design the new system and act as project manager for the works.
- 2.6 This procurement will provide a contractor to install the designed system to the required specification within the timeframe of the grant funding.
- 2.7 The current electrical switchgear is aged and requires replacement and funds have been set aside for this work in 23/24 and 24/25. Due to the amount of electrical works associated with the new VRF system, these works are best undertaken at the same time. It will likely mean the power to the Civic will need to be turned off while UKPNs new supply is energised. This shutdown will be kept to a minimum, with exact details developed with UKPNs, B&Y and the successful contractor.
- 2.8 There is the possibility of road closures associated with the delivery of the works; for the new electrical supply into the Civic and for crantage of redundant plant from the 2<sup>nd</sup> floor roof, although it may be possible to use the car park for the latter. Any road or lane closures will be agreed with TfL.
- 2.9 Value engineering has identified a number of savings, such as not carrying out works to areas with existing air conditioning, minimising works to existing ventilation, retaining a centralised hot water system, leaving old plant and equipment in situ where the area is not needed for new plant and equipment and removing the lighting replacement works
- 2.10 The value engineering fell short of what was originally expected, due to the way the preferred bidder built up its costs, an aged electrical system where minimising replacement works as part of this scheme is likely to cause issues during install and fewer builders works savings due to phasing of the works.

### 3 ALTERNATIVE OPTIONS

3.1 The consultant engaged during 20/21 to carry out a feasibility considered the following options:

- Replacement with high efficiency gas boilers
- Replacement with a combination of high efficiency gas boilers and heat pumps
- Replacement with heat pumps
- Variable refrigerant flow air conditioning system (VRF)

The table below summarises the findings of the feasibility study in terms of carbon emissions:

Option	MWh/yr	kgCO <sub>2</sub> /yr	Reduction kgCO <sub>2</sub> /yr compared to existing
Current boilers	3,645	765,442	Base
Condensing boilers	2,622	550,674	28%
Air source heat pump + boilers (50:50)	1,197	271,265	65%
Air source heat pump plus new heating distribution	996	232,044	70%
VRF	539	125,480	84%

3.2 It was concluded that the best option, in terms of reduction in carbon emissions and flexibility in use was the abandonment of the gas fired boilers and replacement with VRF.

3.3 The proposed VRF system uses electricity as a primary fuel rather than gas and as such there will be changes to the utility costs associated with the new scheme. These are as estimated below based on current utility costs of 7p/kWh for gas and 25p/kWh for electricity. These figures can change, up or down depending on the utility market.

	<b>Current fuel displacement (kWh)</b>	<b>Current estimated cost (£)</b>	<b>Estimated consumption with VRF (kWh)</b>	<b>Estimated costs using VRF (£)</b>
<b>Heating</b>	1,750,000	£122,500	575,800	143,950
<b>Hot Water</b>	255,252	17,868	150,000	37,500
<b>Total</b>		140,368		181,450

- 3.4 Abandon this project and consider less expensive low carbon option such as heat pumps and apply for grant funding for a new approach. This is a more complex engineering solution and will mean connecting new plant into old existing heating pipework distribution. Again it is unknown if any grant bid will succeed, and it is likely we would receive less grant funding as the carbon reductions would not be as high.

#### **4 CONSULTATION UNDERTAKEN OR PROPOSED**

- 4.1 The approach outlined and followed for this procurement was initially conveyed at the Departmental Procurement Group (DPG) on 25 October 2023.
- 4.2 Legal Services and Finance have been consulted and their comments will be incorporated in the final report.

