

District Heating Update – network expansion and approach to commercial delivery

Date: 20th November 2024

Report of: Director of Communities, Housing and Environment

Report to: Executive Board

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

Brief summary

The Leeds PIPES district heating network is now well established across Leeds following three main phases of work, with the most recent phase now complete. Customers continue to connect regularly to the network, benefitting from more reliable, more affordable, lower carbon heating. There has been a rapid increase in the number of prospective customers with whom the Council is working for future connections. Headline achievements to date are as follows:

- **£58.8m** total network investment, including **£27.4m** of grant funding secured;
- Around **30km** of pipework installed, with over **50** individual buildings connected;
- Over **2,000** council flats and a range of student accommodation, public sector and commercial buildings connected;
- Over **28,000** MWh heat delivered across the whole network during 2023/24, saving almost **6,000** tonnes of carbon;
- The project has resulted in employment of over **400** people, including **19** apprentices, and;
- Leeds PIPES has now won several prestigious, national awards, including most recently 'Energy Project of the Year – Residential' at the Energy Awards.

In March 2024, Executive Board received a [report on future investment plans](#) and gave approval for the Council to enter into grant funding agreements for an extension to the existing network at Wellington Street, and, separately, a new network on the South Bank.

This new report provides an update on the Wellington Street extension of the network. It also provides an update on progress and strategy in relation to the South Bank scheme which is planned to include the connection of up to **28** buildings, benefitting up to **8,000** residents and mixed-use customers, making it the most significant single investment into the network since its inception. A further **£28.9m** of grant funding has been secured for these two new phases.

The report seeks approval for the creation of a joint venture company and the procurement of a delivery partner who will provide capital funding to enable the delivery of the South Bank network and who will develop this network and a wider city centre zone. This is expected to be based on a standard Department for Energy Security and Net Zero procurement approach, but through which the Council would retain a level of control or influence over key matters.

This is within an evolving national policy and legislative context which will support the delivery of heat networks through the creation of designated zones within which new buildings would be mandated to connect to existing networks where they offer the lowest cost solution for decarbonising heat, with zone developers appointed through procurement to develop the networks.

The development of the South Bank heat network will also support the key aims of the Leeds Transformational Regeneration Partnership with Government by providing infrastructure that supports the growth of the city centre in a sustainable way.

Recommendations

Executive Board is requested to:

- a) Note the contents of this report and the updates on the development of the district heating network;
- b) Noting the contents of Confidential Appendix 5, give authority to spend £2,982,286 from the capital programme for the design and build of the Wellington Street extension, funded by £1m of GHNf grant and £1.982m of borrowing;
- c) Give authority to procure a development partner to commercialise a city-centre heat zone (as described at paragraph 41 – the “**Zone**”), including the South Bank GHNf scheme, and subsequently to develop the Zone subject to meeting a range of specified mandatory requirements as assessed by the Council at an approval gateway prior to financial close, noting that the decision to award will be the subject of a further report to Executive Board;
- d) Note and affirm that decisions on the more detailed matters on the approach to the procurements referred to in this report shall be taken by the Director of Communities, Housing and Environment in accordance with the Officer Delegation Scheme;
- e) Subject to the development partner successfully meeting the requirements at the approval gateway, to approve the creation of a joint venture (JV) company involving the Council and the development partner, to approve the Council entering into any other ancillary agreements or taking other actions to facilitate delivery of the Zone, and to affirm that decisions on detailed matters in relation to creation and establishment of the JV and delivery of the Zone shall be taken by the Director of Communities, Housing and Environment in accordance with the Officer Delegation Scheme, and;
- f) Delegate the decision on any land purchase or use of land in the Council’s ownership for the development of an energy centre to support the South Bank network to the Director of City Development subject to VfM assessment and consultation with the Executive Member for Resources.

What is this report about?

