

Holly Lodge – Heating and Hot Water Proposals

Frequently asked questions for residents

Please see below for a list of frequently asked questions and answers to support the heating and hot water proposals at the Holly Lodge Estate. These have been grouped into themes and the **majority of the questions relate to the phase 2 scheme which is still in development.**

The works on site are split into two phases:

Phase 1: upgrading boiler room and removing the temporary boiler.

The Phase 1 works will be to upgrade the boiler room and remove the temporary boilers and will need to take place soon as these works are urgent. We have consultants in place that are helping us with the design. We will need to complete a tender exercise to procure a suitable contractor to deliver the works therefore we will not know the exact tender return costs until this activity is complete. We are aiming for these works to start in late Spring and they should only take a few months to complete.

Phase 2: a future-proof, climate friendly solution.

Phase 2 of the project will look at the heating and hot water system inside your blocks and homes and is a project that we will engage with residents on in early 2022. More information on the phase 2 works is outlined below:

- The proposal is to overhaul the existing heat network by first replacing the boilers in the existing plant room, then reusing the existing buried pipelines to supply heating and hot water to the blocks on the estate.
- The existing heat network pipework is less than 20 years of age. It should have a remaining life expectancy of another 10 to 15 years. Therefore, we are proposing to reuse this pipework.
- Each flat will have a Heat Interface Unit (HIU) installed which will provide heating and hot water all year around. This may vary for those blocks that only receive hot water from the network.
- New heating flow and return pipework will serve each flat. This will connect to the existing buried heat network pipelines from the plant room.
- The mains water pipework may also need to be renewed for the hot water supply to the HIU.
- Each HIU will be fitted with a heat meter, which will measure the heating and hot water usage in each home. Each household will be charged for the heating and hot water they use.
- The proposal is to provide heating and hot water to all flats within blocks which currently have a heat network connection from the plantroom.
- The work is being carried out in two phases. Phase one will replace the existing failed boilers. Phase two will renew the heating to the blocks and internally within the flats.

More information on the working assumptions for phase 2 of the works is outlined below, these assumptions will be reviewed as part of our design process.

Design and scope of the works

What are the other options considered and why were they not shortlisted?

LBC considered individual boilers, district heating and hot water from two plant rooms on the Holly Lodge estate, heating and hot water from a connection to the nearby Highgate Newtown plant room, and a Combination of district heating and hot water from the existing plant room with local plant at block level. These options were not short listed because they did not provide the most economically viable solution combined with the best low carbon technologies. It should be noted that the options appraisal assumed new installations within all apartments.

Is it possible to deliver phase 1 only and not undertake the work inside properties?

Phase 1 is only the boiler replacement and plant reconfiguration. It does not include any of the works inside the blocks and apartments.

The proposed works related to phase 1 are to replace the existing installations before they fail. Replacement plant equipment is necessary because the system is running on temporary boilers and there is a risk of system failure if the works are not undertaken. Where components can be retained, they are being retained, such as the distribution network.

Phase 2 would be undertaken on a block by block basis. Radiators connected to the communal system would be replaced but this will vary by block. These works will need to take place in the near future therefore just undertaking the phase 1 works only is not an option.

Will the heating & hot water systems be separate?

Heat will be provided from the central boilers to the heat interface unit (HIU) inside each home. One section of the HIU will supply the heating, and a second section will provide the hot water to the taps. A heat interface unit allows a consumer to draw energy from a central system, while having an independent installation and being able to control the amount of energy used.

Can I have my own boiler? Have individual gas boilers been considered?

We will not be considering requests to disconnect from the communal system as part of the project.

Various options appraisals and supporting technical studies have been undertaken and these have consistently identified retention and adaptation of the existing heat network as the most viable solution from a lifecycle and carbon perspective.

Which HIU (heat Interface Unit) will be used?

This won't be decided upon until we receive the design. We have had good results and positive feedback on Worcester Bosch Greenstar, SAV and Altecnic HIUs in other installations. The selection will be based on the best manufacturer and model which provides the best performance criteria.

Will all pipe work be boxed in?

Yes, the majority will be boxed in especially at high level. The typical specification is:

Boxing of pipework to be carcassed and enclosed with MDF or ply board with cups and screws. Alternatively, melamine finished 'Pendock' may be fitted. Shiplap / plastic cladding type covering will not be permitted. Pipework boxing to be primed, undercoated and top coated with white emulsion.

If an empty property becomes available on the estate then we will do a 'show flat' with the pipework and heat Interface Unit (HIU) set up so you can see what it will look like. If we are unable to secure an empty property, then we will create a 'mock-up' of the boxing and display it at a resident meeting.

Will pipe work be lagged (insulated)?

Yes, the hot water pipes that run within enclosures or cupboards will be lagged (insulated).

Are you aware of the number of feeds & stacks, and will existing hot water pipes be left and new pipes be installed across lounges and hallways?

In this type of system they are called "flow" and "return" connections rather than feeds and stacks.

There will be one flow connection and one return connection in each home, as well as a new cold-water supply pipe. These three new pipes will enter each flat at a suitable point of entry.

In each home, new heating pipes will be installed going from the HIU to the radiators and back. New cold water and hot water pipes will be provided to kitchens and bathrooms.

Where are the new entry points for feed & exit stacks into flats? If external how can they meet Conservation Area protections?

We are considering installing a new riser (which is a casing for pipes to rise through a building) up through the stairwell, and into each home at high level. This will depend on the design strategy for each block. The aim will be to avoid any impact on the external appearance of blocks.

Where can I find drawings and project information?

