



J Group Limited

Clarendon Road, Wood Green

25-27 Clarendon Road, Wood Green, N8 0DD

Utilities Statement

**REPORT REF.
2401540-R02**

July 2024

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REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	Planning	AF	AMC	AD	21/06/24
A	Planning	AF	AMC	AD	12/07/24
					

Distribution

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1. Executive Summary

- 1.1. This report demonstrates that the proposed development of 222 co-living studios and affordable workspace at 21-27 Clarendon Road can be supplied with portable water, sewage infrastructure and telecommunication connections from supplies within the immediate vicinity of the site. A full utility investigation is included in **Appendix G**.

Gas

- 1.2. While Cadent Gas owns assets in the surrounding area, there will be no gas connection to the site.

Portable Water

- 1.3. Thames Water has an existing sewer line located on Clarendon Road. Thames Water has confirmed that the network has sufficient capacity to support the first 16 properties of the development with additional modelling required in order to confirm whether reinforcement works are required post planning.

Electricity

- 1.4. UK Power Networks (UKPN) have existing Low and High voltage infrastructure in Clarendon Road adjacent to the site. UKPN has communicated an estimated budget of £270,000 for establishing a connection to their high voltage network along Clarendon Road.

Telecommunications

- 1.5. BT Openreach and Virgin Media own several underground cables within Clarendon Road. BT Openreach is legally obligated to service the site, and the site should be registered with Openreach once planning permission has been granted.

Foul and Surface Water Drainage

- 1.6. Thames Water has both surface and foul water infrastructure in the adjacent road to the east of the site. Information regarding capacity from Thames Water has not yet been received. However, since the existing site is currently drained to Thames Water assets, it is anticipated that sufficient capacity should be available to accommodate the site's drainage needs.

2. Introduction

- 2.1. J Group have commissioned Ardent Consulting Engineers (ACE) to provide a Utilities Statement for the proposed development at 25-27 Clarendon Road, Wood Green. This report has been prepared to support the development of 222 co-living studios and affordable workspace.
- 2.2. In preparation of this report, ACE consulted the relevant Statutory Undertakers that provide services in the area.
- 2.3. Elements of this report have been produced on the basis of the information received from relevant service companies. ACE cannot accept responsibility for the accuracy of the information received.
- 2.4. Copies of the correspondence received from the Statutory Undertakers are provided in the appendices of this report for further reference.
- 2.5. This report provides a summary of utility provision which serve the development, demonstrating the site can be suitably served without having a detrimental impact on the surrounding networks and environments. Likely required reinforcement works or diversion are outlined.

3. Baseline Parameters

3.1. This section outlines the baseline parameters of the site, including site location and existing land use.

Site Location

3.2. The Site, circa 0.15ha, is located west of Clarendon Road, London, with approximate OS Grid Co-ordinates 530874mE, 189559mN.

3.3. The site is bound by a railway line to the west, mixed use industrial/ office and residential to the north, east and south. **Plate 3.1** shows the site location in relation to the surrounding area.

Existing Land Use

3.4. The 0.15 ha site is brownfield, and comprises of commercial buildings.



Plate 3.1 – Site Location Plan

4. Development Proposals

- 4.1. The proposed development constitutes the construction of a single block consisting of 222 co-living studios and affordable workspace.
- 4.2. **Plate 4.1** shows an extract of the proposed Site Layout Plan, with **Appendix A** showing the complete plan.
- 4.3. There will be no gas connection or utilisation within the flats. It is assumed that all heating will be via Heat Pumps.

Access

- 4.4. The development will primarily be accessed through doors leading from Clarendon Road. There is no vehicular access proposed for the site.



Plate 4.1 – Site Layout

5. Utility Service Provision

- 5.1. Consultation between all relevant Statutory Undertakers occurred between May 2024 and June 2024.
- 5.2. ACE contacted each Statutory Undertaker with known plant in the area, requesting details of:
- Existing assets in the area;
 - The requirement for any off-site reinforcement works to meet the peak load demand generated by the development proposals; and
 - The potential point of connection to the supply distribution network.

Approximate Utility Demands

- 5.3. Anticipated approximate utility demands for the Site, derived using BSRIA Guidance Documents, and common benchmarks from providers, was provided to utility providers.
- 5.4. The calculations in this section are based on electric heating system, with no gas connection to the site. The loads may vary depending on the preferred strategy, amount of renewables and energy and efficiency.
- 5.5. **Table 5.1** presents the approximate loadings, which are used to inform the overall Site demands.

Land Use	Electricity Peak (kVA) (per unit)	Gas Peak (kW) (Per Unit)	Potable Water (l/day) (per head)	Foul Water (l/day) (per unit)
Flat – 1 Bed	8.25	0	160	4000
Office Space	33 (W/m²)	0	23	4000

Table 5.1 – Approximate utility demands for various unit types

6. Gas

6.1. Cadent Gas serve as the only gas operator in the area.

Cadent Gas

6.2. **Plate 6.1** shows asset plans provided by Cadent Gas illustrating the presence of gas mains in proximity to the site.



Plate 6.1 – Cadent Gas Asset Extract

6.3. **Figure 6.1** shows low pressure (LP) gas mains running in Clarendon Road and moderate pressure (MP) coming from the east.

6.4. The site is currently served by Cadent. This will require being capped off as part of on-site works.

6.5. No gas connection will be required for the proposed development.

7. Potable Water

7.1. **Plate 7.1** shows the Thames Water Asset Plan of the existing potable water supply network.



Plate 7.1 – Thames Water Potable Water Asset Extract

7.2. **Plate 7.1** shows singular potable water distribution main within the locality of the site, along Clarendon Road. No assets are located directly within the site confines. **Appendix B** shows the full asset plans.

7.3. Under current Ofwat charging regime, it is the responsibility of Thames Water to provide capacity within their system.

7.4. Thames Water have confirmed that capacity exists for the first 16 units without further investigation, refer to **Appendix B**. Some reinforcement works may be required in order to support the entire development, subject to Thames Water investigations. As the statutory undertaker, Thames Water would have 24 months to carry out reinforcement works if necessary.

7.5. Thames water will model the network to confirm whether reinforcement of the network is necessary. Thames Water will undertake this at their cost, once outline or full planning permission has been granted.

8. Electricity

UKPN

8.1. **Plate 8.1** shows the UKPN record plans of the existing electricity distribution network. **Appendix C** shows the full record plans.

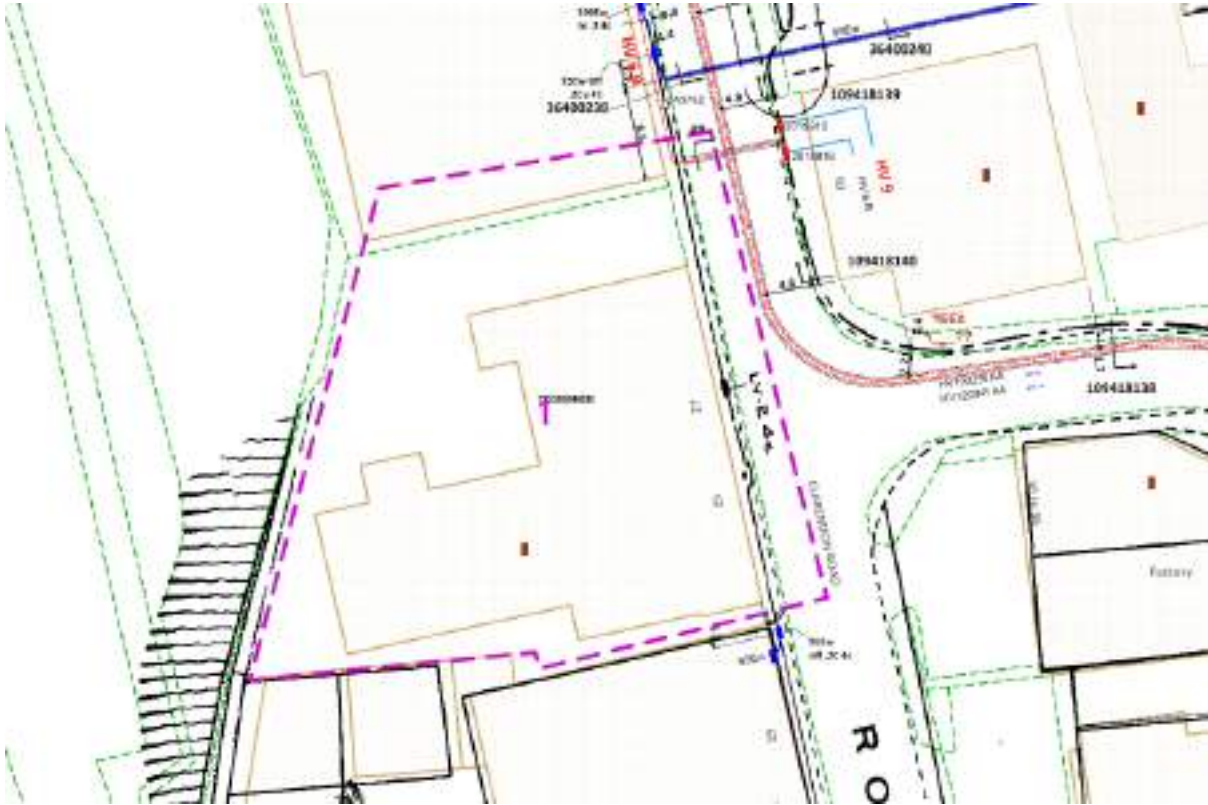


Plate 8.1 – UKPN Asset Extract

8.2. There are no assets located within the site boundary.

8.3. UKPN have confirmed a budget estimate of £270,000, refer to **Appendix C**, in order to provide the required reinforcement works to accommodate the proposed site.

9. Telecommunications

BT Openreach

9.1. **Plate 9.1** shows the BT Openreach apparatus within the vicinity of the site, with the full plan within **Appendix D**.



Plate 9.1 – BT Openreach Asset Extract

9.2. The extracts show there are currently no above ground assets in the vicinity of the site.

9.3. In terms of supplying the site, BT is legally obliged to serve the development proposals. The Site will be registered with Openreach once planning has been granted and once a start date has been confirmed, BT will begin to draw up plans to supply the site with future broadband.

Virgin

9.4. **Plate 9.2** shows the Virgin Apparatus within the vicinity of the site, with the full plan within **Appendix E**.



Plate 9.2 – Virgin Asset Extract

10. Foul and Surface Water Drainage

Thames Water

10.1. **Plate 10.1** shows the Thames Water Foul and Surface apparatus within the vicinity of the site, with the full plan within **Appendix F**.