- 1 The Leeds PIPES district heating network continues to grow in terms of scale, customer numbers and reputation. The network, and district heating generally, offers a cheaper, reliable, low carbon alternative for heating compared to conventional gas and newer forms of heating such as heat pumps which rely on electricity.
- 2 The project team were successful with two grant funding applications submitted in September 2023, seeking grant funding support to unlock two new phases to the expansion of the network: Wellington Street, the new main business district in the city centre, and South Bank.
- 3 Following Executive Board approval in March 2024 to enter into the Grant Funding Agreement for each scheme with the funder (Department for Energy Security and Net Zero – “**DESNZ**”), the Council has progressed each of these two schemes, working with a wide team of stakeholders.
- 4 Given the scale of the investment that is likely to be required for the South Bank scheme, the Council has been exploring delivery models which differ from the model used for the Leeds PIPES scheme since inception (i.e. wholly owned and operated via contracts by the Council). These models would involve entering into a joint venture (JV) with a private sector partner who would bring private investment into the project as well as delivering the network.
- 5 This would ensure the network can continue to expand in a way which best mitigates risk to Council finances whilst still being able to extend the benefits of low carbon, affordable, reliable heating and hot water to buildings and residents in the city. Following a period of engagement with prospective partners to establish market interest and to seek feedback on key issues, the Council is now in a position to recommend what it believes is the optimum procurement route.
- 6 In parallel with the development of these projects, central government has continued to develop key legislation affecting the heat network industry: Heat Network Zoning and Heat Network Regulation. These emerging policies and direct engagement with DESNZ have also closely informed the formulation of the recommended procurement strategy.
- 7 This report therefore seeks to:
 - a) provide Executive Board members with a progress update on the schemes;
 - b) recommend to Executive Board that a procurement is undertaken to deliver the South Bank scheme and a wider heat network zone, and;
 - c) provide an update on the policy context for district heating.

What impact will this proposal have?

Phase 4 - Wellington Street extension

- 8 At the last Executive Board update on the project in March 2024, the Board were updated that an application to the GHNf for partial grant funding for the Phase 4 extension to the network in the Wellington Street area of the city had been successful. A recommendation to proceed with the first phase of this extension, 4a, along St Paul’s Street and down to the old Yorkshire Post site on Wellington Street, was approved at the same Board meeting. The decision to proceed with 4b, to Wellington Place and Whitehall Road, was deferred to a later Board meeting.
- 9 Since the March 2024 update, the project team have worked to bring Phase 4a to delivery. However, there have been challenges with identifying a deliverable route for elements of the extension which would take the network to Whitehall Road, as the adopted highway routes present significant technical hurdles, and private land options which have been explored have also been discounted on detailed assessment.
- 10 In addition to the challenges associated with the route, there has been limited progress in discussions with customers which the extension had been designed to connect to the network,

and it is therefore recommended that the extension to Whitehall Road is not pursued further in the immediate term.

- 11 Alternative building connections have been explored which could be supported by the extension, as well as alternative routes into other areas of the city centre, such that the grant funding originally intended to take the network to Whitehall Road, can be re-purposed rather than fully withdrawn from the application. The preferred option of these alternatives has been confirmed and, for comparison, the original and new proposals are shown at Appendix 1.
- 12 On the basis of these changes, a change request has been submitted to the funder, DESNZ, for a change in scope to the original grant application. Our application has been updated to be based on £3.1m of grant funding for an estimated £7.49m scheme, for which prudential borrowing will be required of £4.39m. This is the cost for the full scope of the Phase 4 extension, and the change request was approved by the funder in October 2024.
- 13 Following a similar approach as set out within the March 2024 Executive Board update on the extension, this report recommends that the Phase 4 extension is split into two approvals: one approval sought within this report for an extension on St Paul's Street and Park Place (Phase 4a) and a subsequent approval for extending the network further to Wellington Street (Phase 4b). The second approval for 4b will be dependent on securing commitments from prospective customers in the area which improve the business case but which are currently not in place. Once secured, a further update will be brought to Executive Board to seek this approval.
- 14 The financial impact of these works and connections has been modelled and is shown in detail in Confidential Appendix 5. The business case highlighted here shows that the additional investment relating to Phase 4a will result in a more positive long-term business case for the network and supports the £1.98m of borrowing required to deliver Phase 4a, which will have a total capital expenditure of £2.98m, with £1m funding from GHNf. It should be noted that Heat Network Zoning policy, covered later in this report, will see buildings mandated to connect to heat networks and, as such, the current business case is seen as a conservative projection.
- 15 It is anticipated that these works will be directly awarded to Vital Energi Utilities Ltd who have delivered the Leeds PIPES network to date and are currently engaged by the Council under its existing operation and maintenance contract. This direct award is proposed not only due to the very challenging project and funding timescales and Vital Energi's unique ability to mobilise quickly, but also the technical difficulties in potentially introducing contractual and physical interfaces with another contractor for what is essentially an extension of an existing installation. These issues would be expected to result in an absence of competition. This is in contrast to the proposed South Bank network covered in the next section of this report, which would stand alone in terms of having a separate primary heat source and hydraulic separation from Leeds PIPES, and is to be subject to a full competitive procurement process. Construction is planned for Phase 4a in the early part of 2025, whilst 4b will be dependent on the progress of buildings planning to connect to the network.

