WHAT IS THE HOSPITAL ENERGY PROJECT?

The Hospital Energy Project is an innovative, sustainable energy solution to:

- Replace outdated energy and heating systems at the John Radcliffe Hospital (JR) and Churchill Hospital (CH)
- Reduce the energy bills for Oxford University Hospitals NHS Foundation Trust (OUH)
- Guarantee both hospitals’ energy and heat provisions for at least 25 years
- Reduce both hospitals’ reliance on the National Grid
- Replace all the old boilers and generators with a single gas fired Combined Heat and Power Generator (CHP) at the JR and new boilers at both the JR and CH
- Link the JR and CH with a district heating pipeline (Energy Link). A high voltage cable and communications cable are also being placed in the energy link trench
- Replace 7,000 old light fittings
- Update the building management systems
- Update the cooling systems

WHY DO WE NEED IT?

The boilers at the JR are over 30 years old and at the CH over 40-50 years old and require costly maintenance, wasting valuable NHS resources.

WHO IS DOING THE WORK?

The Trust has appointed an expert partner, Vital Energi, to deliver this innovative project.

FACT

OUH uses about the same amount of power every year as 10,000 homes
WHY IS AN ENERGY LINK NEEDED?
The CHP at the JR generates electricity. This in turn will produce surplus heat, which is captured in hot water (90°C) that will flow from the JR, along the 2.2km length of the Energy Link to the CH with negligible loss of heat. It will be used at both the JR and CH for hot water, heating, chillers and air conditioning before returning to the CHP to be re-heated and re-circulated.

TRENCH CROSS SECTION
- Trench 1.5M wide
- Diameter of pipework 280mm
- 11,000V cable
- fibre optic cable

HOW WILL THE ENERGY LINK BE LAID?
Each work section, which is up to 120 metres long, is securely fenced off by Heras fencing with a mobile cabin for 24-hour security staff. A trench is dug and unusable spoil is removed. The flow and return pipes, HV cable and communications ducting are laid in the trench and fully tested. The trench is back filled and the road is re-surfaced. The team moves on to the next section and repeats this process.

There is a leak detection system along the length of the Energy Link that enables Vital Energi to pinpoint any changes in moisture precisely and immediately so that remedial work can be done efficiently and quickly.

FACT
The average heat loss in similar district heating systems is 2/3°C
**TIMETABLE FOR THE ENERGY LINK THROUGH HEADINGTON**

Where the dig goes past a junction, the work section will end and begin halfway across the junction so that one side of the road is always kept open.

<table>
<thead>
<tr>
<th>Date Range</th>
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| **MONDAY 28 NOVEMBER – FRIDAY 16 DECEMBER** | Latimer Road ➤ Latimer Grange  
All Saints Road/Barrington Close ➤ 84 Lime Walk |
| **MONDAY 19 DECEMBER – MONDAY 2 JANUARY** | No work |
| **TUESDAY 3 JANUARY – FRIDAY 20 JANUARY** | Latimer Grange ➤ The Brambles  
86 Lime Walk ➤ Nursery Close |
| **MONDAY 16 JANUARY – FRIDAY 27 JANUARY** | London Road ➤ 1a Sandfield Road |
| **MONDAY 23 JANUARY – FRIDAY 10 FEBRUARY** | Nursery Close ➤ 129b Lime Walk |
| **MONDAY 23 JANUARY – FRIDAY 24 FEBRUARY** | The Brambles ➤ 55 Latimer Road |
| **MONDAY 30 JANUARY – FRIDAY 17 FEBRUARY** | 1 Sandfield Road ➤ Beech Road |
| **MONDAY 13 FEBRUARY – FRIDAY 24 FEBRUARY** | 130 Lime Walk ➤ Old Road |
| **MONDAY 20 FEBRUARY – FRIDAY 10 MARCH** | Sandfield Road junction with Beech Road – Woodlands Road |
| **MONDAY 27 FEBRUARY – FRIDAY 17 MARCH** | 57 Latimer Road – All Saints Road |
| **MONDAY 6 MARCH – SUNDAY 19 MARCH** | Lime Walk/Old Road Junction ➤ Churchill Drive (includes weekends) |
| **20 MARCH – 31 MARCH** | London Road Eastbound – (includes weekends) |
| **3 APRIL – 13 APRIL** | London Rd Westbound |

Please note this timetable could change. For up to date information, follow Twitter or see the Trust website - ouh.nhs.uk/energy
ROUTE MAP

JOHN RADCLIFFE HOSPITAL
WOODLANDS ROAD
SANDFIELD ROAD
LONDON ROAD
LATIMER ROAD
ALL SAINTS ROAD
LIME WALK
OLD ROAD
CHURCHILL DRIVE
CHURCHILL HOSPITAL

Map design by scalablemaps.com
Map data © OpenStreetMap contributors
One of the conditions of the City Council’s Planning Permission was for a full archaeological survey of the Churchill Drive section. Should artefacts be found in the trench, this timetable could be extended.

