

## BARNSELY METROPOLITAN BOROUGH COUNCIL

This matter is a Key Decision within the Council's definition and has been included in the relevant Forward Plan

### REPORT OF THE EXECUTIVE DIRECTOR PLACE

#### Berneslai Homes – Tender District Heating Underground Mains Replacement Programme 2019-21

#### 1. PURPOSE OF REPORT

- 1.1 To seek Council approval for Berneslai Homes to carry out the replacement of the underground heating mains at three district heating schemes following a competitive tender exercise.
- 1.2 The proposed capital works programme will improve the overall Energy Efficiency, of three district heating schemes; supplying heat to council housing and connected buildings. This investment will return social, economic and environmental outcomes, which will positively benefit; the Council, it's residents and the wider community.

#### 2. RECOMMENDATIONS

It is recommended that:

- 2.1 **Cabinet approve the lowest tender submitted by the contractors to carry out the 3 year capital works programme.**
- 2.2 **Cabinet approve the 2019/20 Aldham Farm/Hudson Haven replacement programme.**
- 2.3 **Cabinet approve, in principle, the replacement programmes for Marston Crescent – 2020/21 and Rose Tree Court – 2021/22. Funding for these two schemes will be released annually as part of the agreed annual budget process.**

#### 3. INTRODUCTION

- 3.1 Three district heating schemes require the full replacement of the underground district heating distribution mains pipework:

Schemes	Dwellings & Buildings
Aldham Farm/Hudson Haven, Wombwell, Barnsley	80 dwellings including an independent living scheme
Marston Crescent, New Lodge, Barnsley	92 dwellings
Rose Tree Court, Cudworth, Barnsley	53 dwellings and a community centre

- 3.2 These schemes consist of commercial biomass and gas systems with ancillary equipment from a centralised plant room, supplying heat and hot water connected to individual dwellings and buildings.

- 3.3 The existing underground distribution heating pipework has been installed at these schemes since the district heating systems were originally installed. The sectional iron and plastic combination pipework has reached its 25-30 year life expectancy and are beyond economical repair.
- 3.4 District/communal heating schemes comprise of a range of elements. Life cycles of these elements i.e. commercial boiler plant, below and above ground heating mains, dwelling heating internals, community centres, distribution etc. have varied projected lifespans.
- 3.5 Following analysis of the entire managed district heating schemes, it was identified that the underground heating distribution pipework to a number of schemes were either close to or had reached the end of their recommended life expectancy.
- 3.6 Berneslai Homes have commissioned NPS to complete a mechanical services condition survey and scheme estimate for the replacement of the underground heating mains at the recognised schemes. The report provided a detailed summary of the current condition and functionality of the existing underground district heating mains, with estimated costs of their replacement and indicative timescales for renewal.
- 3.7 The report highlighted only one scheme with the full original iron distribution pipework and recommended that it should be prioritised for replacement works. The other schemes with iron and plastic combination pipework were given indicative timescales for when full replacement works should be completed.
- 3.8 Based on the mechanical services condition report, full replacement works at the following sites were estimated to be:

<b>District Heating Site</b>	<b>Estimated Replacement Costs £</b>
Aldham Farm/Hudson Haven	£327,800
Marston Crescent	£590,040
Rose Tree Court	£334,866

- 3.9 The total estimated capital costs for works of the project therefore total £1,252,000 excluding professional fees.
- 3.10 It was agreed that these schemes would be completed as part of the Berneslai Homes capital replacement programme and be funded from the HRA supplementary capital programme, as part of the heating works budget.
- 3.11 Due to total estimated value of the works as highlighted above being in excess of the annual heating works budget, it has been agreed that a three project programme will run over a 3 year period with one scheme to be completed within each fiscal year. This will ensure to costs will be contained within the agreed annual budget allocation.
- Aldham Farm/Hudson Haven - 2019/20
  - Marston Crescent - 2020/21
  - Rose Tree Court – 2021/22

- 3.12 NPS was commissioned to provide professional services for the procurement of the project.
- 3.13 The procurement was undertaken via shortlisted tender. Prospective tenderers for the works programme were sought through the YOR tender procurement system.

