

Report of Sustainable Energy and Air Quality Team

Report to Director of Resources and Housing

Date: 16th August 2019

Subject: Leeds Pipes District Heating

Are specific electoral wards affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, name(s) of ward(s):	Little London and Woodhouse
Has consultation been carried out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will the decision be open for call-in?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If relevant, access to information procedure rule number:	10.4(3)
Appendix number:	1

Summary

1. Main issues

- Phase 1 of the council's Leeds Pipes District Heating Network has been under construction for the last 18 months and is now nearing completion. Ensuring the appropriate commercial arrangements are in place for the operational period of the contract is necessary to maintain the supply of heat to customers.
- The council's ambition to extend the DHN can be realised through a Phase 2 extension as a result of HNIP funding that help with the affordability of the project.
- The council's LPTIP project aimed at improving the transport gateways and corridors will be commencing works in September 2019 along the Headrow, the same route as the council's DHN. Aligning these 2 projects is essential for the success of both projects and to ensure the DHN extension can take place prior to the highways embargoes that will exist on completion of the LPTIP works.

2. Best Council Plan Implications (click [here](#) for the latest version of the Best Council Plan)

- The extension of the District Heating Network supports the aspirations set out in the Best Council Plan and the overall vision of becoming the best city and best council in the UK. In particular, the project helps deliver the Best Council Plan 2019/20 to 2020/21 priority on Sustainable Infrastructure with a focus on:

- Improving air quality, reducing pollution and noise; and
- Promoting a more competitive, less wasteful, more resource efficient, low carbon economy.

3. Resource Implications

- Early construction works of £1,015,000 for phase 2 of the DHN are required to ensure the network extension aligns with the construction programme of the council's LPTIP project. It is proposed that these early works can largely be funded through the £400k agreed at Executive Board in April 2019 for complementary district heating works.
- These early works will be instructed through the Phase 1 design and build contract to ensure the works take place under the terms of a robust contract. These costs will initially be funded through the Phase 1 capital budget and will ultimately be funded through phase 2 as set out in the confidential appendix 1.

Recommendations

The Director of Resources and Housing is recommended to note the content of this report and:

- a) Approve spend of £1,015,000 for early works to phase 2 of the Leeds PIPES DHN through issuing instructions via the phase 1 design and build contract with Vital Energi Utilities.

1. Purpose of this report

- 1.1 To update the Director of Resources and Housing on developments with phase 2 of the DHN since Exec Board in April 2019 and seek approval to begin early works to phase 2 through issuing instructions via the phase 1 contract.
- 1.2 To update the Director of Resources and Housing regarding progress with phase 1 of the Leeds PIPES DHN and to note intentions to achieve practical completion.

2. Background information

- 2.1 The aim of the Leeds Pipes DHN is to supply low carbon heat generated by the Recycling and Energy Recovery Facility (RERF) to all connected customers. The volume of heat generated at the RERF provides an excellent opportunity for the DHN to supply heat to customers along the newly constructed phase 1, however the network was designed to allow further expansion into the city centre and beyond.
- 2.2 Phase 1 has included the construction of the necessary infrastructure to enable expansion to take place, with suitable sized pipework and all the necessary resilient heat provision contained within the construction.

Phase 1 Completion

- 2.3 Phase 1 of the Leeds Pipes DHN is nearing completion with heat now being delivered to MSF and non-domestic customers. The energy centre located next to the RERF at Cross Green has already been taken over by the council, subject to list of defects, to enable the steam supply from the RERF to commence. It is expected

that the majority of the work Vital can undertake on phase 1 will be completed by mid-September.

- 2.4 As the majority of Phase 1 will be complete and the DHN will be supplying heat to a growing number of customers, it is important that the agreed Operation and Maintenance contract with Vital Energi commences, so that the network can be operated under the controls of this contract. This reduces the cost of keeping open a construction site, triggers the defects liability period, and ensures appropriate contractual arrangements can be enforced.

Phase 2

- 2.5 The competitive tender exercise undertaken in 2016 and the subsequent contract awarded to Vital Energi included a network branch into the city centre. However this was removed from the initial construction phase to reduce risks and improve affordability.
- 2.6 A separate council project involving significant highways works to improve transport corridors and gateways is being delivered over the next few years. One element of this Leeds Public Transport Improvement Programme (LPTIP) involves significant upgrades to The Headrow.
- 2.7 The route of phase 2 of the DHN incorporates The Headrow, and as such there is a requirement to align the projects.