South Bank GHNf scheme

- 16 The South Bank GHNf scheme represents a major new network rather than an extension of the existing network, and a plan illustrating the proposed route is included at Appendix 2.

Regeneration context

- 17 In March 2024, Executive Board approved the Council entering into a long-term Leeds Transformational Regeneration (LTR) Partnership with Government, Homes England (the Government's national housing and regeneration agency) and West Yorkshire Mayoral Combined Authority to support a ten year programme of change and investment focused on central Leeds.

- 18 The work will set the basis of a spatial regeneration strategy for the city centre and adjoining 'city rim' neighbourhoods, which will be developed and delivered through the partnership, and will set out how we propose to design and accelerate city centre growth to support the delivery of the social, economic and spatial ambitions in the 2023 Inclusive Growth Strategy. The Leeds Transformational Regeneration partnership will develop proposals to deliver infrastructure to support growth, including new public realm, active travel connections, Leeds Station enhancements, Mass Transit and wider infrastructure to support the city's growth and net zero ambitions.
- 19 South Bank forms one of the neighbourhoods of the partnership. Guided by the 2018 South Bank Regeneration Framework Supplementary Planning Document, there is significant momentum to the Regeneration here: c3,700 homes have completed or are under construction; a further c8,000 are consented in Planning and moving towards implementation; c600,000 sq ft of commercial development is completed or under construction); a further 2.5 million sq ft is consented in Planning. This includes the developments with a major focus on carbon reduction such as the Climate Innovation District and Aire Park. The potential investments into Leeds Station, Mass Transit, British Library North and Royal Armouries, as well as the pipeline of new development sites provide major opportunities.
- 20 In developing the heat network to expand into the South Bank, this will support key aims of LTR by providing infrastructure that supports the growth of the city centre in a sustainable way. Furthermore, work will take place across the Council to integrate and align the proposed locations for heat networks with proposed infrastructure proposals that may emerge through LTR, or more widely (such as Leeds Station and Mass Transit).

Network Design

- 21 The original GHNF funding business case was based on 28 buildings connecting to the network, and the project team has been working to progress technical and commercial discussions with these developers or building owners with a view to entering ultimately into formal connection agreements for the supply of heat.
- 22 The primary heat source for the network would be waste heat from Verallia's glass manufacturing process in the South Bank area (formerly Allied Glass). The project team has been in technical and commercial discussions with Verallia since the last update to Executive Board and expects to be in a position soon to enter into formal heads of terms. This facility would then connect to an energy centre from which the heat would be delivered to the network and connected buildings.
- 23 The energy centre will house pumping equipment, thermal storage cylinders and also electric boilers or other heating infrastructure to provide back-up in the event of primary heat source outages. The project team is completing site selection work to identify a suitable site on which the energy centre can be located which is in close proximity to the primary heat source and the proposed network route given the very significant costs of installing the connecting pipework.
- 24 Since the preferred energy centre site has yet to be identified and agreed, it is proposed that a decision in relation to this matter is delegated to the Director of City Development in consultation with the relevant Executive Member.
- 25 The commercialisation of the South Bank network is now well underway, with the RIBA 2 design for the scheme nearing completion. This work has been largely delivered through GHNF funding and is supported by a multidisciplinary advisory team consisting of AECOM (technical), Hermetica Black (commercial), Asteros (financial), and Addleshaw Goddard (legal).
- 26 Commercialisation activity is currently expected to complete in early 2025, with construction of the network starting in late 2025.

