



Confidential

17/02/2016

Utility Site Investigation Report

Hertford Gas Works

St William

Designed for life



Premier Energy
Specialists in utility infrastructure





Document History

Project Number	600478
Client	St William Homes
Site	Hertford Gas Works, Marshgate Drive, Hertford, SG13 7AQ

Issue Number	Date	Comments	Prepared by	Signed off by
1	17/02/2016	For Information	 Graham Phillips	 Jason Raymond



Premier Energy Services Ltd has taken all reasonable steps, within the timescales, to obtain the most robust information in this report but accepts no liability for the accuracy of such information or report and in addition to any limitation of liability under its Standard Terms and Conditions.



These services are provided subject to our standard Scope of Services, the Supplementary Terms and our Standard Terms and Conditions.

This report is for the private and confidential use of the client for whom the report is undertaken and should not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express authority of Premier Energy Services Ltd. ©

Document number SI 024_38

4 The Courtyard, Pondtail Farm
West Grinstead, Horsham
West Sussex, RH13 8LN

t: 01403 740240
info@premierenergy.co.uk
www.premierenergy.co.uk



Abbreviations Key

Apparatus	
Electric:	
DNO	Distribution Network Operator
iDNO	Independent Distribution Network Operator
ICP	Independent Connections Provider
LV	Low Voltage
HV	High Voltage
EHV	Extra High Voltage
kVA	Kilovolt Amperes
MVA	Megavolt Amperes
AC	Alternating Current
S/S	Substation
PMT	Pole Mounted Transformer
Gas:	
GT	Gas Transporter
iGT	Independent Gas Transporter
UIP	Utility Infrastructure Provider
PRS	Pressure Reducing Station (Governor)
LP	Low Pressure
MP	Medium Pressure
IP	Intermediate Pressure
HP	High Pressure
Water	
SLO	Self Lay Organisation
Incumbent	Local Water and/or Sewerage company
WRAS	Water Regulation Advisory Scheme
Other	
PE	Polyethylene
DI	Ductile Iron
ST	Steel
CI	Cast Iron
SI	Spun Iron
HPPE	High Performance Polyethylene
MDPE	Medium Density Polyethylene
CATV	Cable Television
GRP	Glass Reinforced Plastic
FTTP	Fibre to the premise
FTTC	Fibre to the cabinet
l/min	Litres per minute
H&S	Health and Safety
HBF	House Builders Federation
TPO	Tree Preservation Order



Contents

Introduction	1
Executive Summary	3
1. Electric	6
1.1. Existing Network	6
1.2. New Connections	8
2. Water	10
2.1. Existing Network	10
2.2. New Network (Mains)	12
2.3. New Connections (Services)	12
2.4. Infrastructure Charges	13
2.5. Drainage	13
3. Gas	13
3.1. Existing Network	13
3.2. New Connections	16
4. Telecoms	16
4.1. Existing Network	16
4.2. New Connections	18
5. Cable TV	18
5.1. Existing Plant	18
5.2. New Connections	20
6. Communications	20
6.1. Vodafone Ltd	20
6.2. Colt	20
6.3. KPN/TATA	20
6.4. BSkyB/Easynet	20
6.5. Interoute (inc 51 Degrees)	20
6.6. SOTA	21
6.7. Affiniti	21
6.8. Level 3/Global Crossing UK/Global Crossing PEC/Fibernet UK/FibreSpan	21
6.9. Verizon	21
6.10. Orange/O2/T-Mobile/Vodafone/3	21
6.11. Vtesse Networks	22
6.12. TeliaSonera	22
6.13. euNetworks	22
6.14. SSE Neos Networks	22
6.15. CityFibre	22
7. Tunnels & Pipelines	22
7.1. LinesearchbeforeUdig	22
7.2. BT Deep Level Tunnels	22
7.3. Thames Water Ring Main	23
7.4. Thames Tunnel	23



7.5.	Post Office Tunnels	23
8.	Transport	23
8.1.	Docklands Light Rail	23
8.2.	London Underground	23
8.3.	LUL HV Power Assets	23
8.4.	Crossrail	23
8.5.	Network Rail	23
8.6.	Transport for London	23
8.7.	Trafficmaster	23

Enclosures



Introduction

This report investigates the utility companies' existing plant within the vicinity of the site and the ability and capacity of this plant to serve the proposed development.

The report identifies and comments on any potential adverse effects the proposed development may have on the existing plant. The report also recommends further items of investigation and action where appropriate.

The report is based on the information provided by the client about the proposed development and the information provided by the utility and service organisations about their plant and networks. The information contained in this report is primarily based on desk research although a visual site inspection was made on 12/01/2016.

All costs given are budget only and therefore should not be used for contract purposes. Formal quotations can be provided for both new supplies and any diversions when the site has full planning permission and detailed plans are submitted to each utility.

Utility infrastructures are dynamic systems with new loads affecting them in different ways and new developments coming on stream all the time. The difficulty for site appraisal is that load cannot be secured until the formal site supply quotations have been applied for, accepted and paid. Therefore, it must be clearly understood that the information and budget costs given in this report could be superseded by load demand take-up at any time.

Site access

The proposed site access is not known at this stage as there is no site layout available. However, the site is split over two areas referenced in the report as north and south site.

During the access construction, caution will need to be exercised when working around the existing plant and temporary protection works may be necessary. Some utilities may also require the installation of spare ducts across the access for future use.

Hand dug trial holes should be carried out at proposed access roads to determine the exact depth and location of any plant. Costs can then be obtained based on the results of these trial excavations.

General note on diversions

Companies such as Premier Energy SURVEYS can carry out CAT (Cable Avoidance Tool) scans and GPR (Ground Probing Radar) surveys to determine depth and location of plant, although their accuracy can be impaired due to congestion of plant or variations in ground conditions/plant material types.

We recommend, as a minimum, that a CAT scan/GPR survey is carried out to determine the location of all utility plant in the vicinity of the site to



establish the extent and necessity of all diversions. From this survey, further trial holes may be recommended to verify the exact location of services and possible diversions.

Site information

The information issued to each utility/organisation about the proposed development was as follows:

Table 1: Drawings

Drawing/Source	Reference No.
Location Plan	Promap

Table 2: Dwelling Schedule

Dwelling Type	No Beds	Total
Flat	2	300
Site to be split between 2 areas.		
Total		300

Source: Client

Table 3: Commercial Schedule

Unit	Use	Area (m2)
1	Retail	200

Source: Client

Table 4: Type of Heating

All units to be heated by Gas.

Source: Client



Executive Summary

The following summary is a collation of the information contained within the body of the main document. This is purely for headline purposes only and must be read in conjunction with details contained in the report.

Electric

Disconnections

A contingency of £5,000 should be allowed for basic disconnections.

Diversions

TBC - Dependent on locations of proposed entrances.

Reinforcement

New HV cables required from two POC's, approx. 1,300m in length. Budget costs of £650,000 apply.

New Connections

Two new substations required on-site. Budget costs of £260,000 apply.

Water

Disconnections

A contingency of £4,000 should be allowed for basic disconnections.

Diversions

TBC – Dependent of location of proposed entrances.

Reinforcement

390m of off-site mains reinforcement required. Budget cost of £105,300 anticipated although off-setting of infrastructure charges to be clarified.

New Network (Mains)

As there is no site plan available an assumed mains length of 500m for the north area and approx. 200m for the south section of the site is anticipated. This equates to a total budget cost of £91,000.

New Connections (Services)

Budget connection cost is between £38,000 to £120,000 depending on whether individual connections or bulk connections are specified. Commercial connections approx. £1,000 each.

Infrastructure Charges

Residential charges for water and sewerage approx. £212,328 at current rates. Commercial Infrastructure Charges will be based on the meter size and loading units therefore additional charges will apply.

Gas

Disconnections

Assumed to be dealt with by National Grid therefore costs not included in this report.



Diversions

Assumed to be dealt with by National Grid therefore costs not included in this report.

Reinforcement

Not anticipated.

New Connections

Gas supply to centralised plant. Allow budget costs of £43,334 for 2 x MP connections to a gas governor on each site and service to 2 x bulk meters.

Openreach

Diversions

Diversions are likely. Openreach require a cheque for £600 inc VAT to provide a C4 budget estimate.

New Connections

The rebate for the residential element is expected to be £15,000 based on 300 flats.

Virgin Media

Diversions

Diversions are likely. Virgin Media require a cheque for £720 inc VAT to provide a C4 budget estimate.

New Supplies

New connections possible. Further investigation required.

Others

Mobile Masts

Vodafone base station are located close to the site boundary. Further investigation required.



The cost summary is not a complete schedule of costs. It may consist of a combination of costs provided by the utilities, PES's estimation of PC sums or other sources of information. Additional costs may be incurred, as further information is known about the development proposals and utility infrastructure requirements.

Figures shown below should be read in the context of the details contained in this report. It is recommended that full quotations are obtained if it is critical for contractual purposes.

Table 5: Budget cost summary

Utility	Disconnections	Diversions	Reinforcement	New Connections
Electric	£5,000	TBC	£650,000	£260,000
Water (Mains)	£4,000	TBC	£105,300	£91,000
Water (Services)	N/A	N/A	N/A	£121,000
Water (Infrastructure)				£212,328
Gas	Yes	Yes	N/A	£43,334
Openreach	Yes	TBC	N/A	(contribution) £15,000
Virgin Media	Yes	TBC	N/A	See Report
Others (listed below)				
Vodafone Mast	N/A	See Report		

Source: PES/Utilities

Table 6: Abbreviations used

Note	Meaning
N/A	Disconnections, diversions or reinforcement are “not anticipated” by the utility company.
TBC	“To be confirmed” – a response is still awaited from the relevant utility company.
Possible	Utility plant exists in area and either PES or the utility thinks diversions or reinforcement may be required. Further investigation is recommended.
Yes	Disconnections, diversions or reinforcement will be required and it is likely that costs will be the responsibility of the client unless otherwise stated.
£	£ sums are rounded to the nearest £1000.

The Distribution Network Operator is UK Power networks.

Based on the utility record plans there is EHV/HV/LV apparatus in the vicinity of the site.

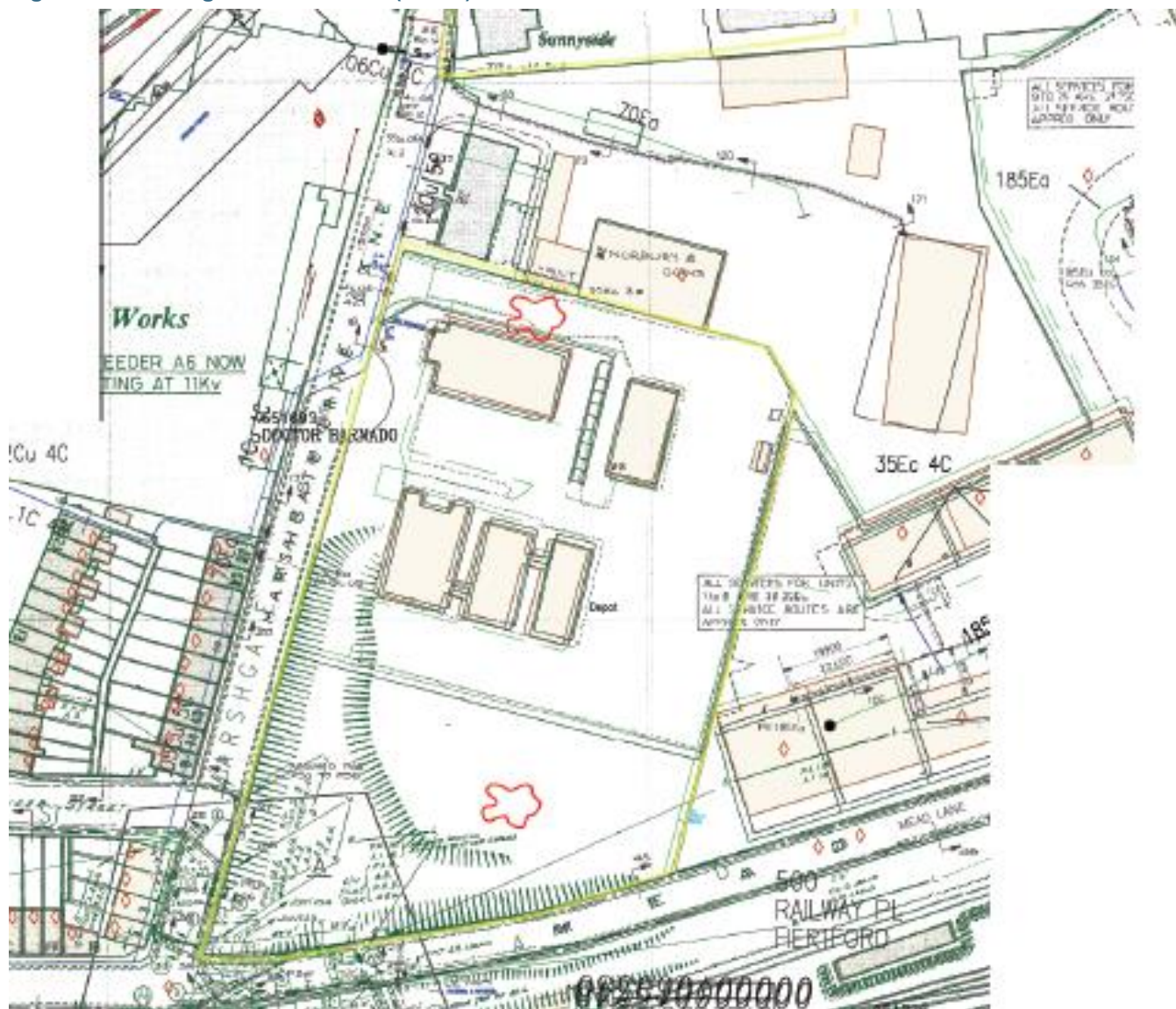
Figure 1: Existing UKPN Network (north)



To the north of the site there is an HV cable route located in the tow path area. The cable is shown parallel with the site boundary and appears to serve an existing substation labelled as Hertford Lock located just to the east of the site boundary. There are also overhead LV poles and cables near the north-east corner of the site serving properties located on the opposite side of the canal. This apparatus appear to be outside of the site boundary but it is recommended that the plant is surveyed to ensure it can be maintained during works.

To the west of the site there are a number of HV and LV cables located in the carriageway and footpath areas of Marshgate Drive. An existing substation is located on the opposite side of the road to the site and is labelled as Marshgate Canal Bridge. This appears to be a recently built substation potentially associated with the developments on the west side of Marshgate Drive.

Figure 2: Existing UKPN Network (south)



Source: UKPN

There are various LV cables shown to enter the middle section of site between the two development areas. The cables are shown to serve number 28 and various industrial units. It is assumed this area will be retained and therefore diversion of this plant is not anticipated on the basis the site works do not extend into the area of the cables.

A service cable is shown into the south section of the site from Marshgate Drive, it is labelled as abandoned. This will need to be confirmed by UKPN prior to starting on-site.



There are also various LV and HV cables in the footpath area on the site side of Marshgate Drive near the junction of Mead Lane, to the south west of the site. Various cables including HV are routed in the footpath and carriageway on along Mead Lane parallel to the south boundary of the site.

Diversion of the UKPN apparatus will be dependent on the location of the proposed entrances into the site. At this stage the locations are unknown. A typical budget cost of **£25,000** should be allowed based on lowering 2 x HV cables per 15m wide entrance. The cost will be confirmed once details are provided at procurement stage.

Disconnections

A contingency of **£5,000** should be allowed for basic disconnections.

Diversions

TBC - Dependent on locations of proposed entrances.

Please note that there is a new site under construction on the opposite side of Marshgate Drive. This may be served via an IDNO although initially this has not been highlighted on any of the searches carried out. However, the records may not be up to date on the UKPN system at the time of our searches.

Please note that not all service connections or private apparatus are shown on the utility record plans. Redundant services will require disconnection prior to starting on-site. A contingency of **£5,000** should be allowed for basic disconnections.

1.2. New Connections

UKPN have confirmed that there is insufficient capacity in the existing LV network to serve the development.

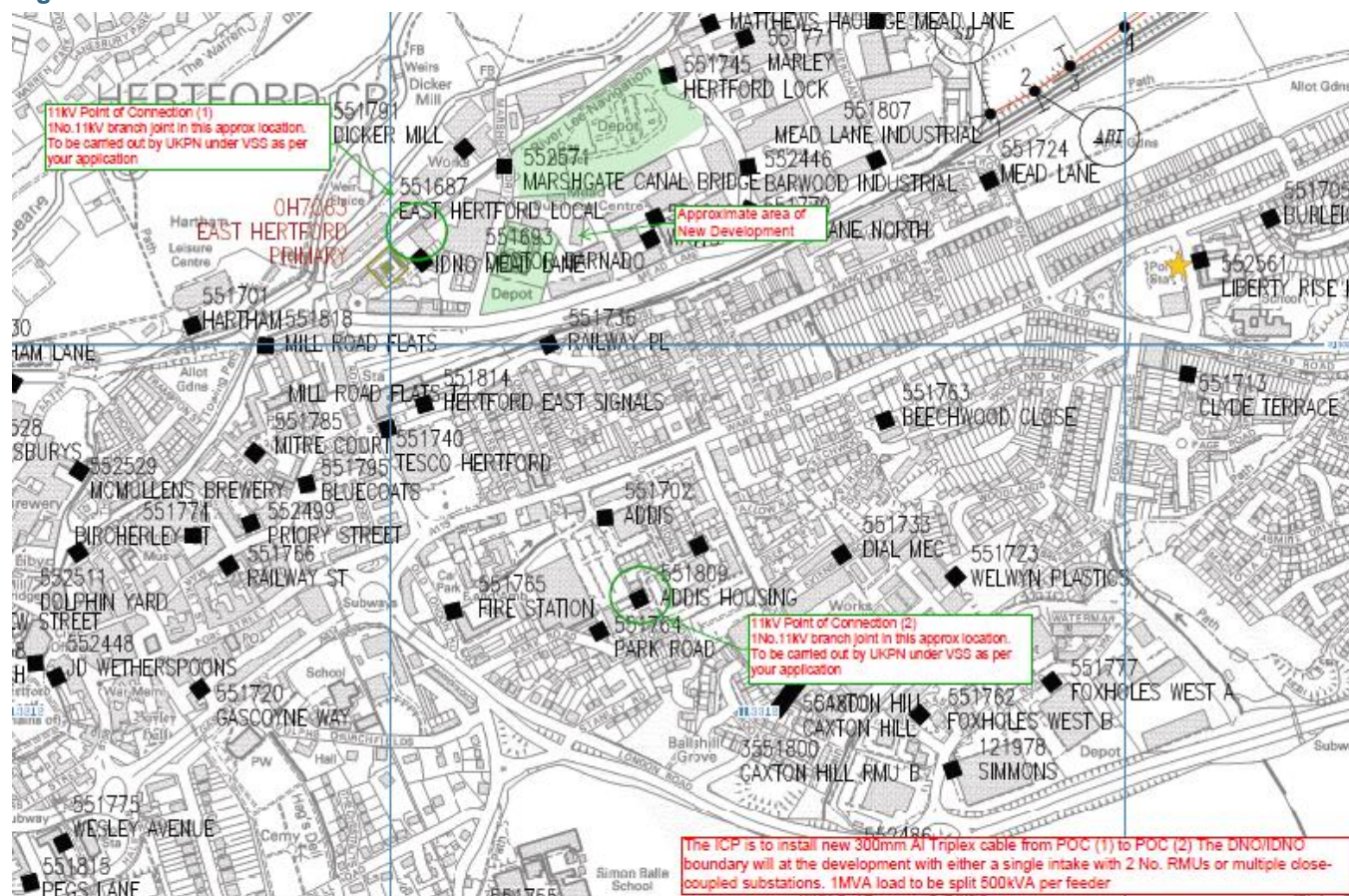
UKPN have provided a budget estimate of £185,000 to serve the site. This is based on there being sufficient capacity to serve the site from the local HV network.

One new substation will be required in the northern area to provide connections to 200 gas heated flats and one new substation in the southern area to provide connections to 100 gas heated flats and 250kVA commercial connection.

This cost does seem low given that two new substations are required, therefore PES recommends a budget of **£260,000**.

This will also assume a supply to a suitable location, probably in a ground floor intake room. UKPN's costs do not include risers and laterals to meter positions – please liaise with your electrical contractor for a PC sum for this element of works.

Figure 3: UKPN POC Locations



Source: UKPN

In addition, a formal point of connection quote from UKPN has been received. They have provided a cost of **£19,415.10** for a connected load of 1MVA to the HV network. UKPN have advised that the load will require two points of connection. The first POC is located near the Primary Substation to the west of the site in the tow path. The second POC is to the HV network in Wisdom Drive to the south of the site. This will require an HV cable to be installed from each POC to the site and terminate at the RMU. The cable route is approx. 1,300m in length. This work can be done by an ICP or IDNO and is expected to cost in the region of **£650,000**.

A route proving exercise will need to be carried out to agree the final route. There are likely to be complications with the connection in the tow path and potential 3rd party issues to resolve. Programme to agree planning, highway notices periods, work lead-in and actual construction is likely to take 18 months.

Additional costs will apply to extend the HV supply to the on-site substations and then at LV to individual meter positions. These works/costs could be via an ICP or IDNO.

If you wish to secure this load it may be worth considering paying the POC quote although final design of the site may alter the capacity and the POC may need updating.

A space of at least 4m x 4m should be allowed for a substation in a GRP kiosk. A space of 5m x 5m should be allowed for a brick-built substation enclosure. The developer is responsible for obtaining planning permission for brick-built enclosures. Vehicular access will be required to the substation position.

At least 4-6 months should be allowed for a new substation to be installed and commissioned.

UKPN note that if the price of the electricity connections is critical to your decisions or financial commitment to this project, you are strongly advised to consider the option of asking them to provide a formal quotation.

Reinforcement

New HV cables required from two POC's, approx. 1,300m in length. Budget costs of **£650,000** apply.

New Connections

Two new substations required on-site. Budget costs of **£260,000** apply.

2. Water

The local incumbent water company is Affinity Water.

2.1. Existing Network

Based on the utility record plans there are various water mains in the vicinity of the site.

Figure 4: Existing Affinity Water Network (east)



Source: Affinity Water

Figure 5: Existing Affinity Water Network (south)


Source: Affinity Water

Figure 6: Existing Affinity Water Network (north)


Source: Affinity Water

To the east of the site there is a 125mm main located close to the boundary near Sanctuary House.

To the west of the site there is a 4" and a 100mm main located in the carriageway of Marshgate Drive. The 4" currently terminates at a washout adjacent the existing entrance. The 100mm main continues north across the canal.

To the south of the site there is a 125mm main located in the footpath area on the site side of Mead Lane.

Diversion of the Affinity water mains will be dependent on the location of the proposed entrances into the site. At this stage the locations are unknown. A typical budget cost of **£15,000** should be allowed based on lowering 1 x 125mm main across a 15m wide entrance. The cost will be confirmed once details are provided at procurement stage.

Disconnections

A contingency of **£4,000** should be allowed for basic disconnections.

Diversions

TBC – Dependent of location of proposed entrances.

Please note that not all service connections or private apparatus is shown on the utility record plans. Redundant services will require disconnection prior to starting on-site. A contingency of **£4,000** should be allowed for basic disconnections.



2.2. New Network (Mains)

Premier Energy Services have made enquiries to Affinity Water regarding the capacity of their mains and their ability to serve the development.

Reinforcement

390m of off-site mains reinforcement required. Budget cost of **£105,300** anticipated although off-setting of infrastructure charges to be clarified.

New Network (Mains)

As there is no site plan available an assumed mains length of 500m for the north area and approx. 200m for the south section of the site is anticipated. This equates to a total budget cost of **£91,000**.

Affinity Water have confirmed that there is a requirement for off-site reinforcement. At this stage they have not provided a location of the works but have advised that 390m of off-site main is required at a budget cost of **£105,300** for the works. They also note that infrastructure charges can be off-set against the off-site works but do not clarify at this stage whether the cost provided already allows for deduction of the infrastructure charges. Therefore for budget purposes it would appear the cost they provided should be used at this stage.

Without a proposed site layout it is not possible to establish the exact requirement for on-site mains.

However, It is likely that the on-site mains budget cost will be £130 per metre. As there is no site plan available an assumed mains length of 500m for the north area and approx. 200m for the south section of the site is anticipated. This equates to a total budget cost of **£91,000**.

Under Section 41/42 of the Water Act developers are offered a Mains Agreement Deposit or a Non-Returnable Contribution (NRC). The NRC is a % of the total cost of mains. The NRC for this site is expected to be approx. £30,000.

2.3. New Connections (Services)

The connection type will depending on the site layout. Usually there are two standard methods of metering for blocks of flats.

The first are external individually metered connections located at back edge of footpath areas. This may be suitable for small low rise blocks with mains pressure plumbing systems. To serve 300 units the standard budget connection cost from Affinity Water for an on-site 25mm connection is £400. Total for the site for this method is **£120,000**.

The second method is via bulk supplies to serve boosted cold water tanks and internal fit water meters. Separate meters for the commercial units will also be required. To serve 300 units with 2 x 90mm bulk connections and internal fit meters will be approx. **£38,000**.

The commercial connection will be approx. £1,000.