LPTIP

- 2.8 The DHN project and LPTIP have been working closely over the last 12 months to ensure the two projects can collaborate effectively with good working relationships having been established between all parties.
- 2.9 This has enabled two separate construction projects to be coordinated. This includes shared traffic management plans, shared ground penetrating radar surveys, co-location of site compounds and alignment of branding and key messages.
- 2.10 Once the LPTIP works on the Headrow are complete the finish will be protected and further excavation not allowed for 5 years. Therefore, there will not be an opportunity to extend the DHN along this route for at least 5 years.
- 2.11 In order to fit with the LPTIP programme, phase 2 must start construction on the 2nd September.

HNIP Funding

- 2.12 In December 2018 the government launched its Heat Network Investment Programme (HNIP), which made £300m available for the delivery of heat networks. The council applied for c£2.5m of grant funding to enable the phase 2 city centre extension.
- 2.13 The council has since been in discussion with HNIP but these discussions are embargoed. This is explained in confidential appendix 1.
- 2.14 Executive Board received a report in April 2019 and supported the development of phase 2. This report therefore builds on the authority granted by Executive Board.

3. Main issues

Phase 1 Completion

- 3.1 As phase 1 is complete with the exception of gas and some minor issues, the council intends to accept the works as complete subject to a list of defect items which sets out unfinished work that needs completing within the next 12 months.
- 3.2 The defect list will contain the works associated with a new medium pressure gas connection, along with other items agreed between the council, Vital Energi and Arup.
- 3.3 This approach reduces the costs and logistics associated with keeping the entire DHN active as a construction site.
- 3.4 To cover the period up to the full completion of gas and steam within phase 1, the O&M contract will need to be varied to include a reduced service period. During this the contractor is simply obliged to supply heat to those customers that are connected to the network and carry out health and safety and other basic tasks across the elements of the network that are already complete. This reduced level of service is subject to a reduced service charge all of which is within the scope of the original procurement. This variation will be approved by the Chief Officer for Sustainable Energy and Air Quality.

HNIP

The following paragraphs 3.5 to 3.9 set out the contractual proposals for phase 2. These are all subject to HNIP approval and a further decision report:

- 3.5 HNIP funding requires that all projects valued over £2.4m to be carried out through an SPV. The works associated with Phase 2 will be therefore be carried out under a newly established D&B contract with Vital Energi. This will be based on the terms of the existing D&B contract to ensure it is closely aligned and will only include the phase 2 requirements relevant to the works.
- 3.6 Once these documents are agreed between the council and Vital and the grant offer has been finalised with HNIP, they will be signed by the council and Vital Energi. As explained in the April Executive Board report, HNIP require an SPV to be established to receive the funding. Once the SPV has been established, the contracts will then be novated to the SPV.
- 3.7 Prior to entering into the contractual arrangements with Vital for Phase 2 a formal grant offer from BEIS is required.
- 3.8 The existing O&M contract between the council and Vital Energi will be used to operate Phase 2. The contract will be varied to ensure it captures phase 2 requirements, with the council remaining responsible for enforcing the contract requirements. An agreement between the SPV and the council will be required to place an obligation on the council to enforce the contract on behalf of the SPV.
- 3.9 The council will provide a PCG to Vital to reduce the risks related to entering into a contract with a newly established SPV. This will not increase the council's liabilities; just retain responsibility for client obligations under the D&B as always intended.

Early works

- 3.10 To enable works to progress to achieve a 2nd September start, early works will need to be instructed by LCC via the Phase 1 design and build contract. These instructions will cover essential work required to achieve the programme, with these being:
 - Appointment of a civils contractor - £25k

- Ordering of pipework - £310k
 - Vital Energi PM costs - £130k
 - Works within the initial zones during September – £550k
- 3.11 It is proposed that these early works can largely be funded through the £400k agreed at Executive Board in April 2019 for complementary district heating works. The instructions that cover these early works will be instructed through the Phase 1 design and build contract to ensure the works take place and take place under the terms of a robust contract. They will be novated across to the Phase 2 contract once the grant funding has been received. These costs will initially be funded through the Phase 1 capital budget and will ultimately be funded through phase 2 as set out in the confidential appendix 1.
- 3.12 These works will allow the installation of pipework along The Headrow in accordance with the LPTIP programme of works. Risks are discussed below and in confidential appendix 1.

4. Corporate considerations

4.1 Consultation and engagement

- 4.1.1 Positive discussions have taken place with HNIP, the Carbon Trust and Addleshaw Goddard in relation to the HNIP requirements.
- 4.1.2 Discussions with Vital Energi and Arup (as NEC project manager) and the council's Procurement and Commercial Service have also progressed regarding the approach to the commercial contract position for phase 2 of the network, and also in relation the completion of phase 1.
- 4.1.3 Engagement with the council's LPTIP team and their contractors have taken place over the last 12 months to coordinate works programmes, shared costs, and shared messages.

