From: Sent: 15 December 2023 09:43:07 To: Planning Reps Cc:

Subject: Plant Enquiry Ref Job No. 31870964

Attachments: UKPN_31870964.pdf; UKPN Customer Letter.pdf; Excavation leaflet JACKHAMMER_DIGI.pdf; South+of+England.pdf

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe. Remember your cyber security training and report anything suspicious.

15/12/2023

LinesearchbeforeUdig ref: 31870964

Your ref: da/23/01457/ful

Dear Sir/Madam,

Thank you for contacting us

Please see attached information specific to your enquiry:

1. Plan (Please print in colour)

2. Letter

3. Other safety related information : Think+before+you+dig+underground.pdf

The Plan is an extract from our mains records of the proposed work area enclosed for your guidance. This plan only shows the cables and overhead lines owned by UK Power Networks. Please note that privately owned electricity cables or ones owned by other Independent Network Operators may be present in this area and information regarding those cables needs to be requested from the owners.

The accuracy of the information shown on this plan cannot be guaranteed. Please read the information and disclaimer on these plans carefully. The information included on the plan is only valid for 3 months however please note our data is updated daily.

A colour copy of these plans and the safety advice booklet enclosed should be passed to the senior person on site in order to prevent damage to our plant and potential direct or consequential costs to your organisation.

Safe digging practices, in accordance with HSE publication HSG47 "Avoiding Danger from Underground Services" must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all relevant people (direct labour or contractors) working for you on or near electricity assets.

Damage to our cables can be extremely dangerous for your employees and the general public.

If you require any further information please contact the number below.

Network Feedback Tool

To help improve the accuracy of its electrical asset plans, UK Power Networks is inviting all users to submit feedback when they have worked around its network. Providing information on any inaccuracies, damage or missing network, could help UK Power Networks to enhance their plans and try to ensure safer working for others.

It should only take a few minutes of your time and any response will be greatly appreciated.

will take you to the feedback form.

Alternatively, you can use your mobile device to scan the QR code provided in your plans package.

Yours sincerely,









ukpowernetworks.co.uk

Your life can be lost within seconds if you come into contact with electricity.

Every year, people are killed or seriously injured when they come into contact with high voltage electricity.

This can have a far-reaching and devastating effect on family, friends and colleagues.

Distractions, working long hours, rushing to get the job done, can all impact on how we work and our safety.

Taking time to plan, being prepared and focusing on the way we work can help keep us safe.



The electricity network is designed to keep you safe. But how safe are you when you are working?

UK Power Networks is the country's biggest electricity distributor, making sure the lights stay on for more than eight million homes and businesses across London, the South East and the East of England.

The safety of our customers and staff is our top priority.

Underground cables carry a powerful electrical charge which can be conducted through machinery and equipment with fatal consequences. Anyone working close to live underground cables should take the time to read this simple leafnet and identify the precautions they should be taking.



WATCH OUR EXCAVATION ANIMATION BY SCANNING THE QR CODE WITH YOUR PHONE CAMERA.





Keep well away -Electricity can kill

Remember:

- The depth and location of cables and services shown on the plans may have changed because of subsequent site alterations
- Be aware that not all cables and services may be shown on the plans
- Cables do not run in straight lines. Underground cables may be defracted around underground obstacles and can change depth
- Wear Personal Protective Equipment to minimise the harm of electric shock and burns



How can we help?

If you work or live in the UK Power Networks area contact us or look on our website. We provide free information and advice about the precautions and safe working practices to be followed when working close to electrical equipment.

Further advice and guidance is available from the Health and Safety Executive (HSE): HSG85 - Electricity at Work –Safe Working Practices GS6 - Avoiding Danger from Overhead Power Lines HSG47 - Avoiding Danger from Underground Services

What to do in an emergency

If a mains electricity cable is damaged:

- STOP WORK IMMEDIATELY
- Notify UK Power Networks: Dial 105
- If you damage a cable, stay calm, keep clear, and call for help
- Call the emergency services if anyone is injured or there is a fjre. Anyone who has received an electric shock should go to hospital as damage may have occurred to the heart
- Always treat the cable(s) as live even if they are not sparking
- Never remove anything that is stuck or in contact with the cable
- Stay clear keep everyone away until assistance arrives



To request your FREE vehicle cab stickers visit www.ukpowernetworks.co.uk/ internet/ en/ safety/

If you are unsure who your network operator is then please visit www.energynetworks.org



You could be in danger when carrying out your everyday trades activities such as digging, construction and demolition.

