

London Borough of Enfield

Operational Report

Report of Peter George – Director of Development

Subject: MW HIF Substation – Connection Offer

Executive Director: Sarah Cary – Executive Director Place

Ward Upper Edmonton

Key Decision: KD5436

Purpose of Report

1. To accept the UKPN Connection Offer to provide the power supply for Phase 2 of Meridian Water; supporting 2,000 homes and 240,000sqm of commercial space across multiple development plots, including Meridian 2, 3, 4 and 5 of the Meridian Water development and approve the associated expenditure. See Appendix A for Meridian Water Site Plan.
2. The Connection Offer and associated expenditure is for the non-contestable works which can only be carried out by UKPN. The contestable works, which include the delivery of a primary substation, will be directly procured by the Council or delivered by the Main Contractor for the HIF Street Works (Vinci Taylor Woodrow).
3. This decision is outside the Pre-Construction Services Agreement with Vinci Taylor Woodrow (VTW) so that the normal VTW uplift is not borne by the Council. The UKPN Terms and Initial payment are being progressed now to safeguard the pricing and power allowance. VTW is expected to manage the construction.

Proposal(s)

4. Executive Director Place to accept the UKPN Terms and Conditions for Connection and Diversionary Works for UKPN to carry out the non-contestable works to provide an 8MVA electricity connection on the 33kV electricity network for the Meridian Water development.
5. Executive Director Place to approve the associated expenditure of £737,494.48 (excl. VAT) and a contingency of £147,498.90 bringing the total cost to £884,993.39 (excl. VAT). Noting that first £250k payment will be made on acceptance of the offer. Any future payment will only be made if and when relevant payment milestones are hit. The Council will only be liable for actual cost incurred and will not pay if works are not progressed.

6. Executive Director of Place to note that the contestable works which include the delivery of a primary substation will be directly procured by the Council or by Vinci Taylor Woodrow (VTW). Either delivery route requires the acceptance of the Connection Offer and associated expenditure for UKPN to carry out the non-contestable works.
7. Executive Director Place to approve completion of the Acceptance Form commissioning the works.
8. Executive Director Place to note that the cost is covered from the approved Meridian Water Capital Budget with the facility to recharge DLUHC via the HIF funding agreement in place.

Reason for Proposal(s)

9. Early Discussions with UKPN advised that the electricity capacity at the existing Tottenham sub-station could only supply up to 2,000 new homes in Meridian Water. It is expected that this capacity will be used to serve the new mixed-use developments in Meridian 1 and Meridian 2. A new Primary Substation at Meridian Water is required to provide power to future development phases, including Meridian 4 and support delivery of the entire Meridian Water masterplan.
10. Accepting and making payment to UKPN, the statutory provider of power, to carry out the connection works is time critical for Meridian Water's infrastructure delivery programme and is required to unlock the housing potential at Meridian Water.

Relevance to the Council's Plan

11. An enhanced electricity capacity to serve future development phases is key to unlock the development of Meridian Water and contributes to the priorities of the Council's Corporate Plan:
 - a. *Good homes in well-connected neighbourhoods*
The enhanced electricity capacity at the new Meridian Water substation will ensure power supply for future development phases and serve new housing development in Meridian Water.
 - b. *Safe, healthy, and confident communities*
Statutory utilities, such as electricity underpins the placemaking capability of Meridian Water.
 - c. *An economy that works for everyone*
The enhanced electricity capacity at the new Meridian Water substation will ensure power supply to new commercial uses, attracting new jobs and business growth in the area, supporting Enfield residents and the local economy.