27 Based on the current modelling undertaken by AECOM Ltd, the South Bank scheme has the following metrics:

Pipework length	6.966km
CAPEX Total	£67.1m
CAPEX Phase 1 (2025-2027)	£55.5m
CAPEX Phase 2 (2029-2030)	£11.6m
Annual volume of heat delivered – Phase 1	17GWh
Annual volume of heat delivered – Phase 1 & 2	57GWh
Annual CO ₂ reduction	11,311 tonnes
Internal Rate of Return*	13.74%
Net Present Value*	£55.2m

*40 years, real, pre-tax, pre-financing, post-grant

- 28 As shown above, the cost of the South Bank scheme is currently anticipated to be in the region of £67.1m, spread over a number of years. This would require significant borrowing for the Council over and above the £24.5m GHNF funding already secured if it were to be self-funded and without private sector investment.
- 29 Another aspect of the project (included within the figures above) is to deliver an interconnection between the South Bank network and the existing Leeds PIPES network to the north of the river. The benefit of this interconnection is that, should one low carbon heat source such as the Recycling and Energy Recovery Facility (RERF) go offline, for example during periods of planned annual maintenance, the additional low carbon heat sources added through the South Bank project may be able to step in to supply not only the South Bank sites but also the Leeds PIPES network, and vice versa. This would further reduce carbon emissions for the whole network by reducing gas consumption from use of back-up boilers when heat from primary heat sources is unavailable.
- 30 Within the South Bank scheme, the Council has identified a section of pipework installation which will need to be completed in advance of the main construction. This is to tie in with a Highways scheme planned along Clarence Road, as well as a private landowner's programme of works on an area of their land through which pipework will need to be installed. The maximum cost of this work is forecast to be £2.75m. The funder has confirmed that the Council can access this as early construction funding, 100% grant funded, with no Council match funding obligation. As with the Wellington Street extension, it is proposed that these works be directly awarded to Vital Energi Utilities Ltd, primarily due to the unavoidable urgency and technical challenges associated with co-ordinating with Highways and landowners as set out above and the resulting anticipated absence of competition.

Heat Network Zoning Regulations and Advanced Zoning Pilot

- 31 It should be noted that there is an important evolving national Heat Network Zoning policy and legislative context which will support the delivery of heat networks, and through which new buildings would be mandated to connect to existing networks where they offer the lowest cost solution for decarbonising heat. This is expected to provide significant confidence in terms of the commercial viability of heat networks. Zoning Co-ordinators will be established at local level whose role it would be to implement policy and legislative requirements locally through the designation of specific heat zones within their administrative area and to appoint, via formal procurement process, a developer to develop the heat network in these designated zones.

Once appointed, the successful developer would have exclusive rights to develop the heat network in that zone. It is expected that heat network developers would also have incumbency rights in areas where they already have an established network. However, Heat Network Zoning policy is not expected to come into effect through legislation until late 2025.

- 32 In anticipation of this, DESNZ has been developing clearly defined routes to market for procuring zone developers, including standard contract documentation compliant with Procurement legislation. These routes are intended to reduce bidder fatigue through avoiding numerous authorities going to market with bespoke procurements and contracts, and to minimise the risk of legal challenge by following these standardised and tested approaches.
- 33 However, since the Council's South Bank scheme will be ready to go out to market ahead of Zoning Regulations coming into effect, the approach needs to anticipate and ensure consistency with this forthcoming regulatory context. The Council also has an opportunity here to procure a development partner who would then have developer rights for a wider zone within the City rather than only the area of the GHNf funded South Bank scheme. Procuring a wider zone would potentially substantially enhance market interest in the opportunity and would also allow for the maximum expansion of the network through this process.
- 34 In light of the above, the Council has been working with DESNZ on two fronts: firstly, through participating, along with other cities, in the Advanced Zoning Pilot, via which DESNZ has engaged technical advisors, Arup, to complete techno-economic modelling and an outline business case for a Leeds city centre zone, and; secondly, through engaging with DESNZ and their legal advisors on the emerging standard procurement routes to enable an early procurement of a wider zone, including the South Bank GHNf scheme but remaining aligned with the standardised approach to procurement envisaged by DESNZ once Zoning Regulations come into force.
- 35 The procurement which the Council is therefore recommending to Executive Board is intended to appoint a development partner not only for the scope of the South Bank scheme for which the Council has secured GHNf funding, but also for a wider city centre Zone which it is anticipated would ultimately be formally designated by the Zoning Co-ordinator, with the developer then awarded exclusive rights to develop the network in this area.