Contact UK Power Networks or Line Search Before U Dig (LSBUD) in advance of the works to obtain relevant cable plans or to request disconnections. The cable plans will only show the indicative route and not the route into the property

Ensure the cable plans are shown to and understood by those on site BEFORE starting work

Confjrm the cable location by using a Cable Avoidance Tool (CAT) before digging commences. Once found, mark cable positions with spray paint or similar

For cable plans visit www.linesearchbeforeudig.co.uk or www.ukpowernetworks.co.uk

Complete a risk assessment and ensure it covers electrical hazards

Use spades and shovels with insulated handles in preference to forks and picks

Look around for anything in the vicinity that would have an electricity service such as street lights, CCTV cameras, or meter boxes and identify where the cables are

Look for electrical wires, cables and equipment near to where you are going to work and check for warning signs and any other hazards

Contact UK Power Networks to agree a safe method of work if there is a cable encased in concrete, DO NOT BREAK OPEN

Make sure everyone on site is aware of the presence and location of electrical cables

Before demolishing a building make sure supplies are disconnected, preferably well clear of the work area. For guidance on how to arrange a disconnection visit www.ukpowernetworks.co.uk

NATIONAL POWER CUT HELPLINE





Stop! Think before you dig!

#bebrightstaysafe



@UKPowerNetworks

/ ukpowernetworks

National power cut helpline

POWER CUT?

CALL 105

Or call us 24 hours a day on **0800 31 63 105**

For safety advice about overhead power lines, disconnections and general enquiries, go to: www.ukpowernetworks.co.uk

To request your FREE vehicle cab stickers visit www.ukpowernetworks.co.uk/ internet/ en/ safety/

If you are unsure who your network operator is then please visit www.energynetworks.org

/// what3words



phone to get the app

To report broken or damaged electrical equipment or in an emergency call 0800 31 63 105 or 105 and use what3words to help us locate you faster.







Network Records NetMAP Symbols Booklet -South East England

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 (& 1:12</u>	50) view	
		Scenery.	
4		Scenery (UK Power Networks use only).	
7		Primary distribution line route (EHV).	
8		Secondary distribution cables (HV/LV).	
9		Secondary distribution cable terminology.	
12		Cable ducts.	
13		Poles.	
14		EHV, HV and LV sites.	
15		Joints.	
16		Street furniture	
17		Miscellaneous.	
18		Connectivity.	
19		Abbreviations.	
20		Cable phasing.	
21		Operational status colours.	
22	<u>1:2500 view</u> (I	JK Power Networks use only).	
		Notes.	
23		Primary distribution line route.	
24		Secondary distribution cables.	
25		Primary and secondary sites.	
27		Switch types.	
28	1:10000 view	(UK Power Networks use only).	
		Notes.	
29		Secondary distribution cables.	
30		Primary and secondary sites.	
		•	

Guidance notes.

Important notice:

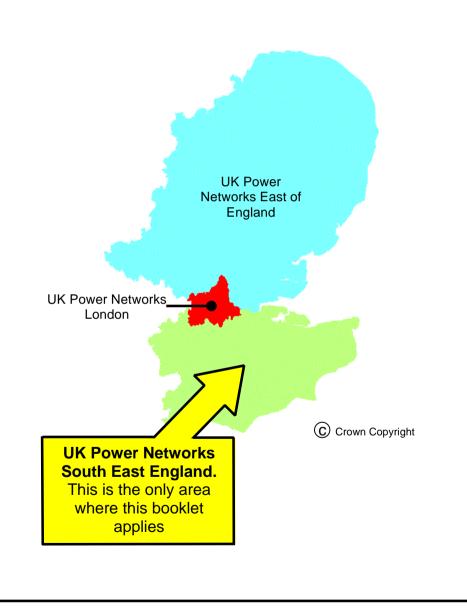
If you do not understand the NetMAP record that you are using, please contact the UK Power Networks Network Records team for guidance on **Tel: 08000 565866.**

- 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.
- Third party cables are not usually shown.
- When viewed in black and white, the line-style indicates the voltage.
- All LV cables are 4 core and all HV cables are 3 core unless otherwise stated.
- All cables are copper unless otherwise stated.



