O2 Masterplan Site, Finchley Road Utility Statement

Version 1, January 2022

Prepared for LS (Finchley Road) Limited by Hoare Lea





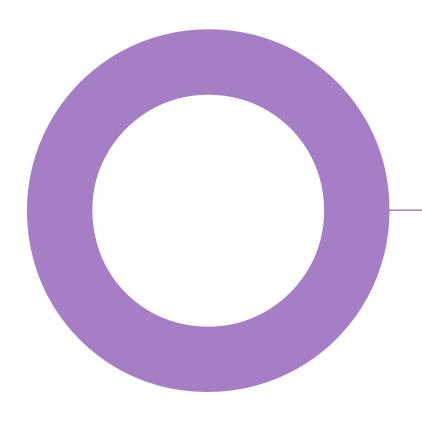


O2 Masterplan Site. Finchley Road. LS (Finchley Road) Ltd.

UTILITY & ENERGY INFRASTRUCTURE

PLANNING STATEMENT

REVISION 01 - JANUARY 2022



UTILITY & ENERGY
INFRASTRUCTURE
PLANNING STATEMENT - REV. 01

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Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
01	January 2022	Issue for planning	AD	LB	

This document has been prepared for LS (Finchley Road) Ltd only and solely for the purposes expressly defined herein. We owe no duty of care to any third parties in respect of its content. Therefore, unless expressly agreed by us in signed writing, we hereby exclude all liability to third parties, including liability for negligence, save only for liabilities that cannot be so excluded by operation of applicable law. The consequences of climate change and the effects of future changes in climatic conditions cannot be accurately predicted. This report has been based solely on the specific design assumptions and criteria stated herein.

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1. Executive summary.

This Utility Planning Statement has been prepared by Hoare Lea on behalf of LS (Finchley Road) Limited ('the Applicant') to support an application made part in detail and part in outline (the 'Application') for the demolition and redevelopment of land encompassing the O2 Centre and associated car park, Homebase store, car showrooms and a Builder's Merchant (the "Site") within the London Borough of Camden ('LBC').

The Site will be known as "the O2 Masterplan Site"

Full details and scope of the Applications is described in the submitted Planning Statement, prepared by Gerald Eve LLP.

This report forms part of a hybrid application seeking detailed planning permission for Plots N3-E, N4 and N5 (including demolition of existing above ground structures and construction primary road infrastructure and associated works) and outline planning permission for future phases.

The Application is for the following Proposed Development:

Part full and part outline planning permission comprising the following:

Detailed planning permission for Development Plots N3-E, N4, and N5 including demolition of existing above ground structures and associated works, and for residential development (Class C3) and commercial, business and service (Class E) uses in Development Plot N3-E, residential development (Class C3) and local community (Class F2) and commercial, business and service (Class E) uses in Development Plot N4, and residential development (Use Class C3) and commercial, business and service uses (Class E) uses in Development Plot N5 together with all landscaping, public realm, cycle parking and disabled car parking, highway works and infrastructure within and associated with those Development Plots."

Outline planning permission for Development Plots N1, N2, N3, N6, N7, S1 and S8 including the demolition of all existing structures and redevelopment to include residential development (Class C3) commercial, business and service uses (Class E), sui generis leisure uses (including cinema and drinking establishments) together with all landscaping, public realm, cycle parking and disabled car parking, highway works and infrastructure within and associated with those Development Plots. The purpose of this document is to provide an assessment of the potential utility infrastructure impacts of the development.

There are 10 no. of Plots:

- a) Detailed Proposals (Plots N3-E, N4 and N5);
- b) Outline Proposals (Plots N1, N2, N3, N6, N7, S1 and S8)

The Detailed Proposals will include a total of 55,180sq. m GIA of residential floorspace including an allowance for car parking. The Detailed Proposals will include 608 no of dwellings.

The Outline Proposals will include up to 115,000sq. m GIA of residential floorspace including an allowance for car parking and basements.

Therefore, the total residential use across the Site, including residential parking in podiums could be up to 170,180sq. m GIA which for the sake of the Environmental Impact Assessment has assumed that this equates to around 1,800 residential units.

The Application proposes 35% Affordable Housing by floorspace (GIA) in both the Detailed and Outline Proposals.

The scheme proposes 60% Low-Cost Rent and 40% Intermediate tenure by floorspace (GIA).



There are two key elements to the utility services infrastructure considered to date:

- **Diversions and disconnections strategy**: The impact on existing infrastructure.
- **New connections and reinforcement strategy**: The impact on existing infrastructure locally and upstream in accommodating the increased infrastructure demand, including meeting build out trajectory.

The utilities assessment demonstrates that a robust utility infrastructure strategy has been formed to support the application, ensuring that the development can be accommodated by the surrounding utility infrastructure, following appropriate reinforcements.