Procurement strategy

- 36 An appraisal of options was completed earlier in the year to determine the optimum commercial delivery model for the South Bank GHNf network. The capital funding shortfall and potential borrowing for the Council would create unacceptable financial impacts given current budgetary pressures, and it has therefore not been deemed viable for the Council to deliver the South Bank scheme itself on the same basis as the existing Leeds PIPES network. However, the Council wishes as a minimum to retain a level of control over key issues relating to the development of the network so as to ensure consistency with some of the key priorities and principles of the existing network (see paragraph 39 below).
- 37 The Council undertook a soft market testing exercise during Summer 2024 to ascertain market interest in entering into a JV with the Council to provide capital funding and develop the network, and to seek feedback on key issues. Responses were received from a significant number of the key market players, demonstrating a strong level of interest in both the South Bank GHNf scheme and the wider zonal opportunity.
- 38 One of the issues the Council has sought to explore is whether the existing Leeds PIPES network could be transferred into the new JV as an equity investment, thus providing a greater level of consistency and unity across both networks, but also potentially giving the Council an equity shareholding in the JV. However, this would require comprehensive valuations of Leeds PIPES to be undertaken both by the Council and by prospective development partners which

would be both costly and time-consuming. As well as the risk that this would represent to the Council in maintaining project and funding timescales, the soft market test feedback showed strong resistance to inclusion of an onerous valuation process within the procurement given that it would be undertaken by bidders at their cost and risk. The Council, supported by legal advice, has concluded that the potential future inclusion of Leeds PIPES into the proposed JV should be dealt with separately and subsequent to the South Bank procurement, although the mechanism to enable this in future may to some extent need to be built into the contract requirements now. It should be emphasised that any future decision to transfer the existing Leeds PIPES network into the JV would be the subject of a separate VfM assessment and a further decision in accordance with the Council's decision-making procedure rules.

- 39 In assessing the route to procuring a delivery/JV partner the Council identified a number of key priorities which it will seek to ensure are incorporated into and delivered through the proposed JV partnership:
- a) The Council wishes to retain an influence over the strategic growth of the network to ensure it grows in a way that is right for the city, particularly in relation to zero carbon and affordable heat priorities;
 - b) The network will be competitively priced with clear benefits to connected customers;
 - c) A level of consistency of pricing between the existing Leeds PIPES network and the South Bank network/proposed Zone will be sought, and;
 - d) In the event that Leeds PIPES were to be transferred into the planned JV, existing contracts should be honoured until contract expiry.
- 40 To this end, and given the conclusion noted above in relation to the approach to a potential future transfer of the Leeds PIPES assets into the JV, it is currently expected that the Council would procure a delivery partner on the basis of DESNZ's standard 'JV with golden share' model (with Leeds specific amendments) through which the procuring authority does not make any financial or other investment into the JV and the development partner will be solely responsible for the capital cost of delivery. Through this approach, the Council will have no commercial risk exposure from the project, but will require certain identified 'reserved matters' within the agreement over which it would have influence, control or power of veto. An indication of some of these reserved matters is set out at paragraph 39 above, although this is not an exhaustive list.
- 41 In terms of the boundary of the Zone to be procured, which would incorporate the South Bank GHNF scheme, the original techno-economic modelling undertaken by Arup (commissioned by DESNZ) identified a potential 'city centre zone' which was viable from a technical and commercial perspective and this is illustrated at Appendix 3. Arup is currently completing further analysis of this overall indicative zone which will inform, in discussion with DESNZ, what specific area within, or closely aligned to, this overall area the Council includes within the scope of its heat network developer procurement. It is emphasised that the 'city centre zone' shown at Appendix 3 is not the Zone to be procured, and the decision on the exact boundary of the Zone will be taken by the Director of Communities, Housing and Environment subject to the outcome of the aforementioned further techno-economic analysis and further engagement with DESNZ.
- 42 As noted above, the proposed procurement of a delivery partner is currently expected to follow the DESNZ 'JV with golden share' model. However, it should be noted that the DESNZ models and the sector in general are currently developing and, as such, the detailed approach to procurement will be kept under review and decisions on detailed matters in relation to creation and establishment of the JV and delivery of the Zone will be taken in due course in order to ensure the optimum position for the Council.