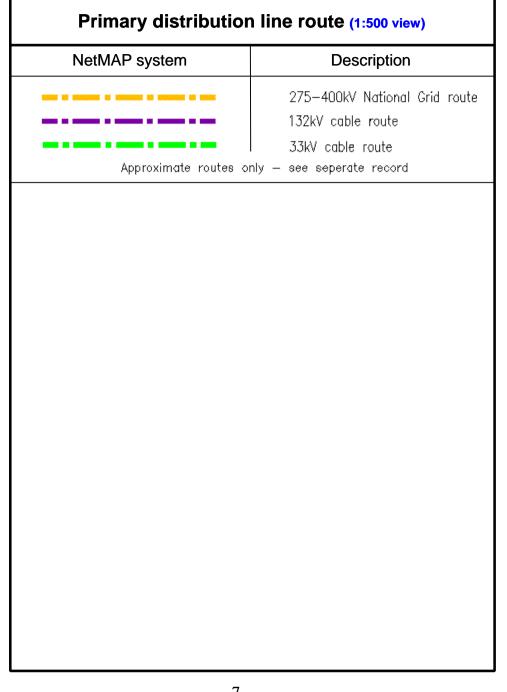
Plan Provision Team and CableWatch Fore Hamlet Ipswich Suffolk IP3 8AA Tel: 08000 565866

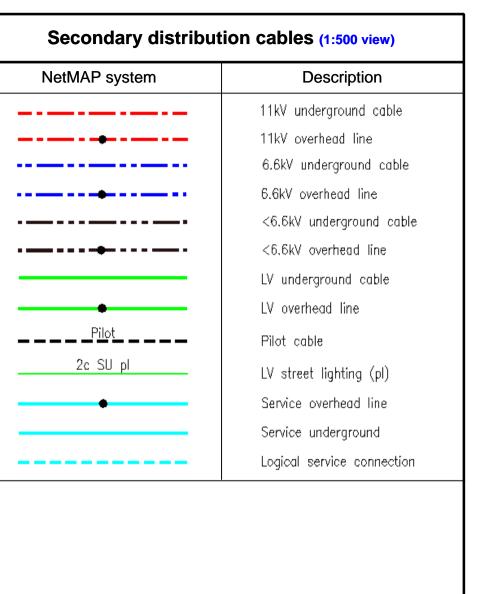
The area covered by this guide:



1:500 (& 1:1250) view		Scenery for UK Power Networks use only - boxed in rec		
Sce	Scenery		Description	
NetMAP system	Description Secondary buildings and fence lines Building line Kerb line UK Power Networks / SPN licence boundary (not visible unless selected)	not carry out any excavation without consent from the products pipeline route in the general vicinity - concontact numbers can also be found on the contact numbers can also be found on the contact number of the contact n	Area of inset network - not the asset of UK Power Networks (only visible to UK Power Networks and their immediate contractors) Proposed Cross Rail route (only visible to UK Power Networks and their immediate contractors) High pressure pipelines in the general vicinity (only visible to UK Power Networks and their immediate contractors) K Power Networks staff and their immediate contractors. Do he relevant agency - legally protected high pressure petroleum suit www.linewatch.co.uk for contacts and guidance. Pipeline e intranet –out of hours, contact our Control Centre. Water - Surface water (only visible to UK Power Networks and their immediate contractors) Water - Source Protection Zone 1 (only visible to UK Power Networks and their immediate contractors) Water - Source Protection Zone 2 (only visible to UK Power Networks and their immediate contractors) Water - Source Protection Zone 3 (only visible to UK Power Networks and their immediate contractors) Water - Source Protection Zone 3 (only visible to UK Power Networks and their immediate contractors) mued on next page	