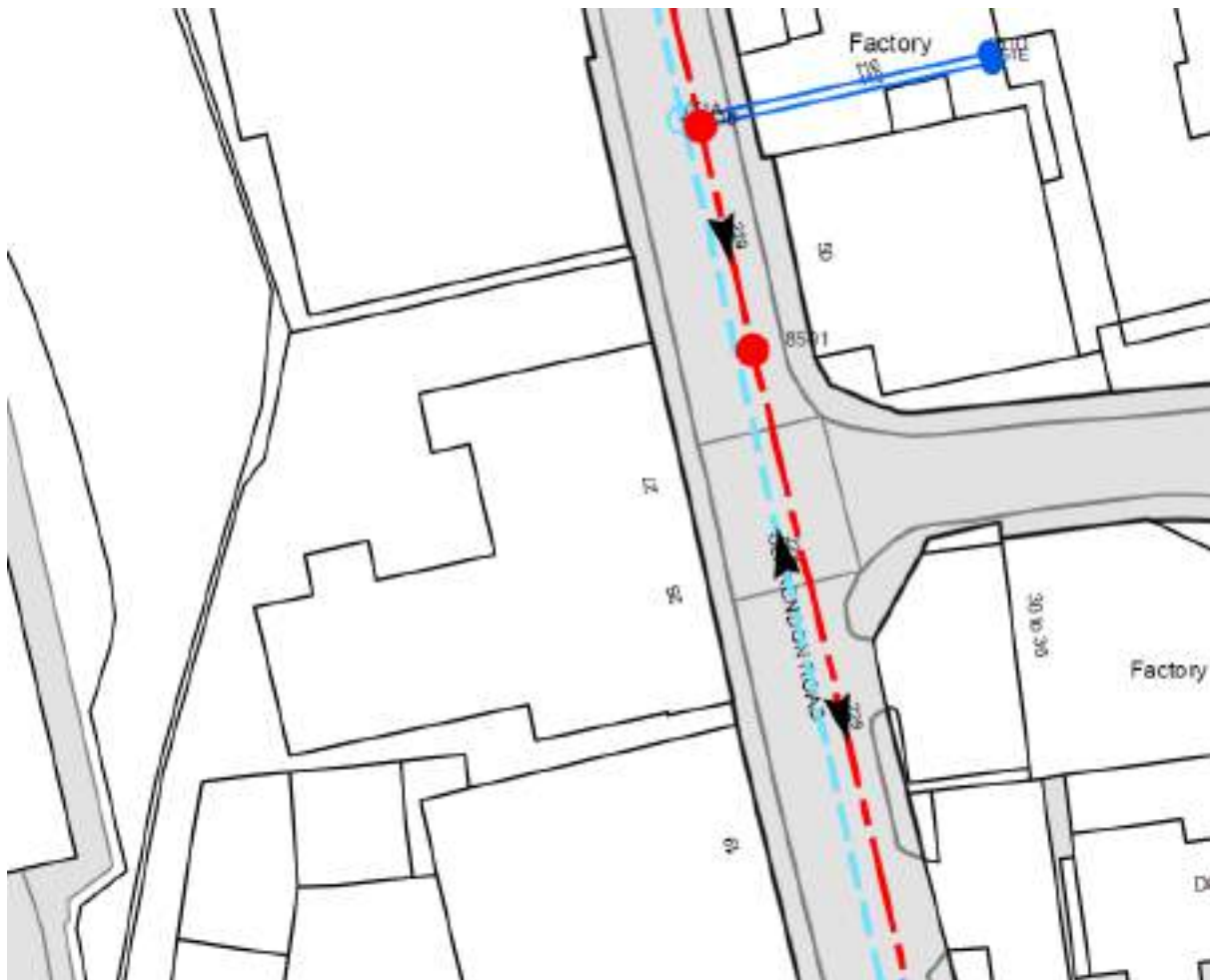


Plate 10.1 – Thames Water Foul and Surface Water Asset Extract

10.2. **Plate 10.1** shows existing foul and surface water networks in Clarendon Road to the east of the site. Further details are provided as part of the drainage strategy within the Flood Risk Assessment Report.

10.3. The Site will utilise SuDS drainage techniques to drain surface water flows. The current drainage strategy is to discharge to the existing surface water sewer on Clarendon Road to the east.

10.4. Foul discharge will connect to the existing sewer running along Clarendon Road to the east.

10.5. Thames Water have not yet confirmed that there is adequate capacity within their surface/ foul networks to service the proposed development without reinforcement works to the wider network.

10.6. Under current charging arrangements Thames Water have to provide capacity within their network and any upgrade costs are the responsibility of Thames Water.

11. Conclusion

11.1. Based upon a review of utilities record plans provided by the various statutory undertakers, it is apparent that foul/ surface water sewers, gas, electric, water and telecom assets are not present within the Site bar the individual connections for the existing development.

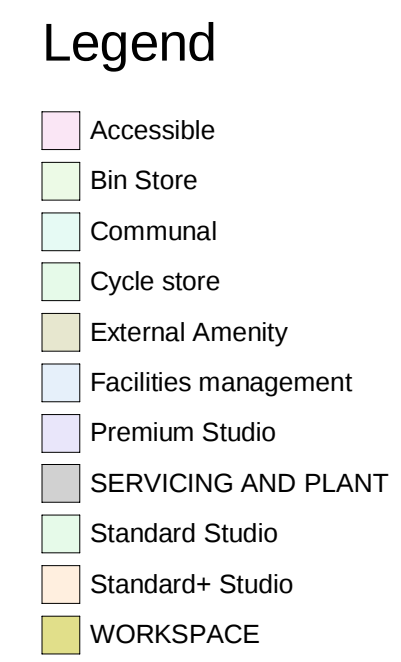
11.2. Thames Water have confirmed potable water capacity for the first 16 dwellings, however investigations are required to ensure capacity for the full 222 co-living studios and affordable workspace.

11.3. To date, we are still awaiting responses on capacity and reinforcement requirements for the foul water connection from Thames Water.

11.4. UKPN have provided a budget for reinforcement works in order to serve the development. The cost of reinforcement works will be the responsibility of the developer.

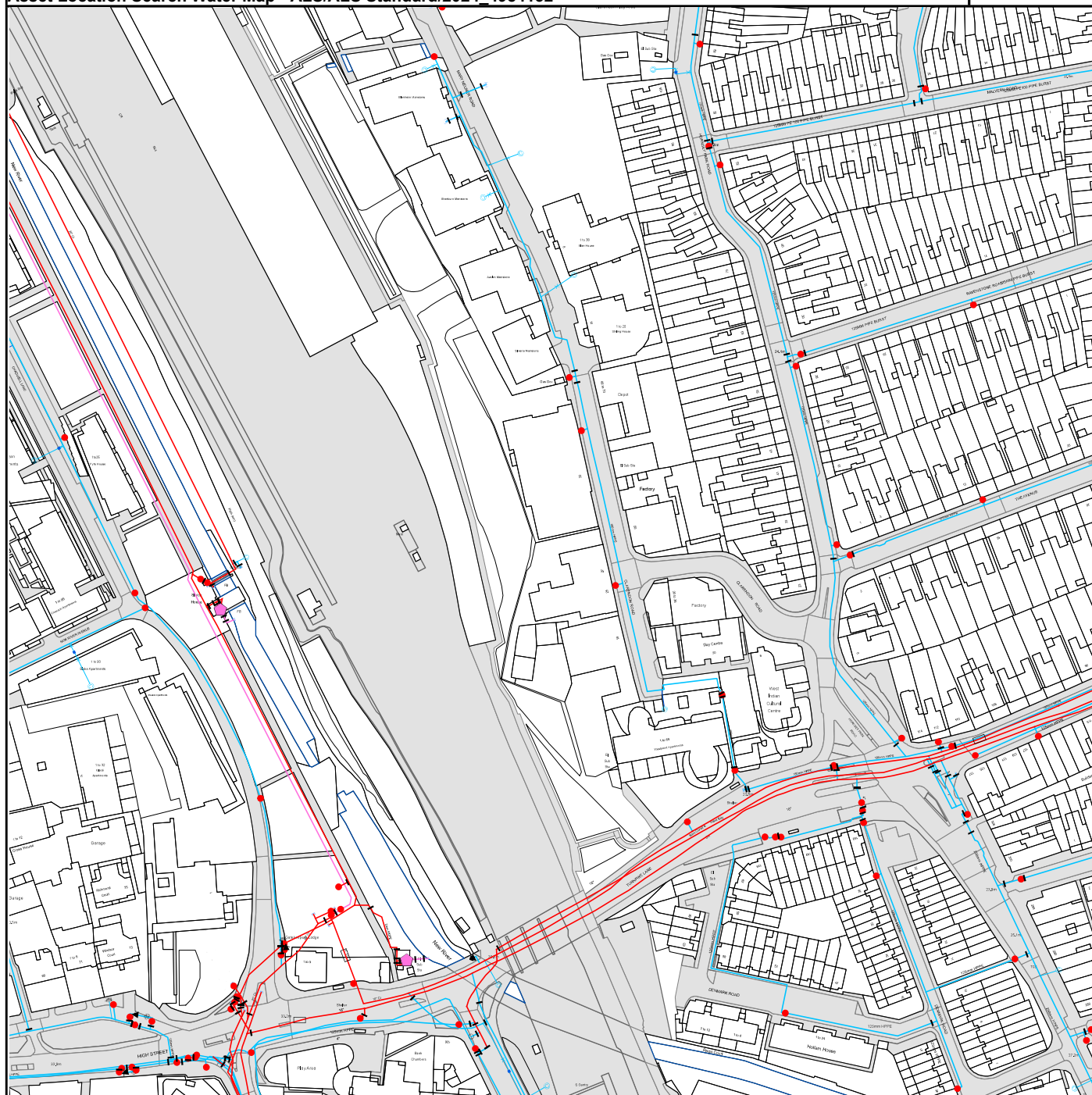
11.5. To date Thames Water have not confirmed capacity in their surface water network. In accordance with the FRA, the local ground conditions suggest impermeability with the site underlain by the London Clay Formation. It is likely that the existing surface water discharge capacity can be reutilised for the proposed development with a betterment to QBar. In accordance with Ofwat charging regime Thames Water have to provide capacity within their network and any upgrade costs are the responsibility of Thames Water.

Appendix A
Proposed Site Layout



Appendix B
Thames Water Potable Water Asset Plan and Correspondence

Asset Location Search Water Map - ALS/ALS Standard/2024 4984132



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 530855, 189574.

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

Adrian Farfan

From: DEVELOPER.SERVICES@THAMESWATER.CO.U
<DEVELOPER.SERVICES@THAMESWATER.CO.UK>
Sent: 03 June 2024 15:40
To: Adrian Farfan
Subject: Clean water capacity concerns – DS6118816 21-27 CLARENDON ROAD, 27-33 and 9-70 CLARENDON ROAD, WOOD GREEN, LONDON, N8 0DD
Attachments: Clean Water Capacity Report-21-27 CLARENDON ROAD,.pdf; TWUL Underwriting Agreement Template Clean Water O.doc

You don't often get email from developer.services@thameswater.co.uk. [Learn why this is important](#)

EXTERNAL EMAIL: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Clean water capacity concerns – DS6118816

Your reference: DS6118816

Your site address: 21-27 CLARENDON ROAD, 27-33 and 9-70 CLARENDON ROAD,
WOOD GREEN, LONDON, N8 0DD

Date: 03.06.2024

We need to do further investigation

Dear Adrian Farfan,

Unfortunately, our capacity check shows our clean water network can only partially supply your development.

Our assessment concludes that we have sufficient capacity to supply the first 16 properties. However, we're currently unable to meet the needs of your full development of 222 flats and 1078m2 Office space.

We'll need to carry out modelling to confirm whether reinforcement of our network is necessary to deliver the capacity you require, which we'll undertake at our cost once outline or full planning permission has been granted by the local council.

[What do I need to do?](#)

We've attached your **capacity report**, which you should include when making your local authority (LA) planning application to show we've assessed the site and are in the process of addressing your requirements.

We'll start modelling once you let us know that you own the land and either have outline or full planning permission. Just email me your land registry documents, planning application reference number and the council decision notice.

What if I don't have this?

If you have a rapid build programme, we understand that you may need us to start modelling before you own the land or have planning permission. In this case we ask you to share the risk with us by underwriting the cost of modelling. This means if you haven't achieved first occupancy on the site within five years, you agree to pay the cost of the modelling work. We don't ask you to pay anything upfront.

Please call me if you would like to discuss this. You'll find a sample underwriting agreement attached.

What happens next?

We may be able to confirm capacity as soon as we've finished our investigative modelling work. If we need to upgrade our network, we'll design a solution and build the necessary improvements.

We estimate this would take up to:

Modelling: 6 months

Design (if required): 6 months

Reinforcement (if required): 6 months

Total: 18 months

Yours sincerely,

Chris Seaman

Clean Water Pre-Planning Engineer

Developer Services

Thames Water

07747 645341

DEVELOPER.SERVICES@THAMESWATER.CO.UK

Original Text

From: Adrian Farfan <afarfan@ardent-ce.co.uk>
To: developer.services@thameswater.co.uk <developer.services@thameswater.co.uk>
CC:
Sent: 14.05.24 14:25:55
Subject: New Development Enquiry In Wood Green Rd.

This e-mail originated from outside of Thames Water. Do not click links, open attachments or reply, unless you recognise the sender's e-mail address and know the content is safe. If in doubt, contact the Digital Service Desk. Report Phishing via the Report Message option.

Dear Thames Team,

I am writing to enquire about the capacity of drainage pipes in the following address:

Clarendon Rd., Wood Green, N8 0DD.

Please find attached the forms:

2401540 - Clarendon Rd - Clean Water Supply Pre-App.pdf
2401540 - Clarendon Rd - Storm and Foul Pre-App Form.pdf
2401540 - Clarendon Rd - Site Layout.pdf

I would like to know if there is enough capacity to accommodate for the required amount stated in the forms for both clean water supply and foul & storm drainage.

If you require anything else, please let me know and I will respond as soon as possible.

Kind regards,

Adrian Farfan
Graduate Engineer



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T | 0117 456 4994 E | afarfan@ardent-ce.co.uk
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Our reference: DS6118816

Your site address: 21-27 CLARENDON ROAD, 27-33 and 9-70 CLARENDON ROAD,
WOOD GREEN, LONDON, N8 0DD

Customer: ARDENT CONSULTING ENGINEERS

Clean water capacity report

Status: Capacity concerns

Date: 03.06.2024

Validity: Valid until 03.06.2025 or for the duration of your Local Authority planning permission when this report is used to support your planning application.