Equality, Diversity, Cohesion & Integration (EDCI)

- 43 EDCI impact assessments have been undertaken regularly for the project, including most recently for the March 2024 Executive Board update (see Appendix 4). In particular, the assessment identified positive impacts from the expansion of the network in terms of the potential for reducing the cost of energy bills for residents receiving heat from the network, thus reducing financial exclusion.

How does this proposal impact the three pillars of the Best City Ambition?

Health and Wellbeing

Inclusive Growth

Zero Carbon

- 44 The Leeds PIPES heat network uses low carbon heat from the RERF for around 95% of the heat supplied to customers, so achieves significant savings against other heating fuels, particularly where it replaces gas, but also when it is used in place of low carbon alternatives such as air source heat pumps.
- 45 The South Bank and wider zonal expansion will add further low/zero carbon heat sources to the network, and will also provide opportunities for interconnection between networks, thus reducing the carbon factor of the network and delivering an even lower carbon heat supply to customers.
- 46 As the network grows, it becomes more efficient with improved steam to hot water conversion efficiencies and lower losses throughout the network. This would significantly decarbonise heat for connected customers, with customers replacing gas boilers typically reducing heating and hot water emissions by c80%. Removing gas boilers from dense urban areas also has a positive impact on background air quality, with a positive impact on health.
- 47 As Leeds PIPES uses so little gas with the bulk of the heat from the RERF, the network is less exposed to energy market price volatility. This allows the avoidance of the rapid escalation in heating costs observed over recent years, which risks pushing thousands more people into fuel poverty. This helps customers to afford to heat their homes and businesses, improving health and wellbeing and supporting inclusive growth. The reliance on gas boilers will reduce further as further low/zero carbon heat sources are added to the network. This principle will be extended through the South Bank and wider zone heat network development.
- 48 The project also creates or secures significant numbers of short-term construction jobs when extensions are built or customers connected. Leeds PIPES also has a dedicated team of engineers to service and maintain the network. The South Bank extension is one of significant scale and encompasses energy centre construction as well as the pipework extension itself, which will ensure a larger number of jobs are required to complete the work than a smaller scale extension.
- 49 The Best City Ambition is the council's vision for the future of Leeds, outlining our mission to tackle poverty and inequality, and improve quality of life for Leeds residents. The paragraphs above demonstrate how closely aligned the Leeds PIPES project is with these ambitions.

What consultation and engagement has taken place?

Wards affected: Hunslet and Riverside, Beeston and Holbeck

Have ward members been consulted?

Yes

No

- 50 The relevant Executive Board Members have been briefed on these proposals. The Hunslet & Riverside and Beeston & Holbeck Ward Members have been contacted and briefed, with more detailed briefings offered and provided where requested.

- 51 The Executive Member for Climate, Energy, Environment and Green Spaces is regularly updated on the PIPES programme and is supportive of the continued development of the network as set out within this report.
- 52 Extensive consultation has been undertaken with the Council's advisors, DESNZ, prospective developers and customers, and with heat network providers through a formal soft market testing exercise.

What are the resource implications?

Phase 4 - Wellington Street extension

- 53 The proposed changes in scope to the original grant application for Phase 4 have changed the grant request of government and overall capital expenditure for the project. The project now has a capex of £7.49m, with a grant funding ask of £3.1m.
- 54 As noted at paragraphs 13-14, it is recommended that the Phase 4 extension is split into two approvals. This report seeks approval for Phase 4a, which has a total capital expenditure of £2.98m. Of this, £1m will be grant funded, meaning £1.98m of prudential borrowing is required. Whilst Public Works Loan Board (PWLB) borrowing is the baseline option for capital projects for the Council, at the previous update provided by the project to Executive Board in March 2024, it was noted that UK Infrastructure Bank funding was being explored for the borrowing element of the financing of the project. Over the course of 2024, discussions have taken place between the Council and UKIB to explore this in more detail. However, it has been concluded that PWLB remains the best value borrowing route in this instance and will therefore be utilised for this project.
- 55 The recommendation to invest £1.98m of borrowing in Phase 4a of the scheme is based on the detailed financial case outlined at Confidential Appendix 5. The business case behind previous investment in Leeds PIPES was predicated on growth to continually improve the business case, and this latest extension will open up further opportunities to connect buildings outside of those included in the updated business case.
- 56 The financial modelling shown in Confidential Appendix 5 demonstrates an overall positive gain for the project from the Phase 4 extension. Over the 40 year life of the scheme the net gain is c£250k versus the baseline. Whilst this is a marginal increase, as always, extensions to the network create wider opportunities for connecting buildings to the network along the installed pipework route, which would further improve the cashflow position.
- 57 Since September 2023 a further six sites have connected to the network, whilst four more have signed up to connect over the next twelve months, each having a positive impact on the business case and the majority being enabled by their proximity to previous grant funded extensions.
- 58 With Heat Network Zoning policy being introduced within the next two years, buildings can be mandated to connect to networks in close proximity, and extensions to the network therefore mean the Council can spread the benefits of district heating to a much larger number of customers with government policy to back it up.