Background

12. In December 2018 the Council submitted a bid to the Department for Levelling Up, Housing and Communities (DLUHC, former MHCLG) for the Housing Infrastructure Fund (HIF) to deliver the first phase of strategic infrastructure works in Meridian Water. On 30 October 2020 the Council entered into the Grant Determination Agreement with DLUHC for a total amount of £170m to deliver the scheme.
13. The Strategic Infrastructure Works comprises of rail enhancement works amounting to a value of circa £54m (HIF Rail Works) and strategic road and flood alleviation works for a value amounting to circa £116m (HIF Street Works). The HIF Street Works include a new primary substation and utility connection to enhance the electricity capacity at Meridian Water and provide power to future development phases, including Meridian 4.
14. In September 2020 Cabinet approved the entry by the Council into a framework agreement with three selected contractors in relation to the delivery of the HIF Street Works (KD 5181), and into a Pre-Construction Services Agreement (PCSA) with the first ranked contractor Vinci Taylor Woodrow (VTW). The Contractor's scope of works includes the contestable works to provide the new Primary Substation at Meridian Water, including technical design and delivery of a new primary substation.
15. A delivery strategy was prepared to assess the delivery options for the substation, which confirmed delivery of the substation works by VTW as part of the HIF Street Works to be the most suitable delivery option given the cost and time constraints tied to the HIF Funding Agreement. This delivery option is in accordance with the original intent at the time of the HIF contractor procurement and requires VTW to progress technical design of the substation under the existing Pre-construction Services Agreement (PCSA) and delivery through the main works contract.
16. However, given the current budget pressures on HIF Street Works, exclusion of the primary substation from the HIF Street Works scope is being considered to bring the project back into budget. The various delivery options for the substation are being re-assessed:
 1. Delivery of the substation works by VTW as part of HIF Street Works;
 2. Self-delivery of the substation works by the Council;
 3. Plot development secure own power and deliver own substation.
17. Work is ongoing to reduce budget pressures, the first two delivery options are the most suitable to deliver the Phase 2 power requirements efficiently and both options rely on the acceptance of the UKPN connection offer to secure power for the whole of Phase 2. Further assessment will be given to whether the Council or VTW are best placed to procure and manage the contestable work to deliver the primary substation.

The third option has been currently discounted as securing power on a plot by plot basis is likely to be significantly more expensive and deter interest from the plot developers. If power is secured on a plot by plot basis, there is no certainty if and when power could be secured for future plots, including Meridian 4.

18. As the primary substation location was not agreed at the time, the substation was not included within the planning application for the Street Works and the design and planning application were progressed separately. The RIBA stage 3 design has now been completed and planning approval for the substation was granted in February 2022 (21/04218/RE4). A plan showing the location of the substation is shown in Appendix B.
19. There is urgency to accept this connection offer as there is limited power available on the network and once this offer has expired (2 June 2022) any further connection request may increase in value. UKPN has confirmed that there are competing applications for the power capacity, so extension is unlikely and Council would lose opportunity to secure power on the available network. Also, this connection is on the critical path to allow the Substation works to progress through the Street Works.

Main Considerations for the Council

Securing Power

20. Whilst the substation will be delivered an independent provider (IDNO) (possibly under the SIW works contract) it is necessary to first secure a connection into the electricity network to obtain the power allowance This is done by making a connection request to UK Power Networks (UKPN).
21. Hilson Moran (HM), a specialist utilities consultant was appointed by LBE to undertake a peer review of the Primary Substation project, they have stated that in terms of future provision of power, UKPN has a duty to invest in their network to meet 'growth' as well as improve security of supply. In their next asset investment cycle (2023-2028) HM suspect that at some point additional capacity will be made available by UKPN on the network, but likely at a higher cost. This supports the rationale for LBE to progress with the chosen strategy; to obtain power provision for Phase 2, within budget.
22. The power supply included in the connection offer is sufficient to serve the development of Phase 2. After that further power will need to be secured to service future plots in Meridian Water.
23. The transformers in the current substation proposal are sufficient to power the whole Meridian Water development (excluding meanwhile & 3rd Party Land), so the infrastructure within the substation is future proofed to service the whole of the site on the 33kV network.
24. There is a risk that there is no capacity for reinforcement on the 33kV network and a jump to the 132kV network will be needed. Hilson Moran advised that this is unlikely and UKPN have a duty to invest in the reinforcement of the existing 33kV network. However, the team have looked at this scenario and it will be possible to reconfigure the substation and install 132kV transformers by utilising a section of the adjacent LBE owned Employment Building Plot for the temporary relocation of transformers.