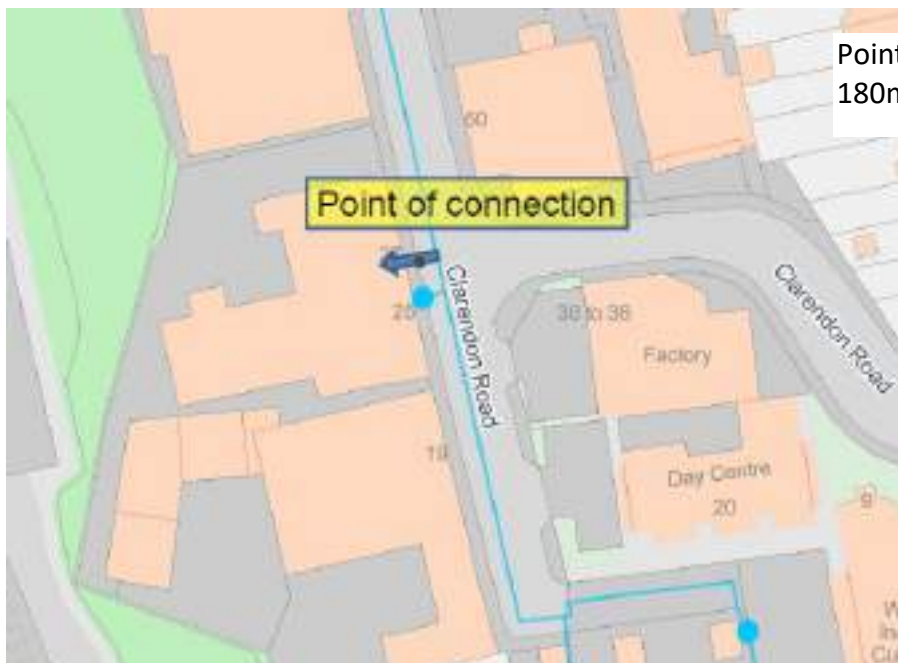
We confirm that there will be sufficient capacity in our clean water network to serve the first 16 properties of your development:

However, we're unable to confirm capacity for your whole development of 222 flats and 1078m² Office space, without further investigation. How to make a request for us to progress with network modelling activity is listed in the accompanying email.

Please be aware that this report is based upon the details and drawings provided. If there are any subsequent changes to these, then the contents of this report will become invalid and a new assessment will be needed.

Please note that the below POC is based on desktop study and it might change after capacity check study or site-specific survey.

Nearest point of connection / Your preferred point of connection



Point of connection -
180mm HPPE Main in CLARENDON ROAD



Contaminated land

If your site is on contaminated land, any new water pipes laid should be barrier pipe which is more expensive. If you think this is not the case you will need to provide a soil report when applying for new mains and services.

Development located within Source Protection Zone

The applicant is advised that their development boundary falls within a Source Protection Zone for groundwater abstraction. These zones may be at particular risk from polluting activities on or below the land surface. To prevent pollution, the Environment Agency and Thames Water (or other local water undertaker) will use a tiered, risk-based approach to regulate activities that may impact groundwater resources. The applicant is encouraged to read the Environment Agency's approach to groundwater protection (available at <https://www.gov.uk/government/publications/groundwater-protection-position-statements>) and may wish to discuss the implication for their development with a suitably qualified environmental consultant.

Building near our assets

Please [read our guide](#) 'working near our assets' to ensure your workings will be in line with the necessary processes you need to follow if you're considering working above or near our pipes or other structures. Should you require further information please contact [us](#).

Diversions

From our records we don't anticipate that any clean water assets need to be diverted to accommodate your proposals.

Building water

It's important that you apply for a building water supply before you start using water on site even if you believe your supply is already metered. We need to ensure your account is properly set up and you have the correct meter for your supply or fines may be imposed. Apply [here](#).

Fire hydrant and sprinkler demand

Please note that we cannot confirm whether a fire hydrant or sprinkler demand can be accommodated on a new connection. You'll need to contact an independent consultant or specialist company for hydrant testing for fire-fighting purposes. Valve operations must be carried out by our Network Service Technician which can be booked on 0800 316 9800.

Asset location search

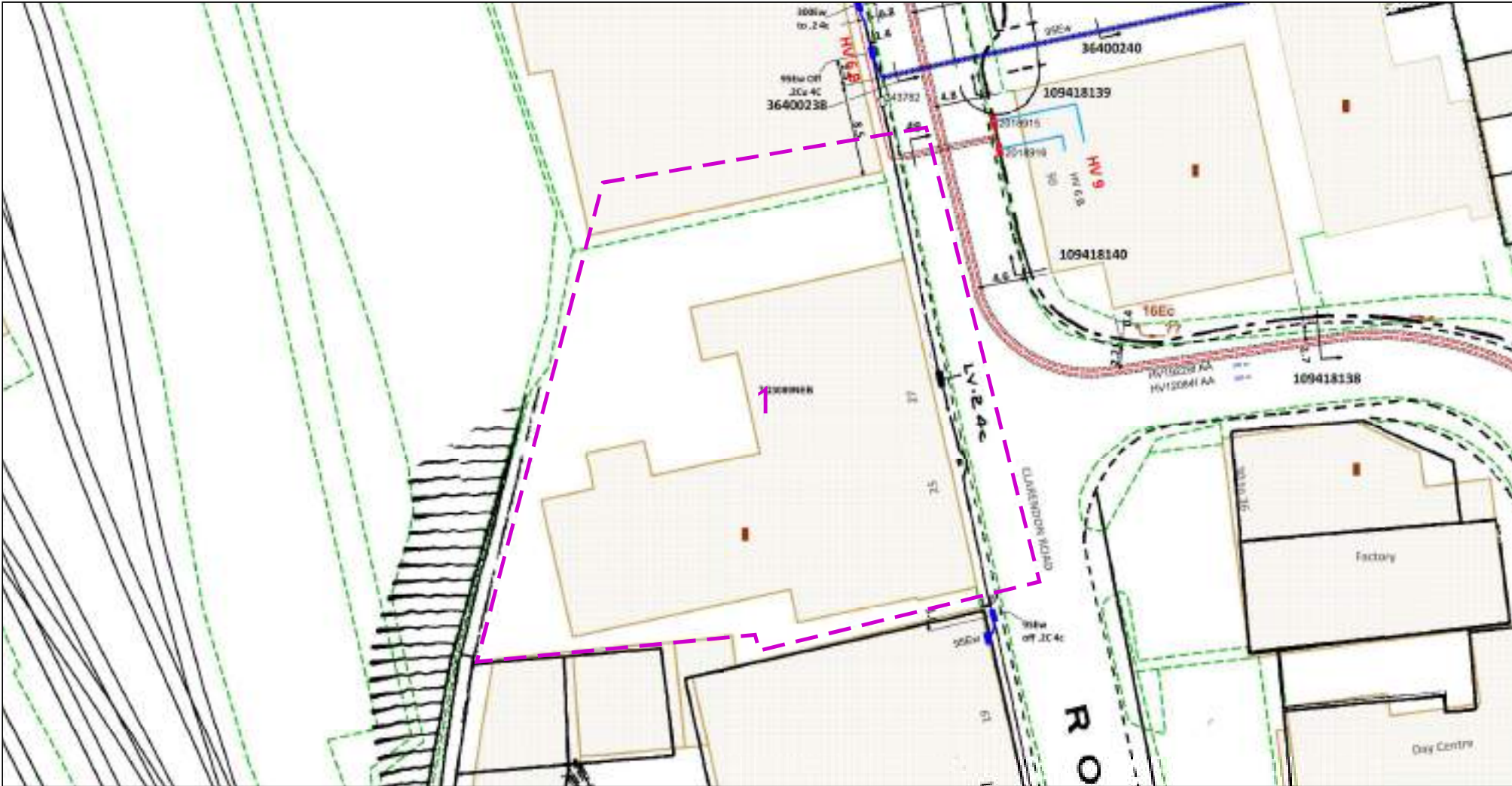
If you need help in identifying the location of existing water mains and sewers, you can get this information from any property search provider. We have a Property Searches team who will carry out an asset location search, which provides information on the location of known Thames Water clean and/or wastewater assets, including details of pipe sizes, direction of flow and depth (for which a fee is payable). You can find out more [online](#) or by calling us on 0845 070 9148.

Quotation process

Please use links below to find out more information about water main and services connections, including application process.

Click [here](#) for our home improvements website, or click [here](#) to apply for clean water services.

Appendix C
UKPN Asset Plan and Correspondence



012.525 metres Dig Sites Area:  Line: 		The quality and accuracy of any print will depend on your printer, your computer and its print settings. Measurements scaled from this plan may not match measurements between the same points on the ground.					
This plan must be used with the attached ‘Symbols’ document.		1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed. 2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools. 3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined. 4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc. 5. All cables must be treated as being live unless proved otherwise by UK Power Networks. 6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes. 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location. 8. Please be aware the Low Voltage Overhead power lines are not currently displayed for the Eastern Region via this service, if you require records on the location of these please contact our Plan Provision team directly via plans@ukpowernetworks.co.uk.		1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk. 2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person. 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever. 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter. 5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party. 6. Please Note: The Overview map does not display UK Power Networks electricity network and should not be used for the location of UK Power Networks assets. For detail of the electricity network please view the relevant page as highlighted in the Overview map.		IF IN DOUBT - ASK! PHONE 0800 056 5866 EMERGENCY - If you damage a cable or line Phone 0800 783 8838 (24hrs) URGENTLY  ALWAYS LOOK UP BEFORE YOU START WORK Refer to HSE Guidance note G56	
Date Requested: 16/05/2024 Job Reference: 33407563 Site Location: 530837 189539 Requested by: Mr Joe Shawyer Your Scheme/Reference: 000959-1RB-GWS Scale: 1:500 (When plotted at A4)		Maps produced at 1:2500 scale are Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.					
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Adrian Farfan

From: Mills, Steve (Potters Bar) <steve.mills@ukpowernetworks.co.uk>
Sent: 03 June 2024 10:14
To: Adrian Farfan
Subject: RE: Development project in Clarendon Rd. 8500298692 (BE) Clarendon Road, N8 0DD
Attachments: Budget estimate 8500298692.pdf

You don't often get email from steve.mills@ukpowernetworks.co.uk. [Learn why this is important](#)

EXTERNAL EMAIL: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good morning Adrian,

I have been working on your request for a budget estimate for connecting 2MVA of load at Clarendon Rd, London.

In order to supply 2MVA at LV we would need to install 2x 1MVA HV/LV transformers at the site.

The good news is that the local HV network currently has capacity to support this load, so minimal off site works are required.

I've attached the estimate to this e-mail.

I tried to call you to go over the estimate this morning but was unable to reach you. If you would like to go over the details please call me back on my direct number 0787 511 3968.

Regards

Steve Mills BSc (Hons)
Project Designer
UK Power Networks
Connections
Unit 5, York Way
Borehamwood
WD6 1DJ
Tel 0787 511 3968

Our aim is to ensure that every customer has a 10/10 service at all times. If we have achieved this, please let us know by clicking the link below:



A short survey can then be completed which takes no more than a couple of minutes.

If you are not completely satisfied, please reply to the sender of this email to allow us the chance of resolving any outstanding issues.



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From: Adrian Farfan <afarfan@ardent-ce.co.uk>
Sent: Tuesday, May 7, 2024 11:55 AM
To: Prelims LPN <PrelimsLPN@ukpowernetworks.co.uk>
Cc: MBX-Small Services <myconnection@ukpowernetworks.co.uk>
Subject: Development project in Clarendon Rd.

[External]: Please note this email has been sent to you by an external source. Please use caution when clicking on links or attachments.

Hello,

I have a development project in the address:

Clarendon Rd., Wood Green, N8 0DD.

The development site is 0.15 acres and will consist of 222 single bedroom flats and roughly 1078m² of Amenity space.

Could we please have a pre-app capacity check, and if required, budgetary figure for any required reinforcement works to supply with the site with circa 2,000kVA. If this number is higher than you would anticipate for a site of this size/ usage etc, any input regarding initial capacity requirements would be appreciated.

Please find attached a copy of the site plans and site allocation.

If there is anything else I'd need to provide, please let me know and I will respond as soon as possible.

Kind regards

Adrian Farfan
Graduate Engineer



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Mr. Adrian Farfan
Ardent Consulting Engineers
Temple Studios
Temple Gate
Temple Meads
Bristol
BS1 6QA

Date: 03 June 2024

Our Ref: 8500298692 / QID 3000050438

Dear Mr. Farfan

Site Address: Clarendon Road, London, N8 0DD

Budget estimate

I am writing to you on behalf of Eastern Power Networks plc the licensed distributor of electricity for the above address trading as and referred to in this Quote as "UK Power Networks". Thank you for your recent enquiry regarding the above premises.