New Connections (Services)

Budget connection cost is between £38,000 to £120,000 depending on whether individual connections or bulk connections are specified. Commercial connections approx. £1,000 each.

2.4. Infrastructure Charges

These will be payable for each dwelling at the rate set by Ofwat. This is currently set at £353.88 for water and £353.88 for sewerage. The cost for this site would be **£212,328** (of which half would be payable to the separate sewerage company).

Infrastructure Charges

Residential charges for water and sewerage approx. **£212,328** at current rates. Commercial Infrastructure Charges will be based on the meter size and loading units therefore additional charges will apply.

Commercial Infrastructure Charges will be based on the meter size and loading units therefore additional charges will apply.

Credits may be available for previous usage, providing adequate evidence is produced and the usage has been within the last 5 years.

2.5. Drainage

The local sewerage company is Thames Water. Utility record plans are enclosed for information only.

Please note that the utility record plans show drainage plant within the site boundary.

3. Gas

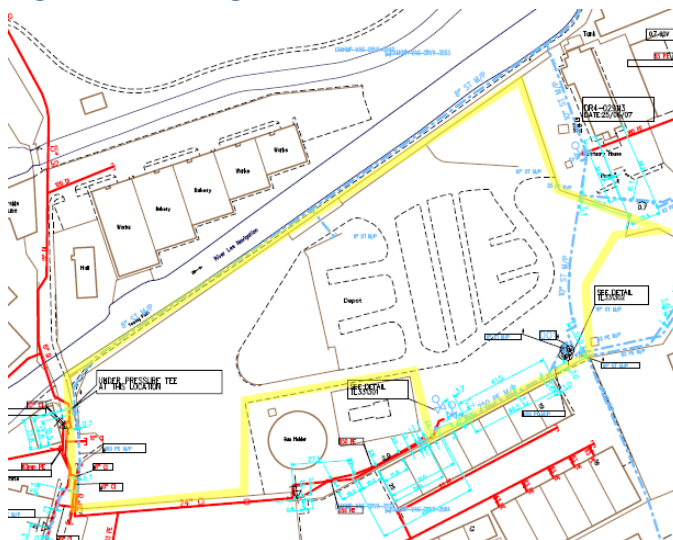
The Gas Transporter is National Grid Gas.

3.1. Existing Network

Based on the utility record plans there are various gas mains in the vicinity of the site.

Figure 7: Existing National Grid Gas Network


Source: National Grid Gas

Figure 8: Existing National Grid Gas Network


Source: National Grid Gas

The site is currently a National Grid gas holder compound with various equipment and apparatus within the site and also external to the site. At the time of the site survey most of the site had been cleared of any visible structures.

To the north of the site there is an 8" ST MP main located in the tow path parallel with the north boundary. A section of MP main extends into the site and terminates 15m into the site. There is a section of 10", 8" and 250mm MP main shown within the site near to the east boundary, the 250mm MP main is shown serving a gas governor located within the site. A 250mm / 24" CI LP main is shown from the governor routed towards Marshgate Drive. At this stage we assume that this issue will form part of site clearance discussions direct with National Grid.

To the west of the site there are 24", 15" and 10" LP mains plus an 8" MP main located in the carriageway and footpath areas of Marshgate Drive. A 10" LP main is shown to extend into the site via the existing entrance and terminate just inside the north-west site boundary. Any construction works near this boundary will need to be coordinated with the existing mains to ensure there is adequate clearance from the MP / LP main.

To the south of the site there is a 150mm DI LP main located in the carriageway area of Mead Lane. To note there is a 63mm LP connection that extends in to the west of the site from Marshgate Drive.

[illegible]

GTC also have a network in Marshgate Drive serving the new site on the opposite side of the road from the site.

Energetics have also responded regarding their network and confirmed that they do not currently have plant in the area.

Assumed to be dealt with by National Grid therefore costs not included in this report.

Assumed to be dealt with by National Grid therefore costs not included in this report.

Please note that not all service connections or private apparatus is shown on the utility record plans. Redundant services will require disconnection



prior to starting on-site. At this stage the disconnection strategy will need to form part of the overall National Grid decommissioning process.

3.2. New Connections

National Grid have confirmed that the nearest main with sufficient capacity is 2m from the site boundary and is an MP main.

Reinforcement

Not anticipated.

New Connections

Gas supply to centralised plant. Allow budget costs of **£43,334** for 2 x MP connections to a gas governor on each site and service to 2 x bulk meters.

AWH has provided a budget cost of **£13,334.10** for the new MP mains serving 2 x MP to LP gas governors located on each of the north and south sites. The governors will serve bulk meters to the communal boiler systems. Cost for the metering is likely to be another **£30,000** based on a suitable external housing to accommodate the meter. No allowance has been made for steelwork or manifold arrangements. This cost is based upon no off-site reinforcement works being required.

A space of 4 x 4m should be allowed for the gas governor in a suitable location with vehicular access and ideally 10m away for the occupied building.

SSE Pipelines have stated that at 2015 rates they consider budget costs to be in the vicinity of £450 per plot. This budget is not specific to this site.

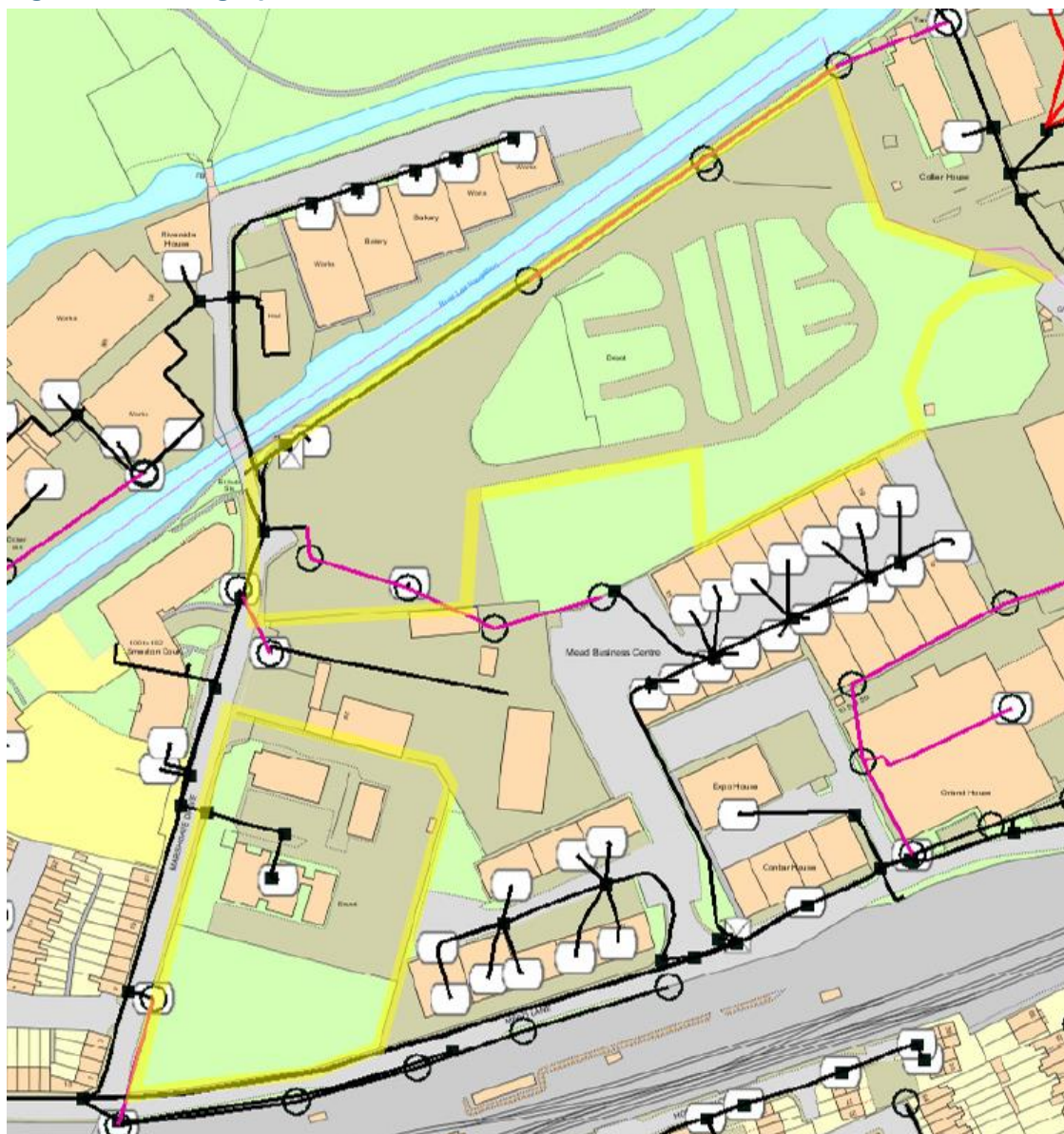
4. Telecoms

Openreach (part of the BT Group) is the local telecommunications company.

4.1. Existing Network

Based on the utility record plans there are various overhead cables, underground ducts, chambers and other surface equipment in the vicinity of the site.

Figure 10: Existing Openreach Network



Source: Openreach

To the north of the site there is a duct and chamber route located within the tow path. There are also various overhead poles and lines located along the route serving house boats and properties on the opposite side of the canal. Part of the duct route appears to cut the corner of the north-west section of the site. This will require CAT Scanning to establish if diversion is required.

To the west of the site there is a duct and chamber route located in the footpath area of Marshgate Drive. There are various sections of duct and overhead lines that extend into the boundary of the site. An overhead line is shown from the network in Marshgate Drive linking to the network in Mead Business Centre to the east of the site. This network may require maintaining if it serves properties outside of the site boundary. This may therefore require a diversion strategy to deal with this.



There are other sections of duct route that extend into the south section of the site. These appear to terminate inside the site and potentially these ducts are redundant and can be disconnected.

Having reviewed the development proposals, diversion of the Openreach network may be necessary. CAT Scan/trial holes are recommended in conjunction with evaluation of access/crossover construction details.

Costs could be high and further investigation is required.

To provide a C4 budget estimate Openreach require a design fee of **£600**, which at this stage you have opted not to pay.

Diversions

Diversions are likely. Openreach require a cheque for **£600** inc VAT to provide a C4 budget estimate.

There is the likelihood of fibre optic and/or copper telecoms equipment in ducts that extend into site. These need disconnecting prior to site demolition.

4.2. New Connections

Openreach will usually carry out any off-site works to bring their supply network to the site at no cost to the developer. However, if costs exceed £3400 per plot Openreach will charge the excess to the developer.

The on-site duct and joint box installation can be undertaken by the developer in accordance with standard Openreach design proposals and specifications. These works are carried out under contract to Openreach at a rate agreed by the House Builders Federation. These rates are currently set at £50 per flat and either £140 or £151 per house depending on the site location.

The rebate for the residential element is expected to be **£15,000** based on 300 flats.

New Connections

The rebate for the residential element is expected to be **£15,000** based on 300 flats.

Based on the site postcode and BT's broadband speed checker, BT estimates the future broadband connection speed to be 8 Mbps.

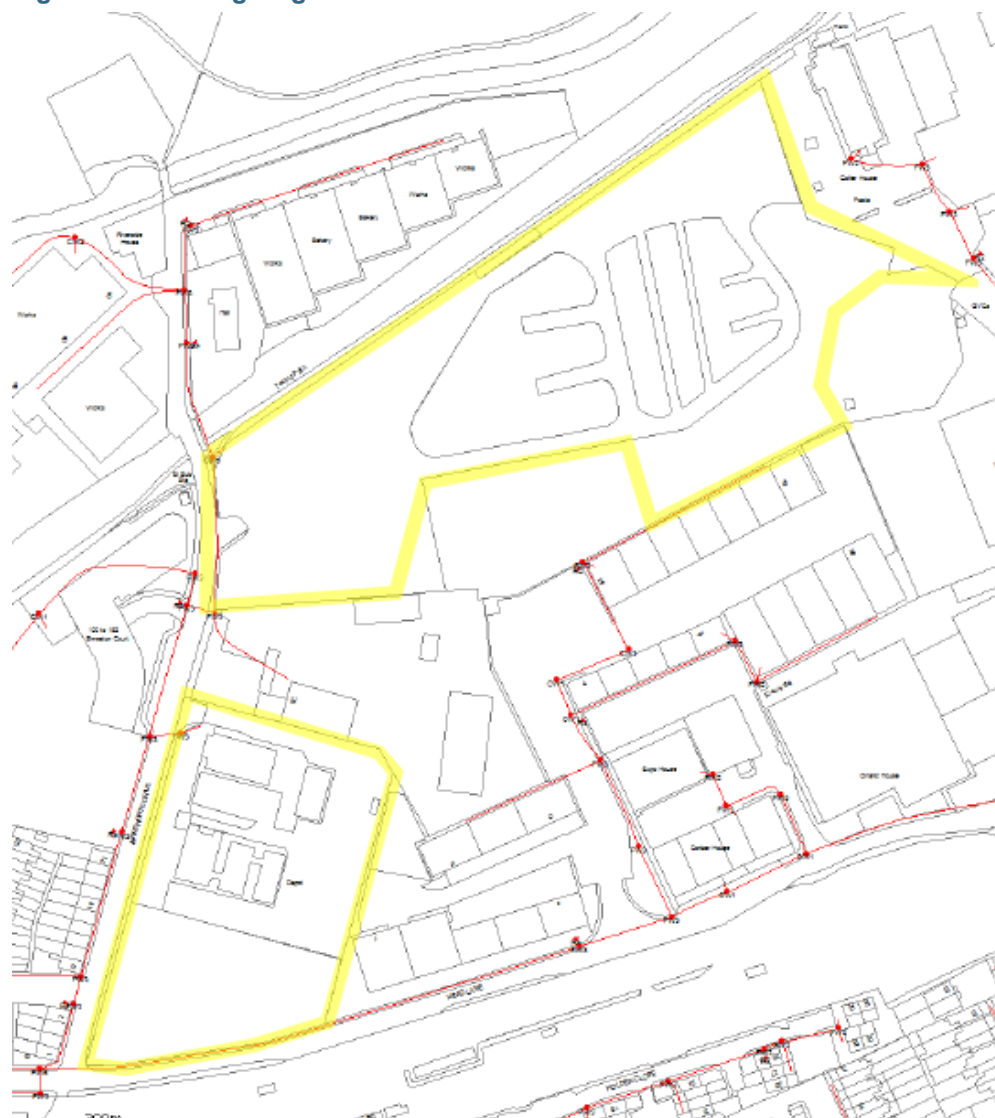
5. Cable TV

Virgin Media can provide phone, cable television and broadband services.

5.1. Existing Plant

Based on the utility record plans there are various underground ducts, chambers and other surface equipment in the vicinity of the site.

Figure 11: Existing Virgin Media Network



Source: Virgin Media

To the north of the site there is a short section of duct shown to extend from Marshgate Drive into the tow path area. This duct terminate near the north-west corner of the site.

To the west of the site there is a duct and chamber route in the footpath of Marshgate Drive. A section is shown across the existing site entrance area. This route may be affected depending on the location of the proposed site entrance in the area. Once details are available of the site proposals the potential diversion in this area can be reviewed.

There is a section of duct that is serving the existing commercial site that is located between the north and south sites. This route will require maintaining during your works.

To the south of the site there is a duct that enters the site from Marshgate Drive. This appears to be redundant supply but will require investigation / confirmation that it can be disconnected.



There is also a duct and chamber route shown in the footpath on the site side of Mead Lane.

At this stage it is not possible to evaluate the diversion requirements as the the location of the proposed entrances are not known at this stage.

To provide a C4 budget estimate Virgin Media require a design fee of **£720**. Please advise if you wish to progress with the C4 diversion cost.

Diversions

Diversions are likely. Virgin Media require a cheque for £720 inc VAT to provide a C4 budget estimate.

5.2. New Connections

Virgin Media has implemented strict financial controls for any new network projects. They do not guarantee to provide cable services to any site because each development is subject to a financial appraisal.

If the site passes the financial criteria then the developer, under contract to Virgin Media, can undertake the installation.

New Supplies

New connections possible. Further investigation required.

When the site is ready to proceed, Virgin Media will raise a business case proposal – this may include costs for the developer to bear.

6. Communications

6.1. Vodafone Ltd

WS Atkins has confirmed Vodafone plant is not affected.

6.2. Colt

CA Telecom has confirmed Colt plant is not affected.

6.3. KPN/TATA

McNicholas has confirmed KPN/TATA plant is not affected.

6.4. BSkyB/Easynet

BSkyB has confirmed plant is not affected.

6.5. Interoute (inc 51 Degrees)

Plancast has confirmed Interoute plant is not affected.

6.6. SOTA

Desk research indicates SOTA plant is not in the vicinity of the site.

6.7. Affiniti

Desk research indicates Affiniti plant is not in the vicinity of the site.

6.8. Level 3/Global Crossing UK/Global Crossing PEC/Fibernet UK/FibreSpan

Instalcom has confirmed Fibernet, Global Crossing UK, Global Crossing PEC, Level 3 and FibreSpan plant is not affected.

6.9. Verizon

Verizon has confirmed plant is not affected.

6.10. Orange/O2/T-Mobile/Vodafone/3

Ofcom Sitefinder internet enquiry shows responses received from Vodafone indicating they have mobile masts close to the site.

Figure 12: Existing Vodafone Mast



Source: Ofcom

Mobile Masts

Vodafone base station are located close to the site boundary. Further investigation required.



6.11. Vtesse Networks

Vtesse has confirmed plant is not affected.

6.12. TeliaSonera

Telent has confirmed TeliaSonera plant is not affected.

6.13. euNetworks

Desk research indicates euNetworks plant is not in the vicinity of the site.

6.14. SSE Neos Networks

Desk research indicates SSE Neos plant is not in the vicinity of the site.

6.15. CityFibre

Desk research indicates CityFibre plant is not in the vicinity of the site.

7. Tunnels & Pipelines

7.1. LinesearchbeforeUdig

AWE Pipeline, BOC Limited, BP Midstream Pipelines, BPA, Carrington Gas Pipeline, Centrica Energy, Centrica Storage Ltd, ConocoPhillips (UK) Ltd, Coryton Energy Co Ltd (Gas Pipeline), CSP Fibre c/o Centara, EirGrid, Electricity North West Limited, E-on UK Plc (Gas Pipelines Only) ESP Utilities Group, ESSAR, Esso Petroleum Company Limited, FibreSpeed Limited, Gamma, Humbley Grove Energy, HV Cables, IGas Energy, Ineos Enterprises Limited, INEOS Manufacturing (Scotland and TSEP), Lark Energy, Lightsource SPV Limited, Mainline Pipelines Limited, Manchester Jetline Limited, Marchwood Power Ltd (Gas Pipeline), National Grid Gas and Electricity Transmission, Northumbrian Water Group, Npower CHP Pipelines, Oikos Storage Limited, Perenco UK Limited (Purbeck Southampton Pipeline), Phillips 66, Premier Transmission Ltd (SNIP), Redundant Pipelines – Land Powers Defence Act 1958, RWEpower (Little Barford and South Haven), SABIC UK Petrochemicals, Scottish Power Generation, Seabank Power Ltd, Shell Pipelines, Total (Finaline, Colnbrook & Colwick Pipelines), Transmission Capital, Vattenfall, Western Power Distribution, Wingas Storage UK Ltd, Zayo Group UK Ltd c/o JSM Group Ltd are not affected.

7.2. BT Deep Level Tunnels

Desk research indicates BT Deep Level Tunnels plant is not in the vicinity of the site.



7.3. Thames Water Ring Main

Desk research indicates that the ring main is not in the vicinity of the site.

7.4. Thames Tunnel

Desk research indicates there are no planned Thames Tunnel works in the vicinity.

7.5. Post Office Tunnels

Desk research indicates Post Office Tunnels are not in the vicinity of the site.

8. Transport

8.1. Docklands Light Rail

Desk research indicates Docklands Light Rail is not in the vicinity of the site.

8.2. London Underground

Desk research indicates LUL plant is not in the vicinity of the site.

8.3. LUL HV Power Assets

Desk research indicates LUL HV Power Assets (the electricity cable network of the London Underground) are not in the vicinity of the site.

8.4. Crossrail

Desk research indicates Crossrail is not in the vicinity.

8.5. Network Rail

Unless the site is adjacent to the railway line Network Rail will not respond. Desk research shows this site is clear of the line.

8.6. Transport for London

Desk research indicates TfL plant is not in the vicinity of the site.

8.7. Trafficmaster

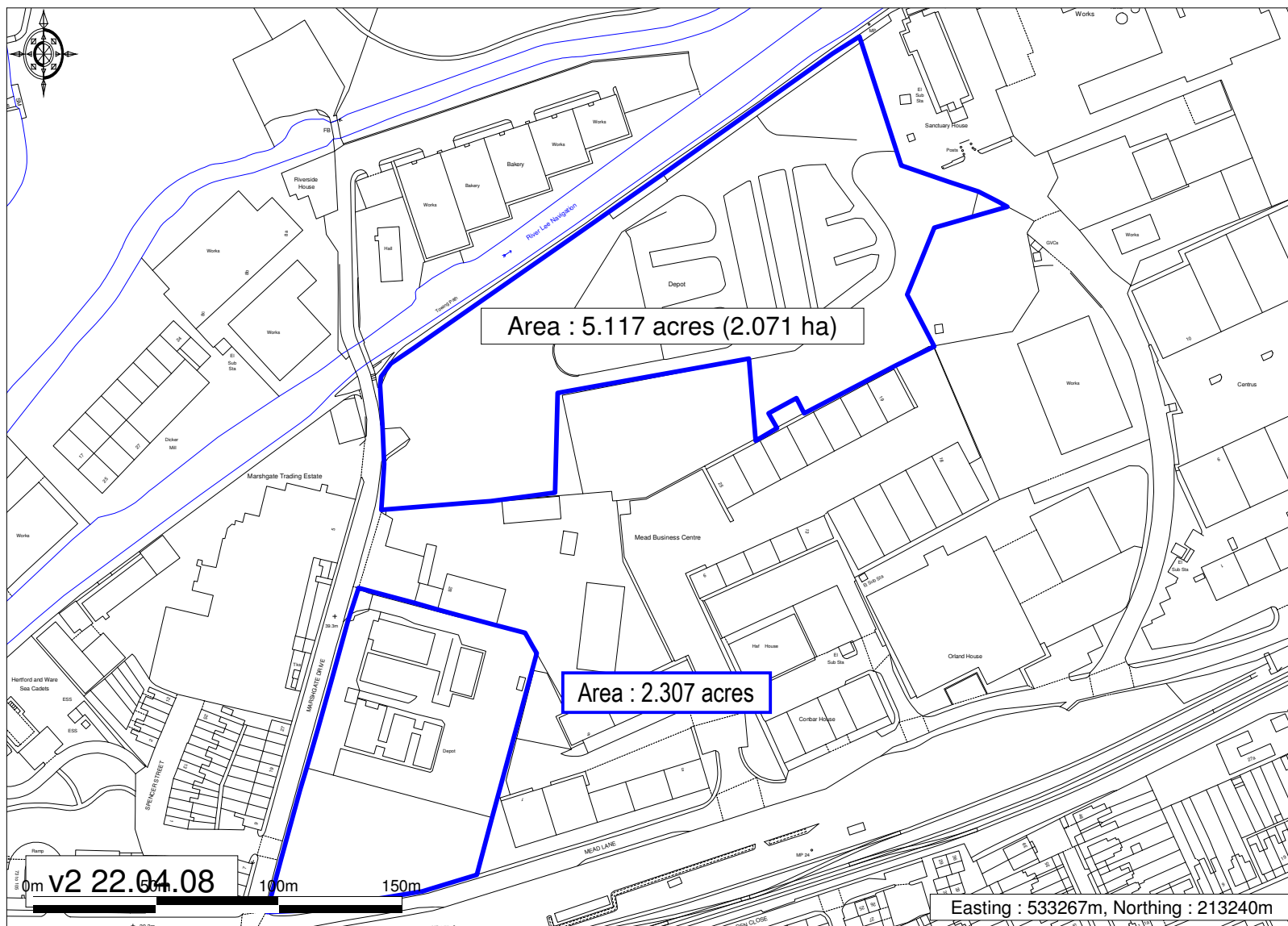
Desk research indicates Trafficmaster apparatus is not in the vicinity.



ENCLOSURES

Type	Company	PES Desk Research	Utility Responded	Awaiting Response
Electric	UK Power Networks		✓	
Water - Mains	Affinity Water		✓	
Water - Sewers	Thames Water		✓	
Gas	National Grid Gas		✓	
	AWH		✓	
Openreach	Openreach (formerly BT)		✓	
Cable TV	Virgin Media		✓	
Communication	Vodafone Ltd		✓	
	Colt		✓	
	KPN/TATA		✓	
	BSkyB/Easynet		✓	
	Interoute (inc 51 Degrees)		✓	
	SOTA	✓		
	Affiniti	✓		
	Level 3/Global Crossing UK/Global Crossing PEC/Fibernet UK/FibreSpan		✓	
	Verizon		✓	
	Orange/O2/T-Mobile/Vodafone/3		✓	
	Vtesse Networks		✓	
	TeliaSonera		✓	
	euNetworks	✓		
	SSE Neos Networks	✓		
	CityFibre	✓		
Tunnels & Pipelines	LinesearchbeforeUdig		✓	
	BT Deep Level Tunnels	✓		
	Thames Water Ring Main	✓		
	Thames Tunnel	✓		
	Post Office Tunnels	✓		
Transport	Docklands Light Rail	✓		
	London Underground	✓		
	LUL HV Power Assets	✓		
	Crossrail	✓		
	Network Rail	✓		
	Transport for London	✓		
	Trafficmaster	✓		

Marshgate Drive, Hertford, Hertfordshire - Uncontrolled Copy



Site is both blue
areas.