NetMAP system	Description	NetMAP system	Description
0	Historical - Scheduled Monuments (only visible to UK Power Networks and their immediate contractors)		Nature - Local Nature Reserve (only visible to UK Power Networks and their immediate contractors)
0	Historical - Parks and Gardens (only visible to UK Power Networks and their immediate contractors)		Nature - National Nature Reserve (only visible to UK Power Networks and their immediate contractors)
	Historical - Areas of Archaeological Potential (AAP) (only visible to UK Power Networks and their Immediate contractors)		Nature - Area of Outstanding Natural Beauty (AONB) (only visible to UK Power Networks and their immedia contractors)
	Nature - Ramsar Wetlands of International Importance (only visible to UK Power Networks and their immediate contractors)		Nature - National Park (only visible to UK Power Networks and their immediate contractors)
	Nature - Special Area of Conservation (SAC) (only visible to UK Power Networks and their immediate contractors)		Fluid filled cables - very high sensitivit (only visible to UK Power Networks and their immediate contractors)
\sim	Nature - Special Protected Area (SPA)		Fluid filled cables - high sensitivity (only visible to UK Power Networks and their immediate contractors)
$\overline{\mathbf{v}}$	(only visible to UK Power Networks and their immediate contractors)		Fluid filled cables - medium sensitivity (only visible to UK Power Networks and their
	Nature - Site of Special and Scientific Interest (SSSI) (only visible to UK Power Networks and their immediate contractors)		immediate contractors) Fluid filled cables - low sensitivity (only visible to UK Power Networks and their



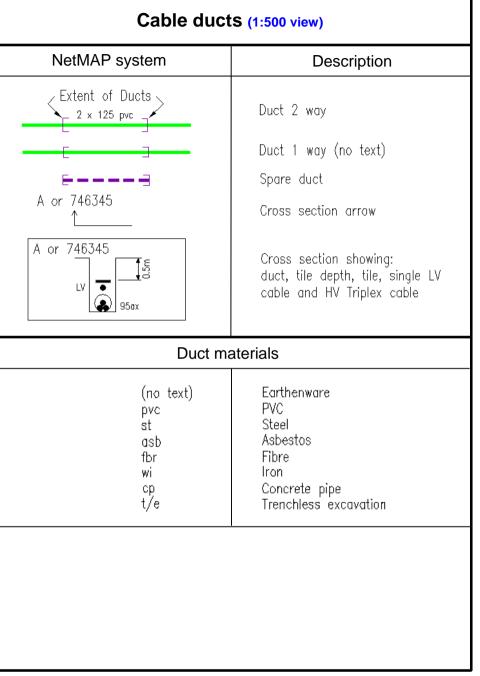


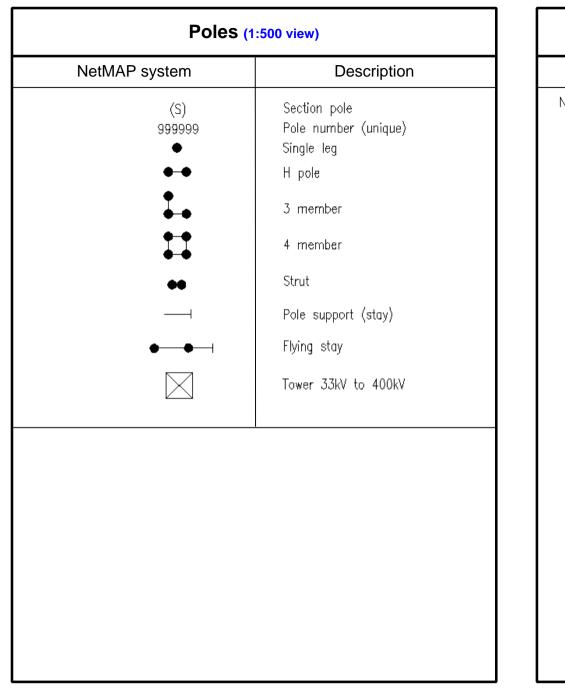
Secondary distribution cable terminology (1:500 view)		
	HV underground	
sta (no text) XLPE bcs scs ua c/c Poly BOTES of 33 kV design ax cx	PILCSTA (paper insulated lead covered steel tape armour) PILCSWA (paper insulated lead covered steel wire armour) XLPE (cross linked polyethylene) insulation CAS (corrugated aluminium sheath) belted construction CAS (corrugated aluminium sheath) with screened cores PILC (paper insulated lead covered) unarmoured Concentric cores Poly (polyethylene) insulation BOTES - Board of Trade earth screen Oil filled Constructed to 33 kV specification Triplex with aluminium conductor Triplex with copper conductor	
	HV overhead	
(no text) pvc cat +ew ccc	Bare open wire Open wire PVC covered ABC (aerial bundled or bunched conductor) with supporting strain wire Open wire with extra earth conductor Compact covered conductor	
	Overhead line materials	
sca cc st sil ccs cpl	Steel cored aluminium Cadmium copper Steel Simalec Copper covered steel Compactal	
	section continued on next page	