I am pleased to be able to provide you with a budget estimate for the Works.

It is important to note that this budget estimate is intended as a guide only. It may have been prepared without carrying out a site visit or system studies. No enquiry has been made as to the availability of consents or the existence of any ground conditions that may affect the ground works and only a cursory assessment of any Reinforcement costs that may be applicable has been undertaken. A detailed evaluation of any potential Reinforcement costs, including the applicability of the High-Cost Project Threshold and associated Cost Apportionment Factor will be undertaken upon receipt of a formal application for a Connection Offer. This Budget Estimate is not an offer to provide the connection and nor does it reserve any capacity on UK Power Networks' electricity distribution system.

Description of work included:

Joint 2x HV 300Ax cables into the HV9 circuit outside of site. These cables will bring power into 2x 1MVA/RMU/ACB subs on site. Customer to run private cables to distribution equipment.

The budget estimation for the Works is:
£270,000 if the Point Of Connection (POC) is to our High Voltage network along Clarendon Road.

Assumptions

This budget estimate is based on the following assumptions:

- The most appropriate Point of Connection (POC) is as described above.
- A viable cable or overhead line route exists along the route we have assumed between the Point of Connection (POC) and your site
- In cases where the Point of Connection (POC) is to be at High Voltage, that a substation can be located on your premises at or close to the position we have assumed

- Where electric lines are to be installed in private land UK Power Networks will require an easement in perpetuity for its electric lines and in the case of electrical plant the freehold interest in the substation site, on UK Power Networks terms, without charge and before any work commences
- You will carry out, at no charge to UK Power Networks, all the civil works within the site boundary, including substation bases, substation buildings where applicable and the excavation/reinstatement of cable trenches
- Unless stated in your application, all loads are assumed to be of a resistive nature. Should you intend to install equipment that may cause disturbances on UK Power Networks' electricity distribution system (e.g. motors; welders; etc.) this may affect the estimate considerably
- All UK Power Networks' work is to be carried out as a continuous programme of work that can be completed substantially within 12 months from the acceptance of the Quote.

Please note that if any of the assumptions prove to be incorrect, this may have a significant impact on the price in any subsequent Quote. You should note also that UK Power Networks' formal Quote may vary considerably from the budget estimate. If you place reliance upon the budget estimate for budgeting or other planning purposes, you do so at your own risk.

If you would like to proceed

If you would like to proceed to a formal offer of connection then you must apply for a Quote. Please refer to our website [click here](#) to complete application process.

To help us progress any future enquiry as quickly as possible please quote the UK Power Networks Reference Number from this letter on all correspondence.

Any Questions?

If you have any questions about your budget estimate or need more information, please do not hesitate to contact me. The best time to call is between the hours of 9am and 4pm, Monday to Friday. If the person you need to speak to is unavailable or engaged on another call when you ring, you may like to leave a message or call back later.

Yours sincerely



Steve Mills

Mobile: 07875 113 968
Email: steve.mills@ukpowernetworks.co.uk



To download your free safety leaflets and resources visit
[UK Power Networks - Safety Page](#)

Appendix D
BT Openreach Asset Plan

Maps on Demand Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may arise at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email nnhc@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cpd

Accidents happen

If you do damage any Openreach equipment please let us know by calling (800) 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

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KEY TO BT SYMBOLS

	Planned	In Use	Change Of State	+	Hatchings
PCP			Split Coupling		Built
Pole			Duct Tee		Planned
Box			Building		Inferred
Manhole			Work		Duct
Cabinet			Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid active of preparation. Maps are only valid for 50 days after the date of publication.		
	Pending Add	In Place	Pending Remove	Not In Use	
Power Cable					
Power Duct				N/A	

BT Ref : ZNN11546A

Map Reference : (centre) TQ3086489563

Easting/Northing : (centre) 530864, 189563

Scale : 1:100

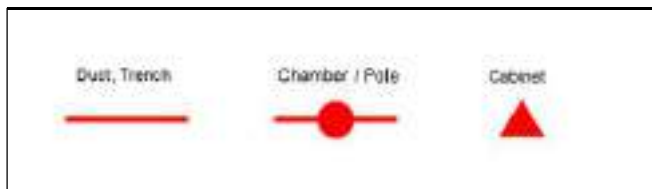
Issued : 02/05/2024 11:54:42

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Appendix E
Virgin Media Asset Plan



(c) Crown copyright and database rights 2024 Ordnance Survey 100019209 Scale: 1:1000 Date: 16/05/24 Telecoms Plan A4
 Data updated: 02/04/24 Map Centre: 530864,189563 Our Ref: 1470677 - 3 Powered by digdat



mail@groundwise.com

000959-1RB-GWS



Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2024 Ordnance Survey 100019209.

Appendix F
Thames Water Foul and Surface Water Asset Plan

The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 530855,189574

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map (2020) with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

Appendix G
Groundwise Utility Survey

GROUNDWISE

Groundwise Searches Ltd

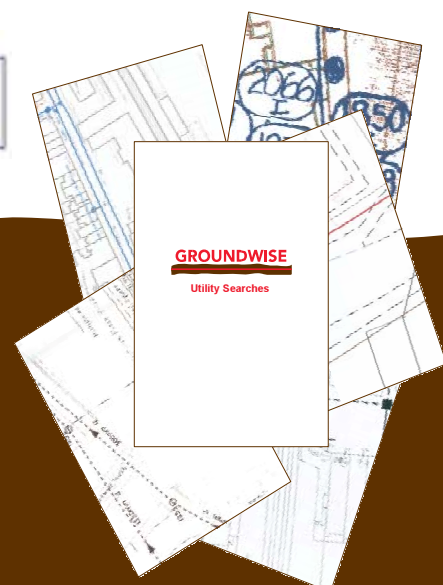


Groundwise Searches Limited

Suite 6, Princess Caroline House
1 High Street
Southend-on-Sea
Essex, SS1 1JE

Telephone 01702 615566
Email mail@groundwise.com
Website www.groundwise.com

Registered Office Address:
Matrix House, 12-16 Lionel Road
Canvey Island, Essex, England, SS8 9DE



GROUNDWISE

Groundwise Searches Ltd

Product	Desktop Utility Search
Scope	PAS 128 – Level D

Groundwise Reference	000959-1RB-GWS
Site	Clarendon Road, Haringey N8 0NW
Easting/Northing	530864, 189563
Client	Andrew Carter
Company	Ardent Consulting Engineers
Client Reference	2401540
Purchase Order	



Researcher	Rebecca Bennett rbennett@groundwise.com
Quality Check	Debbie Miller dmiller@groundwise.com

Groundwise Searches Limited
Suite 6, Princess Caroline House
1 High Street
Southend-on-Sea
Essex, SS1 1JE

Telephone 01702 615566
Email mail@groundwise.com
Website www.groundwise.com

Registered Office Address:
Matrix House, 12-16 Lionel Road
Canvey Island, Essex, England, SS8 9DE

GROUNDWISE
Utility Searches

GROUNDWISE

Groundwise Searches Ltd

Groundwise Reference

000959-1RB-GWS

Site

Clarendon Road, Haringey N8 0NW

Version	Date Issued	Researcher	Notes
#1	17/05/2024	Rebecca Bennett	First batch of received utility data issued – outstanding result to be sent on receipt.

Groundwise Searches Limited

Suite 6, Princess Caroline House
1 High Street
Southend-on-Sea
Essex, SS1 1JE

Telephone 01702 615566
Email mail@groundwise.com
Website www.groundwise.com

Registered Office Address:
Matrix House, 12-16 Lionel Road
Canvey Island, Essex, England, SS8 9DE

GROUNDWISE
Utility Searches

GROUNDWISE

Groundwise Searches Ltd

Groundwise Reference 000959-1RB-GWS

Site Clarendon Road, Haringey N8 0NW

Click on a Data Supplier to view their response.

Type	Data Supplier	Date Sent	Assets in Area
Electricity	UKPN	17/05	X
Electricity	Eclipse Power	17/05	
Electricity	Utility Assets Ltd	17/05	
Gas	Cadent Gas	17/05	X
Mobile Phone Masts	Mast Data	17/05	
Telecom	C.A. Telecom - Colt	17/05	
Telecom	CityFibre	17/05	
Telecom	MBNL	17/05	
Telecom	OCU Group (Lumen Technologies)	17/05	
Telecom	Openreach	17/05	X
Telecom	Sky UK Ltd	17/05	See Result
Telecom	Verizon	17/05	
Telecom	Virgin Media	17/05	X
Telecom	Vodafone	17/05	
Transport	High Speed 1 (HS1)	17/05	
Transport	High Speed 2 (HS2)	17/05	
Transport	London Underground	17/05	
Transport	Network Rail	17/05	X
Transport	Transport for London	17/05	
Tunnels	MOD **	17/05	
Tunnels	Thames Tideway Tunnels	17/05	
Various	ESP Utilities	17/05	X
Various	GTC	17/05	
Various	HSE	17/05	
Various	Leep Utilities	17/05	
Various	LinesearchbeforeUdig	17/05	
Water Mains	Thames Water	17/05	X
Sewers	Thames Water	17/05	X
Street Lighting	London Borough of Haringey **	Awaiting	

** Result may not be received within PAS128 recommended period of 20 working days – the enquiry will be chased & closed at this point.
Any data received after the initial 20-day period will be forwarded on receipt. Please contact us if you have any queries.

Our Ref: 33407563 Your Ref: 000959-1RB-GWS

Thursday, 16 May 2024

Joe Shawyer
Suite 6, 3rd Floor Princess Caroline House, 1 High Street
Southend on Sea
ESS
SS1 1JE

Dear Joe Shawyer

Thank you for contacting us regarding UK Power Networks equipment at the above site. I have enclosed a copy of our records which show the electrical lines and/or electrical plant. I hope you find the information useful.

I have also enclosed a fact sheet which contains important information regarding the use of our plans and working around our equipment. Safety around our equipment is our number one priority so please ensure you have completed all workplace risk assessments before you begin any works.

Should your excavation affect our Extra High Voltage equipment (6.6 KV, 22 KV, 33 KV or 132 KV), please contact us to obtain a copy of the primary route drawings and associated cross sections.

If you have any further queries do not hesitate to contact us.

Plan Provision
0800 056 5866



This information is made available to you on the terms set out below. If you do not accept the terms of use set out in this fact sheet please do not use the plans and return them to UK Power Networks.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. The information about UK Power Networks electrical plant and/or electric lines provided to you belongs to and remains the property of UK Power Networks. You must not alter it in any respect.
5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to UK Power Networks. The information provided relates to electric lines and/or electrical plant belonging to UK Power Networks that it believes to be present but the plans are not definitive: other electric lines and/or electrical plant may be present and that may or may not belong to UK Power Networks.
6. Other apparatus not belonging to UK Power Networks is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.
7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.
8. Because the information provided to you may not be accurate, you are recommended to ascertain the presence of UK Power Networks electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.

Excavations must be carried out in line with the Health and Safety Executive guidance document HSG 47. We will not undertake this work. A copy of HSG 47 can be obtained from the Health and Safety Executives website.

All electric lines discovered must be considered LIVE and DANGEROUS at all times and must not be cut, resited, suspended, bent or interfered with unless specially authorised by UK Power Networks.

The electric line and electrical plant belonging to UK Power Networks remains so even when made dead and abandoned and any such electric line and/or electrical plant exposed shall be reported to UK Power Networks.