Terms and Conditions

25. The connection offer is subject to UKPN's standard Terms and Conditions for Connection and Diversionary Works. Terms and Conditions include a caps and exclusions on UKPN's liability and ground for variations and termination.
26. In addition, the standard Terms and Conditions the Council must meet Connection Milestones to ensure the power capacity is reserved and not released for other projects that are progressing more quickly. These conditions are managed via the VTW contract.
27. To secure the connection offer a payment to UKPN must be made before expiration of the offer on 2 June 2022. The following payment milestones are included within the offer: -
- | | |
|-----------------------------------|--------------------|
| 1. On acceptance: | £250,000 |
| 2. Prior to material orders: | £200,000 |
| 3. Prior to commencement on site: | £150,000 |
| 4. Prior to commissioning: | £137,494.48 |
| Total: | £737,494.48 |
28. There are special conditions applicable to the connection offer. The quote is based on UKPN being able to satisfactorily refurbish an existing circuit breaker at the Grid Site – this is the non-contestable elements of the work. Following acceptance of the quote, UKPN will assess and, if appropriate, attempt to refurbish and recommission the circuit breaker to meet UKPN's requirements and standards necessary for the provision of your connection. The quote assumes that no civil modification works are required to enable the circuit breaker to be assessed, refurbished, and recommissioned. If UKPN determines that the circuit breaker is not serviceable or cannot be refurbished or it is not economic or feasible to do so, or that there is a need to undertake civil modifications, UKPN will notify LBE in writing and shall be entitled to vary the works, the price, and the date for completion. The risk if it eventuates will be mitigated through the HIF funded Street Work PCSA or Main Contract.

Cost and Funding

29. The cost associated with the UKPN connection offer is £737,494.48 (excl. VAT) excluding contingency. This was higher than the expected figure of c. £450,000. This cost is non-negotiable as UKPN is the statutory provider of power. The cost break-down is set out below:

Item	Cost
EHV Plant and Switchgear	£196,020.70
EHV Underground Main	£136,095.34
Transactional charges	£5,860.00
Operation and Maintenance charges	£351,252.15
Miscellaneous	£48,266.29
Contingency	£147,498.90
Total	£884,993.39

30. The payment of the cost associated with the UKPN connection offer is staged. Only the first £250k payment will be made on acceptance of the offer. Any future payment will be made if and when relevant payment milestones are hit, and the Council is only liable for actual cost incurred. Indicative dates for payment milestones will be aligned with the Construction Programme for the substation once available and agreed by the Council.

Payment	To be made	Amount	Indicative Date
1	On acceptance Prior to detailed design	£250,000	Before 2/06/2022
2	Prior to materials orders	£200,000	TBC*
3	Prior to commencement on site	£150,000	TBC*
4	Prior to commissioning	£137,494.48	TBC*
	Total	£737,494.49	

*Onward milestones to be confirmed once SIW programme crystallised

31. The Connection offer is of provisional nature and price could be adjusted once the detailed design and the procurement process is complete and the Consents and Land Rights have been obtained. To mitigate this, we have included a 20% contingency of £147,498.90.

32. The cost in relation to the UKPN Connection Offer will be covered from the Meridian Water capital budget and HIF funding can be claimed back from DLUHC quarterly in arrears under the Grant Determination Agreement. The first £250k payment will be made on acceptance of the offer and could be claimed back from DLUHC as preliminary expenditure. Claims for any of the future payment will be subject to discharge of all conditions precedent under the GDA. HIF Works, including the substation won't progress unless all conditions in the HIF Funding Agreement have been satisfied.

Safeguarding Implications

Not applicable

Public Health Implications

Not applicable

Equalities Impact of the Proposal

Not applicable

Environmental and Climate Change Considerations

33. The works that will potentially be delivered as part of this project are relatively minor so will have limited carbon and environmental impacts. They will facilitate large scale new development, the impact of which is assessed and mitigated through the planning process.