#### 4. CURRENT POSTION

- 4.1 Following a competitive procurement exercise tenders were received on 12 July 2019 as follows:-

Contractor	Tender £
NPS Barnsley	872,687
Warmer Energy Services	1,322,711
Eneteq Services Ltd	No Response
Vital Energi	Opt Out

- 4.2 The tender was issued to four contractors, unfortunately however, only two submitted tenders. One of the tenderers provided no response, whilst the other opted out stating unable to submit due to the product range specified.
- 4.3 Following the low tender return, feedback was sought from contractors who declined to tender.
- 4.4 Eneteq Services Ltd explained that the legal department of their parent company (Veolia) had raised issues with the wording of the standard warranty and bond, and consequently they were instructed to withdraw from the tender process. Vital Energi chose to withdraw from the tender process as their preference was to install an alternative pipework material. Therefore, they did not consider their tender would be competitive based upon the specification.
- 4.5 Arithmetical checks found an error was identified where NPS Barnsley had not made any allowance for an element of the priced works.
- 4.6 Under section 8.3 of Instructions for tendering, errors are to be dealt with in accordance with; *JCT Tendering Practise Note 2017 – Alternative 2 – giving the Tenderer an opportunity of confirming offer of amending to correct genuine errors – arithmetical errors and patent errors in pricing.*
- 4.7 NPS Barnsley were contacted and advised of the pricing error. They were able to amend their tender submission. This resulted in an addition of £9,200 to the tender figure giving a revised tender sum of £881,887.
- 4.8 Technical checks found that the Employers Requirements had specified lockable brick built enclosures for external heating pipework risers. NPS Barnsley confirmed that their tender was based on pre-formed metal boxing not brick enclosures. As Warmer Energy Services have costed this item in accordance with the Employers Requirements, there was disparity in the received tenders. For comparison purposes, Warmer Energy Services were advised and provided a cost for fitting pre-formed metal boxing's. This represented a saving on their tender submission of £18,243. However, this saving suggests no change to the overall position of the tenders received.

- 4.9 The tender submitted by NPS Barnsley in the sum of £881,887 is £297,113 below the reported pre-tender estimate of £1,179,000.
- 4.10 The revised tender submitted by NPS Barnsley in the sum of **£881,887** is compliant with the client's requirements, therefore can be considered for acceptance subject to the client approval of the pre-formed metal boxing in lieu of brickwork enclosures and the client obtaining appropriate approval and satisfactory assessment of the Contractors Health and Safety. The Tender Report is attached at Appendix B.
- 4.11 NPS pre and post professional services fees for the project total £55,559. The full Works & Fees Report is attached at Appendix C.

## **5. PROPOSAL AND JUSTIFICATION**

- 5.1 It is proposed that NPS Barnsley is awarded the project as the lowest tender received.
- 5.2 The pipework at these 3 schemes are close to reaching 30 years old and pose significant risk. The characteristics of deteriorating heating distribution systems include the increased frequency of leaks and main breaks which lead to supply interruptions. In our experience, repairs on buried infrastructure are time consuming and expensive.
- 5.3 Potential disruptions in supply will have a negative impact on our customers as a consequence. At this juncture, based on the evidence presented, it makes considerable sense to replace the below ground heating distribution pipework.
- 5.4 New pre-insulated underground pipework systems have extremely low heat loss. The hot water supplied from the heat source to buildings can maintain the supply temperature, ensuring a high level of energy efficiency ensuring environmental, economic and social benefits for the business and our customers.
- 5.5 The concept of district heating contributes to Local / National energy policies; to reduce greenhouse gas emissions through the use of a wide range of low carbon initiatives and renewable heat and energy sources.

## **6. CONSIDERATION OF ALTERNATIVE APPROACHES**

- 6.1 The underground heating mains could potentially be replaced as part of wider works programme for the scheme in the future i.e. when the central boiler plant has reached its anticipated end of life 2026-30. However, to wait until this time poses significant risk and will not achieve the context and rational with the agreed approach to carry out the programme of works over the next 3 years.

## **7. IMPLICATIONS FOR LOCAL PEOPLE/SERVICE USERS**

- 7.1 The effective management of the Council Housing Investment Programme helps to consistently drive forward service improvements for the benefit of both the council tenants and the wider community.

- 7.2 Installing these new underground heating pipework systems will offer an improved supply of heat that is good value to our customers and contributes to reducing fuel poverty.
- 7.3 Consultation will take place with the services users, where specific impact has been identified through this programme of works to be carried out.