There is information about the Better Homes work to Holly Lodge on our website at camden.gov.uk/better-homes-holly-lodge. This includes information and contact details for the project team responsible for the scheme.

We will soon start sharing more detailed information, including specific documents relating to the works, through your Camden Account. You will be able to find these documents in the coming months by logging on to camden.gov.uk/camdenaccount.

Environmental Benefits

Are the proposals best for the environment?

These proposals include the best low carbon technologies currently available and are the best option for reducing Holly Lodge's carbon footprint by reducing greenhouse gas emissions.

The main benefit from Phase 1 is that the new boilers will be more energy-efficient than the temporary boilers, they will use less gas and will produce less emissions. Phase 2 will offer much greater benefits by allowing residents to directly control their own energy use and cut down on any unnecessary contribution to climate change.

Will the new boilers run on gas, oil, or electricity? Is this the most efficient option?

We are utilising the existing boilers which run on gas, and the replacement boilers will also use gas. We have assessed the potential to use heat pump and other electrical technologies now and they are not feasible at the moment but will be considered in the phase 2 project. The reason why this is not feasible at the moment is because the properties would need to be more energy efficient and have fabric improvements delivered first before we change the energy source to something that can operate at a lower temperature.

What efficiency rating will the lagging have? How will the thermal interface between internal pipe work, external mounted, & external ground pipe work be maintained?

All new insulation will be better than Building Regulations Part L standards with the aim of being in line with the recommendations of CIBSE CP1: Code of Practice for Heat Networks in the UK. It may not be possible to achieve this in all cases due to space

Project costs

What are the running costs and how to they compare to other options?

We have instructed FLOH our consultant to provide a cost analysis.

How much will the work cost for leaseholders?

The cost differs depending on the rateable value of your flat, so not all leaseholders will pay the same; we will write to each of you to explain your personal contribution. This is referred to as 'leasehold consultation'. You will receive a letter called a 'section 20: notice of intention to do works' (often just called a 'section 20') which tells you your contribution, and the project costs as a whole. We will arrange a meeting to explain the charges and what is involved to deliver the project.

How will the bulk gas discount be applied and will we still receive money back from heating charge?

The replacement system will initially be billed on the same basis as you are billed now. Once the heat meters are activated you will make the payments for your heat in the same way, but you will only be charged for heat used in your home.

The gas and electricity used for the supply to the central plant and equipment for your heating and hot water will benefit from Camden's bulk purchase discount. As LBC purchases so much gas across its estate, it is able to negotiate better rates than those typically available to consumers.

What measures will be put in place to protect the elderly & those with young children from a dramatic price increase for heating properties?

When the heating and hot water system is switched over to heat meters, residents will be charged according to how much heat and hot water they use. You will be able to check how much heat and hot water you have used, which will allow you to keep on top of your bills, and control your own carbon footprint.

We will provide support and reassurance to any residents who have difficulty in paying for the heating and hot water. Anyone concerned about their bills can contact the billing team for help and advice.

Delivering the works – what will this entail?

How long will overall project take?

The project should take around 18-24 months including phase 1 and phase 2.

Will the system include isolation valves to each incoming point within each flat?

The new heating circuit will have isolating valves where it enters each home. The old pipes in the risers will be drained down and abandoned.

What are the exact works that will take place inside each flat?

Regeneration blocks have completely new installations so these homes only need to be disconnected and reconnected to the network when the sub-station plantrooms are removed. Once homes are reconnected, we will check their systems have started up correctly and are working as they should.

In the other blocks we will decommission the existing installations and remove the interconnecting pipelines between the sub-station plantroom and individual homes. We will install new heat network pipes from the sub-station plantroom through the communal parts of the block and into each home. These pipes will connect to the heat interface unit (HIU) in each home which will generate both heating and hot water for that home. We will install a new heating system in each home, including surface mounted copper pipes to the radiators, which are usually near windows. We will also install new hot and cold-water pipes from the HIU to both the kitchen and bathroom.

It may be necessary to install a new cold water main to each apartment, but that is subject to further consideration.

Maintenance

Who is responsible for maintaining the new communal system, including the heat exchanges

After the statutory guarantee period, Camden Council's maintenance term contractor will be responsible for the continued maintenance of the whole heating system. The actual HIU's require very little maintenance.

Will all heat exchanging units be covered (thermal casing, not exposed exchanger) & boxed in correctly & comply with all current regulations?

Yes, and all new units installed are available with manufacturer's thermal insulation outer casing.

In Summary

- Camden is committed to consulting with all of our leaseholders and tenants equally. The consultation will be on a resident-wide basis and everyone will be included. We will also offer separate leasehold-specific meetings as required to address issues such as payment options.
- All of our residents are seen as clients, or end users. Although they are not presented with a formal bill, tenants still pay for major works through their weekly rent. This means that both leaseholders and tenants contribute financially to the project.
- Camden is happy to share reports that we have produced about this scheme, and it is helpful to have residents comment on the proposals. We will keep updating the Holly Lodge webpage and everybody's Camden Account as the project progresses, with things like reports, drawings, and updates, as often as possible.
- This project is being run on a 'design and build' process using the NEC 3 form of contract. NEC3 does not contain penalties that can be levied against the contractor but does ensure the contractor will not benefit financially from any lack of performance. The procurement mechanism to appoint the contractor is via our new framework contracts which have appointed five contractors to each category of work, or 'lot'. Once on the framework, they enter into a mini competitive tender in order to provide a competitive price for a particular scheme. The prices they submit cannot be higher than those they submitted when appointed onto the framework and leaseholders were fully consulted on the appointment of the framework contractors over the last two years.