34. The capacity for of the substation has been reviewed to accommodate an increase in the generation of Renewable Energy (Photovoltaics etc) and an increase in the use of Public and Private Electric Vehicles. In addition, further resilience has been allowed for in the space available in the substation compound.

Risks that may arise if the proposed decision and related work is not taken

35. If this connection offer is not accepted, the available capacity on the existing UKPN network will be offered to other applicant and the Council will lose the opportunity to secure power on the existing 33kV network. UKPN has confirmed that it received competing applications and will not be able to extend the connection offer. An earlier connection request for 40mva on the existing 33kV network has already been rejected by UKPN as capacity was not available, highlighting that the existing network is nearing capacity posing the risk that Council could miss out to secure power on the existing network.

32. The existing network is nearing capacity, which means that UKPN will need to invest and reinforce the existing network to increase the capacity before it can respond to future connection requests. If the connection offer is not accepted, there is no certainty if and when power could be secured to service future plots, putting housing delivery in phase 2, including Meridian 4 at risk. Even if power is secured on a plot by plot basis the same uncertainty on availability and timing of power exists running risk that power is not secured in time to service future plots.

33. If the connection offer is not accepted and reinforcement of the network is required to facilitate any future requests to secure power this is likely to result in a significantly higher cost and the Council could be asked to forward fund the network reinforcement works.

34. If UKPN needs to invest and reinforce the existing network to increase the capacity, design changes could be required to the substation altering the footprint and cable route. The substation has been future proofed to accommodate any required changes, but any changes to existing design could result in additional cost and time delays.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

35. **Risk:** Additional power requirements for future phases may not be able to be accommodated on the existing 33kV network, therefore reinforcement will have to be on 132kV network – this requires design changes, altering the footprint of the substation and cable routes.

Mitigation: Further work will be undertaken to confirm the power requirements for the whole of Meridian Water. The current substation design has been future proofed, and the feasibility of laying 132kV rated cables has been considered and the team have identified a solution whereby the substation could be re-configured to a 132kV arrangement without having to permanently extend the site.

36. **Risk:** Connection offer and resulting power provision is not sufficient to service the Phase 2 development.
Mitigation: Assessment has been carried out by Jacobs to confirm that the connection offer by UKPN secures sufficient power to service the Phase 2 development.
37. **Risk:** If HIF Funding doesn't become unconditional costs cannot be recovered from the grant.
Mitigation: Only the first £250k payment will be made on acceptance of the offer and could be claimed back from DLUHC as preliminary expenditure. Any future payment will be made if and when relevant payment milestones are hit and the Council is only liable for actual cost incurred. HIF Works, including the substation won't progress unless all conditions in the HIF Funding Agreement have been satisfied.
38. **Risk:** Risk of increased costs if UKPN determines that the circuit breaker is not serviceable or cannot be refurbished or it is not economic or feasible to do so, or that there is a need to undertake civil modifications.
Mitigations: A 10% contingency has been allowed to cover any cost increases. Any extra cost if it eventuates will be mitigated through the HIF funded Street Work PCSA or Main Contract.

Financial Implications

Atul Lad – Capital and Projects Finance Manager – 26/04/2022

39. This report is seeking approval to accept the UK Power Network (UKPN) terms and conditions to increase electricity capacity to the Meridian Water site to facilitate future developments. The cost of this is currently estimated at £885k including 20% contingency.
40. These works form part of the strategic infrastructure works across the site. There is an approved Meridian Water budget allocation for these works, which will be funded from the HIF grant. Cost covered by the HIF grant are claimed quarterly in arrears, following approval of grant claims from DLUHC. This process has started, and the Council has had claims approved and received the money for them.
41. There is a risk that costs could increase if UKPN determine that civil modification works are required (currently assuming they aren't). If required it is currently estimated that these works would be covered from the contingency.
42. If there are delays to accepting the quote then a new quote will need to be provided with revised costs.
43. LBE has opted to tax sites on acquisitions where possible on Meridian Water, figures provided in the report exclude VAT. It is expected LBE will recover any VAT on costs.