Where your works are likely to affect our electric lines and/or electrical plant an estimate of the price of any protective /diversionary works can be prepared by UK Power Networks Branch at Metropolitan House, Darkes Lane, Potters Bar, Herts. , EN6 1AG, telephone no. 0845 2340040



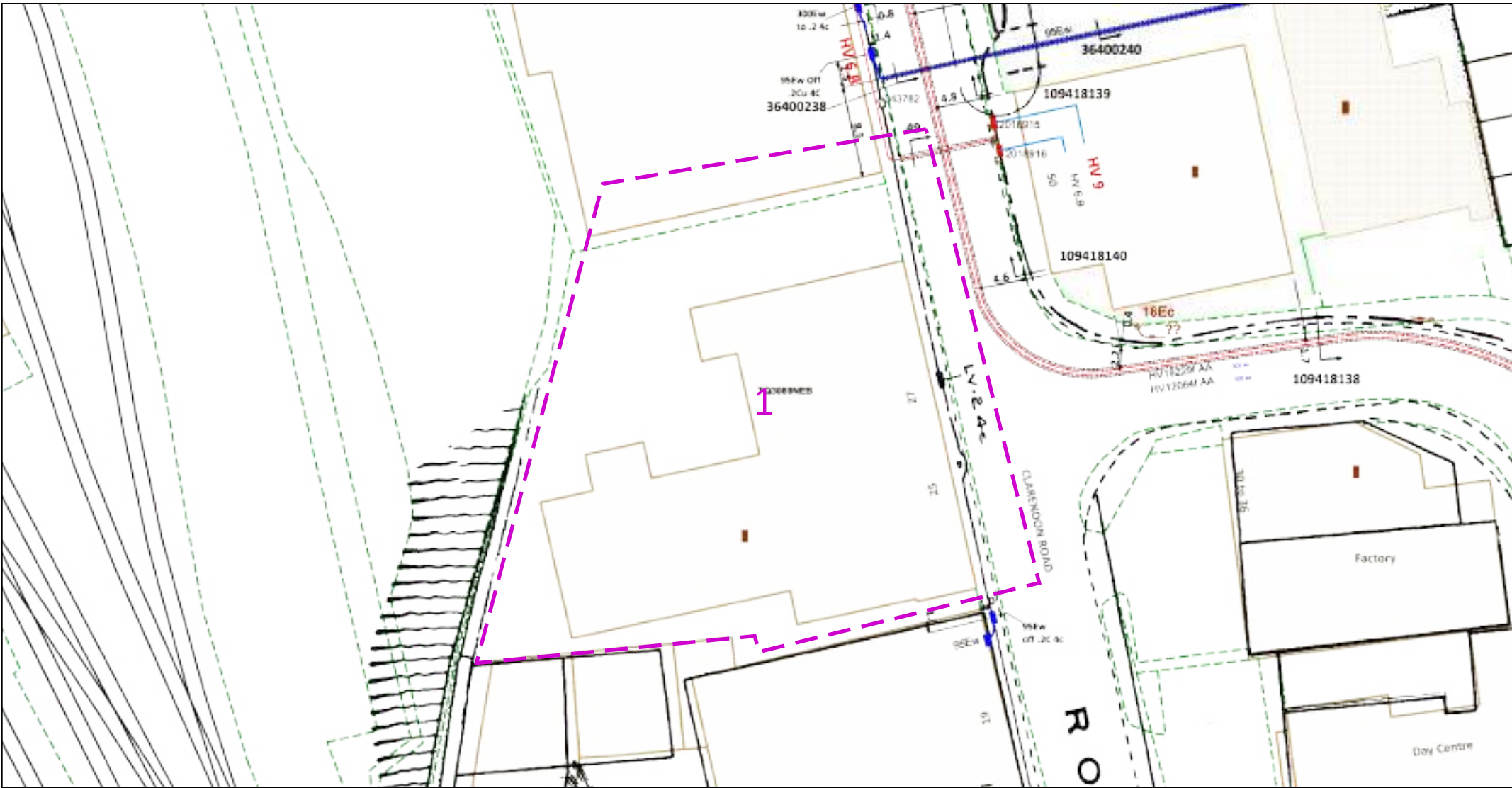
- 9 Any work near to any overhead electricity lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

The GS6 Recommendations may be purchased from HSE Books or downloaded from the Energy Networks Association's website.

If given a reasonable period of prior notice UK Power Networks will attend on site without charge to advise how and where "goal posts" should be erected. If you wish to use this service, in the first instance please telephone: 0845 6014516 between 08:30 and 17:00 Monday to Friday.

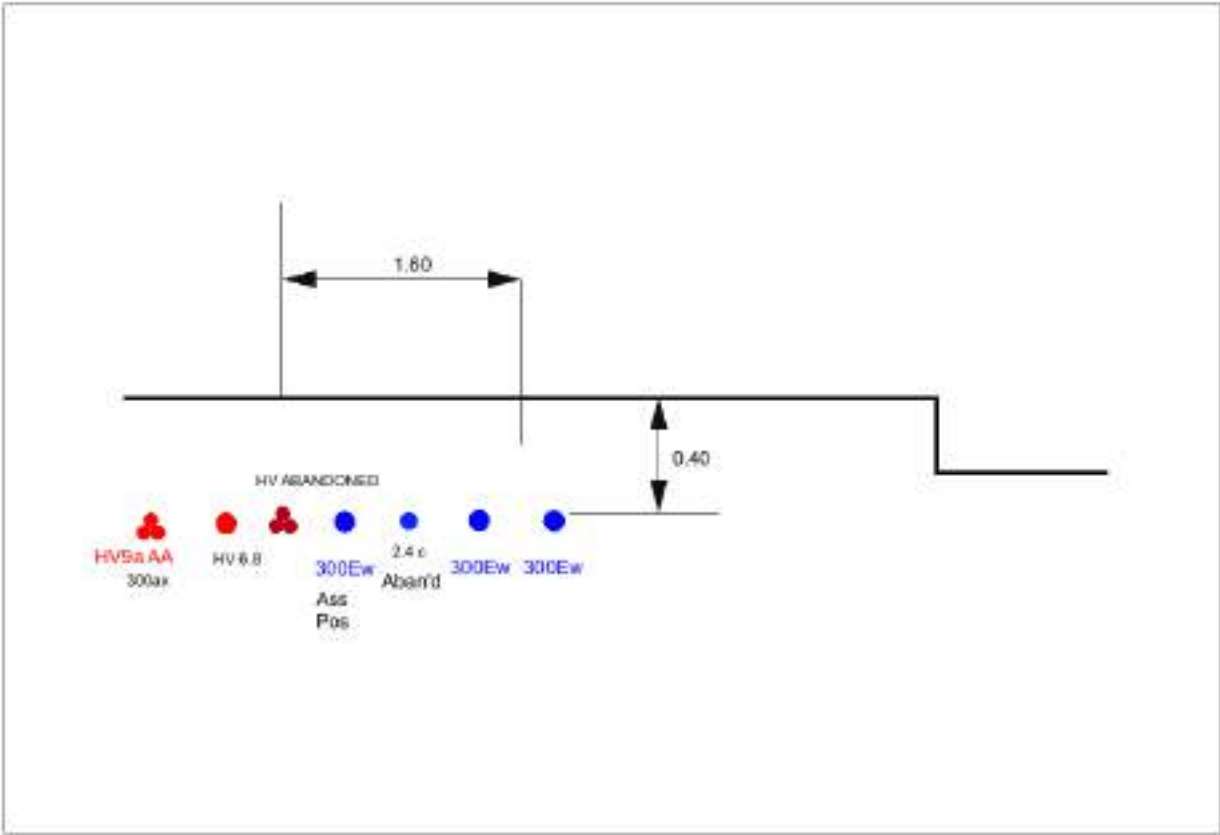
10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.
11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to UK Power Networks you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately UK Power Networks by our emergency 24 hour three digit telephone number **105** providing;
- your name, address and telephone number;
 - the date, time and place at which such damage was caused;
 - a description of the electric line and/or electrical plant to which damage was caused;
 - the name of the person whom it appears to you is responsible for that damage;
 - the nature of the damage.
12. The expression "UK Power Networks" includes UK Power Networks (EPN) plc, UK Power Networks (LPN) plc, UK Power Networks (SEPN) plc, UK Power Networks and any of their successors and predecessors in title.





12.5 25 metres Dig Sites Area: Line:	
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Cross Section : 5423327



Cross Section
5423327

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.
4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

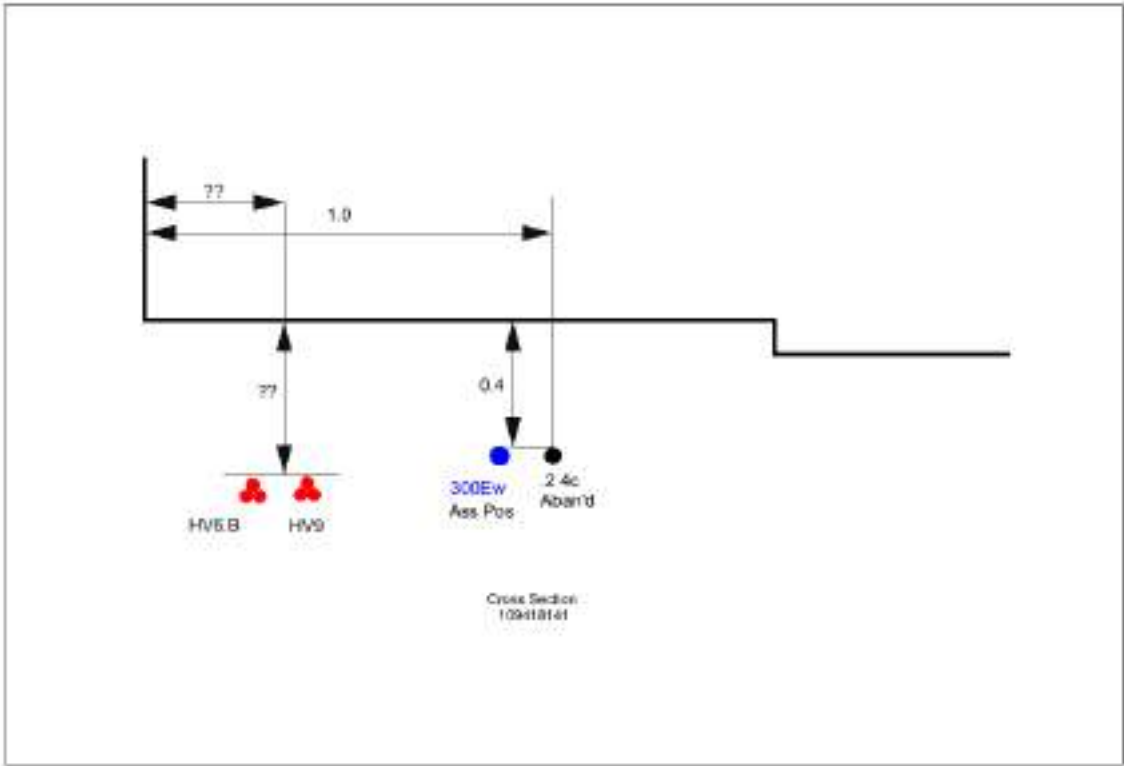
IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable or line
Phone 0800 732 5839 (24hrs)
URGENTLY



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-schematics which show smaller cables and are field lines (or some called all voltages). Prior to carrying out excavations, you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

Cross Section : 109418141



1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.
4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable on line
Phone 0800 732 6839 (24 hrs)
UKDNLT17



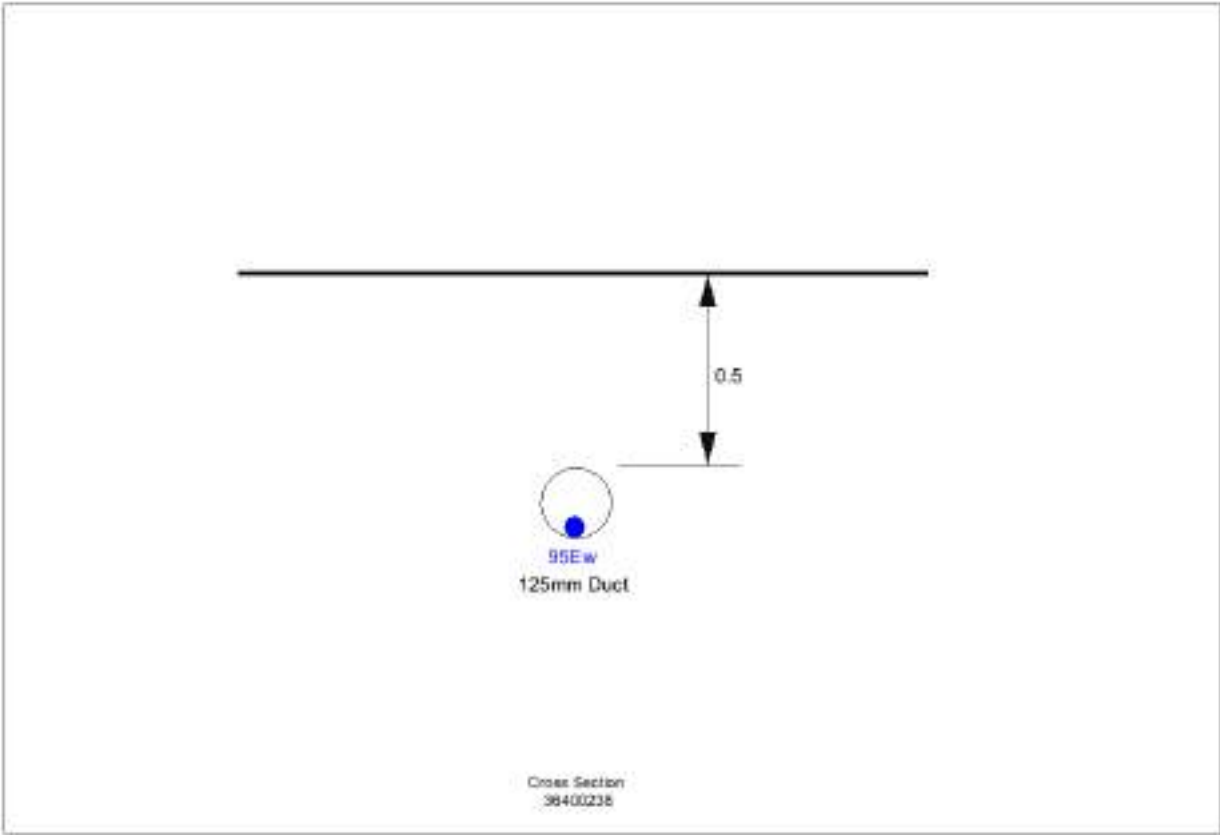
ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-schematics which show electrical cables and overhead lines (or cable ducts at voltages) prior to carrying out excavations. You must refer to the 1:500 records to determine the location of all known underground plant and equipment.

