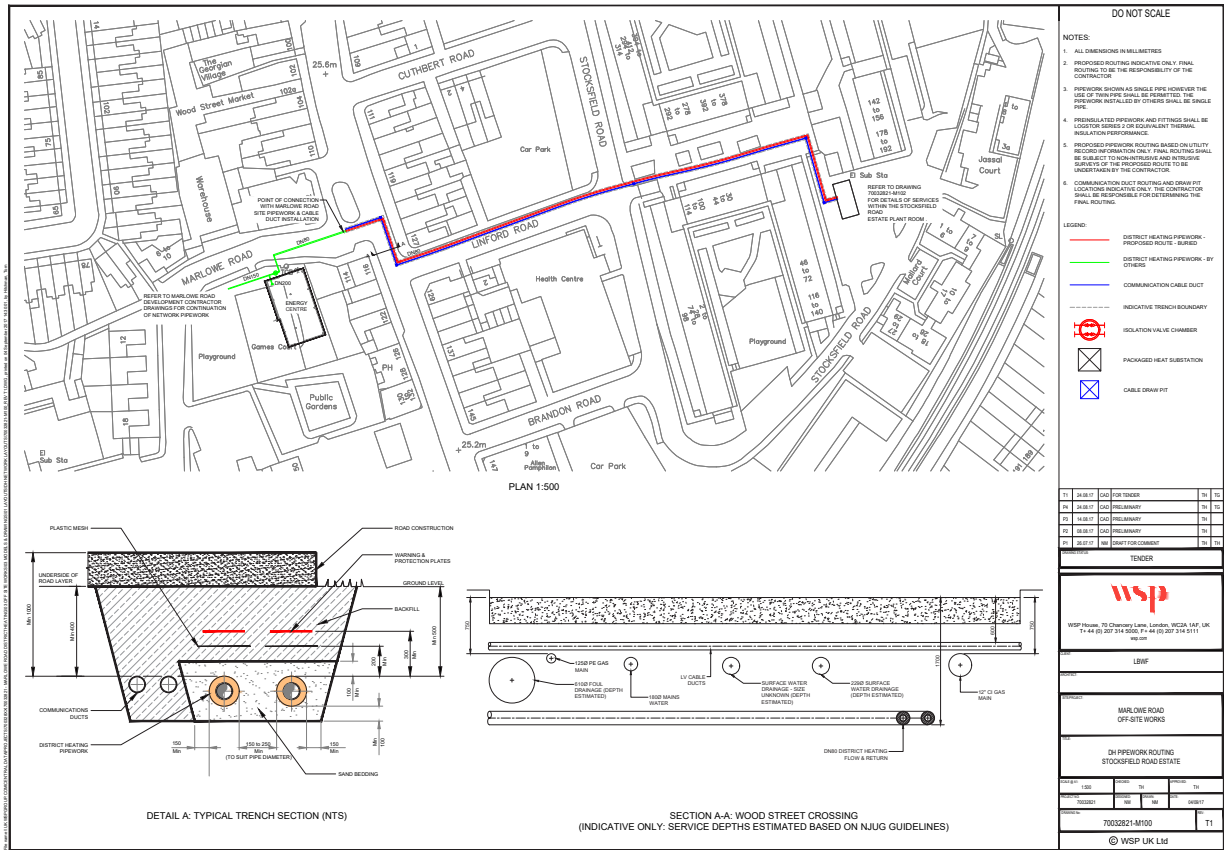


WOOD STREET SOUTH HEAT NETWORK



Funding beneficiary	London Borough of Waltham Forest
Location (Town/City)	Walthamstow, London
Total project capex	£1,950,000
Funding awarded	£1,000,000 construction grant
Planned/estimated heat export at completion	3.8 GWh per annum
Heat source & technology	Combined heat and power plant
Thermal storage capacity planned	24m ³ (2x 12m ³ Vessels)
Key anchor loads	Stocksfield Estate, Holy Family College, Alliston House
Length of primary network	0.5km
Anticipated number of buildings and/or connections	742 connections to date
Annual carbon savings (average over first 15 years)	170 t/CO ₂ e

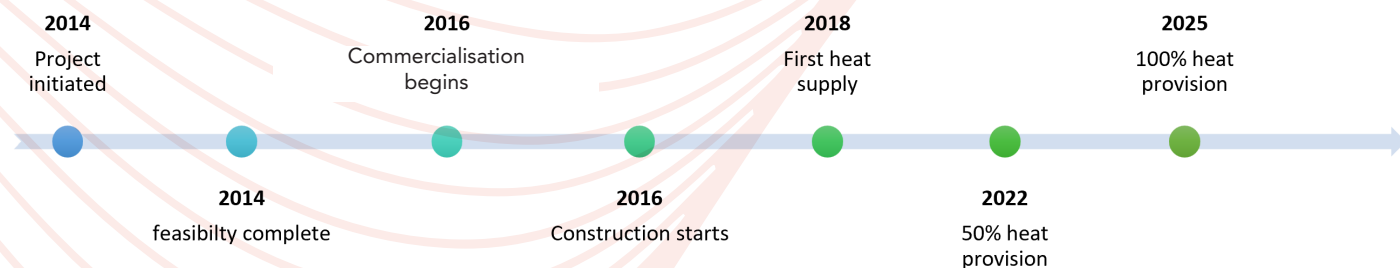
The Wood Street South heat network will use a combined heat and power energy centre to provide decentralised heat to 589 new homes as well as existing off-site residential blocks (Northwood Tower and Walnut Court) and other off-site connections in the local area.

The new energy centre will use natural gas to produce electricity which will eventually be sold to the National Grid, whilst heat generated through the process is used to produce hot water which is piped to residents' homes on the regenerated estate as well as off-site locations across Waltham Forest Borough once the final connections are made.

HNIP funding is helping to extend the project to provide district heating to the other off-site locations at Stocksfield Estate, Holy Family College and Alliston House care home.

The network was built by the London Borough of Waltham Forest in partnership with Countryside Properties. There is the capacity to add further connections to the heat network if new schemes are developed in the local area.

Project Milestones



The Story So Far*

The project is in its final phase of construction, with the Marlowe Road Energy Centre now supplying heat to 331 homes as well as the existing adjacent blocks at Northwood Tower and Walnut Court.

The energy centre has supplied a total of 101,394,244 million kwh of heat since its construction.

The network is currently connected to a gas boiler with a combined heat and power element currently under construction.

Project Insights

Lessons from the Wood Street project emphasised the importance of assessing off-site connections in advance. Prior consideration of off-site connections like Northwood Tower and Walnut Court, including necessary remediation work, would have improved the return temperature before making the connection. Connecting older existing buildings to new developments significantly affects return temperatures, as observed in this project.

To address remediation costs for off-site buildings, exploring options to share expenses with the contractor and incorporate them into the build contract is recommended. However, in the case of the Marlowe Road Regeneration, retrospective works made this approach unfeasible.

*Up to date as of March 2023