Legal Implications

44. Section 111 of the Local Government Act 1972 permits local authorities to do anything that is calculated to facilitate, or is conducive or incidental to, the discharge of their functions. The Council also has a general power of competence under section 1(1) of the Localism Act 2011 to do anything that individuals may do, provided it is not prohibited by legislation and subject to Public Law principles. The Council therefore has sufficient powers to enter into the contract as proposed in this report.
45. The estimated value of the contract is below the Public Contracts Regulations 2015 (the "Regulations") threshold for works. However, the Council must comply with its constitution, including the Contract Procedure Rules in relation to the connection and diversionary works. Competition is restricted by government/statutory control and therefore these works have not been competitively tendered. This is permissible under the Contract Procedure Rules.
46. Officers should take care to comply with the provisions of the acceptance form and UKPN's terms and conditions, including but not limited to complying with any milestones for delivery required to be met by the Council. Given the anticipated value of the works, the Council's seal must be affixed to the acceptance form. The contract must also be registered on the Corporate Contract Register.
47. It is proposed that the contract sum payable will be reimbursed to the Council out of preliminary HIF grant funding to be made available by DLUHC. Although the Council's bid for HIF funding was successful and a grant agreement has been entered into, availability of the majority of funding remains subject to satisfaction by the Council of various conditions. Any contract entered into, or any expenditure incurred by the Council prior to receiving formal confirmation that any preconditions to funding have been met, is at the Council's own risk. The Council must comply with the conditions set out in the funding agreement, including but not limited to complying with milestone dates for delivery of outcomes. Failure to do so may result in the requirement to repay any grant already claimed and the withholding of further grant.
48. The anticipated contract value exceeds £500,000. Therefore, this is a Key Decision, and the Council must comply with its Key Decision procedure.

Workforce Implications

49. Not applicable

Property Implications

Adrian Smallwood, Head of Strategic Property Services. 30 March 2022

50. There are no specific property implications arising directly from this report. The proposals in this report include the need for the creation of a sub-station. On the basis that this sub-station will be controlled and operated

by UKPN (or another statutory supplier), a lease will need to be agreed with the supplier. The terms of the lease will need to be signed-off by Strategic Property Services and the governance processes for its approval will need to be in accordance with the Property Procedural Rules.

51. If works to create the sub-station are to be carried out by a contractor that is contracted by the supplier (as opposed to contracted by LBE) prior to the lease commencing, relevant licences will need to be put in place with the supplier and its contractor prior to their occupation/works commencement. These too will need to comply with Property Procedure Rules governance requirements.
52. If other interests in land are needed to be put in place regarding conduits or cabling to enable the electricity supply, such as wayleaves or easements, these too will need to comply with Property Procedure Rules governance requirements.

Other Implications

53. The recommendations in this report do not have other implications.

Options Considered

54. Do Nothing. Rejected. Not possible as power reinforcement is necessary to build out Phase 2.
55. Obtain full power for the entire development now by using the 132kV network. This was rejected due to the works being significantly over budget.
56. Reject connection offer and secure power on a plot by plot basis has been discounted at this stage as this is likely to be significantly more expensive and deter interest from the plot developers. Also, if power is secured on a plot by plot basis, there is no certainty if and when power could be secured putting housing delivery programme in Meridian Water at risk.
57. Accept the UKPN Connection Offer and associated expenditure for the non-contestable works. This is the recommended option put forward in this report as it will secure power supply from UKPN for the whole of Phase 2 and support the housing delivery. Further consideration is being given to whether the Council or VTW are best placed to procure and manage the contestable works, but either delivery option relies on the acceptance of the UKPN connection offer to secure power and deliver the non-contestable works.

Conclusions

58. Officers and specialist consultants have undertaken detailed analysis of options and recommend LBE accept this connection offer. This will secure power supply for development plots in Phase 2.

Report Author: Bron Claridge

HIF programme Manager
Bron.Claridge@enfield.gov.uk
02081320481

27 April 2022

Appendices

Appendix A: Meridian Water Site Plan

Appendix B: Substation Location Plan