## 8. FINANCIAL IMPLICATIONS

- 8.1 Consultations have taken place with representatives of the Service Director – Finance (S151 Officer).
- 8.2 This report seeks approval for the lowest tender of a planned three year replacement programme from October 2019 to March 2022. The process for tendering for the 3 projects as one overall tender represents value for money to the Council’s HRA, as opposed to 3 separate tender processes.
- 8.3 The tender exercise has now been concluded and the lowest tender price, which totals £0.882M, is proposed to be accepted and approved by Cabinet. In addition to this, NPS professional fees associated with these works are estimated to total £0.056M, bringing the total cost of the project to £0.938M.
- 8.4 The indicative breakdown of this total cost per individual project can be seen in the table below:

District Heating Site	Year of Delivery	Estimated Cost of Works	Estimated Fees	Total Estimated Cost
		£M	£M	£M
Aldham Farm/Hudson Haven	2019/20	0.231	0.015	0.246
Marston Crescent	2020/21	0.415	0.026	0.441
Rose Tree Court	2021/22	0.236	0.015	0.251
<b>Total Project Costs</b>		<b>0.882</b>	<b>0.056</b>	<b>0.938</b>

- 8.5 To ensure the affordability of the scheme, it is proposed that the three elements of works are phased across 3 financial years, from 2019/20 through 2021/22. As part of the annual HRA budget setting process and the HRA 30 year business plan, resources are set aside annually for works on the Council’s dwellings in terms of maintaining them at the Barnsley Homes decency Standard as well as supplementary investment in the Council’s dwelling stock. Included within the supplementary investment funding is a recurring, annual element for district heating (£0.6M), to ensure that the Council’s district heating networks are maintained and replaced if required.
- 8.6 Cabinet approval is sought to release the funding for the 2019/20 scheme (Aldham Farm/Hudson Haven replacement). It will be funded through the uncommitted 2019/20 District Heating capital replacement programme budget. The table below shows current levels of committed schemes against this budget:

Total 2019/20 Funding		2019/20 Commitments		2019/20 Funding Available	
Rolled Forward Funding (From 18/19)	£0.557M	2019/20 Approved Schemes	£0.507M		
2019/20 Annual Budget	£0.606M	Other Commitments (Grey Street) Not Yet Approved	£0.171M		
<b>TOTAL</b>	<b>£1.163M</b>	<b>TOTAL</b>	<b>£0.678M</b>	<b>TOTAL</b>	<b>£0.485M</b>

Aldham Farm/Hudson Haven Scheme **£0.246M**

2019/20 Funding Available **£0.239M**

- 8.7 The remaining funding available in 2019/20 (£0.239M), as shown above, is to be held as contingency for any urgent, emergency works that may be required to the district heating networks during the remainder of the financial year.
- 8.8 The funding of the remaining two schemes within this proposal (Marston Crescent and Rose Tree Court) will be the first call on the annual funding set aside for district heating, as outlined in paragraph 8.5, and will formally be released as part of the annual budget setting process for both the 2020/21 and 2021/22 financial years respectively. The remaining funding allocated for district heating networks in those respective years will be held as contingency for urgent emergency works.
- 8.9 The formal approval and detailed update in respect of these two remaining schemes will form part of the annual Supplementary HRA Investment Report which is presented to Cabinet following approval of the funding for that financial year.
- 8.10 The summarised financial implications are shown in the attached Appendix A.

## 9. EMPLOYEE IMPLICATIONS

- 9.1 There are no additional employee implications arising from these works, which will be undertaken using existing Berneslai Homes' resources.

## 10. COMMUNICATIONS IMPLICATIONS

- 10.1 Berneslai Homes and the contractor will communicate with the tenants affected by the proposed works directly within appropriate timescales.

## 11. CONSULTATIONS

- 11.1 Consultation on the report has taken place at the Council ALMO liaison meeting between Berneslai Homes' Senior Management Team and Council Housing Growth Team.

## 12. RISK MANAGEMENT ISSUES

- 12.1 Contractual – As a service partner with BMBC, NPS Barnsley Ltd are not required to provide a performance bond.

- 12.2 Health & Safety – The project notifiable for CDM purposes. The contractor currently meets the minimum registration requirements for competency as Principle Contractor for the project and has provided sufficient evidence to support.
- 12.3 Contractor Performance Management – monitoring processes to measure the project and project management performance will be applied to effectively control the three project programme.
- 12.4 Supply Disruption – Service users will experience supply interruptions to their homes. The agreed works programme will keep disruption to a minimum, with the contractor responsible to notify and provide necessary interim measures to service users during periods of scheduled downtime.

### **13. GLOSSARY**

HRA – Housing Revenue Account

ALMO – Arm’s Length Management Organisation

CDM – Construction (Design Management) regulations 2015

### **14. LIST OF APPENDICES**

Appendix A - Financial Implications

Appendix B - NPS Works tender report

Appendix C - NPS Works & Professional fees report

### **15. BACKGROUND PAPERS**

NPS Mechanical Services and Condition Report Survey.

If you would like to inspect background papers for this report, please email [governance@barnsley.gov.uk](mailto:governance@barnsley.gov.uk) so that appropriate arrangements can be made

**Report author:** John Dowle

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