See Supplemental Diagram
TQ3089NEB
for Cross-Section 49 details

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed. 2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools. 3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined. 4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc. 5. All cables must be treated as being live unless proved otherwise by UK Power Networks. 6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes. 7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.	1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk. 2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person. 3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever. 4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter. 5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.	IF IN DOUBT - ASK! PHONE 0800 836 5846 EMERGENCY - If you damage a cable or line Phone 0800 732 5839 (24 hrs) UK POWER 	 ALWAYS LOOK UP BEFORE YOU START WORK Refer to HSE Guidance note GSC Maps produced at 1:2500 scale are best-schongies which show electrical cables and in addition lines (or some cases all voltages). Prior to carrying out excavations, you must refer to the 1:500 records to determine the location of all known underground plant and equipment.
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Cross Section : 36400238



1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.
4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable or line
Phone 0800 732 5839 (24 hrs)
URGENTLY

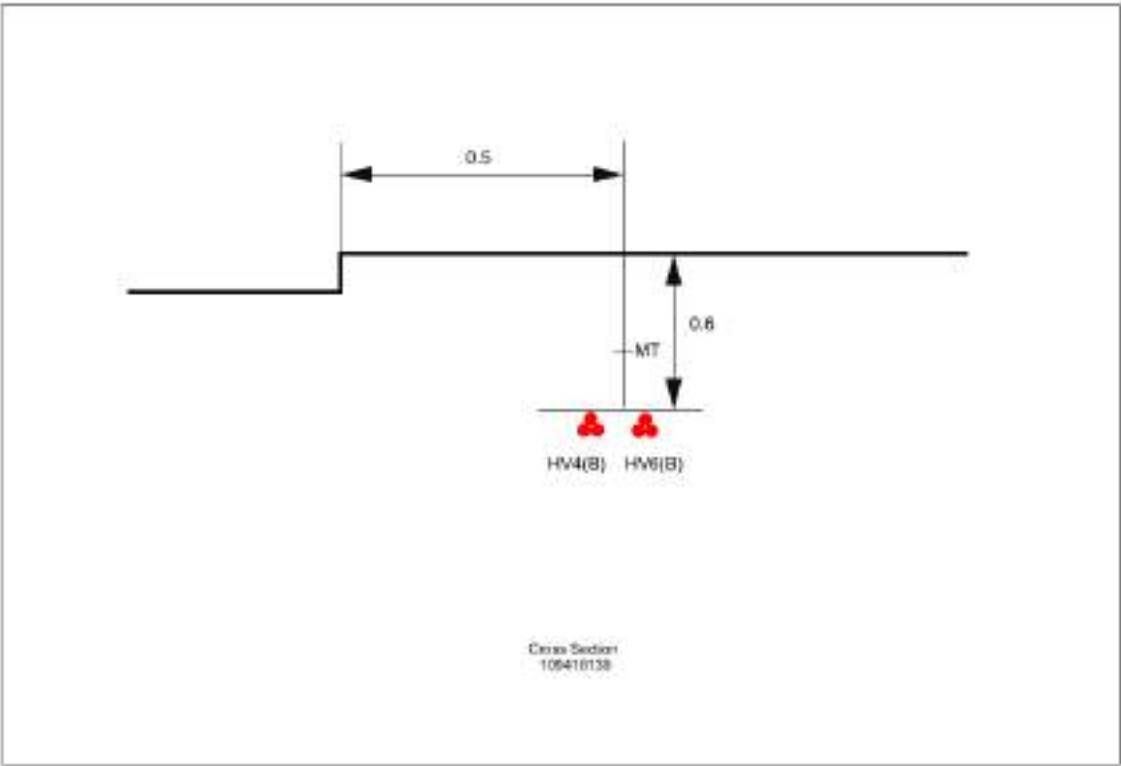


ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-sightings which show electrical cables and overhead lines (or some dated old drawings). Prior to carrying out excavations, you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

Cross Section : 109418139

10



Cross Section
109418139

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.
4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
7. Please be aware that electric cables/lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

1. UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks does not exclude or limit its liability if it causes the death of any persons or causes personal injury to a person.
3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise for any loss, damage, cost, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.
4. This plan has been provided to you on the basis of the terms of use set out in the covering letter that accompanies this plan. If you do not accept and/or do not understand the terms of use set out in the covering letter you must not use the plan and must return it to the sender of the letter.
5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

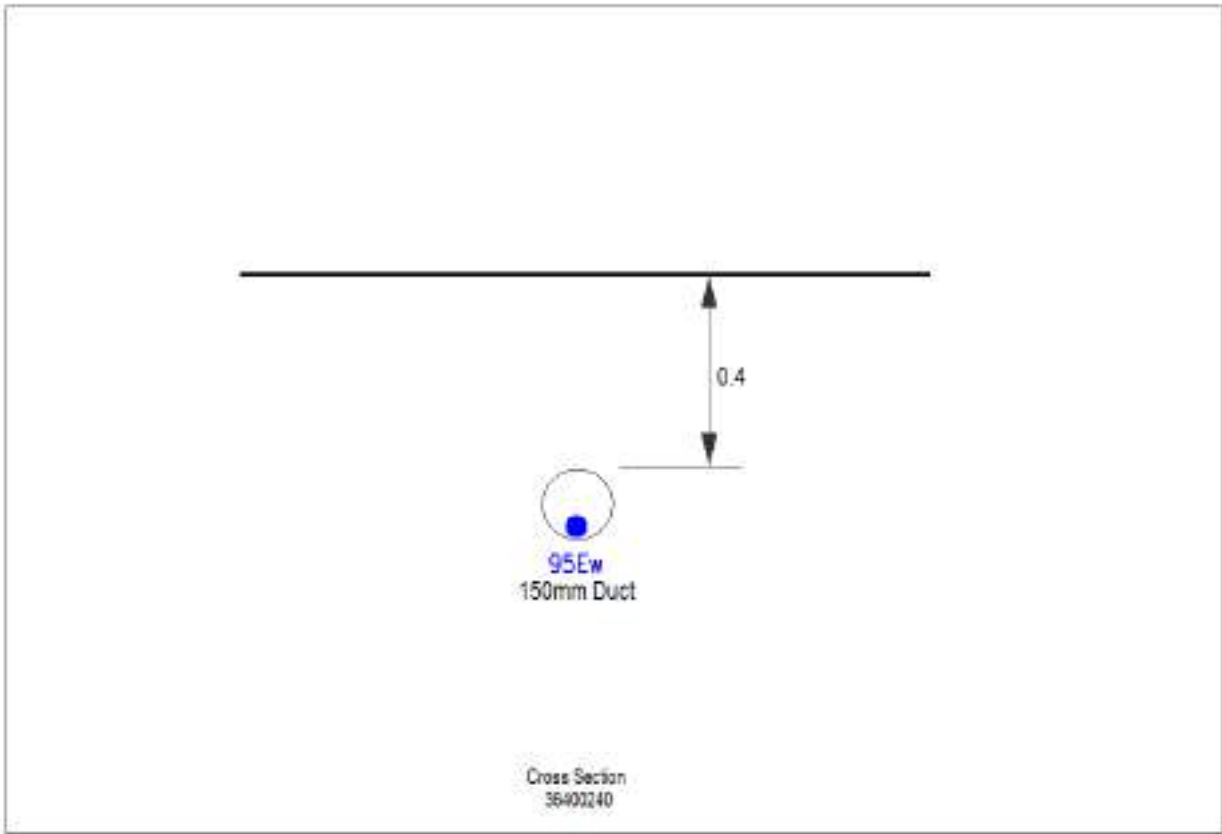
IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable call 999
Phone 0800 732 5839 (24 hrs)
UK POWER



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-sightings which show electrical cables and
are not to be used for excavation purposes. Prior to carrying out excavations, you must refer
to the 1:500 records to determine the location of all known underground plant and
equipment.

Cross Section : 36400240



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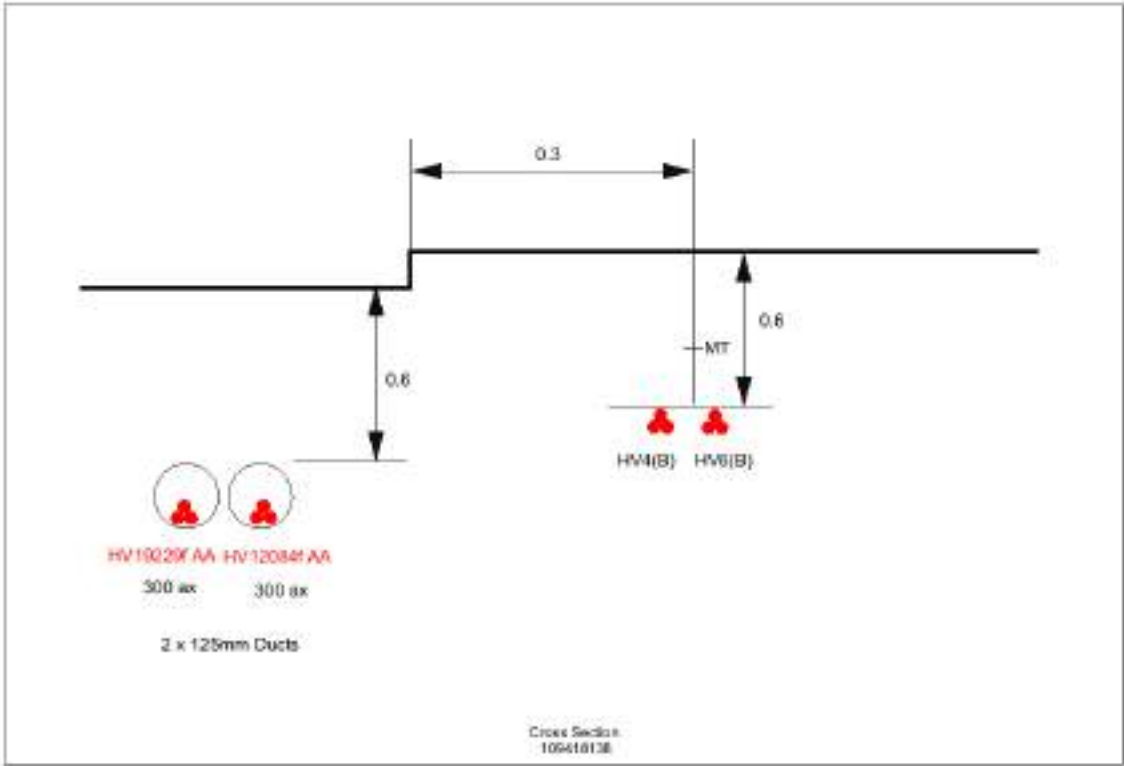
IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable or line
Phone 0800 792 5839 (24hrs)
UK POWER



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-schematics which show electrical cables and
are field lines (or some dated all voltages). Prior to carrying out excavations, you must refer
to the 1:500 records to determine the location of all known underground plant and
equipment.