A summary of the findings is as follows.

Utility	Onsite Apparatus Present	Diversion/ Disconnection Required	Estimated Peak Demand	Point of Connection Identified	Upstream reinforcement required
Electricity	✓	✓	9,493.1kVA	✓	*
Gas	✓	✓	N/A	N/A	*
Water	✓	✓	16.572l/s	✓	TBC
Telecoms	✓	✓	N/A	TBC	TBC

1.1 Energy Strategy

In response to the UK's commitment to achieving net zero carbon emissions by 2050 and in line with policy updates such as Part L 2021 and the Future Homes Standard, the scheme is to adopt an 100% electric energy strategy, providing all, heating, hot water and small power loads.

2. Terms of Reference and Objectives.

Hoare Lea has been appointed by LS (Finchley Road) Ltd to provide planning stage advisory services in relation to utility infrastructure at the proposed development. This document forms part of the Planning Application and will inform London Borough of Camden's Planning Department of the connectivity of the site regarding new services.

Hoare Lea were tasked to investigate whether the existing nearby utility infrastructure could support the new residential and light commercial development as described below. This document is provided to give an overview of existing utility services, provision for new connections and establish any underlying requirements for diversionary works.

Please note that this report is based upon utility information that has been provided by third parties. The information received has been summarised within this report. In the event that the information is relied upon and is subsequently found to be incorrect, Hoare Lea accepts no responsibility for any direct and/or consequential loss that may occur as a result.

A Ground Penetrating Radar (GPR) Survey is being undertaken on site which will highlight any diversions which may be necessary to accommodate the proposed development. Any additional diversions will also be committed to by the developer.

Note, any existing supplies to units on the site will be disconnected and abandoned as part of the enabling works package. Where mains or cabling are supplying offsite infrastructure, these assets will be protected or relocated to ensure no loss to existing levels of service.

2.1 Glossary

ADMD After diversity maximum demand CSEP Connected system Exit Point DNO Distribution network operator EHV Extra high voltage EML Electromagnetic location FTTC Fibre to the cabinet

FTTP Fibre to the premises
GDN Gas distribution network
GPR Ground penetrating radar

GT Gas Transporter HV High voltage

ICP Independent Connections Provider

IDNO Independent distribution network operator

IGT Independent gas transporter

LP Low pressure

LTDS Long term development statement

LV Low voltage

LZC Low and zero carbon MP Medium pressure

MUSCo Multi-utility service company

PoC Point of connection

PV Photovoltaic



3. The Proposed Development.

The proposed development consists primarily of residential units, with an allowance for commercial/workspace/community, landlord/plant/back of house/cycle storage and car parking spaces. The below massing has been taken from area schedule 19066_FR_Accommodation Schedule_211207_Option 60_R01.

Block N1

- 201 residential units
- 3674m² commercial/workspace/community
- 1126m² landlord/plant/back of house
- 269m² car parking space

Block N2

- 247 residential units
- 759m² commercial/workspace/community
- 810m² landlord/plant/back of house

Block S1

- 106 residential units
- 4255m² commercial/workspace/community
- 229m² landlord plant/back of house
- 615m² car parking space

Block N3

- 333 residential units
- 755m² commercial/workspace/community
- 739m² landlord/plant/back of house
- 586m² car parking space

Block N4

- 234 residential units
- 611m² commercial/workspace/community
- 942m² landlord/plant/back of house
- 697m² car parking space

Block N5

- 306 residential units
- 1361m² commercial/workspace/community
- 1085m² landlord/plant/back of house
- 693m² car parking space

Block N6

- 70 residential units
- 283m² commercial/workspace/community
- 144m² landlord/plant/back of house

Block N7

- 228 residential units
- 1553m² commercial/workspace/community
- 573m² landlord/plant/back of house
- 746m² car parking space

Block S8

- 69 residential units
- 794m² commercial/workspace/community
- 253m² landlord/plant/back of house



Detailed Proposals Housing Mix

Type of Housing	Private	Low Cost Rent	Intermediate Rent
Studio	59 (14%)	0	0
1 bedroom	157 (37%)	14 (13%)	48 (57%)
2 bedroom	187 (45%)	36 (35%)	25 (30%)
3 bedroom	17 (4%)	54 (52%)	11 (13%)
	400		
Total	420	104	84

Outline Proposals: Distribution of Housing mix across the Outline Proposals on a percentage basis.