National Grid
Location Code 219

DESK RESEARCH

Project No:	600478
Date:	23/11/2015
Client:	St Williams
Site:	Hertford Gas Works

Postcode:	SG13 7AQ		
OS Ref:	TL 33207 13216		
National Grid Ref:	Easting: 533207	Northing: 213216	

UTILITIES

BT OPENREACH Ordnance requested? Broadband check made (SI only)?	Internet <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	Stoke <input type="checkbox"/> N/A <input type="checkbox"/>	SIGNED HS
---	---	--	--------------

GAS NETWORK Plan printed/IGT plans requested if nearby?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	SIGNED HS
---	---	-----------------------------	--------------

VIRGIN MEDIA Plan requested?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	SIGNED HS
--	---	-----------------------------	--------------

TUNNELS & PIPELINES

LINESEARCH Is the site in the vicinity of any oil pipelines etc? If yes, send enquiry to plant operator	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
--	---	--	--------------

THAMES WATER RING MAIN Is the site in the vicinity of the TWU Ring Main? If yes, ensure TWU ordnance shows Ring Main	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	------------------------------	--	--------------

THAMES TUNNEL Is the site in the vicinity of any planned works? If yes, print details	Yes <input type="checkbox"/> Done <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
--	---	--	--------------

MOBILE MASTS

OFCOM SITEFINDER Is the site in the vicinity of a base station? If yes, print details and email to operator if necessary	Yes <input checked="" type="checkbox"/> Done <input checked="" type="checkbox"/>	No <input type="checkbox"/>	SIGNED HS
---	---	-----------------------------	--------------

NATIONALS

AFFINITI/KINGSTON COMMUNICATIONS Is the site in the vicinity of Affiniti plant? If yes, print plan	Yes <input type="checkbox"/> Done <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	---	--	--------------

SOTA Is the site in Kent? If yes, email enquiry to McNicholas	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
--	---	--	--------------

DESK RESEARCH

CITYFIBRE Is the site in the vicinity of CityFibre? If yes, email enquiry to CityFibre	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	---	--	--------------

SSE NEOS NETWORKS Is the site in the vicinity of NEOS Networks? If yes, print plan	Yes <input type="checkbox"/> Done <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	---	--	--------------

TRANSPORT

NETWORK RAIL Is the site either (a) immediately adjacent to or above major Network Rail infrastructure such as substations or (b) on land formerly owned by Network Rail? If yes, email enquiry to Network Rail	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
--	---	--	--------------

CROSSRAIL Is the site in the vicinity of Crossrail? If yes, email enquiry to Crossrail	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	---	--	--------------

TRAFFICMASTER Is the site adjacent to a Trafficmaster installation? If yes, email enquiry to Trafficmaster	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input checked="" type="checkbox"/>	SIGNED HS
---	---	--	--------------

GREATER LONDON

YES ☐ NO ☒

euNETWORKS Is the site in the vicinity of euNetworks plant? If yes, email enquiry to euNetworks	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input type="checkbox"/>	SIGNED
--	---	-----------------------------	--------

If site is within a Greater London Borough, send enquiries to: LONDON UNDERGROUND LUL HV POWER ASSETS TRANSPORT FOR LONDON	Sent <input type="checkbox"/> Sent <input type="checkbox"/> Sent <input type="checkbox"/>	SIGNED
--	---	--------

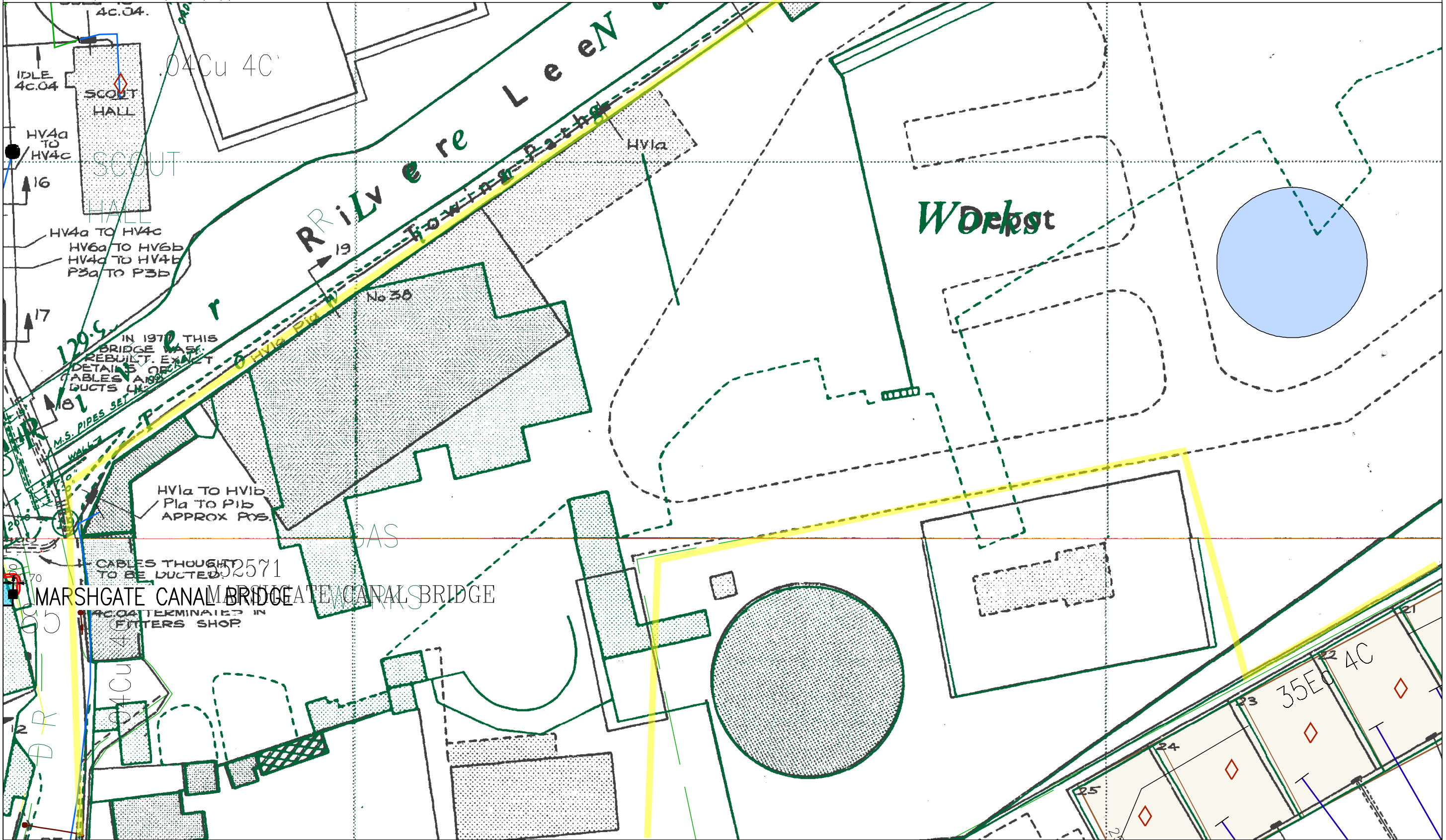
BT DEEP LEVEL TUNNELS Is the Openreach plan marked with hatching in the vicinity of the site? If yes, email enquiry to Openreach	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input type="checkbox"/>	SIGNED
---	---	-----------------------------	--------

INNER LONDON

YES ☐ NO ☒

DOCKLANDS LIGHT RAIL Is the site close to the DLR? If yes, email enquiry to DLR	Yes <input type="checkbox"/> Sent <input type="checkbox"/>	No <input type="checkbox"/>	SIGNED
--	---	-----------------------------	--------

POST OFFICE TUNNELS Is the site close to the tunnels? If yes, only piling or similar depth works will affect plant	Yes <input type="checkbox"/>	No <input type="checkbox"/>	SIGNED
---	------------------------------	-----------------------------	--------



This plan must be used in conjunction with our symbology booklet available from www.ukpowernetworks.co.uk (search for "symbols").

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 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 provided must be given to all people working near UK Power Networks' plant & 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 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 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 to which you have accepted prior to downloading this plan.
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.

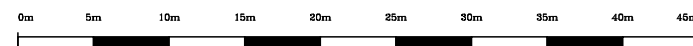
Grid Ref : TL3313SW
Scale 1:500
(When Plotted at A3)
Plotted on : 24/11/2015
Plotted by:
hannah.stalley@premierenergy.co.uk

IF IN DOUBT – ASK! PHONE 0800 056 5866.
EMERGENCY – If you damage a cable or line
Phone 0800 783 8838 (24hrs) URGENTLY

Maps produced at 1:2500 scale are LV 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.

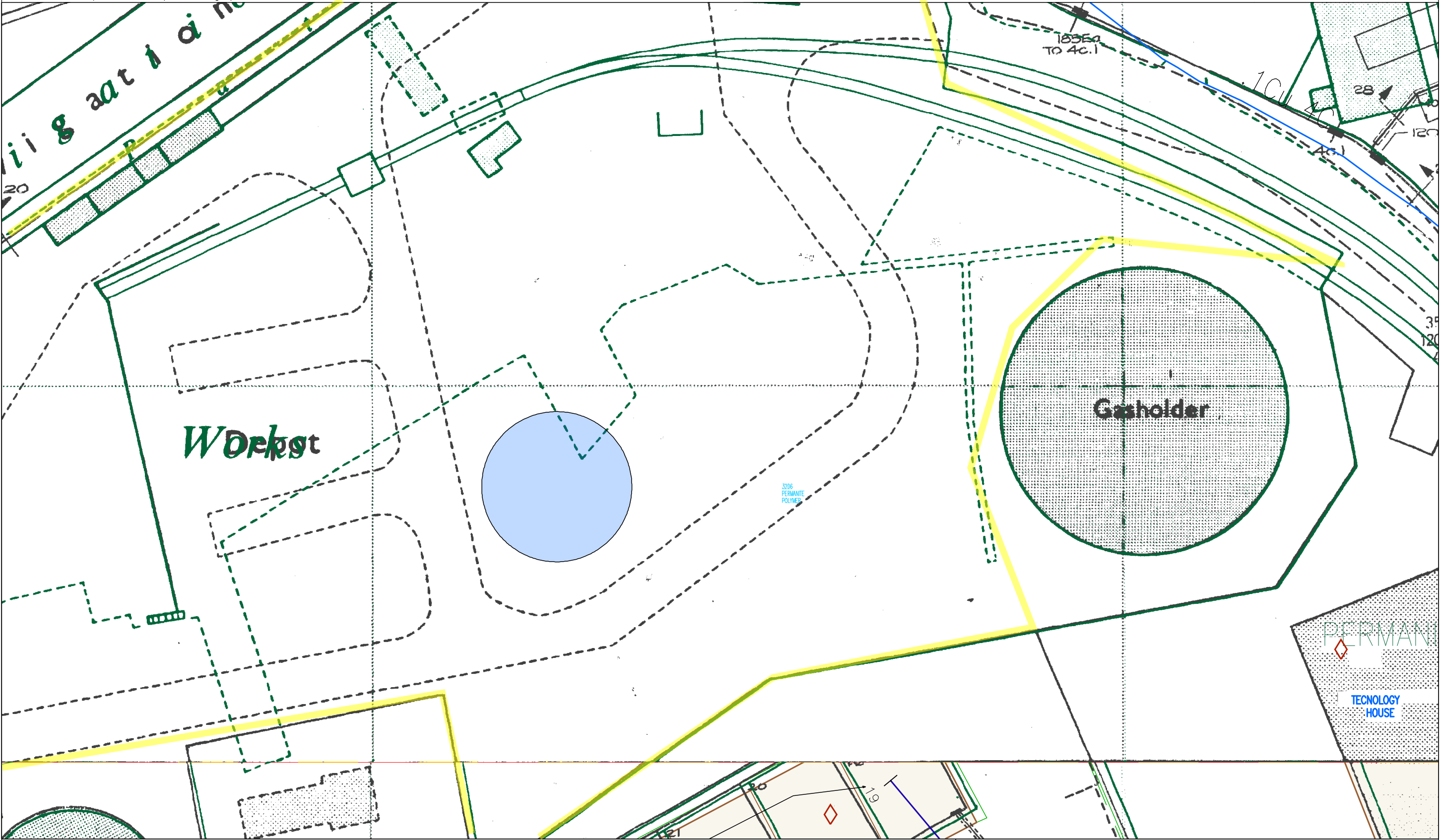
ALWAYS LOOK UP BEFORE YOU START WORK
Refer to HSE Guidance note GS6

Reproduced by permission of Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 100019626. Data has been added to the Ordnance Survey base map; all proprietary rights in such additional data are and shall remain the exclusive property of (c) Eastern Power Networks plc or London 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 licence. All rights in such data reserved.



Maps produced at 1:2500 scale are LV 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.

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 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 to which you have accepted prior to downloading this plan.
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.



0m 5m 10m 15m 20m 25m 30m 35m 40m 45m

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 in conjunction with our symbology booklet available from www.ukpowernetworks.co.uk (search for "symbols").

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 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 provided must be given to all people working near UK Power Networks' plant & 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 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 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 to which you have accepted prior to downloading this plan.
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.

Grid Ref : TL3313SW

Scale 1:500
(When Plotted at A3)

Plotted on : 24/11/2015

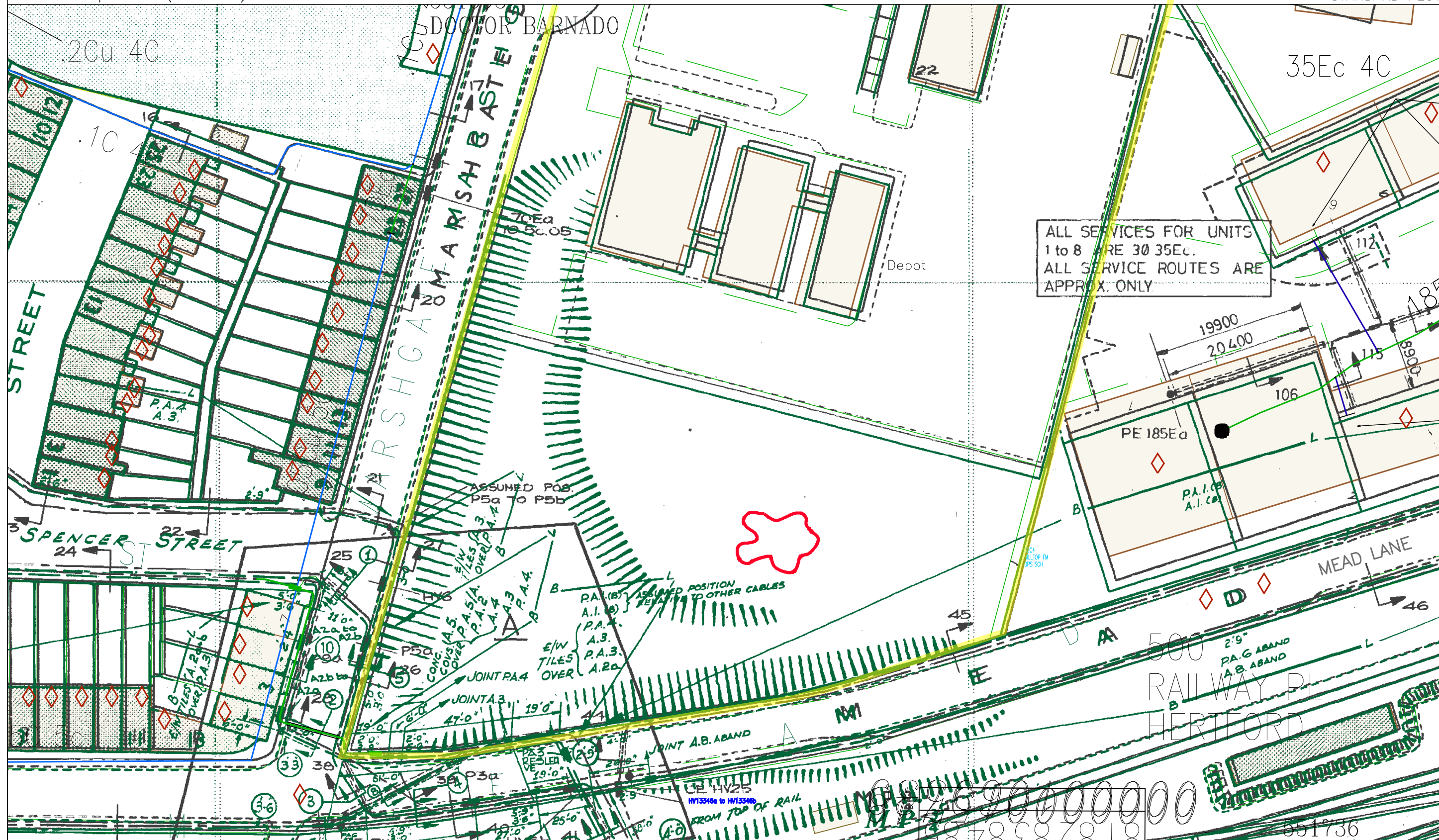
Plotted by:
hannah.stalley@premierenergy.co.uk

IF IN DOUBT – ASK! PHONE 0800 056 5866.
EMERGENCY – If you damage a cable or line
Phone 0800 783 8838 (24hrs) URGENTLY

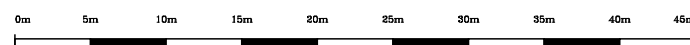
ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are LV 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.

Reproduced by permission of Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 100019626. Data has been added to the Ordnance Survey base map; all proprietary rights in such additional data are and shall remain the exclusive property of (c) Eastern Power Networks plc or London 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 licence. All rights in such data reserved.



ALL SERVICES FOR UNITS
1 to 8 ARE 30 35Ec.
ALL SERVICE ROUTES ARE
APPROX. ONLY



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 in
conjunction with our symbology
booklet available from
www.ukpowernetworks.co.uk
(search for "symbols").

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 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 provided must be given to all people working near UK Power Networks' plant & 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 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 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 the terms of use to which you have accepted prior to downloading this plan.
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.

Grid Ref : TL3313SW

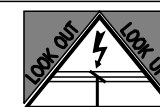
Scale 1:500

(When Plotted at A3)

Plotted on : 24/11/2015

Plotted by:
hannah.stalley@premierenergy.co.uk

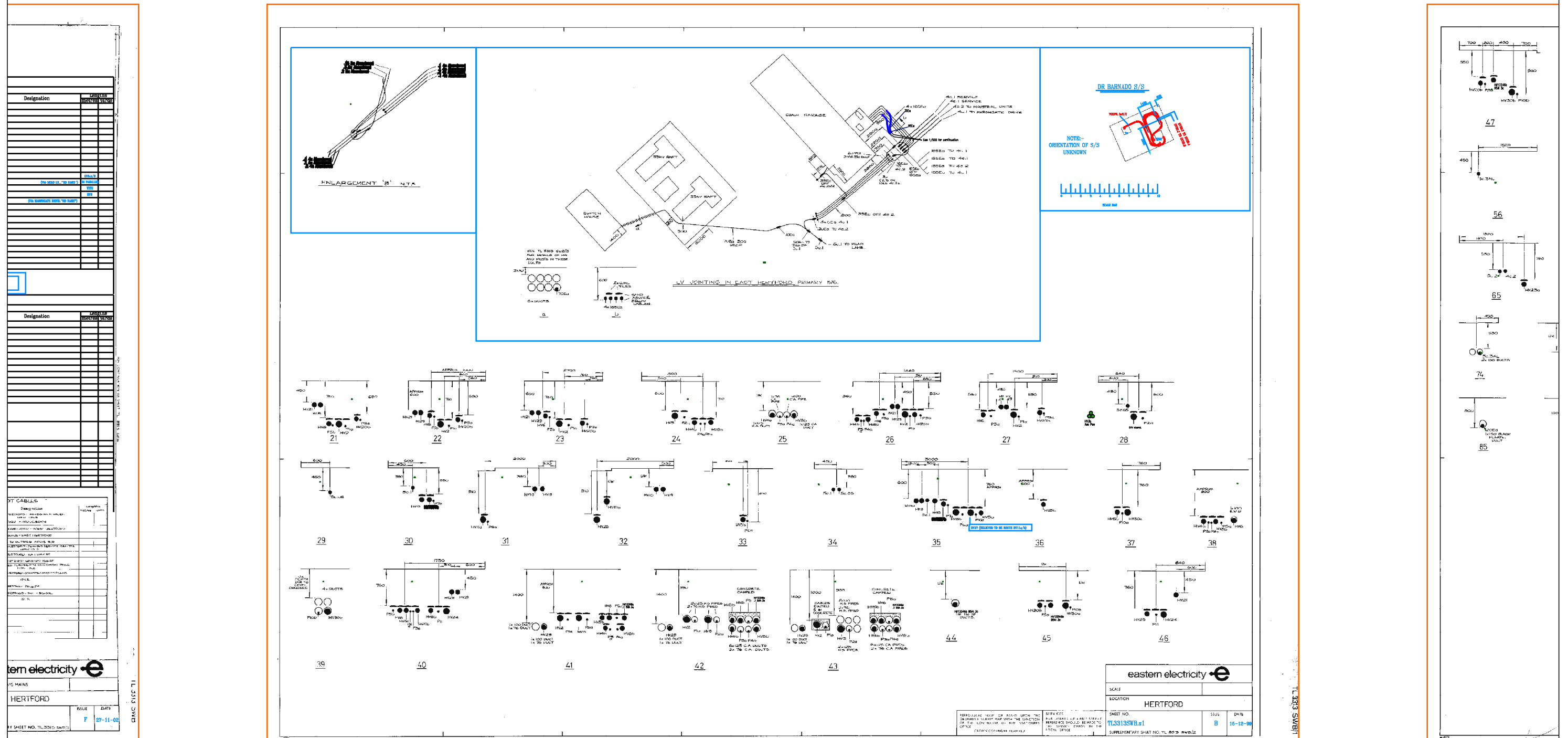
IF IN DOUBT – ASK! PHONE 0800 056 5866.
EMERGENCY – If you damage a cable or line
Phone 0800 783 8838 (24hrs) URGENTLY



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note GS6

Maps produced at 1:2500 scale are LV 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.

S1

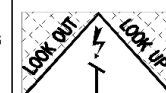


1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified — use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all 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 provided must be given to all people working near UK Power Networks' plant & equipment. Do not use plans more than one day 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 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 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 for any damage, loss, expense, cost, claim, demand 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 you 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.

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.