Cross Section : 109418138



1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified - use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all the cables have been determined.
4. It must be assumed that there is a service cable into each property, lamp column and street sign, etc.
5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
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5. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

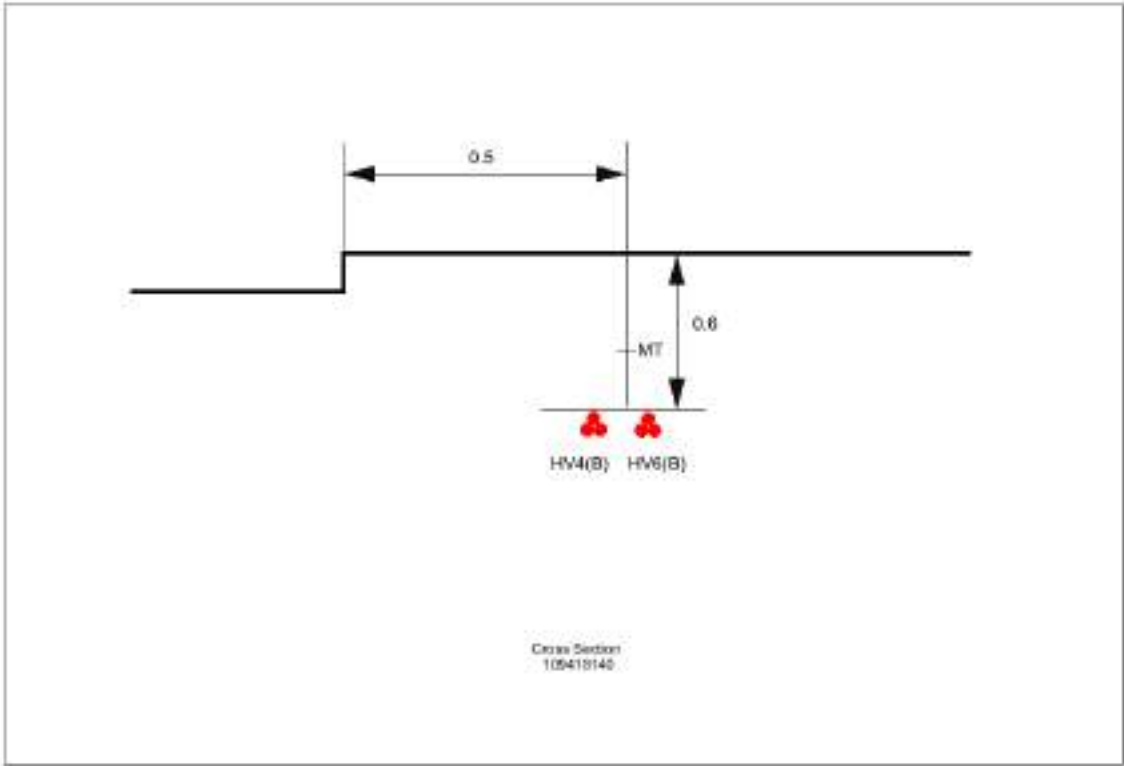
IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable or line
Phone 0800 732 5839 (24 hrs)
UNIDENTITY



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-sightings which show electrical cables and
are produced from aerial data (not images). Prior to carrying out excavations, you must refer
to the 1:500 records to determine the location of all known underground plant and
equipment.

Cross Section : 109418140



Cross Section
109418140

1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
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5. All cables must be treated as being live unless proved otherwise by UK Power Networks.
6. The information proved must be given to all people working near UK Power Networks plant and equipment. Do not use plans more than 3 months after the issue date for excavation purposes.
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IF IN DOUBT - ASK! PHONE
0800 836 5846
EMERGENCY - If you damage
a cable or line
Phone 0800 732 5839 (24 hrs)
URGENTLY



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note G56

Maps produced at 1:2500 scale are best-schematics which show smaller cables and
are field lines (or cable ducts at voltages). Prior to carrying out excavations, you must refer
to the 1:500 records to determine the location of all known underground plant and
equipment.

UK Power Networks Feedback Tool

Please help UK Power Networks improve the accuracy of their network records and help make it safer for all those working around them in future.

All you need to do is:

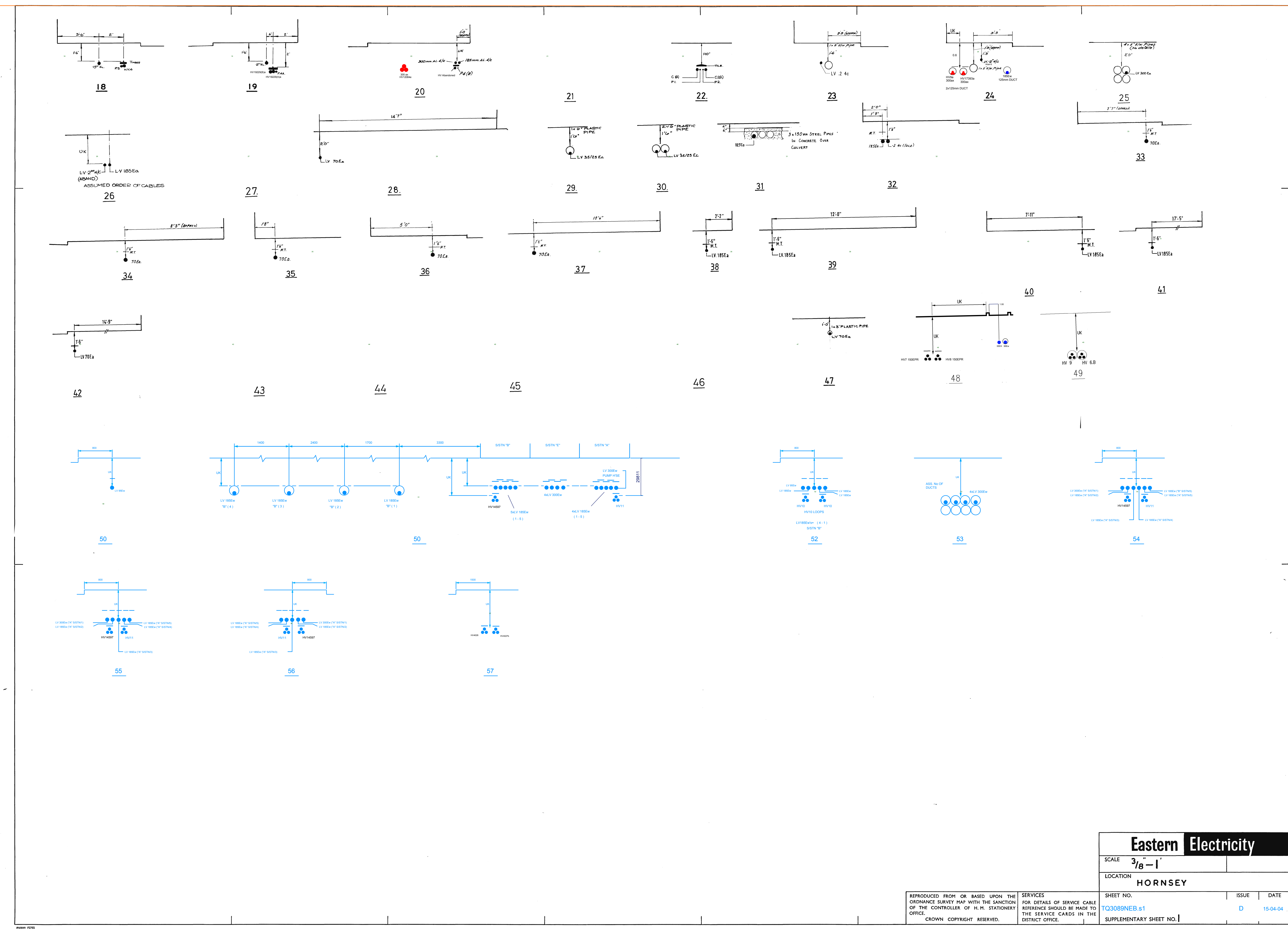
1. Use your phone camera to scan the QR code:
2. Provide feedback on what you have found on site (good or bad)
3. Upload a photo if needed



Thank you for making the area a safer place to dig.

UK Power Networks, working with LSBUD

s1



Eastern Electricity			
SCALE	3/8" = 1'		
LOCATION	HORNSEY		
SHEET NO.	TQ3089NEB s1	ISSUE	D
	SUPPLEMENTARY SHEET NO. I	DATE	15-04-04

s2

[illegible]



Network Records NetMAP Symbols Booklet - East of England

This symbol booklet is intended as a general guide only - some local variations of these symbols may be found.

Version 1.2

Released October 2010

Always check with your local Network Records office or the UK Power Networks server to ensure that you are using the most up to date copy of this booklet - Tel: 08000 565866.

Index:-

Page no:	Contents:
1	Guidance notes.
2	The area covered by this guide.
3	<u>1:500 view</u>
4	Scenery.
7	Scenery (UK Power Networks use only).
8	Primary distribution cables (EHV).
9	Secondary distribution cables (HV/LV).
10	Service cables/terminations.
11	Cable ducts.
13	EHV/HV/LV sites.
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25	Underground cables.
26	Joints.
26	Substations/pole transformers.

Guidance notes.

Important notice:

If you do not understand the NetMAP record that you are using, please contact the UK Power Networks Network Records team for guidance

Tel: 08000 565866.

- The position of apparatus shown on NetMAP is believed to be correct, but the original landmarks may have altered since the apparatus was installed.
- It must be assumed that there is at least one service to each property, lamp column, street sign etc.
- All cables must be treated as live, unless proven otherwise by an authorised UK Power Networks representative.
- Third party cables are not usually shown. In cases of doubt, please telephone 08000 565866.
- When two or more maps are supplied for the same area, the maps must be read in conjunction with each other and with this symbol document.
- All LV cables are assumed to be 4 core, and all HV cables assumed to be 3 core unless otherwise stated.

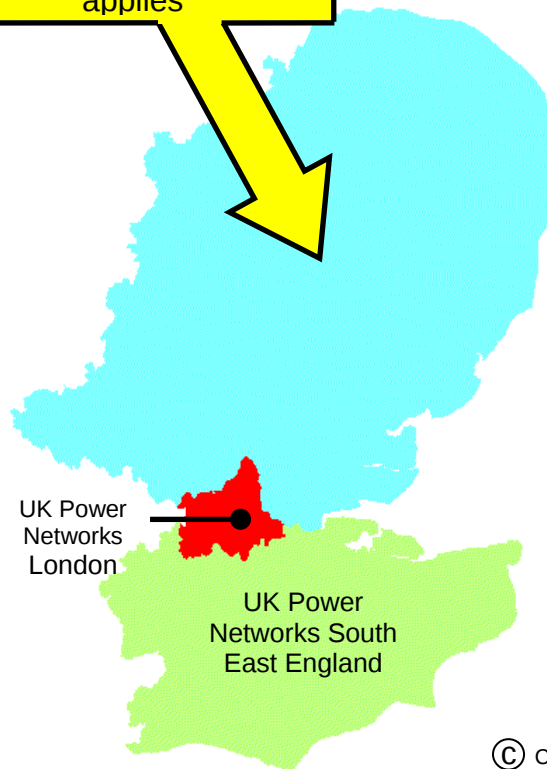


**Plan Provision Team
Fore Hamlet
Ipswich
Suffolk IP3 8AA
Tel: 08000 565866**

The area covered by this guide:

UK Power Networks East of England.

This is the only area
where this document
applies



© Crown Copyright

1:500 view - underground network

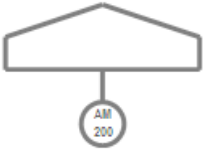
Scenery

NetMAP system	Scanned image	Description
		100 metre Ordnance Survey grid line (on O/S based maps only.)
		Property fence line
		Building line
		Kerb line
		Electrical Boundary

Scenery - for UK Power Networks use only - boxed in red

NetMAP system	Scanned image	Description
 Inset Network – Contact xxxx IDNO for further information	Not applicable	Area of inset network - not the asset of UK Power Networks (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Proposed Cross Rail route (only visible to UK Power Networks and their immediate contractors)
	Not applicable	High pressure pipelines in the general vicinity (only visible to UK Power Networks and their immediate contractors)
Note: Pipelines are only viewable on NetMAP by UK Power Networks staff and their immediate contractors. Do not carry out any excavation without consent from the relevant agency - legally protected high pressure petroleum products pipeline route in the general vicinity - consult www.linewatch.co.uk for contacts and guidance. Pipeline contact numbers can also be found on the intranet – out of hours, contact our Control Centre.		
	Not applicable	Water - surface water (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 1 (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 2 (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Water - Source Protection Zone 3 (only visible to UK Power Networks and their immediate contractors)

section continued on next page

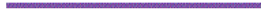
Scenery for UK Power Networks use only - boxed in red		
NetMAP system	Scanned image	Description
	Not applicable	Historical - Scheduled Monuments (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Historical - Parks and Gardens (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Historical - Areas of Archaeological Potential (AAP) (only visible to E UK Power Networks and their Immediate contractors)
	Not applicable	Nature - Ramsar Wetlands of International Importance (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Special Area of Conservation (SAC) (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Special Protected Area (SPA) (only visible to UK Power Networks and their immediate contractors)
		Nature - Site of Special and Scientific Interest (SSSI) (only visible to UK Power Networks and their immediate contractors)
section continued on next page		