Type of Housing	Private	Low Cost Rent	Intermediate Rent
	Percentage	Percentage	Percentage
Studio	0-20%	0-5%	0-20%
1 bedroom	0-40%	0-25%	0-30%
2 bedroom	30-50%	20-25%	20-40%
3 bedroom	0-5%	45-50%	0-15%

Illustrative mix created for ES assessment purposes

Type of Housing	Private	Low Cost Rent	Intermediate Rent
	Percentage	Percentage	Percentage
Studio	143 (18%)	4 (2%)	8 (5%)
1 bedroom	250 (31%)	51 (24%)	52 (31%)
2 bedroom	380 (47%)	59 (28%)	79 (47%)
3 bedroom	37 (4%)	97 (46%)	28 (17%)
Total	810	211	167

4. New Supply Strategy.

Hoare Lea has engaged with the incumbent utility providers for electricity, water and telecoms and in response, the following points of connection with sufficient capacity to serve the site have been identified.

- Electricity Point of Connection: Kimberly Road Primary Substation
- Gas CSEP: N/A
- Water Point of Connection: To be confirmed, following completion of modelling study
- Telecoms Point of Connection: To be confirmed, upon detailed design

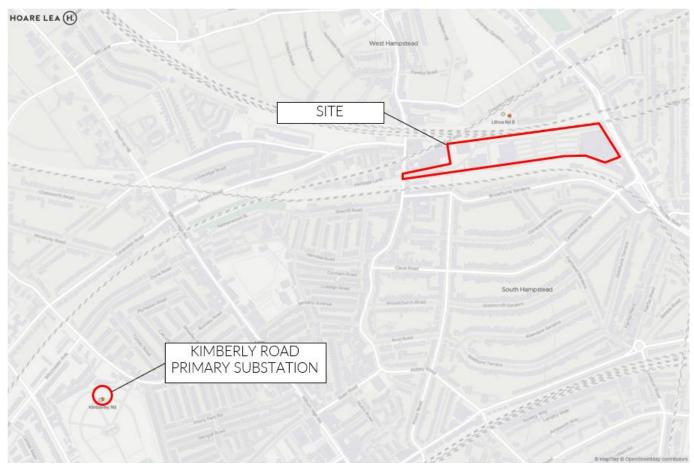


Figure 1 Proposed point of connection

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5. Electricity.

5.1 Existing Infrastructure

- Within the site there is a significant UKPN 11kV cable route which is affected by the proposed development. The existing cable route appears to be located close to the existing Audi Car Showroom.
- There are 4No. existing substations within the development with supplies to units across the site.
- Existing private electrical services may be present within the site.

5.2 Asset Protection

The UKPN 11kV cable route is part of the wider electrical network owned and operated by UKPN, and as such will need to be diverted to accommodate the proposed development while continuing to support offsite infrastructure. The cable route is proposed to be diverted and slewed to the north and west to avoid the proposed building line. A route will need to be retained within the development boundary with a necessary agreement between the landowner and UKPN. See diversion strategy below.

5.3 Disconnections

A phased strategy for disconnection of the existing electrical supplies on site has been developed. This strategy ensures that units will not be disconnected until such time as they are to be demolished as part of the phased development strategy.

- **Homebase:** Existing services to be disconnected ahead of demolition.
- Car Showrooms: Existing services to be disconnected ahead of demolition. The existing Car Showroom substation is to be relocated to a temporary location onsite and will provide the initial site temporary building supply.
- Builders Yard: Existing services to be disconnected ahead of demolition.
- O2 Centre: Existing services to be disconnected and internal substations to be removed ahead of demolition.

5.4 Diversions

A budget quotation has been received from UKPN to divert the existing 11kV route within the north west corner of the site to allow for the proposed buildings to be constructed. Following the completion of a GPR survey a detailed quote will be produced coordinating the design of the cable route.

5.5 Load Assessment.

An electrical demand assessment has been undertaken based on the proposed areas and unit numbers for the development. The current all electric energy strategy is to supply the hot water and heating for the units via air source heat pumps and electric hobs for the kitchens.

The estimated site load capacity ADMDs (After Diversity Maximum Demand), is: 9,493.1kVA, and will require:

- 5No. 1.000kVA substations at locations agreed with UKPN
- 8No. 800kVA substations at locations agreed with UKPN
- 1No. 500kVA substation at a location agreed with UKPN.

5.6 Availability of capacity.

An investigation into the availability of capacity has been completed for the development. UKPN have provided formal offers which confirm that the Kimberley Road Primary, circa 1.7km to the south west of site, has sufficient capacity to serve the full development with an 11kV supply. This demonstrates that the development can be delivered with little affect to the operation of existing networks.

The specified Point of Connection is shown on Figure 2 above.



6. Gas.

6.1 Existing Infrastructure

- 63mm and 90mm PE LP gas mains located on site supplying the car showrooms and Homebase.
- Multiple connections to the O2 Centre.

6.2 Asset Protection

All gas assets on site are to be decommissioned ahead of demolition and the existing network is to be capped at the site boundary.

