

Report to Cabinet
12 February 2020
Report of Director of place
Subject Replacement of space heating system and controls for
Norwich city hall.

Item

11

KEY DECISION

Purpose

To advise of the procurement process for the replacement of the space heating boilers and controls which serve to provide the heating provision for Norwich city hall and to seek approval to delegate authority to award the contract.

Recommendation

To delegate approval to the Director of place in consultation with the portfolio holder for resources to award the contract for the replacement of the space heating boilers and controls which serve to provide the heating provision for Norwich city hall.

Corporate and service priorities

The report helps to meet the corporate priority great neighbourhoods, housing and environment.

Financial implications

The works value are estimated at £315,000.00 and the costs arising from the decisions to award the contracts as detailed will be met from approved budgetary provision within the council's General Fund Capital programme for 2020/21.

Ward/s: Mancroft

Cabinet member: Councillor Kendrick - Resources

Contact officers

Andy Watt Head of city development services	01603 212691
Neil Watts – Major Works and Services Manager	01603 227172

Background documents

None

Report

Introduction

1. The two existing city hall gas boilers provide the heat source to heat the building as required throughout the year. The boilers are located within the plant room within the city hall basement.
2. The existing gas boilers have been in service for 24 years.
3. Currently the systems are functional but system faults have been occurring with increased frequency. This results in loss of system functionality requiring contractor engineer or Hall superintendent attendance to reset the system.
4. To ensure reliability and serviceability of the buildings primary heating equipment the proposal is to replace the existing boiler plant and control systems. The Performance Specification will require potential suppliers who are tendering for the scheme to include in their design how renewable technology can be incorporated in the new scheme.
5. Options considered:

- Ground Source Heat Pump

This type of system requires adequate land space, local to the premises, which can be utilised for a borehole array. Adequate land area does not exist adjacent to the building to support this technology.

- Air Source Heat Pump

This technology requires plant to be located externally to the building. Likely locations would be the roof or internal North Well. The roof already has a large quantity of photovoltaic panels, which restricts the placement of any additional plant in this location. This technology could deliver some of the required heating demand but will only serve to supplement a primary heating source.

The scheme will incorporate a 3000 litre water storage vessel located in the basement that will be capable of being heating by air source technology.

- Natural Gas

Natural gas boilers are capable of delivering the required heating demand and can be located within the existing structure.

6. It is therefore recommended that the two existing gas boilers be replaced with modern energy efficient gas boilers located within the existing heating and ventilation system plant room in the City Hall basement.
7. Four boilers are proposed to reduce the impact of individual unit failure should this occur throughout the system lifetime. The existing two no. 650kw boilers (1300kw total output) operate at 86% efficiency. The proposed 4 no. 280kw new gas condensing boilers (1120kw total output) operate at up to 99% efficiency

8. The heating system will be designed to allow for the future addition of an air source heating system to provide a renewable energy component to the scheme. This will require plant to be located externally to the boiler plant room. Listed Building consent will be required for this element of the scheme.
9. The existing controls have been modified many times over the years and date back to the 1960s. They are extremely limited.
10. The control system for the heating system will therefore also be replaced to modernise the control technology and to ensure component serviceability. The new controls will:
 - Allow the new heating system to switch between fuel types
 - Allow the heating system to be remotely controlled
 - Allow the temperature in the building to be reduced overnight and at weekends
 - Adjust the boiler at times of low demand to reduce gas usage by a minimum of 20%
 - Allow more efficient control of the heating and hot water circuits and pumps by use of variable speed technology
11. The works will be required to take place during the summer months (1st May through to the 30th September) to reduce the impact of system downtime whilst works take place.

Procurement Process

12. An open tender opportunity will be advertised on the council's e-procurement portal and contracts finder.
13. Suppliers will be asked to submit details of their organisation in terms of finance, contractual matters, insurances, quality assurance, environmental standards, health and safety, equality and diversity credentials and previous experience. These aspects will be evaluated to ensure that suppliers met the Council's basic requirements.
14. At the same time, suppliers will be asked to submit details in the form of method statements proposing how they will meet the requirement for the work package and the price that they will charge to carry out this work. These method statements will be evaluated when it has been confirmed that the suppliers have met the Council's basic requirements.
15. The suppliers will need to confirm that they will be able to deliver the scheme during the required project timescale 1st May to 30th September 2020.
16. The design and procurement timetable does not allow a report to cabinet identifying the winning supplier and for the works to be delivered within the project period identified above.

17. The proposal is to target the Contract signing and formal purchase order issue, to the successful contractor, by the 1st April 2020.
18. Cabinet is therefore requested to delegate the decision to the director of place, in consultation with the cabinet member for resources.

Tender Evaluation

19. The supplier selection process requires suppliers to complete a questionnaire. The responses given will be evaluated against pre-determined criteria. This quality assessment carries a maximum of 40% of the marks. The lowest price will be allocated 60% of the marks and marks will be deducted, pro-rata, with each increasing tender price.
20. The supplier with the highest cumulative score will be deemed the best value submission.
21. The decision to award will be published as a key decision and therefore members will have the opportunity to review the decision in the usual way.

Integrated impact assessment



NORWICH
City Council

The IIA should assess **the impact of the recommendation** being made by the report
Detailed guidance to help with the completion of the assessment can be found [here](#). Delete this row after completion

Report author to complete

Committee:	Cabinet
Committee date:	12 th February 2020
Director / Head of service	Andy watt
Report subject:	Replacement of space heating system and controls for Norwich city hall.
Date assessed:	17 January 2020

	Impact			
Economic (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Finance (value for money)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Open tendering ensures that best value is achieved.
Other departments and services e.g. office facilities, customer contact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reliable system will reduce input from Office facilities team and ensure building remains fit for purpose.
ICT services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Economic development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Financial inclusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Social (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Safeguarding children and adults	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>S17 crime and disorder act 1998</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Human Rights Act 1998	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Health and well being	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Impact			
Equality and diversity (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Relations between groups (cohesion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Eliminating discrimination & harassment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Advancing equality of opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Environmental (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Transportation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Natural and built environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The works will ensure building remains fit for purpose.
Waste minimisation & resource use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	New system will deliver better system efficiency and an element of renewable energy generation hence reducing fuel consumption
Pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sustainable procurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Energy and climate change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	New system will deliver better system efficiency and an element of renewable energy generation hence reducing greenhouse gas emissions
(Please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments

	Impact			
Risk management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There is a low risk that the appointed supplier could fail during the life of the contract. There is little risk to the council, as it is not investing in the supplier. The risk is one of service continuity rather than financial which is further mitigated by the fact that the contract is planned in nature.

Recommendations from impact assessment	
Positive	
The works will serve to ensure the building continues to be fit for purpose, will reduce on-going maintenance costs and reduce the buildings carbon emission figures due to improved system efficiencies.	
Negative	
Neutral	
Issues	