4.2 Equality and diversity / cohesion and integration

- 4.2.1 An equality impact assessment was completed as part of Phase 1 and this was updated for the proposed phase 2 extension as part of the report submitted to Executive Board in April 2019.
- 4.2.2 The DHN will have a positive impact on equality as it will support the compassionate city equality objective by reducing fuel poverty, helping to increase life expectancy, improving mental health and wellbeing and reducing health inequalities.

4.3 Council policies and the Best Council Plan

- 4.3.1 As presented to Executive Board in April 2019, the extension of the DHN supports the aspirations set out in the Best Council Plan and the overall vision of becoming the best city and best council in the UK. In particular, the project helps deliver the Best Council Plan 2019/20 to 2020/21 priority on Sustainable Infrastructure with a focus on:
- Improving air quality, reducing pollution and noise; and

- Promoting a more competitive, less wasteful, more resource efficient, low carbon economy’.

Climate Emergency

- 4.3.2 Using waste heat generated at the council’s RERF, the DHN will contribute to a reduction in the city’s carbon footprint by replacing gas boilers that would ordinarily provide heat and hot water to residents and businesses in the city centre.

4.4 Resources, procurement and value for money

- 4.4.1 The business case for the Phase 2 is based upon a capital investment of £5.681m, which is required to construct the 2.5km extension into the civic quarter and to connect a number of council owned buildings to the network. The investment is based on a business model that generates revenue associated with the sale of heat to customers and includes £2.489m of HNIP grant funding.

4.5 Legal implications, access to information, and call-in

- 4.5.1 The information contained within confidential Appendix 1 to this report is designated as exempt from publication in accordance with paragraph 10.4(3) of the Access to Information Rules and Schedule 12A(3) of the Local Government Act 1972 on the grounds that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information). The appendix contains details of discussions with HNIP which are currently embargoed by government. Disclosing details would risk any potential grant award.
- 4.5.2 The Phase 2 extension will be delivered by Vital Energi under the existing OJEU compliant Spine D&B and O&M contracts, described in the July 2017 Executive Board report. Construction of Phase 2 was varied out of the contract when Phase 1 commenced in order to reduce risks and improve affordability. However, it was always intended to undertake this work in future so we now intend to exercise this option by varying the contract to bring this work back in. No new procurement or authority is required.
- 4.5.3 External legal advice regarding state aid has been received. This indicates that the Phase 2 extension can rely on the block exemption under Article 46 of the General Block Exemption Regulations (GBER), which applies to the capital cost of the pipes for the district heating network. Other state aid risks that have been considered (including possible aid to businesses that purchase heat) cannot be ruled out but should not arise.
- 4.5.4 Article 46(6) of GBER requires that the total amount of aid for the distribution networks must not exceed the difference between the eligible costs (i.e. the investment costs) and any operating profit which is generated. The Council must calculate the operating profit on the basis of discounted revenues and operating costs over the life of the asset. If an operating profit is made the Council must then repay an equivalent amount of the grant it received to the grant provider.
- 4.5.5 External legal advice from a QC is being received to substantiate the state aid position.

4.5.6 The decisions within this report are Significant Operation Decisions, as a direct consequence of a previous Key Decision, and are therefore not subject to call in.

4.6 Risk management

- 4.6.1 A formal grant offer has not yet been received from HNIP, which presents the council with risks. However, the risk of not commencing the Phase 2 works on The Headrow in conjunction with the council's LPTIP project also presents a risk as the extension could be delayed for 5 years due to the highways works restrictions that will be in place following the completion of LPTIP.
- 4.6.2 This position was anticipated and discussed by Executive Board in April 2019, with recommendations in the confidential paper agreed to minimise the risk. This is explained in confidential appendix 1 to this report. On balance, the risk of commencing work prior to a formal grant offer is lower than that associated with not commencing works.

5. Conclusions

- 5.1 With Phase 1 of the council DHN nearing completion, the appropriate arrangements need to be in place to ensure the successful O&M of the network to supply heat to an increasing number of customers.
- 5.2 The highways works associated with the council's LPTIP project align with the route of Phase 2 of the DHN, and require the DHN infrastructure to be installed alongside LPTIP. Missing this opportunity to commence would result in the DHN extension being delayed for at least 5 years due to highways work embargoes.

6. Recommendations

- 6.1 The Director of Resources and Housing is recommended to note the content of this report and:
- Approve spend of £1,015,000 for early works to phase 2 of the Leeds PIPES DHN through issuing instructions via the phase 1 design and build contract with Vital Energi Utilities;

7. Background documents¹

- 7.1 None.

¹ The background documents listed in this section are available to download from the council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.