6.3 Disconnections

Prior to demolition and site clearance, all existing dedicated site infrastructure within the development boundary will require disconnection outside of the site boundary at the nearest parent main.

- West of site: Disconnections required to Homebase and both car showrooms.
- East of site: Disconnections required to the O2 Centre from 3 existing connections.

6.4 Diversions

There are no assets onsite which will require diversion to maintain network capability in the local area.

Hoare Lea has obtained offers to clear the western site of existing network infrastructure, demonstrating the viability of the disconnection strategies. Quotes are to be obtained from the gas transporter to disconnect the O2 Centre when appropriate.

6.5 Load Assessment.

Due to the all-electric energy strategy for the scheme, no assessment or application for a new gas supply has been made. Should minor gas allowance be required at a later date, it is anticipated that a connection can be taken from the existing mains capped at the site boundary.

6.6 Availability of capacity.

Due to the 100% electric strategy, no application has been lodged with Cadent Gas.

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7. Potable Water.

7.1 Existing Infrastructure

There are no existing Thames Water supplies onsite. All existing units are fed via private supplies connected
to the local network beyond the site boundary. The location of the private supplies will be confirmed
following the completion of a GPR survey, and the final disconnection strategy will be confirmed at this
time.

7.2 Asset Protection

Thames Water have confirmed that there are no assets onsite which require protection to maintain the status of their network.

7.3 Disconnections

All disconnections of private supplies will be undertaken by the main works contractor when appropriate for each building. The disconnection process with be coordinated and programmed accordingly based on the phased demolition plan.

7.4 Diversions

Thames Water have confirmed that there are no assets onsite which will require diversion.

7.5 Load Assessment.

The water supply to site is comprised of a combination of stored cold water within each building, fed from a single supply connected to the network to the west of the site.

The exact location for the connection has not been confirmed and will be determined following the completion of a Thames Water modelling study which is currently underway, and due for completion in January 2022.

The estimated O2 Finchley site load capacity PI (Peak Intensity), is 16.572I/s based on a 50% cold water storage amount, with a 4-hour infill duration.

Additional fire hydrants will be required throughout the site as none are present within 90m of any proposed dry risers. The location and quantity of these will be established following the development of the detailed scheme design and be assessed and approved by Thames Water, the local fire authority and committed to by the developer.

7.6 Availability of capacity.

A pre-planning enquiry for potable water was submitted to Thames Water which identified that water network modelling was required to ascertain level of reinforcement required to facilitate development. The results of the modelling study are due to be issued in January 2022, at which time a formal quotation and design will be requested.

8. Telecommunications.

8.1 Existing Infrastructure

- There are two distinct feeds to the site from the east and western boundaries which are to be disconnected and removed from the site at the appropriate time.
- Supplies to land beyond the development boundary will be maintained at all times and accommodated within the coordinated utility strategy.

8.2 Asset Protection

Within Blackburn Road there are existing supplies feeding all units located to the north of Blackburn Road. All assets which supply customers beyond the development boundary will be maintained at all times.

There is an additional feed within the cycle path located to the south of the car showrooms which will be maintained and coordinated within the proposed incoming utility corridor.

8.3 Disconnections

A phased strategy for the disconnection of all units across the site has been developed, which allows for each unit to be disconnected in isolation and when required in accordance with the demolition programme.

- Homebase: Existing services to be disconnected ahead of demolition. Supply to car park information kiosk will be retained temporarily whilst the existing O2 Centre car park is in operation, and subsequently disconnected to the site boundary ahead of demolition.
- Car Showrooms: Existing services to be disconnected and removed to site boundary ahead of demolition.
- Builders Yard: Existing services to be disconnected ahead of demolition.
- O2 Centre: Existing services to be disconnected and removed ahead of demolition.

8.4 Diversions

Existing assets located onsite may be diverted to accommodate the proposed utility corridor, however detailed design of this will be undertaken following completion of a GPR survey.

8.5 Broadband Assessment.

Local telephone exchange Hampstead Exchange is located north of the site on Finchley Road (Exchange code **WEWHAM**) and appears to be FTTC enabled.

The presence of extensive local networks lends the site to having a good level telecom connectivity.

Openreach will be consulted to undertake a Fibre to the premise (FTTP) assessment of the area and are likely to welcome the opportunity to include the residential and commercial elements of the scheme into the fibre commercial programme.

FTTP will provide the fastest possible service available from any number of providers, currently offering speeds of up to 1000Mbs download speed - far exceeding the Governments superfast broadband requirements.





ALEX DYKES

SENIOR ENGINEER

+44 1454 806 609 alexdykes@hoarelea.com

HOARELEA.COM

155 Aztec West Almondsbury Bristol BS32 4UB England