6 – 17 March (green section on map)

**TRAFFIC and BICYCLES:**
- Traffic on Old Road two-way with temporary traffic lights.
- No entry or exit via Churchill Drive/Old Road.
- Entry and exit to the site is via Roosevelt Drive/Gipsy Lane junction only.

**BOUNDARY BROOK HOUSE:**
- Access to both Car Parks kept open.

**PEDESTRIANS:** pavements open as usual.

**AMBULANCES:** Entry and exit via Roosevelt Drive/Gipsy Lane junction only.
17 - 20 March (red section on map)

**TRAFFIC and BICYCLES:**
- No entry or exit via Churchill Drive/Old Road.
- Entry and exit to the site is via Roosevelt Drive/Gipsy Lane junction only.

**BOUNDARY BROOK HOUSE:**
- Access via Old Road - Churchill Drive only.

**PEDESTRIANS:**
- Pavements open as usual.

**AMBULANCES:**
- Entry and exit via Roosevelt Drive/Gipsy Lane junction only.

20 March – 21 April (blue sections on map)

**TRAFFIC and BICYCLES:**
- No entry or exit via Churchill Drive to Old Road.
- Entry and exit to the site is via Roosevelt Drive/Gipsy Lane junction only.
- Two way traffic with temporary traffic lights between Car Park 2 and Car Park C.
- Car Park 4 closed for turning circle for buses and delivery vehicles.

**BOUNDARY BROOK HOUSE:**
- Access via Old Road – Churchill Drive only.

**PEDESTRIANS:**
- Pavements open as usual.

**AMBULANCES:**
- Entry and exit via Roosevelt Drive/Gipsy Lane junction only.

**DELIVERIES IN WORK ZONE:**
- Schedule to be agreed in advance.

24 April – 19 May (yellow sections on map)

**TRAFFIC and BICYCLES:**
- Old Road/Churchill Drive entrance/exit open.
- Churchill Drive closed between Roosevelt Drive and Energy Centre slip road.
- Two way traffic with temporary traffic lights between Car Park 2 and Car Park C.
- Car Park 4 closed for turning circle for buses and delivery vehicles.

**PEDESTRIANS:**
- Access to Massey Close open.
- Fenced off, temporary, footpath adjacent to ambulance building.
- Access to buildings open as usual.

**AMBULANCES:**
- Entry and exit via Churchill Drive/Old Road.
- Temporary one-way lane (part road, part existing pavement) on Churchill Drive past ambulance building.

**DELIVERIES IN WORK ZONE:**
- Schedule to be agreed in advance.
Access to Headington
Oxfordshire County Council’s Access to Headington work on the Roosevelt Drive/Gipsy Lane junction is expected to be complete by mid-February 2017. Work on the Energy Link at the CH site will begin shortly afterwards. Vital Energi is co-ordinating its work on Churchill Drive and Old Road with Access to Headington.

Access to houses
Pedestrian access to properties will be kept open at all times. Emergency vehicles will have access at all times. If you need access to your home for any reason, please speak to the security guard as soon as possible to arrange this.

Christmas holidays
There will be no work 23 December 2016 - 2 January 2017. All trenches will be closed up.

Cleanliness
All the rubble and dirt will be removed and work sections cleaned down regularly. The road will be left in a high quality condition as approved by the County Council.

Communications
Vital Energi and OUH will answer emails and phone calls promptly, hold monthly residents’ liaison meetings, update the OUH Energy Project website and Twitter. Residents will receive a letter two weeks before work begins outside their property with information on parking, emergency contact details and advice on what to do if you believe your property has been damaged by the work.

Complaints about the Energy Link work
If you have a complaint, please speak to on-site staff in the first instance as they are best placed to assess the situation and discuss a suitable solution. Should you wish to take the complaint further, please email Oxford-Energy-Link@vitalenergi.co.uk or phone Jo Lennon on 07342 086843 (9am – 4.30pm Mon – Fri only).

Disabled access
There will be a designated disabled drop-off zone at each end of the work sections and Vital Energi staff will be available to discuss the needs of the vulnerable/disabled living along the route on an individual basis.
Emergency access
There will be 24-hour emergency access to homes. If you have called the emergency services to your home, please speak to any member of staff in the work section or security staff as soon as possible and they will take appropriate action.

Hours of work on the trench
Work hours will normally be 8am to 5pm. Weekend working is only planned on London Road and Old Road (as required by Oxfordshire County Council). No night work is planned.