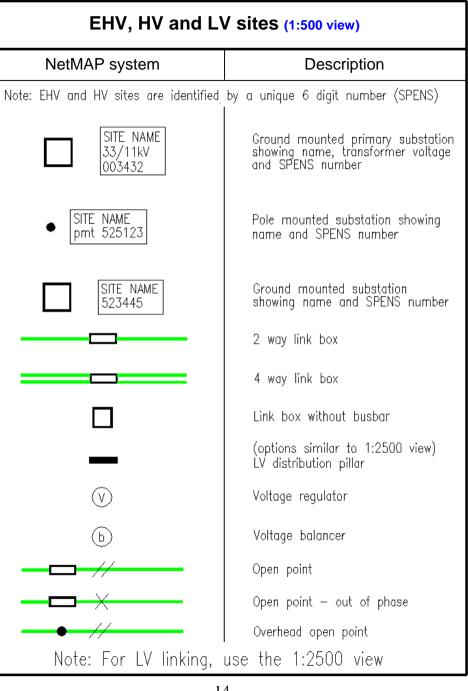
(1:500 view) LV underground mains and services w Waveform Waveform with seperate earth wire We Hybrid - copper neutral with aluminium phase conductor Н He Hybrid with seperate earth wire PILC (paper insulated lead covered) unarmoured Цđ PILC (paper insulated lead covered) with/without armour (no text) XLPE XLPE (cross linked polyethylene) insulation PISTA (paper insulated steel tape armour) 4c SAC (solid aluminium core) with lead covered neutral DISTRI c/c Concentric cores s/c Split concentric with seperated neutral and earth wires CONSAC Paper insulated aluminium sheathed 3 core with solid aluminium cores Vulcanised bitumen/rubber insulation vh. Capothene core insulation Capothene tby Tape braid and yarn PILSWA (paper insulated lead steel wire armour) swa PILSTA (paper insulated steel tape armour) solid aluminium core SOC 4 sector SAC with solid aluminium cores Solidal Low smoke and fume (orange cable) LSF Cable laid in filled trough Trough LV overhead mains and services (no text) Bare open wire ABC Aerial bundled (or bunched) conductor ABC (aerial bundled or bunched conductor) with supporting strain wire cat PVC covered open wire DAC c/c Concentric cores Н Hybrid - copper neutral with aluminium phase conductor Under enves - bession covered lend cable ue Vulcanised India rubber insulation vіг section continued on next page

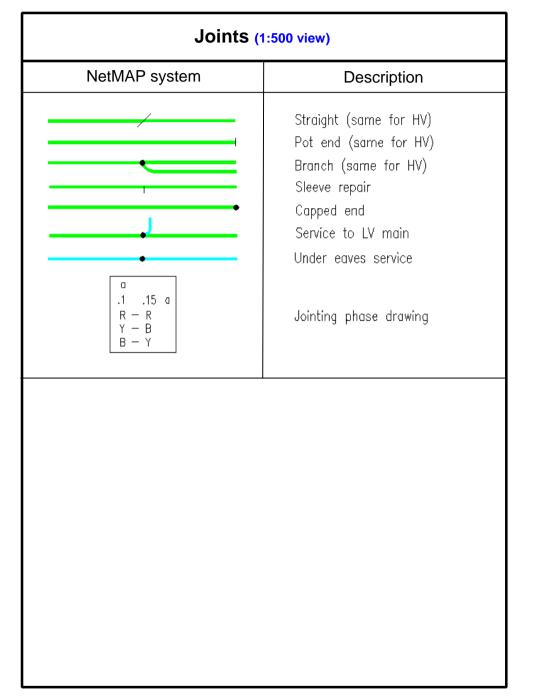
Secondary distribution cable terminology continued

Secondary distribution cable terminology continued (1:500 view)			
	Various annotation		
.1	Cable size (sq. inches)		
185	Cable size (sq. millimetres)		
а	Aluminium		
ПС	Instrument traced cable or ITC - cable traced electronically using Cable Avoidance Tool (CAT) or similar		
			Γ