IF ANY DOUBT – ASK! PHONE 0800 056 5866
EMERGENCY – If you damage a cable or line
Phone 0800 780 0780 (24hrs) URGENTLY

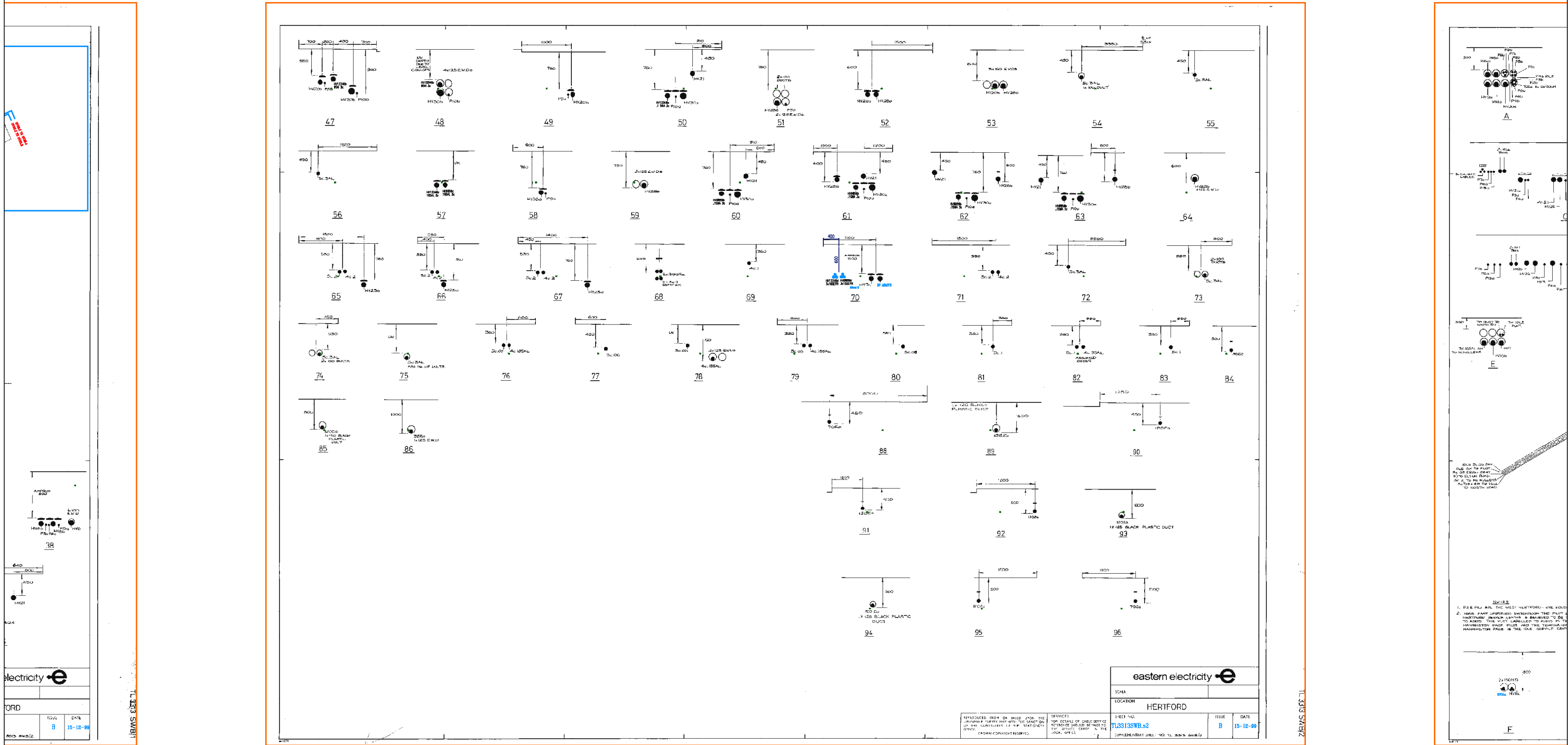


ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note
GS6

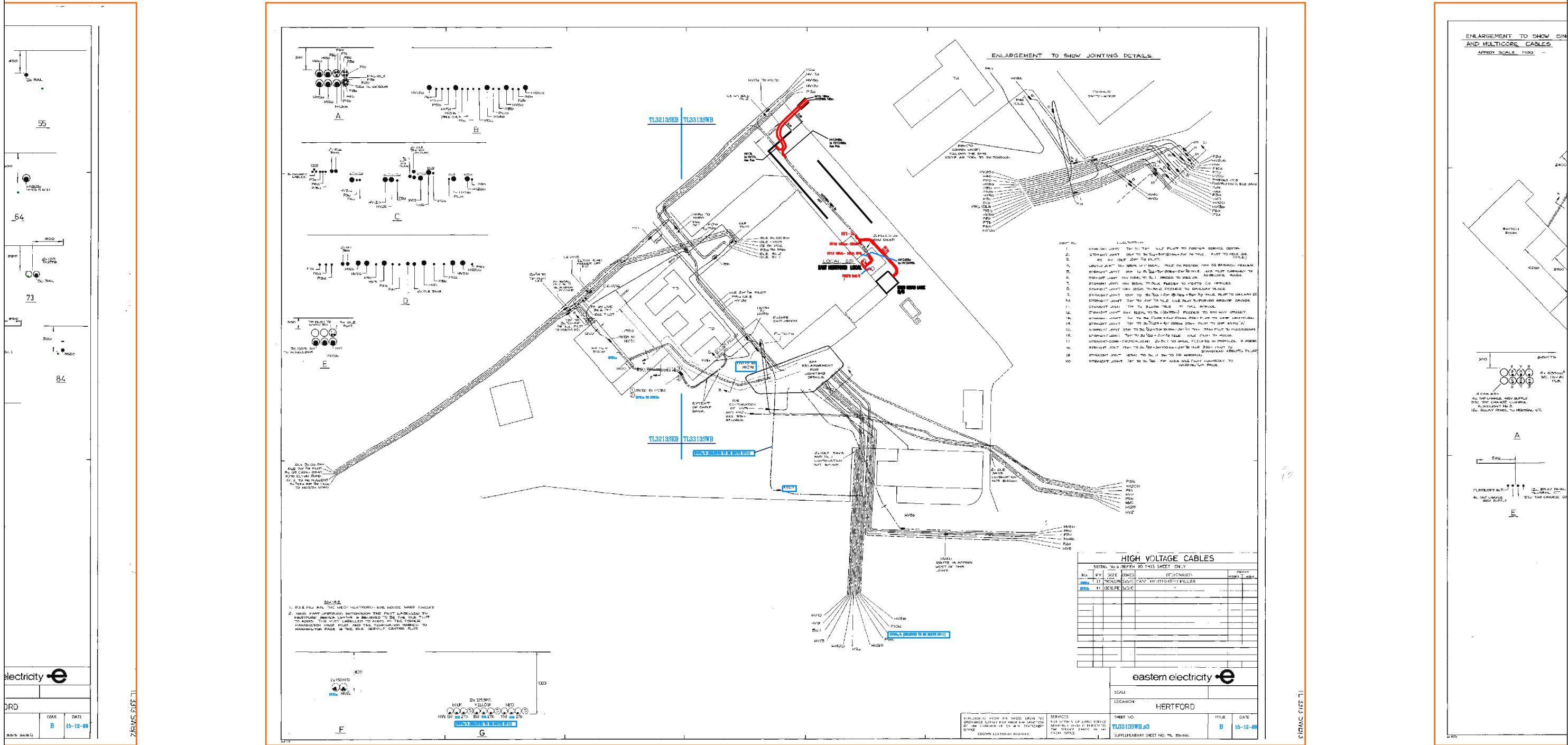


Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (in some cases all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

S2



S3



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 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 & 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 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 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 you 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.

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.

IF ANY DOUBT – ASK! PHONE 0800 056 5866
EMERGENCY – If you damage a cable or line
Phone 0800 780 0780 (24hrs) URGENTLY

ALWAYS LOOK UP BEFORE YOU START WORK
Refer to HSE Guidance note GS6

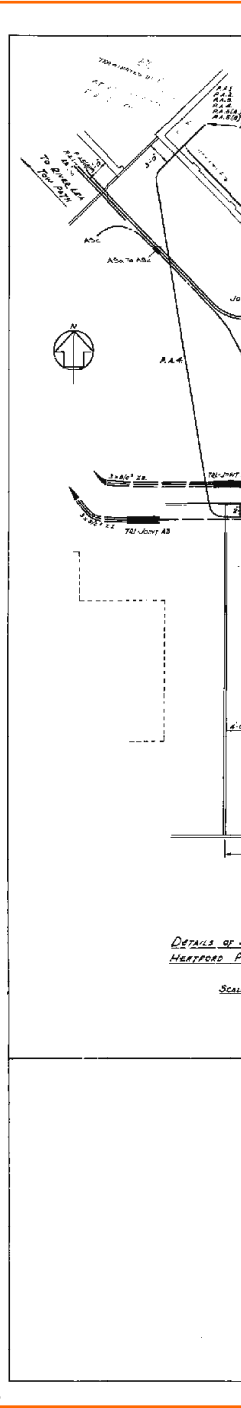
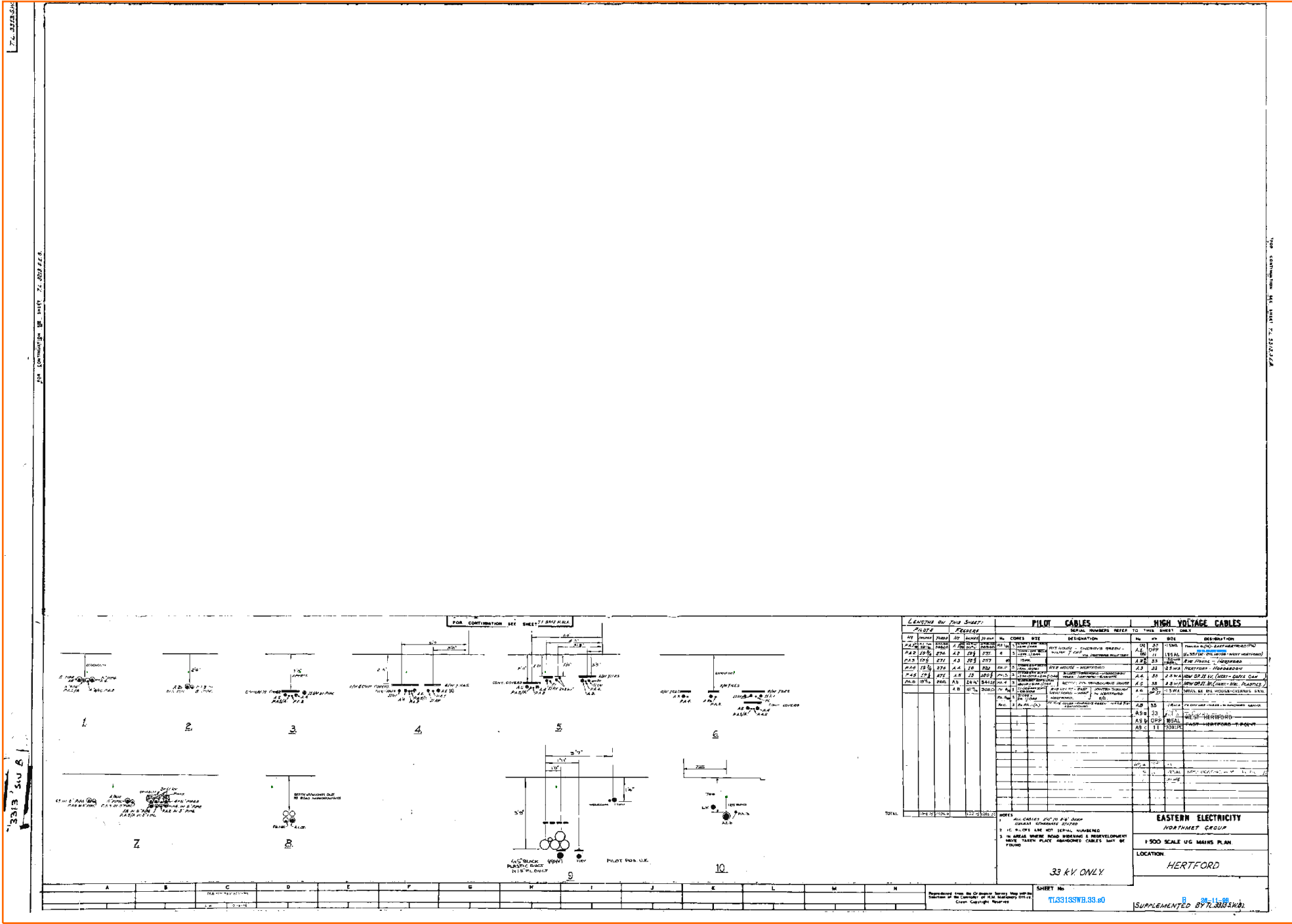
UK Power Networks

Plotted On : 24/11/2015
Plotted by:

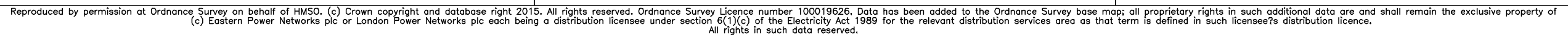
Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (in some case all voltages). Prior to carrying out excavations you must refer to the 1:500 records to determine the location of all known underground plant and equipment.

SO

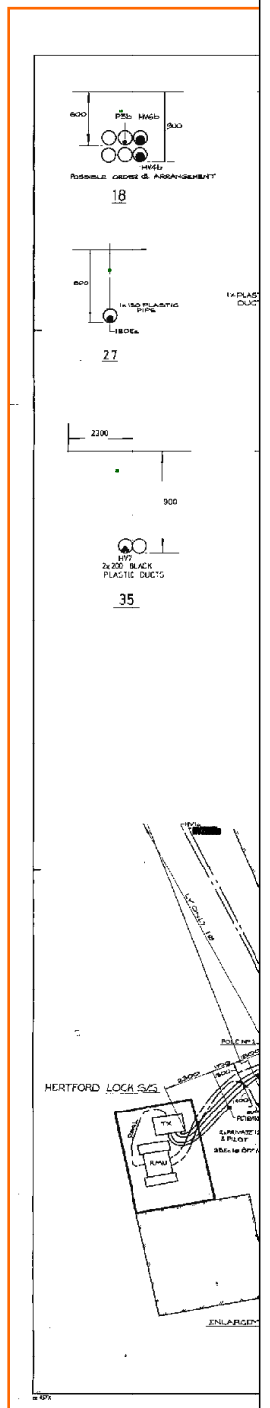
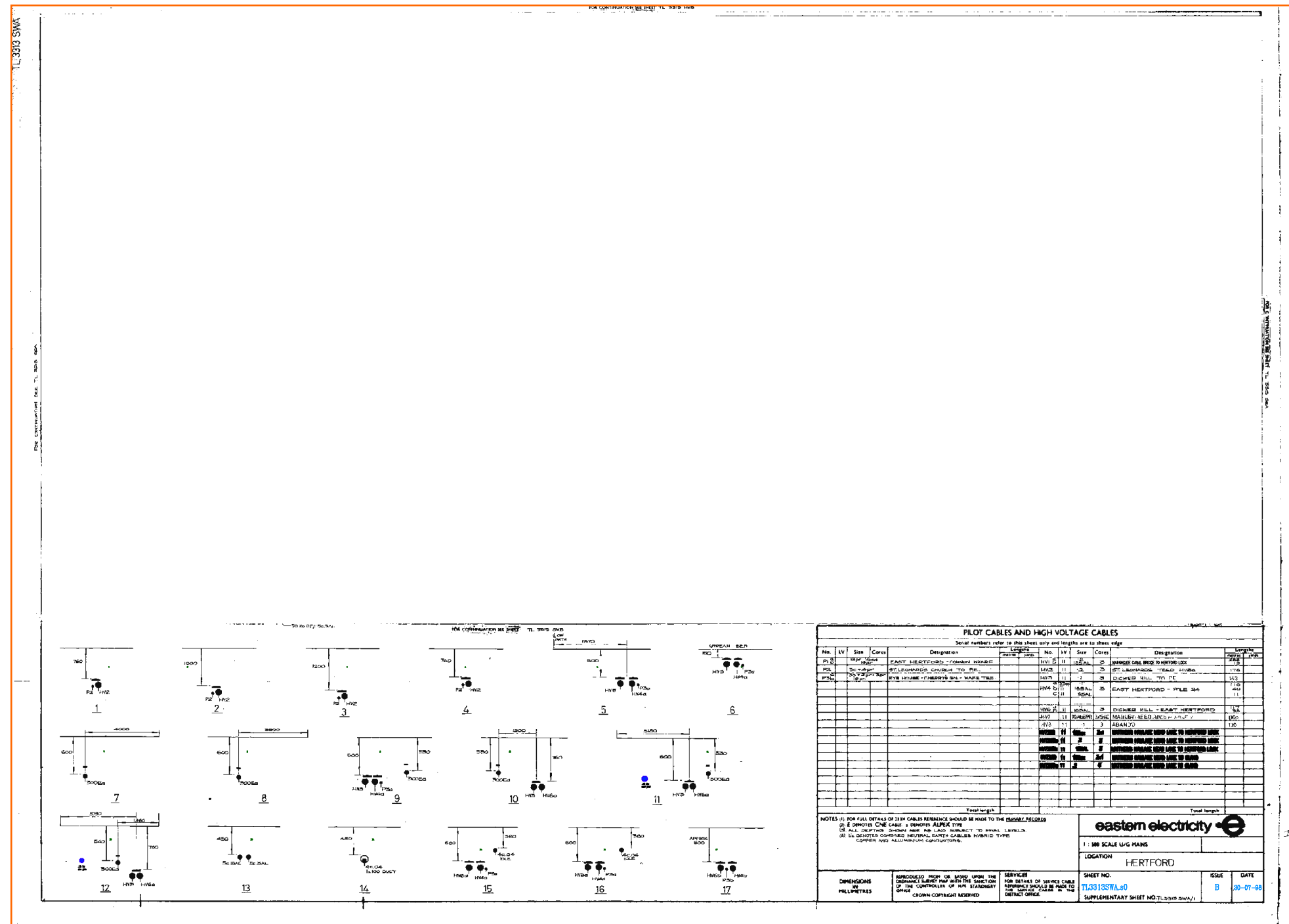
TL3313SWB 1:500 33kV



S1



TL3313SWA1:50TV

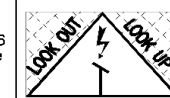


1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified – use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the exact location of all 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 provided must be given to all people working near UK Power Networks' plant & equipment. Do not use plans more than 3 months after the issue of the drawing 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 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 in respect of damages, cost claims or demands, 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 you 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.

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.

IF ANY DOUBT - ASK! PHONE 0800 056 5866
EMERGENCY - If you damage a cable or line
Phone 0800 780 0780 (24hrs) URGENTLY



ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note
GS6



Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (in some case 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.

Description		Length meters / ft.
MDS - TEARD HWY8A		170
HILL TOP DE		5/3
DARTFORD - HYLE 24		120
		60
		11
WILBY - EAST DARTFORD		FLX
NELLYNE+ NALF		900
		110
	Total length	

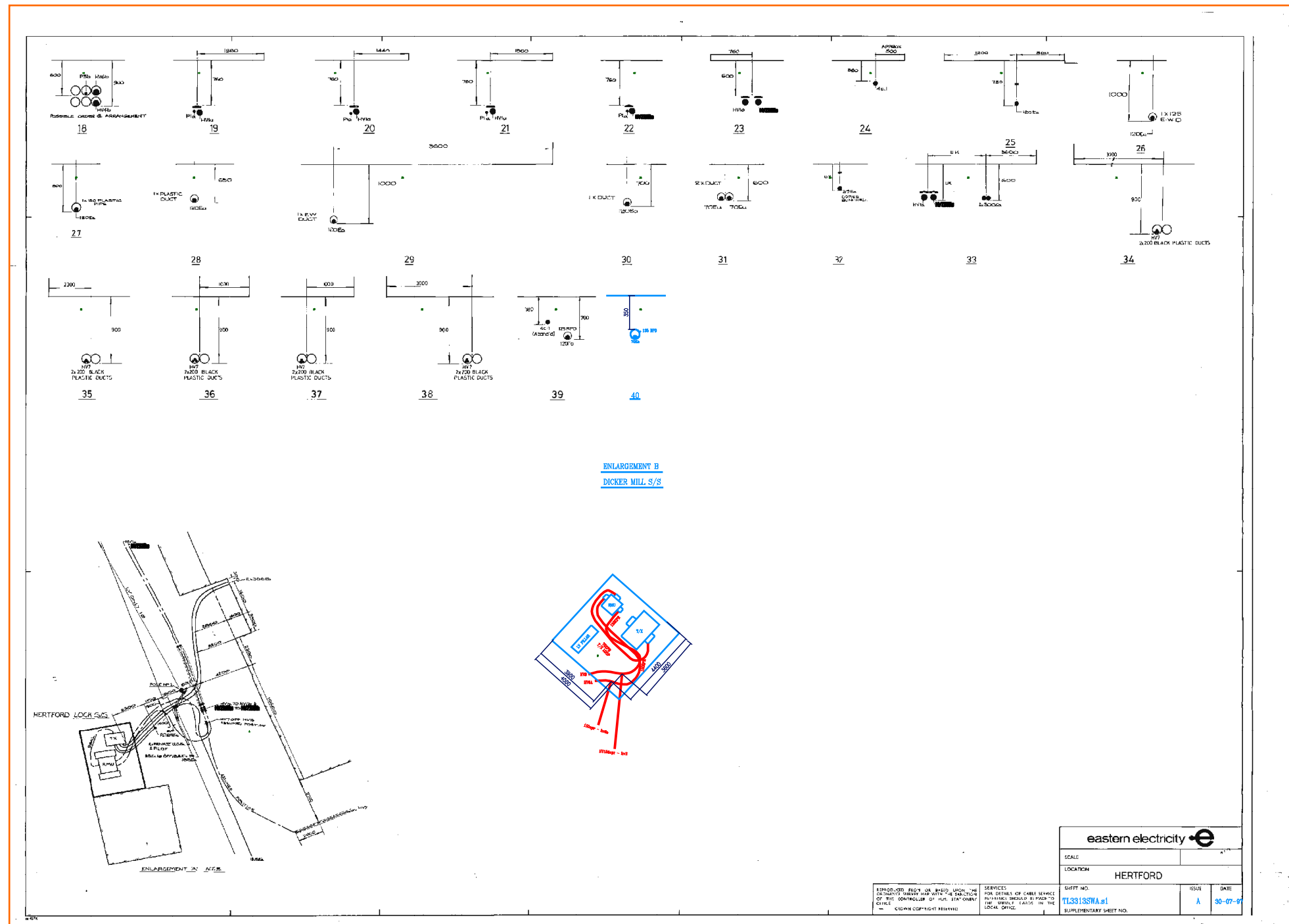
n electricity e

AMT _____

RTFORD _____

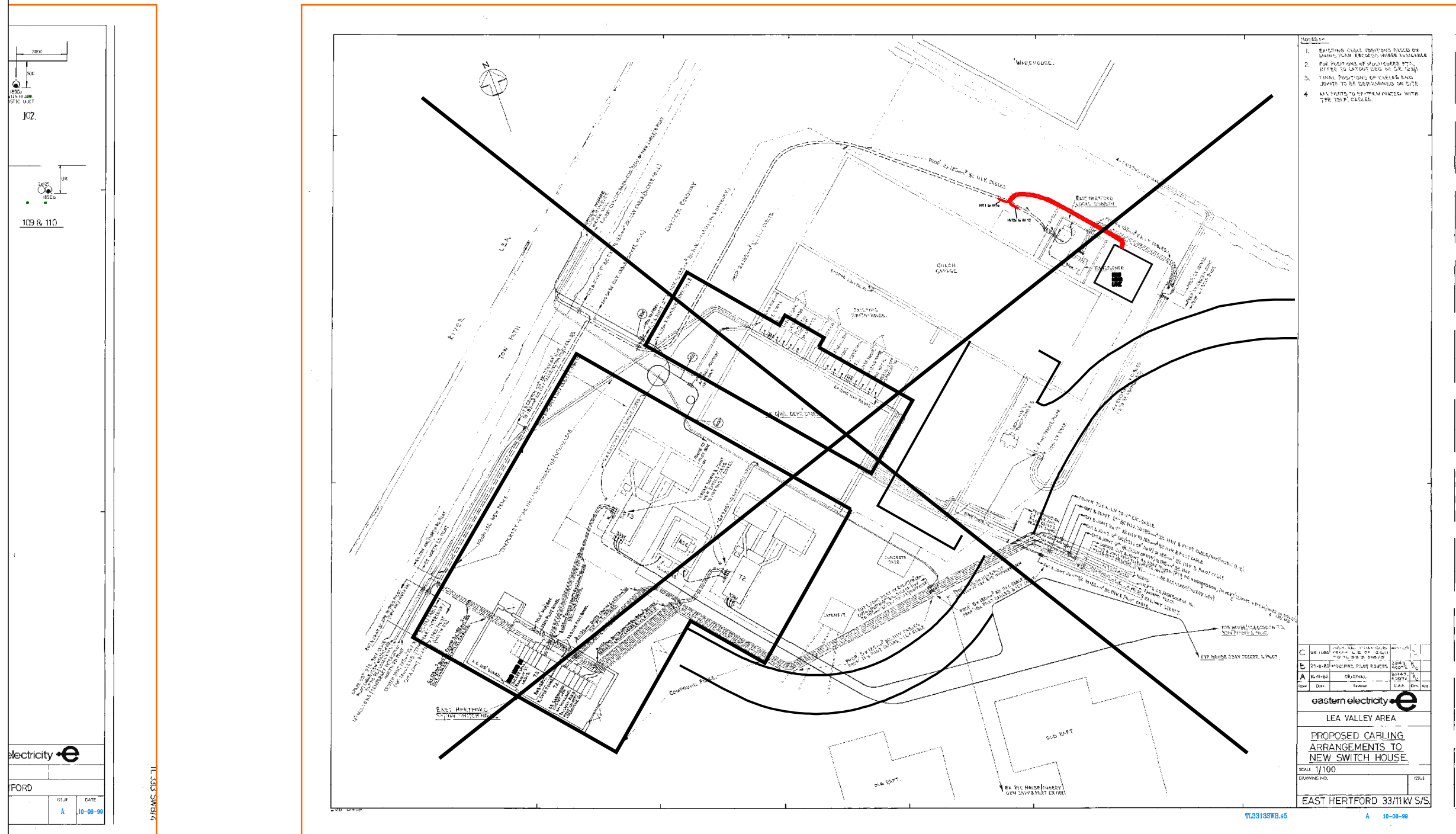
ISSUE	DATE
B	30-07-98

ET NO-TL-2310 SW/VJ



- Reproduced by permission at Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 100019626. Data has been added to the Ordnance Survey base map; all proprietary rights in such additional data are and shall remain the exclusive property of (c) Eastern Power Networks plc or London 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 licence. All rights in such data reserved.

S5

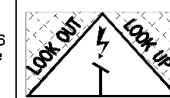


1. The position of the apparatus shown on this drawing is believed to be correct but the original landmarks may have been altered since the apparatus was installed.
2. The exact position of the apparatus should be verified – use approved cable avoidance tools prior to excavation using suitable hand tools.
3. It is essential that trial holes are carefully made avoiding the use of mechanical tools or picks until the excavator location of all cables has 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 provided must be given to all people working near UK Power Networks' plant & equipment. Do not use plans more than 6 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 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 for any damage, loss, claims, 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 you 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.

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.