Lime Walk
28 November – 16 December 2016 there will be three-way temporary traffic lights at the chicane/ All Saints Road junction.

From 2 January – 17 March 2017, Lime Walk will be one-way northbound from Old Road down to the chicane. To enable the traffic to flow efficiently, some parking spaces will be suspended while each section is being dug. From the chicane towards London Road, traffic remains two-way and parking is unaffected.

Noise and light
Cutting the work section’s road surfaces will be done by a Diamond Drill, which will help reduce noise. Similar work undertaken at the JR recently did not cause noise disruption in adjacent wards and offices. There will be no floodlighting at night in the work sections.

Old Road/London Road
Whilst work is underway, these roads will remain open for two-way traffic with temporary traffic lights. Weekends will be worked on these sections to reduce the time spent on these busy roads.

Parcels/deliveries
There will be a drop-off zone at each end of the work section and a manned security cabin. On-site staff will help residents/delivery staff as and when required.

Pavements
Pavements will be kept open on both sides of the road at all times.
**Wheelie bins**

When your property has a work section in front of it, please leave your wheelie bin/s in the usual place outside your property by 5pm the evening before they are normally collected. Vital Energi staff will take your bin/s to the end of the work section for collection. Once they have been emptied, Vital Energi staff will return your bin/s outside your property. Please number your bins clearly so that they can be placed outside the correct house. Please speak to Vital Energi on site staff if you have any ‘special pick-up provisions’, for example, if you are disabled.

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**Parking**

Visitor’s parking permits will be issued to any resident on the route of the pipeline over the age of 17 (regardless of whether they have a vehicle or not) upon production of a completed online application form and supporting official proof of residency.

**Permit enquiries can be made online:**

www.oxfordshire.gov.uk/headington-hospital-energy-pipeline-work

**Or by phone 01865 815649.**

There will also be a lockable, temporary, Car Park at the JR solely for residents. Temporary residents’ spaces will also be available at the CH. Information about parking provisions will be included in letters to residents two weeks before each work section starts.

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**Road Closures**

With the exception of Lime Walk, residential roads will be closed to through traffic and County Council-approved signage will advise motorists that these roads are closed. However, residents can continue to access their streets because only the working/trenched section of the road will be impassable.

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**Safety and security**

Work sections will be enclosed with climb-proof Heras fencing with locked gates at each end. There will be a manned security cabin in the work section for 24-hour security of the trench, assistance to residents and to facilitate access for emergency services if needed.

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**Electric car / vehicle charging point**

There will be one charging point for electric vehicles in the JR temporary Car Park.

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**Weekend working**

Weekend work has been requested by the County Council on London Road and Old Road to reduce the time spent on these busy routes. **No other weekend work is allowed or planned.**

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**Or by phone 01865 815649.**

There will also be a lockable, temporary, Car Park at the JR solely for residents. Temporary residents’ spaces will also be available at the CH. Information about parking provisions will be included in letters to residents two weeks before each work section starts.
The Hospital Energy Project will generate in excess of 10,000 tonnes of carbon savings - over one third of the current carbon emissions from the sites. This is roughly equivalent to taking 3,000 cars off Headington’s roads each year.

The new CHP and boilers save £11M in back-log maintenance – this sum can now be spent elsewhere in OUH.

Guaranteed savings of £460,000 a year, the equivalent of 13 nurses.

The NHS Trust pays for the energy project using guaranteed savings over 25 years - not the capital budget.

New heat exchangers significantly reduce the risk of legionella.

New building management system makes it easier to control and monitor energy and heating use.

OUH uses about the same amount of energy each year as a town such as Witney.

New lights in the JR and CH are up to 90% more efficient.

The Hospital Energy Project is already starting to deliver significant savings.
OUH USEFUL CONTACTS AND FURTHER INFORMATION

@OUH_Estates #OUHEnergy for daily updates

OUH Day time contact: 07342 086843 (9am – 4.30pm Monday – Friday)
OUH Email: hospitalenergyproject@ouh.nhs.uk
OUH Website: ouh.nhs.uk/energy
OUH Video: youtube.com
and search for Hospital Energy Project - the heart of the hospital

THE HOSPITAL ENERGY PROJECT

OTHER USEFUL CONTACTS

Security and Emergency: 0800 6124 039
this number is for genuine emergencies only (24 hours)

Complaints: Oxford-Energy-Link@vitalenergi.co.uk
Visitor Parking Permits: 01865 815649 or online at:
www.oxfordshire.gov.uk/headington-hospital-energy-pipeline-work
Oxfordshire County Council Access to Headington:
www.oxfordshire.gov.uk/accessheadington
700 and 900 buses: www.stagecoachbus.com/headington
Live Traffic Information: www.voyager.oxfordshire.gov.uk