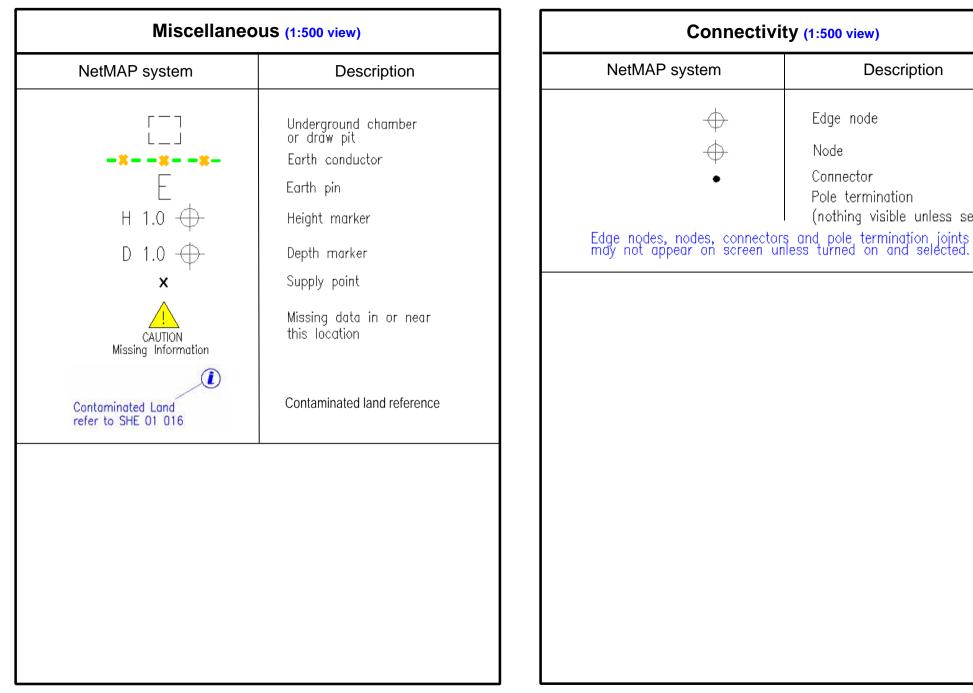








Street furniture (1:500 view)			
NetMAP system	Description		
Ō	Pole mounted street light Street light		
0	Zebra crossing Road sign Bollard Pelican crossing		
0	Traffic controller Advertising sign Amplifier station		
	Control cubicle <u>Text displayed/description</u> Bay and display		
	Pay and display Bus shelter TBS Kiosk Water meter PL pillar TCB		
	Unknown		



Description

(nothing visible unless selected)