South Bank and wider zone

- 59 The South Bank scheme is the most significant extension to the network since the initial phase in 2018, and, as such, carries with it a level of financial risk that needs to be managed. The GHNf funded commercialisation of the project is now well underway and will give greater certainty with regard to customers who will connect to the network and the terms of agreement with heat providers, as well as progressing site selection work to secure land for the development of the energy centre required.

- 60 The Council has engaged external advisors to provide extensive support with the delivery of the project and the current phase of commercialisation of the scheme given its technical complexity and challenging timescales, but this has been funded through GHNZ funding from DESNZ.
- 61 As regards the early installation of the section of pipework in the Clarence Road area, the funding for this has already been received in full from government.
- 62 Fundamentally, the proposed South Bank and wider Zone development, on the basis that the existing Leeds PIPES asset is not transferred into the JV, does not involve any capital contribution or ongoing payment by the Council, and it will be for the development partner to assume the risk on all costs and income. Should the Council seek to transfer Leeds PIPES into the JV, this would be the subject of a full commercial and financial assessment at that time.

What are the key risks and how are they being managed?

- 63 As at each phase of the network development, there is a risk that negotiations with targeted customers stall or are ended without reaching agreement, resulting in fewer than anticipated customers connecting to the network and impacting the financial forecasts outlined in this report. This risk is being mitigated through regular ongoing engagement with these customers and proactive work to identify additional customers and opportunities in the event that discussions with others stall. The funder also requires certain milestones to be reached before funding can be used and the project can proceed further such as having signed heads of terms or full customer supply agreements, thus providing an additional external control.
- 64 Emerging Heat Network Zoning policy and legislation also adds another layer of resilience to investment decisions taken since it is expected that buildings will be mandated to connect to networks to which they are in close proximity where this represents the lowest cost and carbon option. This will significantly increase the number of buildings we anticipate will connect to the network over the next 5-10 years.
- 65 The impact of district heating works on highways networks across the city is closely monitored throughout all phases of work. The multi-disciplinary Council project team and the Council's primary contractor work closely to carefully plan and manage works to minimise disruption to the highways network, key stakeholders and city events.
- 66 A further risk on the South Bank is any potential clawback of the £2.75m of grant funding relating to the works at Clarence Road should the further development at South Bank be deemed not financially viable and therefore not proceed any further. However, only a very limited proportion of this funding has been committed at this stage for pipework which could be used elsewhere on the network. Market interest in the South Bank procurement also seems to be strong, and the risk of not delivering the network successfully from a commercial point of view seems limited.
- 67 Failure to agree satisfactory terms with the primary heat source provider for the South Bank would be a major setback to the project, but discussions have progressed very positively to date with the emerging agreement having mutual benefits.
- 68 Failure to secure a suitable site for the energy centre would also potentially have a significant impact on the scheme. However, the project team has been working closely with Asset Management colleagues to undertake site selection work with a view to identifying a deliverable site option to be developed for this purpose.
- 69 Use of a standard DESNZ procurement approach and contract documentation as proposed should minimise risk of procurement challenge, though it should be noted that these are new models and, while they are considered to be appropriate and compliant, they have yet to be tested before the courts or in the market. The Council intends to issue Voluntary Ex-Ante

Transparency Notices in respect of any direct awards referred to in this report in order to ensure transparency and mitigate risk in respect of such direct award.

What are the legal implications?