IF ANY DOUBT — ASK! PHONE 0800 056 5866
EMERGENCY — If you damage a cable or line
Phone 0800 780 0780 (24hrs) URGENTLY



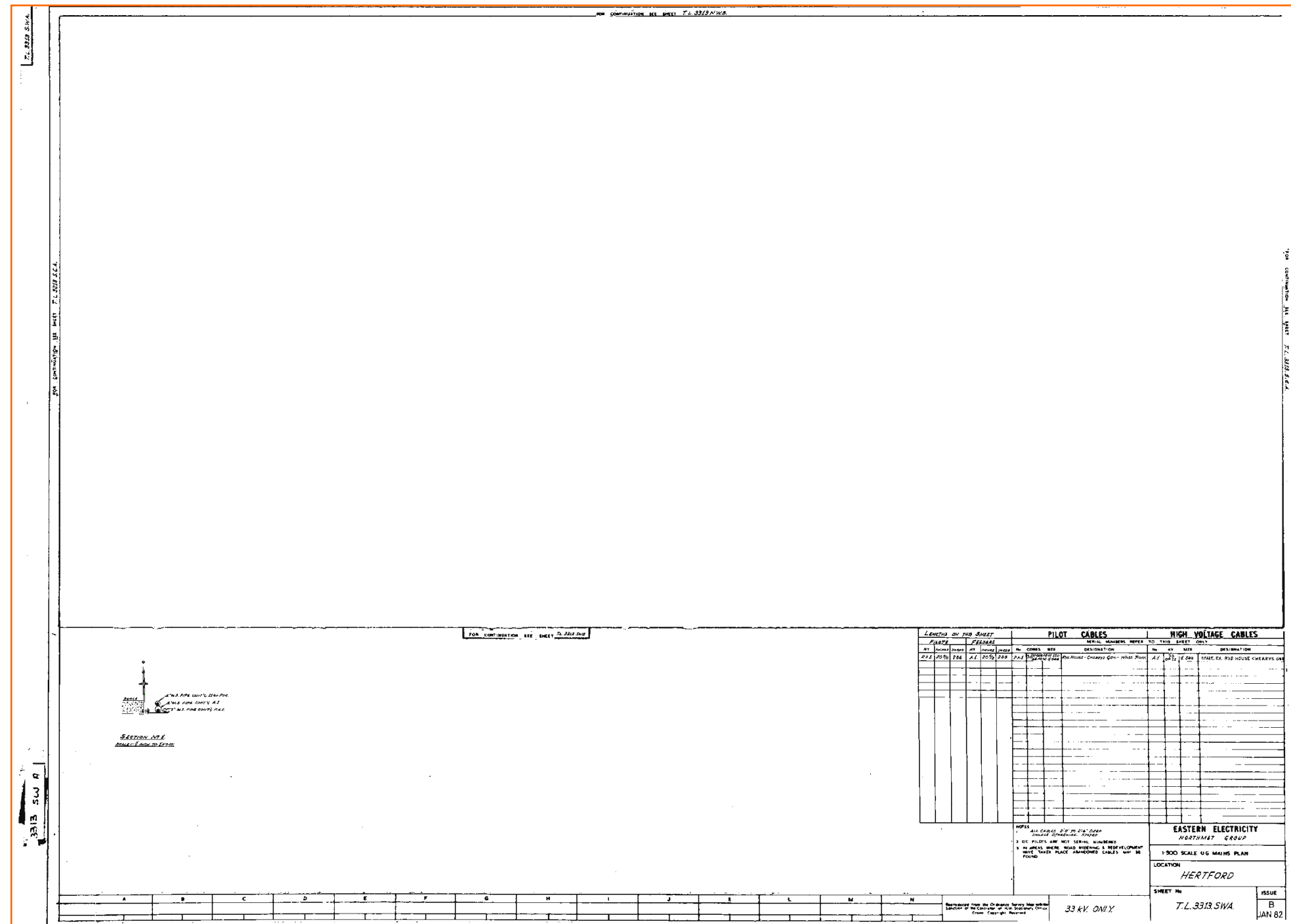
ALWAYS LOOK UP BEFORE
YOU START WORK
Refer to HSE Guidance note
GS6



Maps produced at 1:2500 scale are LV Geo-Schematics which show LV mains cables and overhead lines (in some case 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.

SO

TT33133SWA1:5033KV



- Reproduced by permission at Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 100019626. Data has been added to the Ordnance Survey base map; all proprietary rights in such additional data are and shall remain the exclusive property of (c) Eastern Power Networks plc or London 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 licence. All rights in such data reserved.

Miss Hannah Stalley
Premier Energy Services
4 The Courtyard
Pondtail Farm
West Grinstead
Horsham, West Sussex
RH13 8LN

9th February 2016
Our Ref: 8500024812/3000005097

Dear Miss Stalley

Site Address: Hertford Gas Works, Marshgate Drive, Hertford, SG13 7AQ

Thank you for your recent enquiry regarding the above premises. I am writing to you on behalf of Eastern Power Networks PLC the licensed distributor of electricity for the above address trading as UK Power Networks.

I am pleased to be able to provide you with a budget estimate for the work. 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 works. It is not an offer to provide the connection and nor does it reserve any capacity on UK Power Networks' electricity distribution system.

1. Budget estimate

The budget estimate for this work is:

£185,000.00 (exclusive of VAT) if the Point Of Connection (POC) is to our Low Voltage network along Marshgate Drive.

The above budget estimate is based on establishing one new substation in the northern area to provide connections to 200 gas heated flats and establish one new substation in the southern area to provide connections to 100 gas heated flats and 1 x 250kVA commercial connection based on a total development load of 1MVA.

For multi occupied buildings, we will provide a single intake into a communal area on the ground floor of each block and from there it will be your responsibility to distribute to the individual flats and landlords connections. The above budget estimate is based on the assumption there will be a maximum of 12 blocks split over the two areas.

No costs are included in the Budget Estimate for carrying out works in contaminated land and it will be the responsibility of the developer to ensure that all contamination is removed prior to any of our works being started on site.

Please Note: There are multiple LV, 11kV, 33kV and pilot cables running along the site boundaries. No costs have been included in the above figure for diverting these cables but if you would like a budget estimate for their diversion then please provide a detailed site plan showing the proposed site accesses so we can establish which areas may be affected.

2. Budget estimate 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 formal offer.

Please note that if any of the assumptions prove to be incorrect, this may have a significant impact on the price in any subsequent quotation. You should note also that UK Power Networks' formal connection offer 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 to a formal offer of connection then you should apply for a quotation, Please refer to our website http://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/the_connection_process.pdf for '**The connection process**' which details our 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.

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

Helen Cardoza
Project Designer
Tel: 01279 824623
Email: PrelimsEPN@ukpowernetworks.co.uk

Miss Hannah Stalley
Premier Energy
Pondtail Farm
4, The Courtyard
Horsham
West Sussex
RH13 8LN

09 February 2016

Our Ref: 8200006968/QID 3200004080

Dear Miss Stalley,

Site Address: Marshgate Drive / Hertford SG13 7AQ

Thank you for your recent enquiry regarding the above site. I am writing to you on behalf of Eastern Power Networks plc the licensed distributor of electricity for the above address trading as UK Power Networks.

I am pleased to be able to provide you with a quotation, which serves as a Notice as defined in our Terms and Conditions, for carrying out the works detailed in this document and the attached proposal plan.

Price:

The price for UK Power Networks to undertake the works is £16,179.25 exclusive of VAT at the appropriate rate.

The outstanding balance to pay is £19,415.10 inclusive of VAT.

A breakdown of the price is provided within Section 2 of the Notice.

Point of Connection (POC) Position

The point of connection will be as shown on the attached drawing.

Terms & Conditions

This quotation is subject to Version 2 of UK Power Networks' standard terms and conditions for construction and adoption ("Terms and Conditions") and the LV Live Jointing Addendum to the Terms and Conditions, both of which can be found at <http://www.ukpowernetworks.co.uk/internet/asset/4642aa20-c713-46f5-9837-b808ed67be6P/Standard+Terms+and+Conditions+for+Construction+and+Adoption.pdf> or by request in writing to UK Power Networks, Connections Gateway, Metropolitan House, Darkes Lane, Potters Bar, Hertfordshire, EN6 1AG.

Summary of what's included: All of the paperwork included in this Notice is important, so please take the time to read it. Here is an overview of what's included:

1. Summary of the work
2. The price
3. Works to be completed by UK Power Networks (Non-Contestable Works)
4. Works which you (the customer) need to complete (Contestable Works)
5. Additional information
6. Form of guarantees
7. Acceptance of Notice form

This letter and attachments together with the Terms and Conditions constitute the Notice for the purposes of Section 16A(5) of the Electricity Act 1989.

What you should do next:

What you should do next: If you wish to proceed you will need to ensure that by 5pm on 09 May 2016 .

- We have received a signed and dated Acceptance of Notice Form from Section 7 of the Notice.
- We have received from you into our bank account in cleared funds the sum stated in paragraph 6 of the Acceptance of Notice Form. Payment can be made by cheque, BACS payment or credit or debit card. All payment details are on the Acceptance of Notice Form (section 7 of the Notice). Please make sure that you allow sufficient time for payment to clear.
- Submit your design documentation, in accordance with Engineering Recommendation G81, for approval. The email address to make your submission to is connections.gateway@ukpowernetworks.co.uk

You should sign and date the other Customer copy of the Acceptance of Notice Form and keep it safely with your other records.

Programming of works

Please note that we will not be able to programme any work until:

- Payment and signed Acceptance of Notice forms are received.
- All necessary legal consents have been completed successfully.
- UK Power Networks has accepted your design and programme for the Contestable Works.

The works will be completed by the end of 01 September 2016. This date is subject to:

- The date of your acceptance of this Notice;
- Any further discussions we may have with you regarding the programming of the works;
- The completion of works by others, as stated in the quotation, that are prerequisite to the completion of our works but are not our responsibility to complete; and
- The Terms and Conditions of this quotation.

If you have any questions about this Notice or need more information, the best time to call is between the hours of 9:00 am and 4:30 pm, 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

Anna Sayer

Tel: 0845-234-0040

Mob: 07812262315

Email: anna.sayer@ukpowernetworks.co.uk

1. Summary of the work

This offer is for an HV connection with an import capacity of 1000.0 kVA to supply the development at Marshgate Drive / Hertford SG13 7AQ

2. The price

The price for UK Power Networks to carry out the Non-Contestable Works and the requested Contestable Works is £16,179.25 plus VAT at the appropriate rate.

Outstanding balance to pay

The outstanding balance to pay is as shown below:

Connection Charge				
Charge Type	Net	Vat Rate%	VAT Charged	Gross
Non-Domestic	£16,179.25	20	£3,235.85	£19,415.10
Domestic	£0.00	0	£0.00	£0.00
Total	£16,179.25		£3,235.85	£19,415.10
Advance Payments Received				
Charge Type	Net	Vat Rate%	VAT Charged	Gross
Non-Domestic	£0.00	0	£0.00	£0.00
Domestic	£0.00	0	£0.00	£0.00
Total	£0.00		£0.00	£0.00
Outstanding Balance				
Charge Type	Net	Vat Rate%	VAT Charged	Gross
Non-Domestic	£16,179.25	20	£3,235.85	£19,415.10
Domestic	£0.00	0	£0.00	£0.00
Total	£16,179.25		£3,235.85	£19,415.10

Please note that payment is required in full, in advance of the work being programmed.

Breakdown

Description of cost	Quantity	Unit of Measure	Part funded by UK Power Network	Non-Contestable (including Reinforcement)	Final Closing Joint (Contestable)	All Other Contestable	Total
HV Plant and Switchgear							
Commissioning of a Remote Terminal Unit (RTU)	2	Each	No	£1,497.04			£1,497.04
Locks for a UKPN or ICP installed substation	2	Each	No	£1,026.92			£1,026.92
11kV outage associated with the provision of an 11kV substation	2	Hour	No	£2,994.07			£2,994.07
Legal fees for a Freehold/Leasehold for the establishment of a substation in a new physical location.	2	Each	No	£2,639.67			£2,639.67
SubTotal				£8,157.70			£8,157.70
HV Underground Mains							
11kV Triplex to PILC branch joint 240-300mm	2	Each	No		£2,341.55		£2,341.55
SubTotal					£2,341.55		£2,341.55
Total				£8,157.70	£2,341.55	£0.00	£10,499.25
Transactional Charges							
Assessment Only Charges			£3,060.00				
Design Approval Charges			£2,620.00				
Sub Total			£5,680.00				

Lane Rental Charges

The Works that are the subject of this Notice may be carried out in roads that are subject to lane rental charges. Lane rental charges are daily charges levied by certain road authorities such as Transport for London where a utility is carrying out works in roads that are covered by a lane rental scheme. Please note that the Price may be amended to reflect the Costs arising from such lane rental charges in accordance with the Terms and Conditions.

3. Works to be completed by UK Power Networks

The works to be carried out by UK Power Networks are as detailed by the individual line item descriptions within Section 2 “The price”. In addition, further information about the works, including the point of connection to the existing Distribution system, can be found on the attached proposal plan.

4. Works which **MUST** be completed by you (the customer)

Safety

You are responsible for identifying whether or not the site is notifiable under the Construction (Design & Management) Regulations 2015 (CDM). UK Power Networks is keen to ensure that all work relating to the design, construction and maintenance of this project is carried out in a safe manner. Should your appointed CDM parties require any additional information please ask them to contact our Project Manager.

Harmonics

You are required to ensure that any harmonics produced which are transmitted onto the Distribution System is within the limits in ENA ER G5/4.

Description of Works

You are responsible for the following:

- Liaise with the CiC Delivery Manager before starting work
- Design of network extension to include as a minimum the information shown on our web site at- <http://www.ukpowernetworks.co.uk/internet/en/connections/competition-in-connections/technical-information-for-icps-and-idnos/>
- This offer is based on a demand-only connection; it is the Customer/IDNO's responsibility to conduct a worst case scenario generation study to ensure compliance with G59/1, G59/3 or G83 as appropriate. This study is to include the effect on the DNO's network in the Design Submission. The results are to include, the fault level contribution, step change in voltage, and whether the generation will export onto the DNO network or not (export profile). The Company will then advise the Customer whether the generation can be connected at the proposed POC or a new POC is required.
- Legal acquisition of cable easements and substations on UK Power Networks' standard documentation without amendments
- Planning permission for 2 substations with an aerial
- Obtain design acceptance
- Supply of all materials required for the contestable work
- Excavation, cable laying and reinstatement of 300ax (ducted) or 185ax (direct buried) cable route between the points of connection and points of isolation
- Break open any UK Power Networks' ducts as necessary
- Construction of substations, including earthing, power and lighting
- Installation of substation equipment - RMU (one to be Lucy) with automation and FPI
- Cable and substation jointing and fitting
- Joint bays x 2 excavation & permanent reinstatement for cable identification and final connections

- NRSWA compliance including for final connections
- Obtain opening notices and permits
- Project Management, operational safety, Regulation compliance, testing etc
- Submission to the company of as laid drawings and test results
- To obtain and provide copies of any required Environmental licences or permits

Cable Identification

- All cables shown on the cable records must be exposed at the POC position to allow to positive cable identification including access all round the cables for identification using an approved signalling device.
- To avoid the possibility of opening an HV cable, all LV cables will need to positively be identified. There are 3 methods of achieving this so the extent of the contestable work extends to all work required to allow positive identification. The three methods are:
 - 600v/1000v plastic embossed outer sheath of the cable.
 - Digging back along the cable to an existing service joint
 - Single cable shown on the cable plans which is clearly designated as being an LV cable and only one cable found at the work location.

Tests

- Additional Pre-connection Tests to be undertaken by You and UK Power Networks for High Voltage Contestable Works
 - Appropriate pressure test for high voltage equipment
 - Appropriate pressure test for high voltage cables
 - Sheath tests for high voltage cables
 - Primary & secondary injection testing to suit HV protection
 - Test Fault Passage Indicator operation where fitted
 - SCADA tests
- Additional Post-connection Tests for High Voltage Contestable Works
 - Voltage checks and phase rotation checks on low voltage Transformer terminations
 - Phasing check with exiting low voltage network where possible
 - SCADA operations and indications

5. Important Information

Variation to Terms and Conditions

Neither You nor anyone occupying the Premises for which connection to the Distribution System is to be made will have any express or implied entitlement to any Capacity on the Distribution System on and following the three year anniversary of completion of the Non-Contestable Works beyond that then taken up and used by You and/or such person.

Interactive Process

Please be aware that if UK Power Networks receives another application for a connection to the same part of its distribution system and there is insufficient capacity upon its distribution system, or if there are other constraints upon it that will prevent both connections being made, UK Power Networks will apply its interactive connection application process. In these circumstances the period within which you must return payment and the signed relevant Acceptance of Notice form will be reduced. You will be contacted if this occurs.

About our network

The following information relates to each of the services and is supplied to meet the requirements of Regulation 27 of the Electricity Safety, Quality and Continuity Regulations 2002 and Regulation 312-03 and 313-01 of BS7671 (IEE Wiring Regulations 17th Edition) and should therefore be passed to the designer of the Customer's Installation.

Prospective Short Circuit Current (PSCC)

Prospective short circuit current at UK Power Networks' supply terminals is not expected to exceed the values shown in Table 1 above.

Please note that the values quoted above, are under normal conditions considered to be maximum for UK Power Networks' network. However while they are given in good faith, UK Power Networks cannot guarantee the values quoted will continue for all time.

All the quoted values of earth loop impedance are typical maximum values and the measured value of earth fault loop impedance will change depending on the network configuration due to alterations, faults, maintenance and any embedded generation.

High Voltage Supplies

With respect to high voltage supplies you are advised to ensure the following:

- i Every part of Your Installation, which is for use at high voltage, will be maintained in an efficient state to the satisfaction of UK Power Networks.
- ii If the said installation is not enclosed in a building or other structure to which access can only be obtained by means of a key or special appliance, an authorised person will be available to cut off the supply in the event of an emergency.
- iii Instructions as to the treatment of persons suffering from electric shock will be affixed on or in the premises.

Power Factor

At the point of supply the average lagging power factor is to be maintained as near to unity as possible and under no circumstances operated at a leading power factor.

Lagging power factors will be measured using reactive metering equipment and an additional charge will be levied through the tariff when the average lagging power factor in any month is ascertained in accordance with the terms of UK Power Networks' Statement of Charges for the use of its Distribution System published from time to time..

Where the average lagging power factor in any month is ascertained to be less than 0.50 the published tariff rate will no longer be available.

Important notes

In the interest of safety to personnel, equipment and UK Power Networks apparatus, it is imperative that the approximate position of underground cables is obtained by the use of electronic cable locators and this position confirmed by careful trial holing, using hand held tools. UK Power Networks cannot undertake this work for you.

All cables discovered must be considered LIVE and DANGEROUS at all times and must not be cut, re-sited, suspended or generally interfered with, unless specifically authorised on-site by an UK Power Networks Engineer. All the cables are UK Power Network's property and remain so even when made dead, and any such cable exposed should be reported to the UK Power Networks Project Manager for your Development, who will arrange for collection and authorised disposal.

Any overhead equipment in the vicinity of your works should be considered live at all times. All work in the locality should be carried out in accordance with Document GS6, issued by the Health and Safety Executive, and the Electricity at Work Regulations 1989 must be observed.

Please note that UK Power Networks plant, if damaged or interfered with, represents a serious hazard to life. You must

ensure that any of your staff, agents or contractors who may work or survey in the vicinity are informed of and made fully aware of the possible dangers.

The responsibility for site safety of your employees, your contractors and for other site visitors rests with your site manager. All works must be carried out in accordance with the Health & Safety at Work Act 1974 and its relevant Regulations, including the Electricity at Work Regulations 1989.

It is recommended that you also obtain H.S.E. booklet HS(GS)47 which deals with safe digging practises.

Supply Disturbances

Distortion of the system voltage waveform caused by certain types of equipment may result in annoyance to users of the distribution system or damage to connected apparatus. UK Power Networks may suspend the supply in such an event.

In order to limit these affects the customers proposed load should comply with the following:

- Engineering Recommendation P28 which is the national industry standard which applies for voltage fluctuation on the distribution network. Voltage fluctuation is generally caused by customer's equipment such as motors and welders.
- Engineering Recommendation G5/4 which is the national industry standard which applies for waveform distortion and harmonics on the distribution network. Waveform distortion and harmonics are generally caused by customer's equipment such as variable speed drives and thyristor controlled devices.

Private Generation

This Notice is issued on the understanding that any private generating plant which might be installed is to be reserved as standby to cater for the failure of UK Power Networks connection and not to be used to supply energy when UK Power Networks' connection is available. Parallel operation of private generation with UK Power Networks' connection is not permitted. Suitable open transmission changeover equipment must be provided. Full details of any proposed private standby generating plant including kVA rating, changeover control and earthing arrangements, must be submitted to UK Power Networks for prior approval.

Should you decide to install generating plant on-site, you are required by Regulation 26 of the Electricity Supply Regulations 1988 to comply with Schedule III of the Electricity Supply Regulations 1988. Your attention is drawn to the requirements of the Electricity Association Engineering Recommendation G59 "Recommendations for the Connection of Private Generating Plant to the Public Electricity Supplier's Distribution System".

Standard leaflets and fact sheets

Copies of our standard leaflets can be read and downloaded from our website at www.ukpowernetworks.co.uk.

Contact Us

If you have reason to complain about your connection please use our Complaints Procedure which can also found at our web site detailed above.

If you are unable to resolve a dispute about UK Power Networks' duty to connect and the conditions under which that duty is discharged (sections 16-21 of the Electricity Act 1989). You have the right to contact the Energy Ombudsman which is the independent Ombudsman for gas and electricity consumers. The Energy Ombudsman's contact details are provided below.

Telephone: 0845 055 0760
Fax: 0845 055 0765
Email: enquiries@energy-ombudsman.org.uk
Website: www.energy-ombudsman.org.uk
Energy Ombudsman
PO Box 966

Warrington WA4 9DF

You may also refer the dispute to the Gas and Electricity Markets Authority (known as Ofgem) within twelve months of the date on which your connection was made to our Distribution System. Ofgem will require that you give UK Power Networks and the Energy Ombudsman an adequate opportunity to resolve any complaint or dispute before any action is taken by them.

Ofgem's decision will be enforceable as if it were a judgement of the Court and will include such provisions as it considers appropriate which may include who pays its costs in determining the dispute. Ofgem may give directions to us as to the terms on which we are to make or maintain a connection pending determination of the dispute.

Ofgem can be contacted at 9 Millbank, London SW1P 3GE or via their website <http://www.ofgem.gov.uk>

8. Guarantees

Where UK Power Networks is undertaking the DNO Works only and the Terms and Conditions require the provision of a Parent Company Guarantee or a Bank Guarantee, such Parent Company Guarantee or Bank Guarantee shall be provided on the following terms.

(a) Parent Company Guarantee

Dear Sir/Madam

We _____, of _____ ("the Guarantor"), understand that you have agreed to enter into an agreement ("the Agreement") which expression shall include any document constituting, amending, supplementing or replacing the same with ("the Obligor") on the condition that the obligations of the Obligor under the Agreement be guaranteed by a guarantor.

We are the parent undertaking of _____ and we warrant to you, Eastern Power Networks plc registered in England and Wales with company number 2366906 and any successor holder of the distribution licence held by it under Section 6(1) (c) of the Electricity Act 1989 (herein referred to as "the Beneficiary"), that this description of our relationship with the Obligor is true and accurate.

IN CONSIDERATION of the foregoing under the payment of one pound (£1) by you to us (receipt of which we hereby acknowledge) WE HEREBY AGREE AND UNDERTAKE with the Beneficiary as follows:

- (a) We unconditionally guarantee the proper and punctual performance by the Obligor of all its obligations, undertakings and responsibilities under the Agreement and we shall forthwith make good any default thereunder on the part of the Obligor and we shall pay or be responsible for the payment by the Obligor of all sums, liabilities, awards, losses, damages, costs (including legal costs), charges and expenses that may be or become due and payable under or arising out of the Agreement in accordance with its terms or otherwise by reason or in consequence of any such default on the part of the Obligor.
- (b) This Guarantee shall be a continuing guarantee and shall remain in full force and effect until all obligations to be performed and observed by the Obligor under or arising out of the Agreement have been duly and completely performed and observed and the Obligor shall have ceased to be under any actual or contingent liability to you thereunder;
- (c) Any demand or other notice made by any of the Beneficiary under this Guarantee shall be duly made and sent by first class recorded delivery post to us;
- (d) The Beneficiaries shall be entitled jointly or severally to enforce this Guarantee without taking any proceedings or exhausting any right or remedy against the Obligor or any other person or taking any action to enforce any other security, bond or guarantee;
- (e) The Beneficiary may make any number of demands under this Guarantee jointly or severally;
Provided that:-
 1. We shall have no greater liability to the Beneficiary under this Guarantee than [_____] -thousand pounds (£ _____).
 2. Our obligations hereunder shall remain in full force and effect and shall not be effected or discharged by:
 - (a) any alteration or variation to the terms of the Agreement made by agreement between you and the Obligor;
 - (b) any alteration in the extent or nature or sequence or method or timing of the obligations to be carried out under the Agreement;
 - (c) any time being given to the Obligor or any other indulgence or concession to the Obligor or any forbearance, forgiveness or any other thing done, committed or neglected to be done under the Agreement;
 - (d) any other bond, security or guarantee now or hereafter held by any of the Beneficiary for all or any part of the obligations of the Obligor under the Agreement;
 - (e) the release or waiver of any such bond, security or guarantee;
 - (f) any amalgamation or reconstruction or dissolution including liquidation of the Obligor;
 - (g) the liquidation, administration, receivership or insolvency of the Obligor;
 - (h) any legal limitation, disability, or incapacity relating to the Obligor (whether or not known to the Beneficiary);
 - (i) any invalidity, regularity effecting forceability of the obligations of the Obligor under the Agreement; or
 - (j) the termination of the Agreement.
 3. So long as we remain under any actual or contingent liability under this Guarantee we shall not exercise any right of segregation or any other right or remedy of assurity which we may have in respect of any payment made by or sum recovered from us pursuant to or in connection with this Guarantee or proof in any liquidation of the Obligor in competition with the Beneficiary for any sums or liabilities owing or incurred to us by the Obligor in respect of any such payment by or recovery from us to take or hold any security from the Obligor in respect of any liability or us here under.
We shall hold any monies recovered or security taken or held in breach of this provision in trust for the Beneficiary.