Edge node

Connector

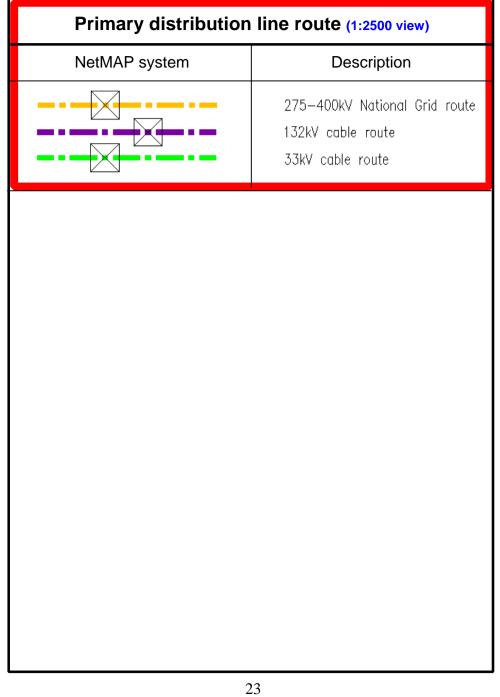
Pole termination

Node

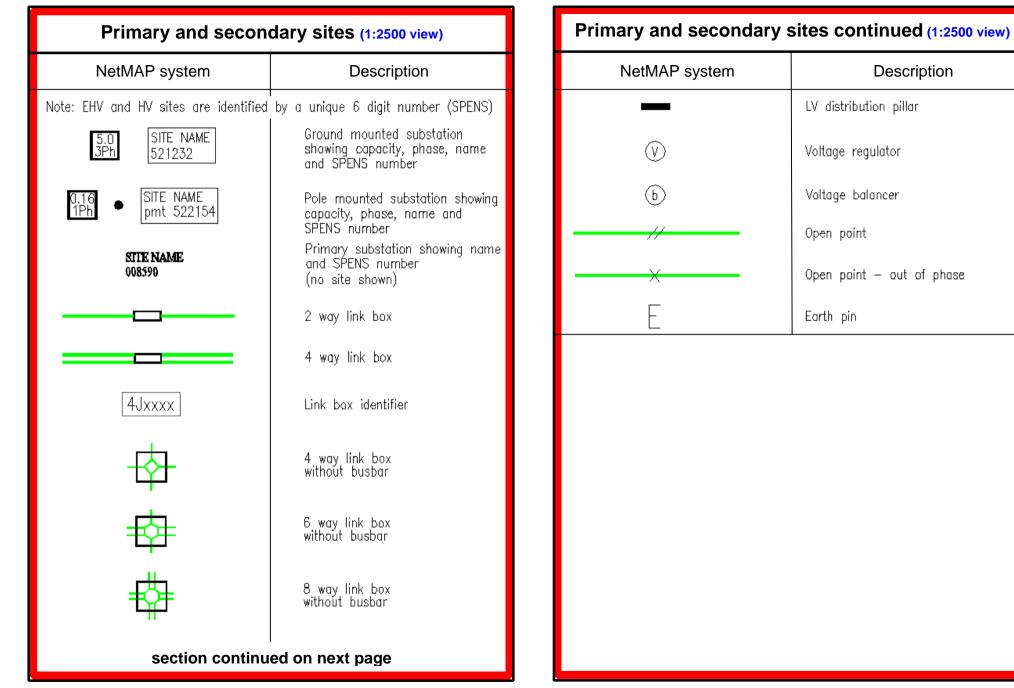
Abbreviations (1:500 view)		
NetMAP system	Description	
NR SU AB (M) VO5 MS MP pmt pl TBS TCB CET IT CAT +sl +sw 2c PESL Added Excluded IIP VSxxxx CB	No record Size unknown Abandoned PME available Year LV linking verified Milestone Marker post Pole mounted transformer Public lighting Temporary builder's supply Telephone call box Cable electronically traced Instrument traced (same as CET) Cable avoidance tool (same as CET) Street lighting Switch wire 2 core Public Electricity Supply License Supplied by SPN Not supplied by SPN Assumed open point Vacant site Callender box	

Cable phasing (1:500 view)				
<u>Old core colours</u> Neutral Red Yellow Blue	<u>Shown on</u> Neutral R Y B Note:— Scott is a d	Neutral L1 L2 L3	<u>New core colour</u> Blue Brown Black Grey system	5

Operational status colours (1:500 view)		1:2500 view - for UK Power		
PROPOSAL		Networks use only - boxed red Notes		
	oubles and joints appear in orier	 No underground HV cables are shown on the 1:2500 view Poles and joint details are similar to the 1:500 view For cable/line information refer to the 1:500 view 		



Secondary distribution cables (1:2500 view)		
NetMAP system	Description	
	11kV overhead line 6.6kV overhead line <6.6kV overhead line LV underground cable LV overhead line	



Switch types (1:2500 view)			
NetMAP system	Description		
ABSD A/R A/S FUSE S/D PF ASL PMR PMS GVR	Air brake switch disconnector Auto recloser Sectionaliser Fuse Surge diverter Pathfinder Automatic sectionalising links Pole mounted recloser Pole mounted sectionaliser Gas vacuum recloser		

1:10000 view - for UK Power Networks use only - boxed red

Notes

- 1. No EHV cables/overhead lines shown on 1:10000 view.
- 2. For congested areas print at 1:5000.
- 3. HV site used instead of branch joint on 1:10000 for connectivity purposes. The site is not displayed until it is selected.