- 70 The information contained within Confidential Appendix 5 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 includes commercially sensitive information regarding and underpinning the project. Disclosure of this information could seriously harm the council's negotiating position when discussing heat sales with potential customers. Therefore, it is considered that the public interest in maintaining the content of Confidential Appendix 5 as exempt outweighs the public interest in disclosing the information at this time.
- 71 As outlined at paragraphs 15 and 30, it is anticipated that the proposed Phase 4a works and the South Bank early works will be directly awarded to Vital Energi Utilities Ltd. Given the nature of the additional works and technical complexities (including existing contractual obligations and third party programmes), such direct awards are considered justifiable in accordance with the Council's Contract Procedure Rules and public procurement law.
- 72 As outlined above, the Council is intending to create a JV company and to procure a funding and delivery partner. The approach to procurement has been informed by advice from the Council external legal advisors and will be in accordance with the relevant Procurement legislation. Should the procurement commence after 24th February 2025, this would fall under the new Procurement Act 2023, which will replace the existing Public Contracts Regulations 2015, Utilities Contracts Regulations 2016 and Concessions Contracts Regulations 2016.

Options, timescales and measuring success

What other options were considered?

- 73 Two other options have been considered for the Phase 4 Wellington Street extension. One option is to continue to proceed with the route originally proposed, but this is not deemed deliverable for the reasons set out earlier within this report. The other option is not to proceed with the extension at all. However, this has been discounted since, as demonstrated by Confidential Appendix 5, the growth of the network via this extension would improve the financial position of the network and therefore benefit the Council.
- 74 As regards the South Bank scheme, the Council could decide not to proceed. However, the GHNf funded commercialisation phase of the project has been substantially progressed and this demonstrates a commercially viable scheme. Market sounding has also demonstrated significant market interest. The Council has also already secured £24.5m GHNf funding which would have to be relinquished, which would make any future network significantly more expensive for connecting customers.
- 75 The Council could develop the new network itself on the same basis as Leeds PIPES, but given the requirement for additional capital investment in the scheme over and above the GHNf funding secured for the South Bank scheme, this is not considered viable in light of current budgetary pressures.
- 76 The Council could procure a developer solely to complete the detailed design and commercialisation of the scheme, with the developer then delivering the network themselves without further involvement from the Council other than in its regulatory role. However, this would mean that Council retained no control over the development of the network nor any opportunity to share in the benefits of its success.

77 In terms of the existing Leeds PIPES network, the Council could seek to transfer the asset to a new JV as a part of the South Bank procurement. However, the need for valuations would impact negatively on project timescales and market interest, and so the Council is intending to consider pursuing this option separately and at a later stage (subject to further consideration and decision by the Council prior to the exercise of any such option).

How will success be measured?

78 Success for the Wellington Street scheme will be measured by realising new customer connections via the expanded route of the project, and increasing the heat demand on the network, achieving the financial outputs detailed in Confidential Appendix 5.

79 The addition of new customers will reduce carbon emissions in the city and contribute to the ambition of achieving net zero by 2030. This growth will also further raise the profile of the DHN, demonstrating to potential customers that connecting to the network can deliver a range of benefits.

80 Success for the South Bank and wider zonal scheme will at this stage be measured by the conclusion of a successful procurement and the appointment of delivery partner to enter into a joint venture partnership with the Council, although award of this contract will be the subject of a further approval by the Executive Board. The scheme will make a significant contribution to the achievement of net zero and energy security objectives.

What is the timetable and who will be responsible for implementation?

81 The timetable for the works included in this report are currently forecast as outlined at below. It should be noted that the programme is subject to discussions with and approvals from the Highways service.

82 Phase 4a extension:

- Contract award – December 2024
- Design and procurement activity – Completing March 2025
- Construction – April 2025 - August 2025
- Phase 4b timescales are subject to further Executive Board approval for investment

83 South Bank:

- Commercialisation period – up to summer 2025
- Procurement period – early 2025 to summer 2025
- Executive Board report seeking approval to award contract to JV delivery partner – late summer 2025
- Construction – early 2026 – 2028

84 The Chief Officer for Climate, Energy and Green Spaces will be responsible for implementation.

Appendices

- Appendix 1 – Maps of Wellington Street extension route
- Appendix 2 – Map of South Bank GHN scheme route
- Appendix 3 – Map of DESNZ Advanced Zoning Pilot 'city centre zone'
- Appendix 4 – EDCI screening
- Confidential Appendix 5 – Wellington Street extension financial modelling (*exempt from publication under the provisions of Access to Information Procedure Rule 10.4(3)*)

Background papers

- None