4. All payments made to any of the Beneficiary under this Guarantee shall be free and clear of all taxes, levies, duties, fees, deductions or with holdings of any kind.
5. The benefit of this Guarantee shall be freely assignable by the Beneficiary and your successors and assigned to without out consent or the consent of the Obligor being required.
6. This Guarantee is irrevocable.
7. Terms defined in the Agreement not otherwise defined here and shall have the same meaning in this Guarantee
8. This Guarantee, executed and delivered as a deed shall be governed by and interpreted according to the laws of England.
9. The Courts of England shall have exclusive jurisdiction to settle any dispute which may arise in connection with the validity, effect, interpretation or performance of, or the legal relationships established by this Guarantee, or otherwise arising in connection with this Guarantee.
10. For the purposes of this Guarantee we hereby appoint _____ (to be a London address) to accept service of process on our behalf and service on the said _____ at the said address shall be deemed to be good service on us and we hereby irrevocably agree not to revoke or terminate such appointment.

In witness whereof this document has been executed as a deed the day and year first before written.

The Common Seal of
was hereunto affixed
in the presence of
Director/Secretary

Bank Guarantee

Dear Sirs,

Eastern Power Networks plc with company number 2366906 has entered into an agreement to provide a Supply to Marshgate Drive / Hertford SG13 7AQ dated 09 February 2016.

The Customer is required under the Agreement to procure a Bank Guarantee issued by a bank in favour of the Company and any successor holder of a distribution licence held under Section 6(1)(c) of the Electricity Act 1989 ("the Beneficiary") in support of the due and proper performance of the Contractor's obligations in the Agreement.

Therefore, in consideration of the above, we _____ ("the Bank") of [registered office of bank] hereby irrevocably and unconditionally guarantee and undertake to the Beneficiary without any right of defence set off or counterclaim whether on our behalf or on behalf of the Customer to pay to the Beneficiary enforcing this Guarantee a sum not exceeding £.....

upon receipt of the Beneficiary's written request addressed to us in the event that the Customer fails to perform or fulfil any of its obligations as set out in the Agreement. The payment shall be by transfer to an account in the Beneficiary's name at such bank as the Beneficiary shall stipulate or in such other manner as shall be acceptable to the Beneficiary.

Such written request shall be conclusively binding on us for all purposes under this Bank Guarantee.

We agree that any changes or additions which may be made to the Agreement, or in the work to be performed there under, or in the payments to be made to the Agreement on account thereof, or any extensions of the time for performance or other forbearance on the part of the Beneficiary or the Customer to the other or to any other guarantor of the obligations of either of them, shall not in any way release us from our continuing liability hereunder. We hereby expressly waive our right to receive notice of any such changes, additions, extensions or forbearance. We further agree that any payment made hereunder shall be made free and clear of and without deductions for or on account of any present or future taxes, levies, duties, fees, deductions or withholdings of any nature whatsoever. This Bank Guarantee shall come into force on the date hereof and shall remain in force in respect of all works to be performed under the Agreement until the expiry of one year after the date on which the works were completed.

This Bank Guarantee shall be governed by and construed in accordance with English Law.

Yours faithfully,

.....
Authorised Signatory of the Bank

Dated

Acceptance of Notice Form

Please complete and send this form back to:

CC Proj, UK Power Networks, Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG

billingteam-networks@ukpowernetworks.co.uk

Site address: Marshgate Drive / Hertford SG13 7AQ

Designer: Anna Sayer

Our Reference: 8200006968/3200004080

Total price of work excl VAT : £16,179.25

Total outstanding balance incl VAT : £19,415.10

1. Please state below where you would like us to send a `paid' invoice to:

Company name:

Contact name:

Address:

Telephone:

2. Please provide the following details of the:

Person we should contact to schedule the work

Land owner or occupier

Company name:

Contact name:

Address:

Telephone:

Email

Company name:

Contact name:

Address:

Telephone:

Email

Method of payment (please tick your chosen method)

☐ Cheque

Please make cheques payable to `UK Power Networks'

☐ Card

Please **call 08701 964 199**. You will need to have your reference number to hand.

☐ BACS/CHAPS

HSBC Bank Plc, Sort Code 40 05 30, Account Number 02302934 and UK Power Network's Reference No above 3200004080. Please send this form back to us at the time of the BACS/ CHAPS transfer to ensure that payment gets processed correctly.

4. Construction (Design and Management) Regulations 2015 (CDM)

Please provide these details if the site is notifiable.

Principal Designer:

Contact name:

Telephone:

Email

Principal Contractor:

Contact name:

Telephone:

Email

5. Solicitors Information

Please provide/confirm these details if requested in section 5.

Company name:

Contact name:

Address:

Telephone:

6. Acceptance

I accept the Notice dated 09 February 2016 for the carrying out of the Works at the above site for the Price of £19,415.10 inclusive of VAT. I understand that the Works and the Price are subject to the Notice by which I agree I am bound.

I understand that the Price must be paid in full before work is commenced. I also understand that where VAT has been charged a Tax Invoice for the Price will be issued by UK Power Networks on receipt of payment.

7. Expiry Date

To accept this Notice, payment must reach us by 5pm on 09 May 2016 . Payments received after this date may be returned and you will need to request a new quotation.

Signed: _____

Date: _____

Print name: _____

As a fully authorised agent acting on behalf of: _____

Acceptance of Notice Form (Customer Copy)

Please complete and retain for your records:

CC Proj, UK Power Networks, Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG

billingteam-networks@ukpowernetworks.co.uk

Site address: Marshgate Drive / Hertford SG13 7AQ

Designer: Anna Sayer

Our Reference: 8200006968/3200004080

Total price of work excl VAT : £16,179.25

Total outstanding balance incl VAT : £19,415.10

1. Please state below where you would like us to send a `paid' invoice to:

Company name:

Contact name:

Address:

Telephone:

2. Please provide the following details of the:

Person we should contact to schedule the work

Land owner or occupier

Company name:

Contact name:

Address:

Telephone:

Email

Company name:

Contact name:

Address:

Telephone:

Email

3. Method of payment (please tick your chosen method)

☐ Cheque

Please make cheques payable to `UK Power Networks'

☐ Card

Please **call 08701 964 199**. You will need to have your reference number to hand.

☐ BACS/CHAPS

HSBC Bank Plc, Sort Code 40 05 30, Account Number 02302934 and UK Power Network's Reference No above 3200004080. Please send this form back to us at the time of the BACS/ CHAPS transfer to ensure that payment gets processed correctly.

4. Construction (Design and Management) Regulations 2015 (CDM)

Please provide these details if the site is notifiable.

Principal Designer:

Contact name:

Telephone:

Email

Principal Contractor:

Contact name:

Telephone:

Email

5. Solicitors Information

Please provide/confirm these details if requested in section 5.

Company name:

Contact name:

Address:

Telephone:

6. Acceptance

I accept the Notice dated 09 February 2016 for the carrying out of the Works at the above site for the Price of £19,415.10 inclusive of VAT. I understand that the Works and the Price are subject to the Notice by which I agree I am bound.

I understand that the Price must be paid in full before work is commenced. I also understand that where VAT has been charged a Tax Invoice for the Price will be issued by UK Power Networks on receipt of payment.

7. Expiry Date

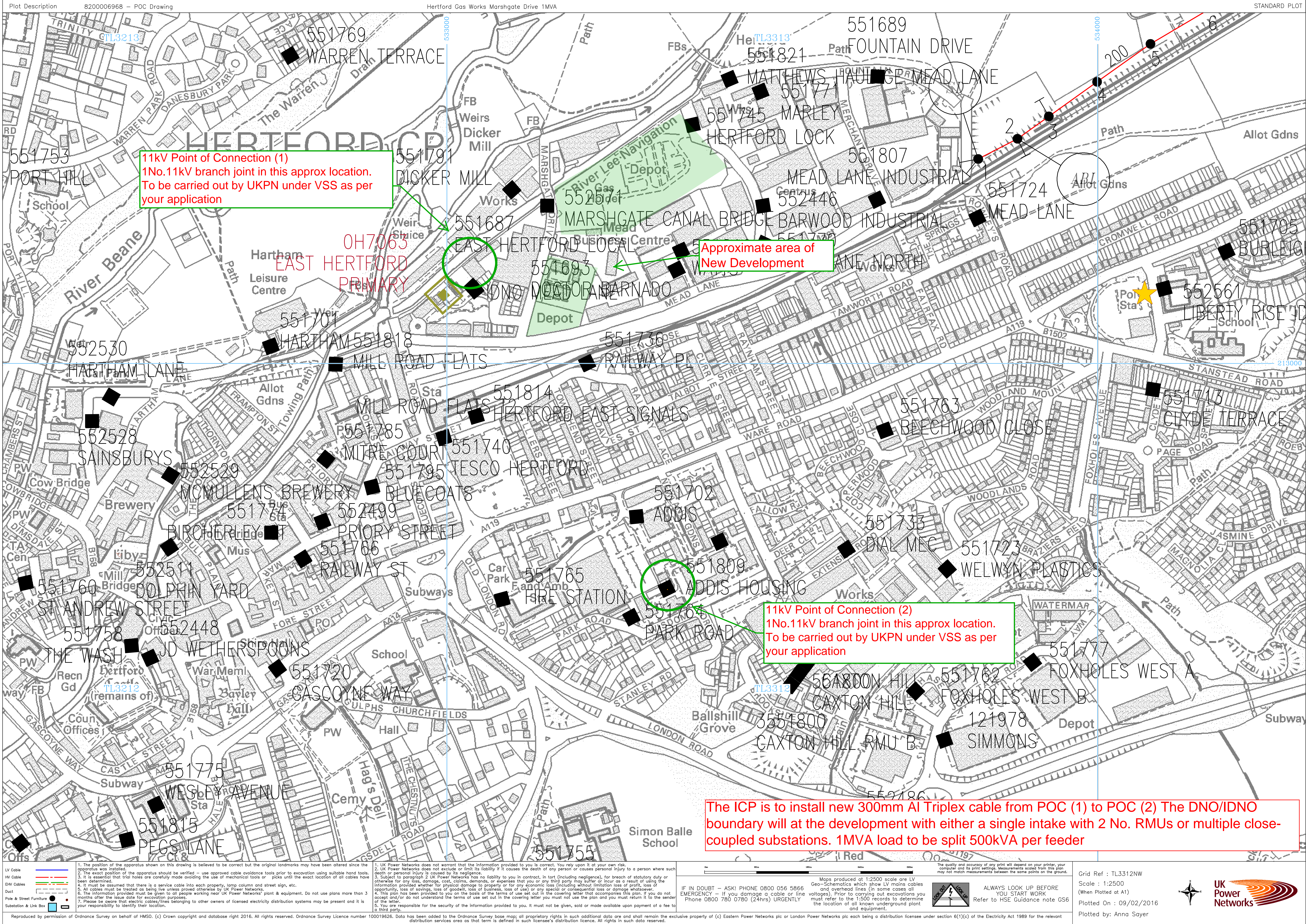
To accept this Notice, payment must reach us by 5pm on 09 May 2016 . Payments received after this date may be returned and you will need to request a new quotation.

Signed: _____

Date: _____

Print name: _____ As a fully authorised agent acting on

behalf of: _____



Hannah Stalley

From: Sayer, Anna <Anna.Sayer@ukpowernetworks.co.uk>
Sent: 12 February 2016 14:28
To: Graham Phillips
Cc: Hannah Stalley
Subject: RE: 8200006968 Marshgate Drive

Hi Graham

The cable between the points of connection is to accommodate the load, therefore it will be necessary to lay a cable from POC 1 to the site which will loop in and out of your RMUs and then extend all the way back to POC 2.

VSS stands for Voluntary Standard of Service – it refers to the HV jointing which is now contestable, but UK Power Networks will still carry it out at the request of the customer.

I hope this makes sense, please contact me if you require further clarification.

Regards

Anna Sayer BA (Hons) MIET
Project Designer
Competition in Connections
UK Power Networks
07812 262315

From: Graham Phillips [mailto:Graham.Phillips@premierenergy.co.uk]
Sent: 11 February 2016 11:29
To: Sayer, Anna
Cc: Hannah Stalley
Subject: 8200006968 Marshgate Drive

Hi Anna,
Thanks for the POC offer dated 09/02/16.

I have a couple of questions that I hope you can help with:

- 1) The drawing notes that the ICP/IDNO is to lay a cable between the two POC's. Can I therefore assume the actual connection for the site will from a local HV cable in Marshgate Drive and not a further cable from POC 1 and POC 2 to the site?
- 2) On the drawing text box you make reference to 'VSS' what does this stand for?

Thanks



Regards

Graham Phillips

Operations Director

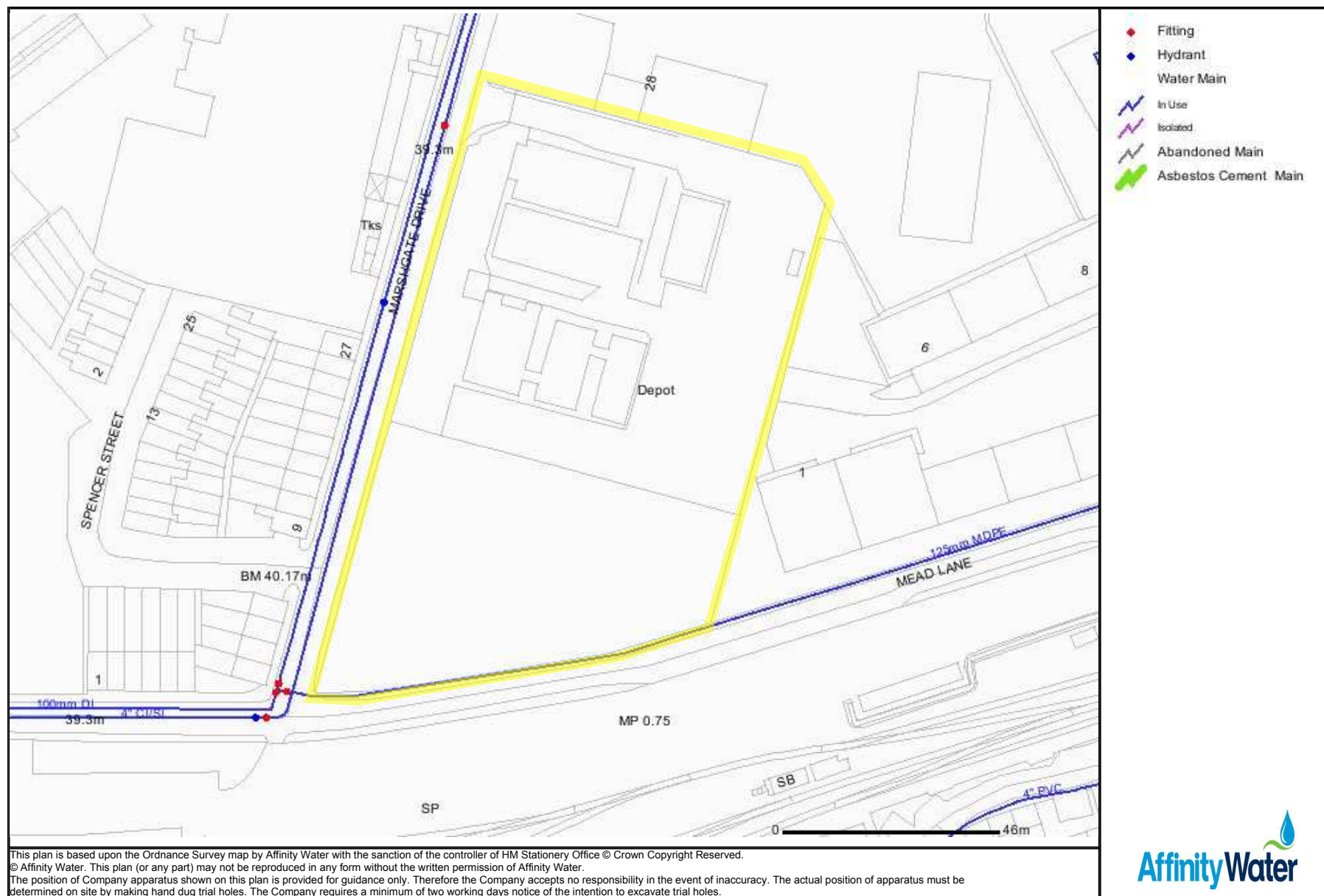
t: 01403 740 240 | m: 07787538863

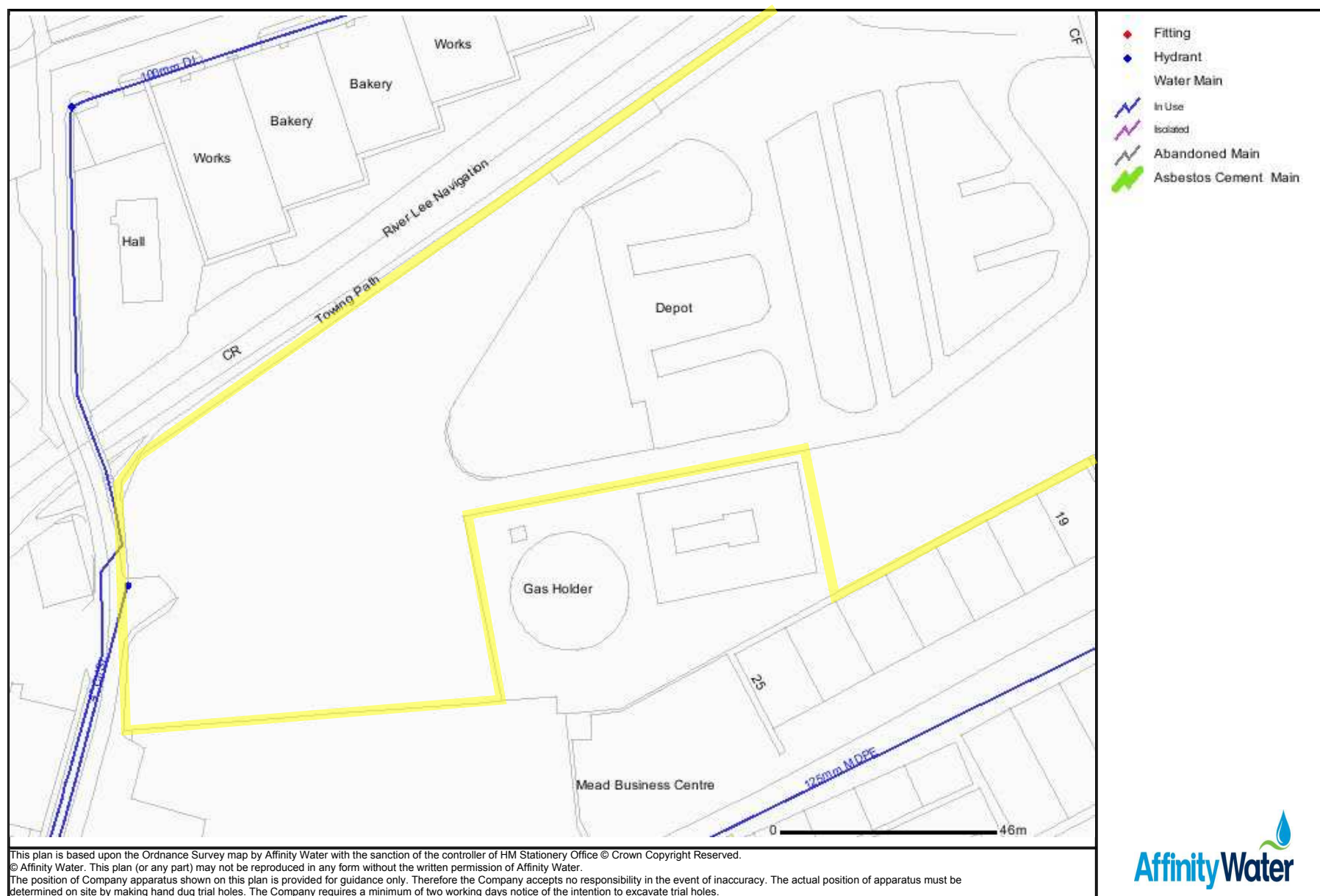
e: graham.phillips@premierenergy.co.uk | www.premierenergy.co.uk

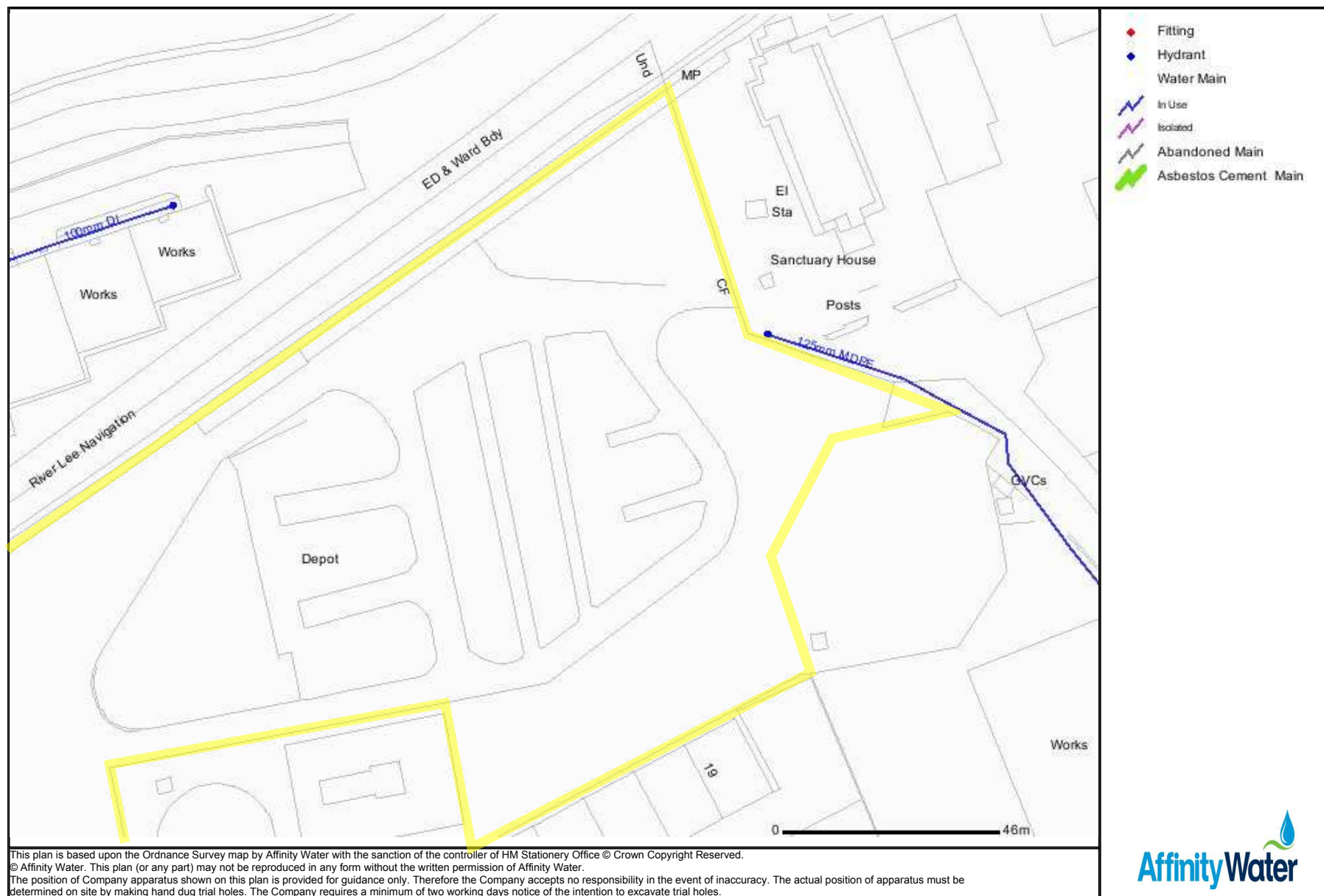
4 The Courtyard | Pondtail Farm | West Grinstead | Horsham | West Sussex | RH13 8LN
Registered office as above. Incorporated in England & Wales No. 3023958



This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Premier Energy Services Ltd. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error. Please note that whilst we scan emails for viruses we cannot guarantee that any email is virus free, please carry out your own virus checks.