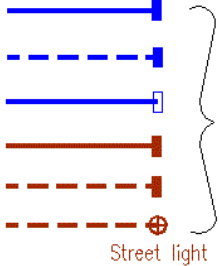
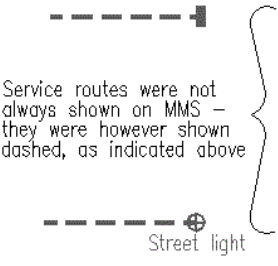
Scenery for UK Power Networks use only - boxed in red		
NetMAP system	Scanned image	Description
	Not applicable	Nature - Local Nature Reserve (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - National Nature Reserve (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - Area of Outstanding Natural Beauty (AONB) (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Nature - National Park (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Fluid filled cables - very high sensitivity (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Fluid filled cables - high sensitivity (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Fluid filled cables - medium sensitivity (only visible to UK Power Networks and their immediate contractors)
	Not applicable	Fluid filled cables - low sensitivity (only visible to UK Power Networks and their immediate contractors)

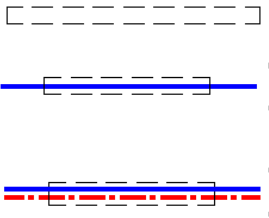
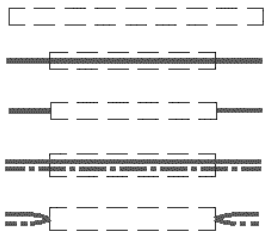
Primary distribution cables (1:500 view)

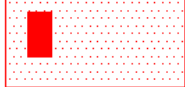
NetMAP system	Scanned image	Description
		Over 33kV and up to 132kV
		Over 11kV and up to 33kV

Secondary distribution cables (1:500 view)

NetMAP system	Scanned image	Description
		Over 230/400V and up to 11kV (HV) cable route
		230/400V (LV) cable route
		Pilot cable route
(Only shown this way if independent from HV cable route)		
Abandoned cables are shown and labelled as such when applicable		

Service cables and terminations (1:500 view)		
NetMAP system	Scanned image	Description
		3 phase service with termination 3 phase service with termination (unknown route) 3 phase service with multi-head termination Single phase service with termination Single phase service with termination (route unknown) Street lighting cable and termination

Cable ducts (1:500 view)		
NetMAP system	Scanned image	Description
		Empty duct Cable(s) in duct(s) Cable(s) in duct(s) (on some raster maps) Multiple cables in ducts Multiple cables in ducts (on some raster maps)

EHV, HV and LV sites (1:500 view)		
NetMAP system	Scanned image	Description
COLCHESTER GRID 	COLCHESTER GRID 	Primary substation
 HIGH STREET	 HIGH STREET  HIGH STREET	Secondary substation
		Pad mounted substation
		Link box – 2 way
		Link box – 4 way (6 way etc shown similarly)
		Feeder pillar – 4 way (6 way etc shown similarly)
CHURCH RD 	CHURCH RD 	Pole transformer
 3	 3	Poles on underground records
		
		H pole, any voltage
		
		Service turret (solid type)
section continued on next page		

EHV, HV and LV sites continued (1:500 view)		
NetMAP system	Scanned image	Description
No NetMAP equivalent  CAUTION Missing Information	 No equivalent	Service turret (with link facility on LV main) Missing data in or near this location
 Contaminated Land refer to SHE 01 016	Not applicable	Contaminated land reference

Mains joints (1:500 view)		
NetMAP system	Scanned image	Description
(voltage indicated by colour/line-style)		
		Straight joint
		Crutch joint
		Straight crutch joint
		Pot end
		Pot end – on one of several cables – single line representation
		Branch joint/pot end – (humpty back joint, back to back joint, bull nose joint or stub joint)
		Sleeve repair or repair joint
		Cut end
		Capped end
		Tee joint
	NetMAP/vector only	Sicame joint box

Service joints (1:500 view)		
NetMAP system	Scanned image	Description
Please note that 3 phase services are shown blue, and single phase services are shown brown		
		Straight joint
		Service joint to main
		Pot end

Cross sections (1:500 view)		
NetMAP system	Scanned image	Description
		Single line representational plan view with NetMAP equivalent (please note the use of separate line for each voltage on the raster/MMS data) Cross sectional view of above Section arrow with old/new numbering system – points in direction section is viewed LV/3 phase service cable Single phase service cable with size annotation HV cable – 3 core with route number annotation
section continued on next page		

Cross sections continued (1:500 view)		
NetMAP system	Scanned image	Description
		HV cable – modern EPR, Plam and Triplex with route number annotation
		Pilot cable
		33kV cable
		132kV cable
		Single duct
		6 way duct formation – irrespective of duct type and material, all are displayed similarly
		Protective slab
		Tiles
		Concrete slabs
		33kV fibre warning board
		Steel plate
		Plastic tile tape
		Timber

Common abbreviations and terminology (all views)

Abbrev.	Description	Abbrev.	Description
1c	Single core	Cut out or C/O	Meter/main fuse position
1ph	Single phase	cx	Triplex (copper)
2c	Two core	DE	Direct earth
3c	Three core	DSTA	Double steel tape armoured
3ph	Three phase	Ea	Alpex cable
ABC	Aerial bunched (bundled) conductor (modern LV overhead line)	EFI	Earth fault passage indicator
ABI	Air break isolator (no fuses)	EHV	Extra high voltage (11,001 Volts and over)
ABSD	Air break switch disconnecter	ELCB	Earth leakage circuit breaker
ACCS	Aluminium concentric copper sheathed	ELT	Earth leakage trip
Al	Aluminium	EPR	Ethylene propylene rubber
AR	Auto recloser	Ew	Waveform cable
ASL	Automatic sectionalising links	E/W	Earthenware duct or earth wire
ax	Triplex (aluminium) 2 x 22mm AL PVC (example) Duplex 3 x 22mm AL PVC (example) Triplex	Fdr or Feeder	LV or HV cable fed by or feeding a substation
CB	Circuit breaker	F/G	Fuse gear
c/c	Concentric cores	F/P	Feeder pillar
ccc	Compact covered conductor	GRP	Fibreglass substation
CCT	Circuit	GVR	Gas vacuum recloser or pole mounted circuit breaker
CNE	Combined neutral and earth	HV	High voltage (1,001 – 11,000 Volts incl)
Cross phased	The core colour may be different to originating transformer phasing	HYBRID	Modern plastic cable with mixed conductor material (Al/Cu)
CS	Consac	Insulation	Electrically protective material surrounding a conductor
CSE	Cable sheath earth	Insulator	Porcelain or glass overhead line support (on poles)
Cu	Copper	ITC	Instrument traced cable or ITC - cable traced electronically using Cable Avoidance Tool (CAT) or similar

section continued on next page

Common abbreviations and terminology continued (all views)

Abbrev.	Description	Abbrev.	Description
Jumper	Connecting lead between open points, section points and overhead plant	PICAS	Paper insulated corrugated aluminium sheath armoured
kV	Kilovolt (or 1,000 Volts) – unit of electrical pressure	PILC	Paper insulated lead covered
kW	Kilowatt (1,000 Watts) – unit of electrical power	PILSTA	Paper insulated lead covered steel tape armoured cable
kVA	Kilovolt Amps or power	PL	Plain lead or public lighting
Link box or LB	Means of connecting LV feeders together using links or fuses	PME	Protected multiple earth or CNE
LSF	Low smoke & fume	PMT	Pole mounted transformer
LV	Low voltage (up to 1,000 Volts incl)	PMR	Pole mounted recloser (generic term for OYT/GVR)
LV Pillar	Low voltage fuse distribution board	PT	Pole transformer
Neutral	Return path of live cable	PVC	Polyvinyl chloride
O/H or OHL	Overhead line	RMU	Ring main unit
OYS	Oil filled pole mounted sectionaliser	RN	Reduced neutral
OYT	Oil filled pole mounted recloser	s/c	Split concentric or single core
PC400	Pole mounted LV fuse unit	S/L	Street light
PE	Pot end or potential end – joint on cable end	S/S	Substation
Phase	Usually the core colour of a cable (caution – may be cross phased) – Red, Yellow, Blue on old cables, or L1, L2, L3 on new cables, for example	STA	Steel tape armoured
		SWA	Steel wire armoured
		T1 or T2 etc	Substation TX setup where more than one TX exists
		T/F or TX	Transformer
		Volts	Unit of electrical pressure
		Watts	Unit of electrical power
		XLPE	Cross linked polyethylene

1:2500 & 1:10000 view - overhead networks - for UK Power Networks use only - boxed in red

General

NetMAP system	Scanned image	Description
		H pole
		Pole

1:2500 scale LV network

NetMAP system	Scanned image	Description
No NetMAP equivalent		132kV cable route
No NetMAP equivalent		33/22kV cable route
No NetMAP equivalent		11kV underground cable
		132kV overhead line
		33kV overhead line dots mark pole position
		11kV overhead line – dots mark pole position
		Dual construction – dots mark pole position
		LV overhead line – dots mark pole position
No NetMAP equivalent		LV underground cable
		Pole and stay
		Pole and strut
		Voltage regulator
		Static balancer
		Example of struts and stays
		Flying stay
		Earthed pole in PME system
261	261	Pole number
		Ground type substation
S.P.	S.P.	Section pole
S.L.	S.L.	Street light

section continued on next page

1:2500 scale LV network continued

NetMAP system	Scanned image	Description
O.R. Stay	O.R. Stay	Outrigger stay
Ext. Brkt	Ext. Brkt	Extension bracket
P. Box	P. Box	Pole box
N.E.	N.E.	Neutral and earth
O.R. Brkt	O.R. Brkt	Outrigger bracket

1:10000 scale HV network

NetMAP system	Scanned image	Description
		132kV overhead line
		33kV overhead line dots mark pole position
		11kV overhead line – dots mark pole position
		11kV overhead line – dual circuit – dots mark pole position
		11kV underground cable and EHV
		Pylon HV or EHV
		Grid line tower
		Stay
		Ground type substation
		Pole type transformer
		Live line taps
		Switchgear – all types
		Fuse gear
		Auto recloser – live line connected

The above circular substation/switchgear symbols may be found that contain different combinations of apparatus (see last example)

LV network diagram view-for UK Power Networks use only-boxed in red

Overhead lines

NetMAP system	Description
	Unknown
	Al
	Cu
	ABC
	Pole link

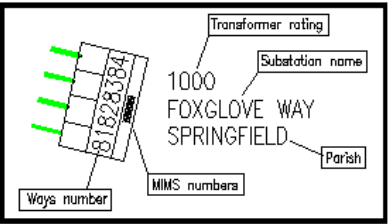
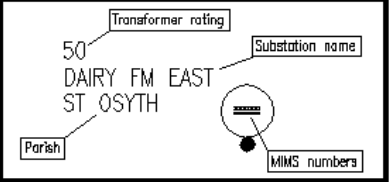
Underground cables (LV network diagram view)

NetMAP system	Description
	Unknown
	Al
	Cu
	CC
	TCC
	Ea
	Ec
	Ecx
	Ew
	LSF
	Other

Joints (LV network diagram view)

NetMAP system	Description
	Pot end or Sicame Box
	Straight joint
	Crutch joint
	3 phase termination

Substations/pole transformers (LV network diagram view)

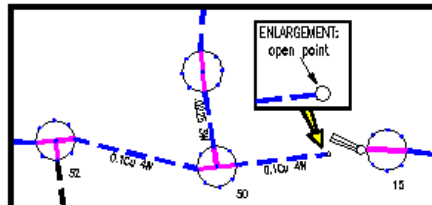
NetMAP system	Description
There are many substation combinations – these are merely a sample of configurations that can be found.            	2 way substation 4 way substation 4 way twin busbar substation 10 way back to back substation Pole transformer (normal) Pole transformer 2 way Pole transformer 3 way Substation with rating, name, Parish and MIMS identifying number Pole transformer with rating, name, Parish and MIMS identifying number Intermediate pole Section pole Overhead fuse

section continued on next page

Substations/pole transformers cont'd (LV network diagram view)

NetMAP system

Description



Overview – the purple lines through the section poles are pole links – these indicate how the network is linked together



2 way link box



3 way link box



4 way link box



4 way double busbar link box



4 way BICC link box



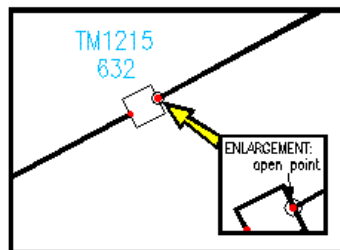
5 way link box



6 way link box



6 way double busbar link box



A two way link box with identification number, connected to a cable with an open point



Feeder pillars – these range from 2 ways through to 9 ways – a 9 way and a 2 way are shown as examples





Be Bright

Stay Safe

Stop!
Think before
you dig!