Secondary distribution cables (1:10000 view)			
NetMAP system Description			
	11kV underground cable		
	6.6kV underground cable		
	<6.6kV underground cable		
	11kV overhead line		
	6.6kV overhead line		
	<6.6kV overhead line		

Primary and secondary sites (1:10000 view)	
NetMAP system	Description
Note: EHV and HV sites are identified	l by a unique 6 digit number (SPENS)
SITE NAME 008590	Primary substation showing name and SPENS number
SITE NAME 521234	11kV ground mounted substation showing name and SPENS number
SITE NAME 🗾	6.6kV ground mounted substation showing name and SPENS number
SITE NAME D	<6.6kV ground mounted substation showing name and SPENS number
SITE NAME pmt 527522 ●	11kV pole mounted substation showing name and SPENS number
SITE NAME pmt 525743 🛛 💌	6.6kV pole mounted substation showing name and SPENS number
SITE NAME prrit 526543 🔿	<6.6kV pole mounted substation showing name and SPENS number
SITE NAME O 527238	Pole mounted switching substation showing name and SPENS number



Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP Company: UK Power Networks (Operations) Limited

Registered in England and Wales No: 3870728

Our Ref: 31870964 Your Ref: da/23/01457/ful

Friday, 15 December 2023

Jan Jennings Civic Centre Home Gardens Dartford Kent DA1 1DR

Dear Jan Jennings

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









Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP

Registered in England and Wales No: 3870728

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





Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP

Registered in England and Wales No: 3870728

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;

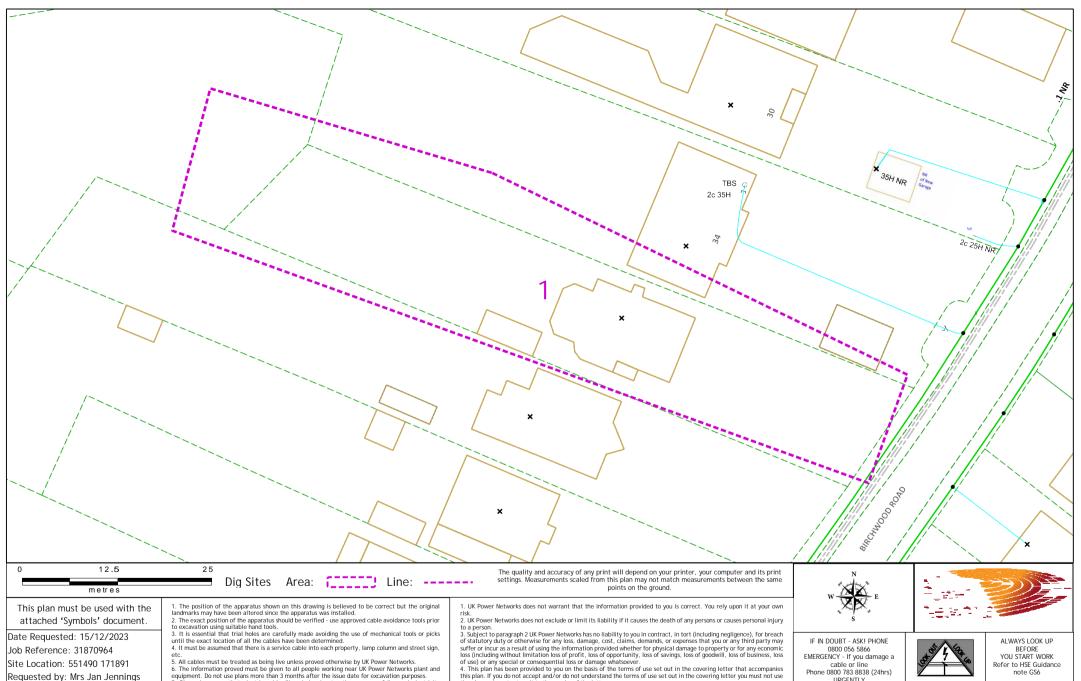
your name, address and telephone number; the date, time and place at which such damage was caused; a description of the electric line and/or electrical plant to which damage was caused; the name of the person whom it appears to you is responsible for that damage; the nature of the damage.

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.









 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.

Your Scheme/Reference:

Scale: 1:500 (When plotted at A4)

da/23/01457/ful

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.

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.

URGENTLY

Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database rights 2023. All rights reserved. Ordnance Survey Licence numbers 100019626, and 100019626, and 100019626, and 100019626 and 100019626. of © London Power Networks plc or Eastern Power Networks plc or South Eastern Power Networks plc each being a distribution licensee under section 6(1)(c) of the Electricity Act 1989 for the relevant distribution services area as that term is defined in such licensee's distribution licensee under section 6(1)(c) of the Electricity Act 1989 for the relevant distribution services area as that term is defined in such licensee's distribution licensee. All rights in such data reserved. Plans generated by DigSAFE Pro™ software provided by LinesearchbeforeUdig.





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