#### **5 TIMETABLE**

<b>Event</b>	<b>Date</b>
Deadline for receipt of tenders	7 December 2023
Evaluation of tenders	7 December – 13 December 2023
Procurement Board (virtual approval request)	21 November 2023
Cabinet	15 January 2024
Call-in period	15 January – 19 January 2024
Cabinet	19 February 2024
Call-in period	19 February – 23 February 2024

Notification of award decision	February 2024
Contract commencement date	February 2024

## **6 FINANCIAL, RESOURCE AND PROPERTY IMPLICATIONS**

- 6.1. A credit check was carried out. Please refer to Appendix C.
- 6.2. The approved capital programme includes £4,903,080 for the delivery of this scheme. The price section was evaluated on % overhead & profit and prelims and is circa £3m higher than this budget.
- 6.3. Officers have undertaken a value engineering exercise to reduce the cost of the works contract to £5,799,726.13.
- 6.4. The scheme is funded by £3.136m Salix grant, in order to retain this grant £1.1m of the scheme needs to be spent by 31 March 2024.

## **7 LEGAL AND STATUTORY IMPLICATIONS**

- 7.1. The award of contract to the approved provider follows a successful tender which is compliant with the process in accordance with Regulation 33 of the Public Contracts Regulations 2015 (PCR) and the Councils Contract Standing Orders.
- 7.2. Officers should retain evidence of the competition process undertaken in order to demonstrate compliance with the framework agreement.
- 7.3. The contract needs to contain terms consistent with grant requirements.
- 7.4. Once the call-off contract has been entered into it will need to be recorded on the Council's contract register and the relevant information required by the PCR should be published on Contracts Finder.
- 7.5. The Council is entitled to delegate the decision making as described in the recommendations under section 9E of the Local Government Act 2000.

## **8 HUMAN RIGHTS, EQUALITIES AND COMMUNITY COHESION IMPLICATIONS**

- 8.1 The successful supplier must, in carrying out its functions, have due regard to the need to eliminate unlawful discrimination and harassment and to promote equality of opportunity in relation to disability, race and gender and the need to take steps to take account of disabilities, even where that involves treating the disabled more favourably than others (section 13(3) Equality Act 2010).
- 8.2 Within the tender, bidders were required to propose social value offers via the Councils Social Value charter, under 4 specific theme areas: Economy; Social; Environmental, and; Innovation. The social value offer submitted by the proposed contractor will potentially generate social value to the London Borough of Merton. The value of which can be found within Appendix D. 5% of this will be specifically for 'Environmental' measures to support the Councils Climate Emergency declaration and efforts to become Carbon neutral.
- 8.3 The recommended preferred bidder employs skilled staff who will be paid above the London Living Wage.

## **9 CRIME AND DISORDER IMPLICATIONS**

9.1. There are no crime and disorder implications relating to the subject of this report.

## **10 RISK MANAGEMENT AND HEALTH AND SAFETY IMPLICATIONS**

10.1 Only when the London Borough of Merton enters into legally binding contracts under the terms of the contracts will the contracts come into force.

10.2 The preferred contractor has successfully completed satisfactory financial checks as well as checks on competency in delivery of similar contracts at the pre-qualification and tender stage of the procurement exercise.

10.3 A risk (Early Warning) register will be produced in line with the proposed contract and will be used by all parties throughout the contract to manage risk.

10.4 The contract falls under the Construction (Design and Management) Regulations 2015 to ensure health and safety is considered during all stages of the contract by all the parties involved. The Consultant B&Y has been appointed as Principal Designer under the regulations and the preferred Contractor, on award of any contract, will be appointed as Principal Contractor.

## **11 ENVIRONMENTAL AND CLIMATE IMPLICATIONS**

11.1 Merton Council approved the Climate Strategy and Action Plan on 18 November 2020 which commits the council to achieve net-zero carbon across four thematic areas (the Green Economy, Buildings and Energy, Transport and Greening Merton by 2030).

11.2 Replacing the boiler plant with a VRF system can play a significant part in reducing the council's reliance on natural gas and it is estimated a reduction in emissions from the Civic Centre boilers by 84% compared to current values will offset circa 640 tonnes of CO<sub>2</sub> per annum.

## **12 APPENDICES – THE FOLLOWING DOCUMENTS ARE TO BE PUBLISHED WITH THIS REPORT AND FORM PART OF THE REPORT**

- Appendix A – Details of Price / Quality Analysis
- Appendix B – Credit Check
- Appendix C – Social Value Commitments

## **13 BACKGROUND PAPERS**

13.1. None



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