Date of this notice: 17.2.16

FAO Hannah Stalley

Your Scheme Reference: NC48059
Please quote this on all correspondence

Dear Hannah

Re: Request for a Budget Price for Water Infrastructure @ Hertford Gas Works, Marshgate Drive, Hertford

We are pleased to enclose this information in response to your request for a budget estimate to supply your development. As there is no scaled site layout plan with the layout of the properties, this is an indicative budget.

Your Budget

Please note the infrastructure charge per property gets offset against the reinforcement works, the current rate is £351.00 per property

Item	Excavation	Approx. Unit Cost	Approx. Scope	Budget Price	Estimated Contribution
Onsite (development) water mains	Not included	£130/m			20%
Onsite (development) service connections	Not included	£400 ea	301	£120,400	100%
Onsite large diameter (>63mm) services	Not included	£3,000 ea	N/A		100%
Off Site (in public Highway) (>63mm) services	Included	£4000	N/A		100%
Offsite water mains laying (e.g. reinforcement)	Included	£270/m	390m	£105,300	100%
Offsite (in public highway) Service connections	Not included	£2000 ea	N/A		100%

Please note the cost information provided in this letter is for budgetary purposes only and is subject to change.

The developer's contribution for onsite water mains is usually much less than the cost of installation. This is in accordance with the legislation set out by the Water Industry Act 1991 for the recovery of water company costs. The contribution varies significantly from scheme to scheme but **typically ranges from 10 – 30%**. It is not possible to give a more accurate figure without a full water mains requisition, so we would advise using a contribution figure of 30%.

In addition to the above, the following items may be required and **have not been included in the above budget estimate**:

- Infrastructure charges (refer to Affinity Water's current Charges Scheme);
- Traffic management costs (charges vary considerably between Local Authorities);
- Service connections to the existing network, e.g. show home supplies to water mains in the public highway (where Affinity Water is to excavate and reinstate);
- Disconnections of existing water mains and / or service pipes;
- Building water charges and Value Added Tax.

Please note that the cost information provided is an estimate and the actual costs may differ significantly. Detailed design (including full hydraulic analysis to size the water pipes, consultation with statutory bodies, e.g. fire brigades, and local authorities to establish traffic management requirements) and costs are supplied to the developer on correct completion of the appropriate application form(s), available on our website.

Summary

We enclose a record plan which shows the approximate positions of our existing water main distribution network in the vicinity of your development. This plan will help give you an indication of the likely connection points to serve your proposed development.

Our budgetary analysis considers whether your development requires any of the following:

- Onsite works: **new water mains**
- Onsite works: **new service connections**
- Onsite works: **large diameter service connections** (greater than 63mm diameter)
- Offsite works: **diversion** of existing assets
- Offsite works: **reinforcement** (upgrade) of the existing network
- Offsite works: **new service connections**

Onsite works

New onsite water mains laid in High Density Polyethylene (HPDE) up to 180mm outside diameter are typically **£130 per linear metre** where the following conditions are met:

- The trenches for the new water mains are fully excavated by the developer in accordance with the Affinity trench specification (enclosed);
- Other onsite utilities are laid in accordance with NJUG regulations, maintaining the necessary access to the new water mains and safe distances from other utilities.

The approximate scope of works is based on the information you supplied with your budget request. We have indicated our proposal for onsite mains on the record plan enclosed.

For developments with complex proposals, we strongly suggest you complete a full mains requisition to allow us to review in detail and schedule a meeting to discuss your needs.

New onsite service connections with an inline meter in Medium Density Polyethylene (MDPE) up to 32mm outside diameter are approximately **£400 each** where the following conditions are met:

- The supply pipe is laid to the correct depth in the material specified by us;
- The trench for the communication pipe is fully excavated by the developer;
- The distance between the property boundary and water main is less than 10 metres;
- The connection point to the onsite water main is exposed by the developer.

Infrastructure charges are due on new service connections. Please check our website for the current infrastructure charge (search for Affinity Water's Charges Scheme).

Onsite works: Large diameter service connections

Some types of developments require larger supplies, for example blocks of flats or offices, hospitals, industrial units or a new hotel. The approximate cost of a **single large diameter connection is £3,000**.

Infrastructure charges due on large diameter service connections for commercial premises are calculated using the Relevant Multiplier method, set out in our Charges Scheme. Please note that infrastructure charges are not included in the budget costs in this letter.

Offsite works

Where our assessment indicates that **diversion and / or reinforcement of the existing water mains network** is required to support your development, mains laid in High Density Polyethylene (HDPE) up to 180mm outside diameter are typically **£270 per linear metre** (including all excavation and reinstatement) where the following conditions are met:

- All works in the public highway (not A roads or motorways);
- Other utilities do not prevent access to the existing network (laid in accordance with NJUG).

The decision to undertake offsite works to support development activity is not taken lightly. The costs for the works are directly proportional to the extra demand required, i.e. we do not charge the developer for anything not related to his development. A basic hydraulic study is undertaken to assess the existing capacity of the network and is considered in our budget cost provided on Page 1 of this letter.

Where offsite reinforcement or diversions are required, it is because at least one of the following criteria applies:

- The existing network as currently sized is not capable of supporting any additional properties.
- The proposed development has a detrimental effect on the water supply to our existing customers.
- The development site proposed is on top of an existing asset and needs to be moved.
- New fittings (valves, washouts etc) are required to enable the connection to the new development to be made.

We would ask you to appreciate that the closest water main to your development may not be the most appropriate main to connect into, and at budget stage we cannot guarantee which main will be used. On receipt of a full mains requisition, we will undertake detailed analysis to identify the most cost effective option for your development; taking into account the above points as well as traffic management requirements.

New offsite service connections with an inline meter in Medium Density Polyethylene (MDPE) up to 32mm outside diameter are approximately **£2000 each** where the following conditions are met:

- The supply pipe is laid to the correct depth in the material specified by us to the boundary of the private land;
- The distance between the property boundary and water main is less than 10 metres;

Infrastructure charges are due on new service connections. Please check our website for the current infrastructure charge (search for Affinity Water's Charges Scheme).

Offsite works: Large diameter service connections

Some types of developments require larger supplies, for example blocks of flats or offices, hospitals, industrial units or a new hotel. The approximate cost of a **single large diameter connection is £4,000 (for bulk supplies with internal meters for flats of 12 or more please allow an extra charge for installing the meter of £109.68 for each property)**.

Infrastructure charges due on large diameter service connections for commercial premises are calculated using the Relevant Multiplier method, set out in our Charges Scheme. Please note that infrastructure charges are not included in the budget costs in this letter.

Other useful information

We have provided the cost information in good faith for your budgetary purposes.

Costs will increase when:

- Working in contaminated ground as a barrier pipe is required to protect water quality. Installations in barrier pipe are typically 30 – 50% more expensive than HDPE pipe.
- Larger diameter pipes (>180mm) are required (whether on and / or offsite), as the excavation is greater and the cost of the materials/fittings increases.
- Affinity Water is required to excavate and reinstate onsite works.
- Above ground asset reinforcement is required (e.g. a booster or new reservoir).

We require completion of the appropriate application form(s) and submission of supporting documentation to provide more accurate costs. Please note we cannot proceed if the application form is incomplete and you should estimate items such as loading units and build rates if the actual figures are currently unknown to you.

The start of mains and service connections works on your site is dependent upon our current programme of works, although every effort will be made to accommodate your timetable. It should be noted that construction in the public highway is governed by statutory regulation and under certain circumstances commencement of offsite works may be delayed by up to three months from the receipt of your payment to gain permission from the Local Authority.

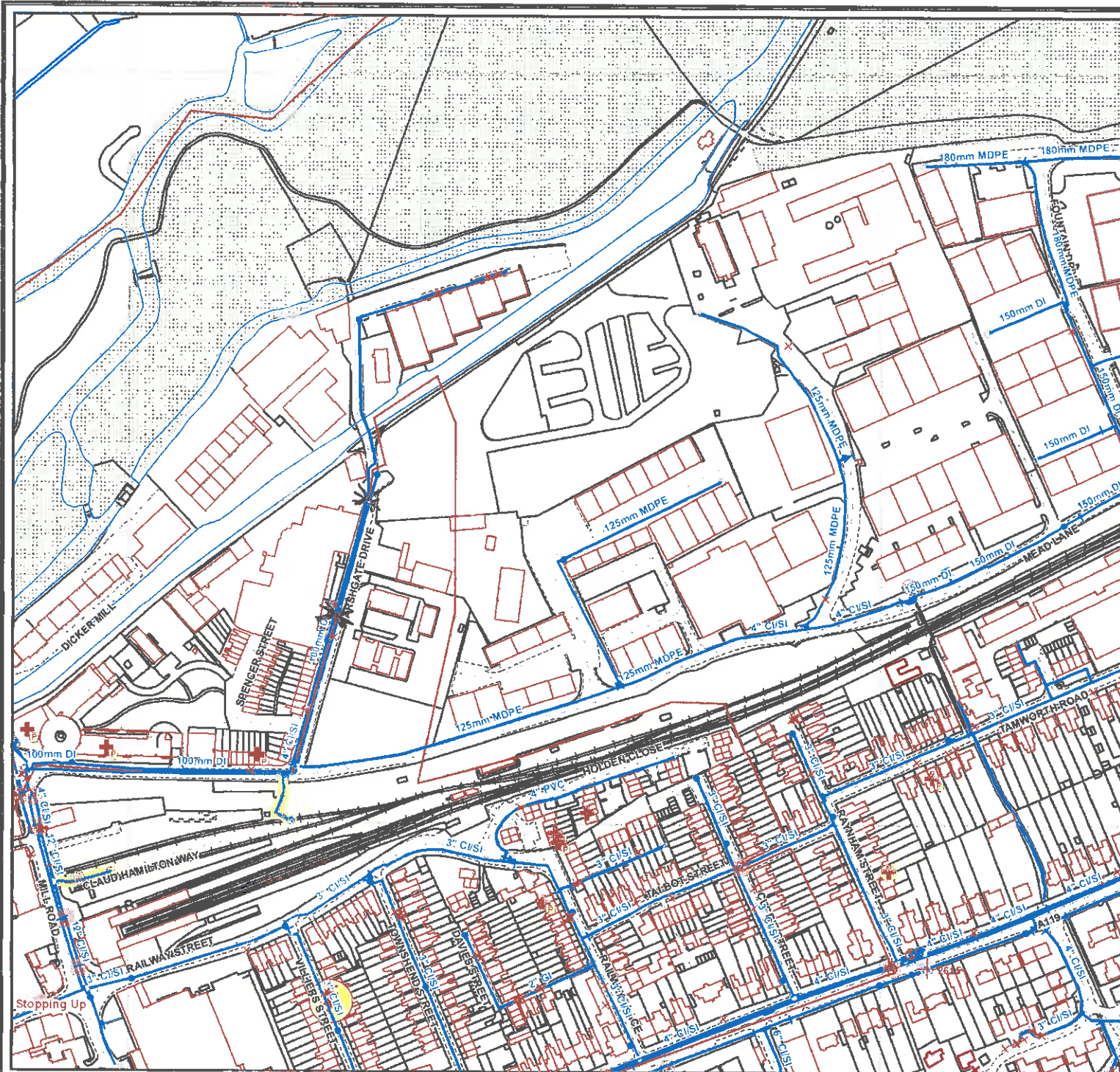
If you need any further advice please do not hesitate to contact us.

Yours sincerely

For and on behalf of Developer Services
Affinity Water Ltd

www.affinitywater/.co.uk

* Marked As
Potential Connection
points



Stoke Valve	Washout Hydrant
Pressure Reducing Valve	Distribution Main
Closed Valve	Water Quality Zone
Fire Hydrant	District Meter Zone
Oil Pipeline	

1:2500
Map Centre
533294,213187

Created by - GRPDOMBrewerk
Created on - 11/01/2016 11:58:57

Copyright Affinity Water Ltd. Based upon the Ordnance Survey Map by Affinity Water by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown copyright, Affinity Water Ltd Licence No. 10003744. Plans are the property of Affinity Water and may not be reproduced or distributed in any form (or any part) without the written permission of Affinity Water. Plans are continuously being updated, so out of date plans should be destroyed and not relied upon.

The position of Company apparatus shown on this plan is provided for guidance only. Therefore the Company accepts no responsibility in the event of inaccuracy. The actual position of apparatus must be determined on site by making hand dug trial holes. The Company requires a minimum of two working days notice of the intention to excavate trial holes. Except where prior written permission has been obtained, it is an offence under Section 174 of the Water Industry Act 1991 to operate or interfere with any valves, hydrants or other apparatus vested in Affinity Water Ltd

Asset Location Search



Premier Energy Services
4, The Courtyard West Grinstead, The Courtyard

HORSHAM
RH13 8LN

Search address supplied Hertford Gas Works
Marshgate Drive
Hertford
SG13 7AQ

Your reference 600478 - Hertford Gas Works

Our reference ALS/ALS Standard/2015_3201605

Search date 24 November 2015

You are now able to order your Asset Location Search requests online by visiting
www.thameswater-propertysearches.co.uk



Asset Location Search



Search address supplied: Hertford Gas Works, Marshgate Drive, Hertford, SG13 7AQ

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This search provides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd
Property Searches
PO Box 3189
Slough
SL1 4WW

Email: searches@thameswater.co.uk

Web: www.thameswater-propertysearches.co.uk

Asset Location Search



Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

With regard to the fresh water supply, this site falls within the boundary of another water company. For more information, please redirect your enquiry to the following address:

Affinity Water Ltd
Tamblin Way
Hatfield

Asset Location Search



AL10 9EZ
Tel: 0845 7823333

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

A charge will be added to your suppliers account.

Asset Location Search



Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

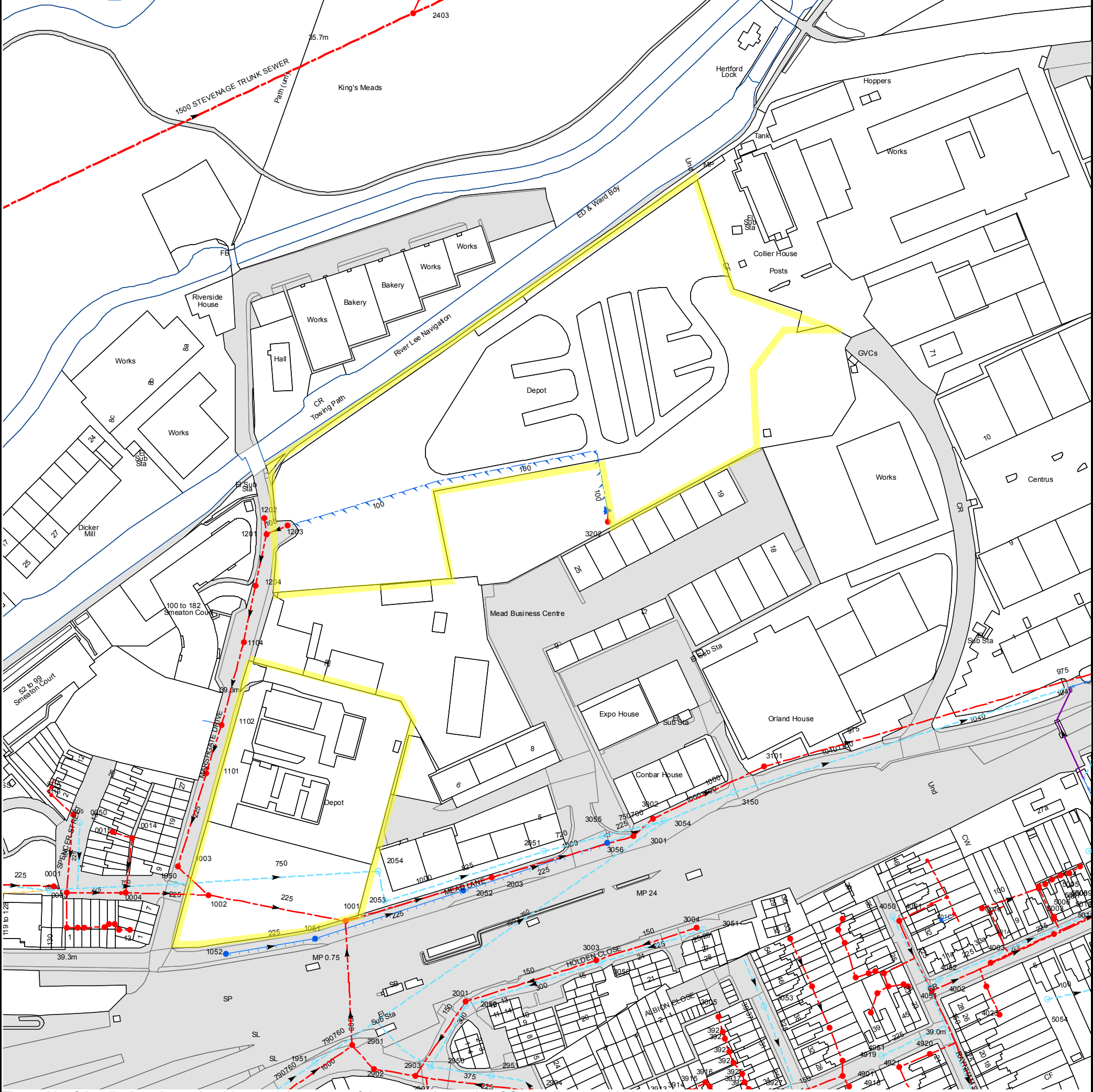
Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2015_3201605



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 533290,213223
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 with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available



















Manhole Reference	Manhole Cover Level	Manhole Invert Level
4052	38.78	37.65
401C	n/a	n/a
4018	.01	n/a
4019	n/a	n/a
4029	.01	n/a
4022	.01	n/a
401B	n/a	n/a
4003	38.57	n/a
4023	.01	n/a
401A	n/a	n/a
5005	.01	n/a
5004	.01	n/a
5006	.01	n/a
5054	.01	n/a
5007	.01	n/a
5003	38.25	36.77
5011	.01	n/a
5012	.01	n/a
5008	.01	n/a
5009	.01	n/a
4919	.01	n/a
4901	39.46	n/a
4918	.01	n/a
4951	39.22	n/a
4921	.01	n/a
4920	.01	n/a
3923	.01	n/a
3922	.01	n/a
3921	.01	n/a
4024	.01	n/a
3005	.01	n/a
4014	.01	n/a
3053	39.42	37.42
4013	.01	n/a
4002	38.94	37.07
4051	38.94	37.73
4016	.01	n/a
4027	.01	n/a
4012	.01	n/a
4015	.01	n/a
4008	.01	n/a
4011	.01	n/a
4009	.01	n/a
4010	.01	n/a
4007	.01	n/a
4004	.01	n/a
3051	37.94	36.45
4006	.01	n/a
3004	37.95	36.9
4001	38.66	37.21
4005	.01	n/a
4050	38.62	38.03
4021	.01	n/a
3916	.01	n/a
3917	.01	n/a
3924	.01	n/a
3925	.01	n/a
3926	.01	n/a
3927	.01	n/a
2050	38.54	35.57
2951	39.13	35.45
2001	38.57	36.09
3050	37.93	36.02
3003	37.96	36.54
1052	38.83	37.2
1051	38.21	36.75
1001	38.19	32.7
2053	36.96	34.18
1002	.01	n/a
2052	37.85	36.22
1050	39.57	n/a
2003	38	32.68
2054	36.34	34.12
1003	39.87	n/a
2051	36.99	33.96
3056	38.29	35.78
3055	38.22	33.95
3001	38.49	n/a
3054	38.55	33.98
3002	38.61	n/a
1101	39.68	34.85
1102	39.45	n/a
1104	n/a	n/a
1204	n/a	n/a
1201	n/a	n/a
1203	n/a	n/a
3202	n/a	n/a
1202	n/a	n/a
1951	39.71	n/a
2901	39.66	n/a
2902	39.43	35.56

Manhole Reference	Manhole Cover Level	Manhole Invert Level
2903	39.44	35.74
2950	39.3	35.26
001A	36.475	34.125
011A	n/a	n/a
011B	n/a	n/a
0001	36.25	33.66
0003	36.52	33.58
0006	.01	n/a
0005	35.9	34.98
0007	.01	n/a
0050	36.01	n/a
0008	.01	n/a
0009	.01	n/a
0010	.01	n/a
0015	.01	n/a
0011	.01	n/a
0012	.01	n/a
0004	38.2	33.57
0013	.01	n/a
0014	.01	n/a
2403	36.84	32.54
3150	38.42	33.95
3101	.01	n/a
4017	.01	n/a
5010	.01	n/a
5059	.01	n/a
5153	.01	n/a
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.		



ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

	Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.		
	Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.		
	Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.		
	Trunk Surface Water		Trunk Foul
	Storm Relief		Trunk Combined
	Vent Pipe		Bio-solids (Sludge)
	Proposed Thames Surface Water Sewer		Proposed Thames Water Foul Sewer
	Gallery		Foul Rising Main
	Surface Water Rising Main		Combined Rising Main
	Sludge Rising Main		Proposed Thames Water Rising Main
	Vacuum		

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plans are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
- 5) 'na' or '0' on a manhole level indicates that data is unavailable.

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve
	Dam Chase
	Fitting
	Meter
	Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Control Valve
	Drop Pipe
	Ancillary
	Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Outfall
	Undefined End
	Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

	Public/Private Pumping Station
	Change of characteristic indicator (C.O.C.I.)
	Invert Level
	Summit

Areas

Lines denoting areas of underground surveys, etc.

	Agreement
	Operational Site
	Chamber
	Tunnel
	Conduit Bridge

Other Sewer Types (Not Operated or Maintained by Thames Water)

	Foul Sewer		Surface Water Sewer
	Combined Sewer		Gully
	Culverted Watercourse		Proposed
			Abandoned Sewer

- 6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

Credit Card	BACS Payment	Telephone Banking	Cheque
Call 0845 070 9148 quoting your invoice number starting CBA or ADS.	Account number 90478703 Sort code 60-00-01 A remittance advice must be sent to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW. or email ps.billing@thameswater.co.uk	By calling your bank and quoting: Account number 90478703 Sort code 60-00-01 and your invoice number	Made payable to ' Thames Water Utilities Ltd ' Write your Thames Water account number on the back. Send to: Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW or by DX to 151280 Slough 13

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.



Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

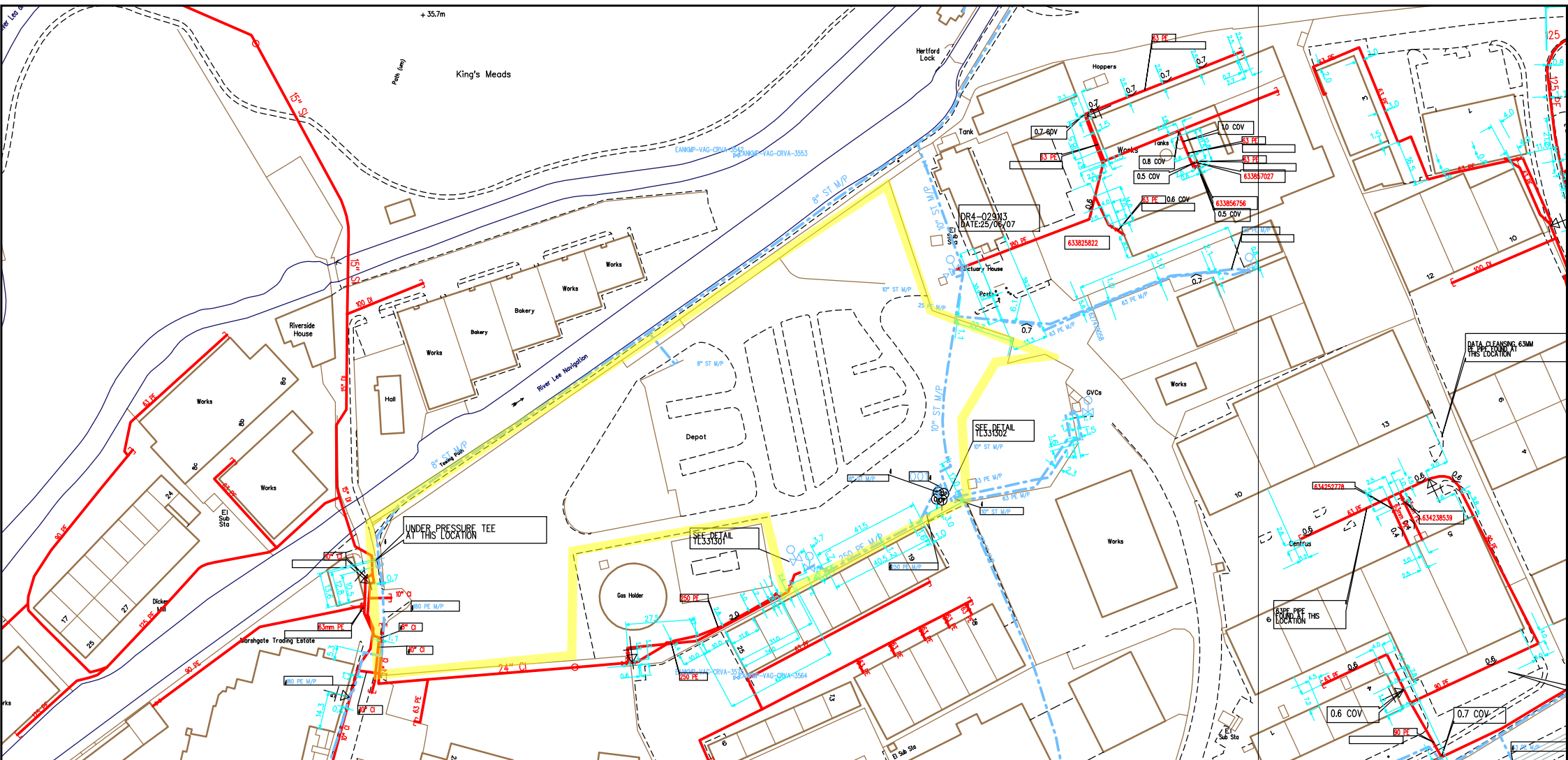
Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

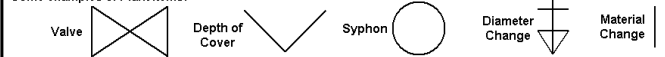
You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE



SCALE: Not to scale
USER ID: hannah.stalley
DATE: 23/11/2015
EXTRACT DATE: 24/09/2015
MAP REF: TL3313
CENTRE: 533318, 213312

Some examples of Plant Items:

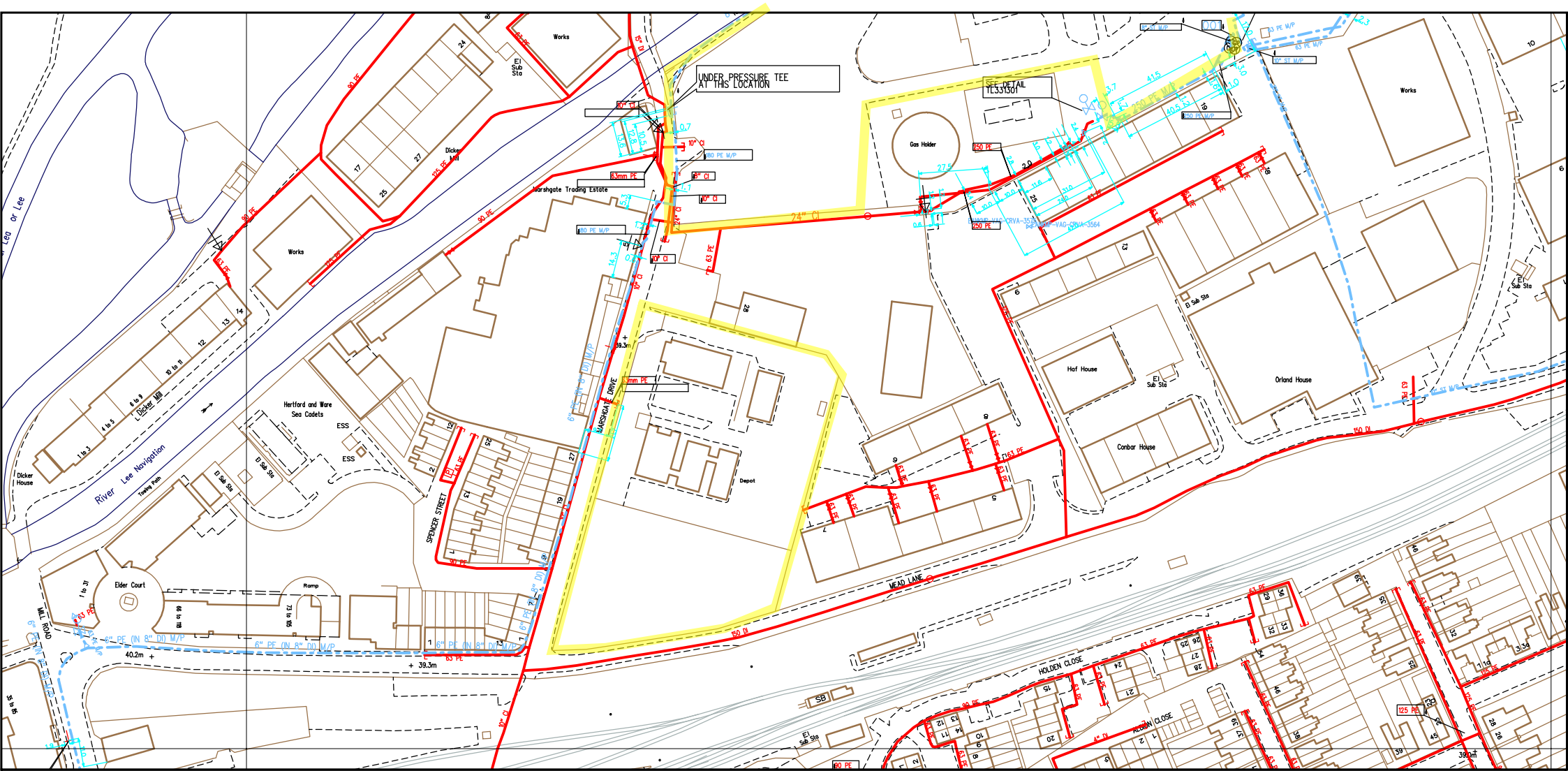


This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, 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 persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.6.7.0

Local Machine

This plan is reproduced from or based on the OS map by National Grid Gas plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.



SCALE: Not to scale			<p>This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, 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 persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.</p>	MAPS Viewer Version 5.6.7.0	
USER ID: hannah.stalley				Local Machine	
DATE: 23/11/2015					
EXTRACT DATE: 24/09/2015					
MAP REF: TL3313					
CENTRE: 533206, 213137		<p>This plan is reproduced from or based on the OS map by National Grid Gas plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.</p>			

Network Enquiry No : 180003895
Your Reference : SG13 7AQ

nationalgrid

Connections, Digitising & Statutory Reco

National Gas Emergency Service - 0800 111 999* (24hrs)
*calls will be recorded and may be monitored

HANNAH STALLEY
PREMIER ENERGY SERVICES
4 THE COURTYARD
PONDTAIL FARM
WEST GRINSTEAD
HORSHAM
RH13 8LN

Date : 21st January 2016
Contact : Claire Wilcox
Direct Tel :
Email : claire.wilcox@uk.ngrid.com

www.nationalgrid.com

Dear HANNAH,

Re: Land Enquiry for Proposed Development Site at NEW SUPPLY, HERTFORD GAS WORKS, MARSHGATE DRIVE, HERTFORD HERTFORDSHIRE, SG13 7AQ.

Thank you for your enquiry which we received on 14th January 2016. I enclose details of National Grid Gas plant in the vicinity of your proposed supply.

The nearest main with sufficient capacity is 2 metres from the site boundary and it is a Medium Pressure main.

Please be aware of existing mains or services within the site boundary that may require diversionary or abandonment works, this will be costed upon receipt of a firm request. Connection to the LP main will require reinforcement.

Plans attached: Yes

A copy of the National Grid Connections Charging Statement referenced in this letter can be found on National Grid's website:

<http://www2.nationalgrid.com/uk/services/Gas-distribution-connections/charges/>

If you require a printed version please contact us on the details provided above.

I trust this meets with your requirements at this stage. If you have any queries please do not hesitate to contact Claire Wilcox on the above number.

Yours sincerely,

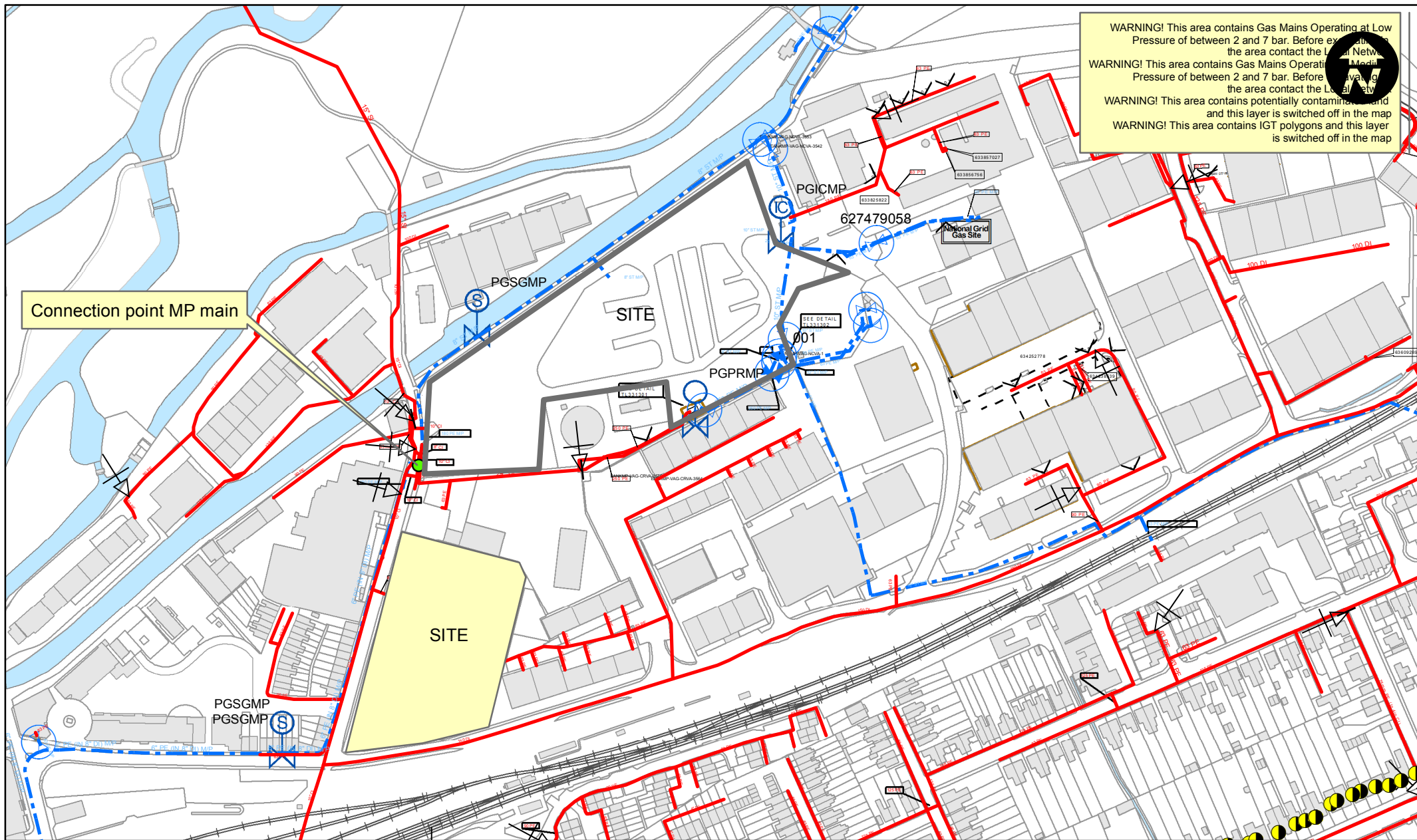


Claire Wilcox
Design Specialist



National Grid Gas plc
Registered No.2006000
Registered Address 1-3 Strand, London, WC2N 5EH

Letter Id: CRM013
Page 1 of 1



SCALE: 1:1,250 @ A4	L/P GAS MAIN	SCHEME: <NG GDFO Scheme Name>
USER ID: roger.hamman	M/P GAS MAIN	DESIGN: <NG GDFO Design Number>
DATE: 21-Jan-2016 10:17:51	I/P GAS MAIN	REVISION: <NG GDFO Revision>
INTERNAL USE ONLY	N/H/P GAS MAIN	
MAP REF: 533337, 213233	PROPOSED PIPE - LP	
CENTRE:	PROPOSED PIPE - MP	
	PROPOSED PIPE - IP	
	ABANDON - LP	
	ABANDON - MP	

This plan shows those pipes owned by National Grid in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

180003895

nationalgrid

This plan is reproduced from or based on the OS map by National Grid Gas plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.

Hannah Stalley

From: plantenquirysevice=gtc-uk.co.uk@mail.gtc-uk.co.uk on behalf of
plantenquirysevice@gtc-uk.co.uk
Sent: 24 November 2015 14:56
To: Hannah Stalley
Subject: GTC Plant Enquiry - Ref- 187551
Attachments: 187551.png; GU-DPR-IG-0022 Safe working in the vicinity of utility networks.pdf

Warning: GTC Apparatus Exists in This Area

Our Plant Enquiry Service Ref: 187551

Your Enquiry Ref: N/A

Dear Hannah,

Thank you for your enquiry concerning apparatus in the vicinity of your proposed work. For your records, the search area is shown in the attached map.

Please click on the links below to download copies of the relevant utility asset drawings locating our assets in the area which you identified. These drawings are grouped by our relevant network reference, should you need to contact us regarding any of our networks please quote this reference. Links to files will remain live for 10 days. If you do not download these files within this period you will need to submit a new enquiry – this will ensure you have an up-to-date copy of our asset records.

PLEASE NOTE: Where drawings are large, these have been provided in smaller segments. A drawing index is provided as the first file listed for each network reference (example of a network reference: N1234567) shown below. This is intended to help you find the drawing relevant to you more quickly. Please take care to ensure that you use the relevant drawings for every network listed below as we may have multiple networks and multiple utilities in this area.

N0014383-1

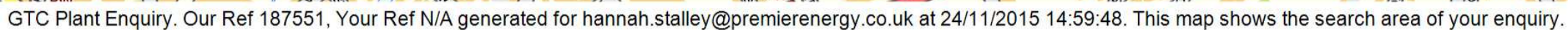
Gas

- [N0014383-1_1_of_1.png](#)

This information is for guidance only and the precise position of the plant must be established, prior to your works, using hand-digging methods only. The contractor will be held responsible for any damage caused to our asset. Please note our assets now include those owned and operated by:

- GTC Pipelines Limited
- Independent Pipelines Limited
- Quadrant Pipelines Limited
- Electricity Network Company Limited
- Independent Power Networks Limited
- Independent Water Networks Limited
- Independent Fibre Networks Limited
- Independent Community Heating Limited

If you have any queries or require any further information please do not hesitate to contact us.



**METERS TO BE LOCATED A MINIMUM
OF 350mm FROM GROUND LEVEL
DUE TO FLOOD RISK**

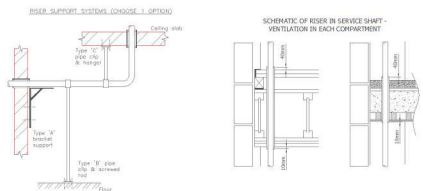
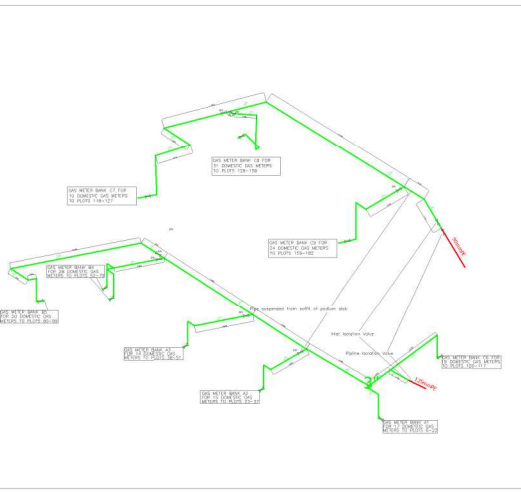
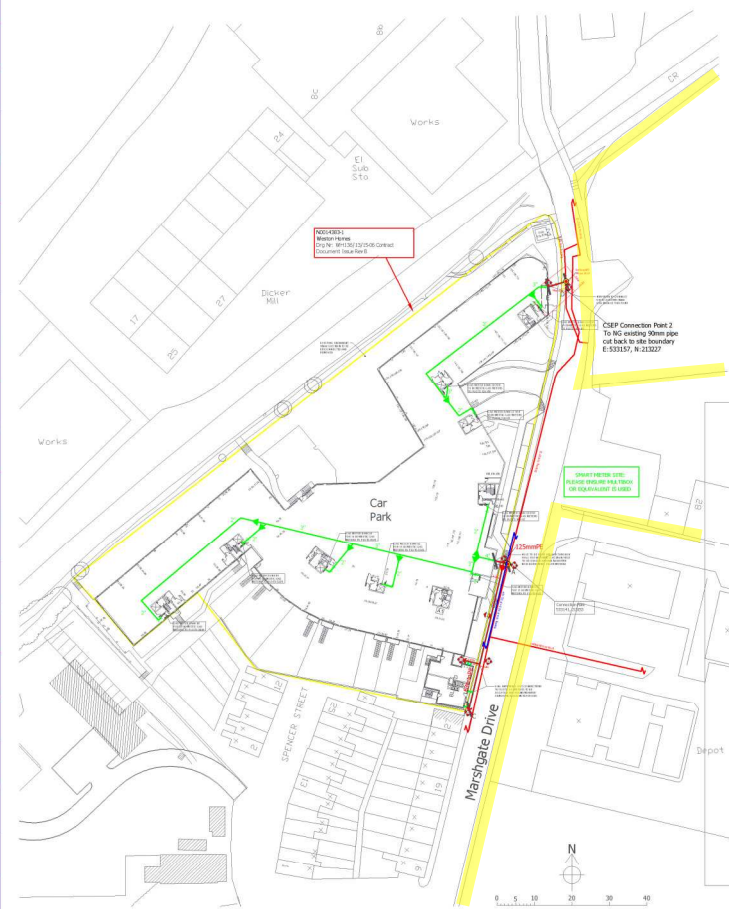
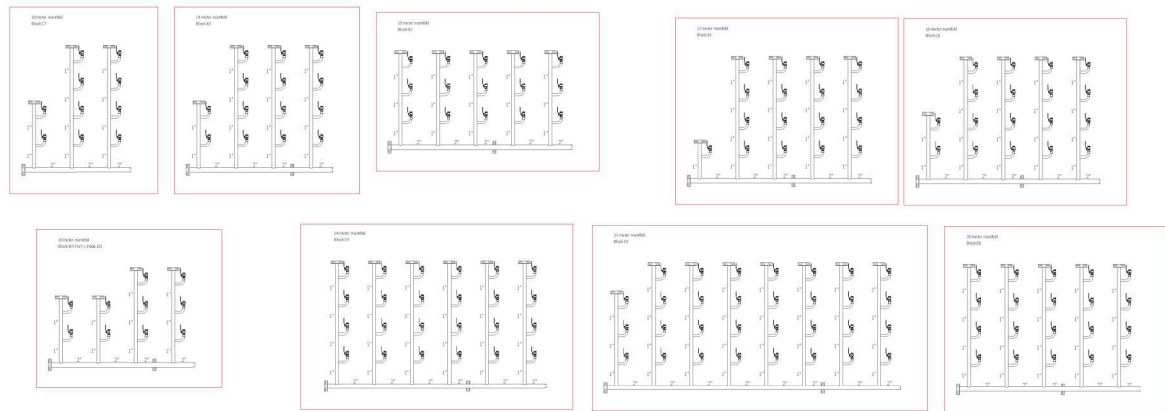
GENERAL NOTES

1. All work shall be in accordance with the latest edition of the British Standards Institution (BSI) standards and codes of practice.
2. All materials and workmanship shall be of a standard acceptable to the Local Authority and the Health and Safety Executive (HSE).
3. All work shall be carried out in accordance with the Health and Safety at Work Act 1974 and the Management of Health and Safety at Work Regulations 1992.
4. All work shall be carried out in accordance with the Environmental Protection Act 1990 and the Environmental Protection Regulations 1986.
5. All work shall be carried out in accordance with the Noise and Vibration Act 2004 and the Noise and Vibration Regulations 2005.
6. All work shall be carried out in accordance with the Air Quality Act 2000 and the Air Quality Regulations 2002.
7. All work shall be carried out in accordance with the Water Resources Act 1989 and the Water Resources Regulations 1989.
8. All work shall be carried out in accordance with the Landfill Tax Regulations 1996.
9. All work shall be carried out in accordance with the Planning Act 2008 and the Planning Regulations 2008.
10. All work shall be carried out in accordance with the Building Act 2003 and the Building Regulations 2003.
11. All work shall be carried out in accordance with the Electricity Act 1989 and the Electricity Regulations 1989.
12. All work shall be carried out in accordance with the Gas Act 1986 and the Gas Regulations 1986.
13. All work shall be carried out in accordance with the Water Act 1989 and the Water Regulations 1989.
14. All work shall be carried out in accordance with the Landfill Tax Regulations 1996.
15. All work shall be carried out in accordance with the Planning Act 2008 and the Planning Regulations 2008.
16. All work shall be carried out in accordance with the Building Act 2003 and the Building Regulations 2003.
17. All work shall be carried out in accordance with the Electricity Act 1989 and the Electricity Regulations 1989.
18. All work shall be carried out in accordance with the Gas Act 1986 and the Gas Regulations 1986.
19. All work shall be carried out in accordance with the Water Act 1989 and the Water Regulations 1989.
20. All work shall be carried out in accordance with the Landfill Tax Regulations 1996.

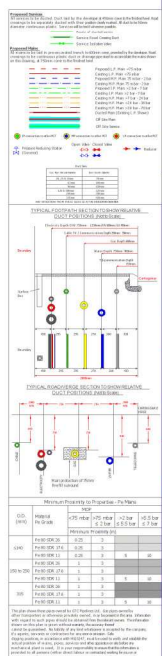
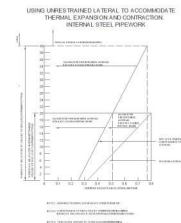
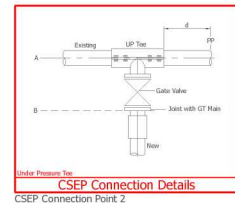
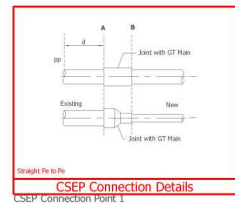
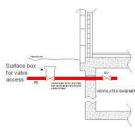
WORKS TO BE CARRIED OUT

1. Installation of new gas supply system.
2. Installation of new water supply system.
3. Installation of new drainage system.
4. Installation of new ventilation system.
5. Installation of new heating system.
6. Installation of new lighting system.
7. Installation of new fire alarm system.
8. Installation of new security system.
9. Installation of new access control system.
10. Installation of new CCTV system.
11. Installation of new intercom system.
12. Installation of new door entry system.
13. Installation of new lift system.
14. Installation of new escalator system.
15. Installation of new staircase system.
16. Installation of new roof system.
17. Installation of new floor system.
18. Installation of new wall system.
19. Installation of new ceiling system.
20. Installation of new furniture system.

Item	Description	Quantity	Unit	Price	Total
1	Gas supply system	1	m	100	100
2	Water supply system	1	m	100	100
3	Drainage system	1	m	100	100
4	Ventilation system	1	m	100	100
5	Heating system	1	m	100	100
6	Lighting system	1	m	100	100
7	Fire alarm system	1	m	100	100
8	Security system	1	m	100	100
9	Access control system	1	m	100	100
10	CCTV system	1	m	100	100
11	Intercom system	1	m	100	100
12	Door entry system	1	m	100	100
13	Lift system	1	m	100	100
14	Escalator system	1	m	100	100
15	Staircase system	1	m	100	100
16	Roof system	1	m	100	100
17	Floor system	1	m	100	100
18	Wall system	1	m	100	100
19	Ceiling system	1	m	100	100
20	Furniture system	1	m	100	100



TYPICAL BELOW-GROUND ENTRY



Drawing Scale: 1:500
 O.S. REF: 53135, 21314
 Network Number: N001435-1
 Linked Networks: N001435-1, 1 of 1
 Drawing Number: N001435-1, 1 of 1
 Developer: Weston Homes Ltd
 Location: Marchgate Trading Estate
 Harford
 Herbs SG13

SAFE WORKING IN THE VICINITY OF UTILITY NETWORKS

(Refer to the HSE Guidance Document HSG47)

General

1. It is imperative that all works are carried out in accordance with the guidance provided by the HSE in their document HSG47 "Avoiding Danger from Underground Services", ISBN 0-7176-1744-0. No party should carry out any excavation works or other intrusive works such as piling, blasting or demolition without following the guidance in HSG47.
2. We own gas, electricity, water and fibre apparatus located in the highway, private property and through the countryside. Some plant may be located in land for which a wayleave or easement has been granted & there may be no surface evidence of the presence of apparatus.
3. Ensure that you have obtained detailed plans of existing and proposed gas, electricity water and fibre networks.
4. The position of the networks should be pinpointed as accurately as possible by reference to the plans and by means of a locating device, which has been tested and calibrated within the last twelve months.

Excavation work should be carried out where applicable, and carefully follow recognised safe digging practices. Once a locating device has been used to determine position and route, excavation may proceed; trial holes should be dug using suitable hand tools to confirm the position of buried networks. During excavation the locating device should be reused to check position and route of buried apparatus.

5. Hand-held power tools can damage buried apparatus and should be used with care until the exact position has been determined. They may only be used to break a paved or concrete surface above the network, unless there are any indications that the network is particularly shallow, in such circumstances, accuracy of plant location is determined and excavation initiated adjacent to the apparatus.
6. No manhole, chamber or other structure should be built over, around or under the network. Such structures, other pipes, ducts and cables should be laid to provide a minimum clearance from the network of 300mm or 1.5 times the diameter of the network, whichever is the greater. No work should be carried out if this minimum clearance cannot be met or which results in a reduction of cover or protection over the network, without first consulting GTC.
7. Where an excavation uncovers a network apparatus the backfill should be adequately compacted, particularly beneath the network, to prevent any settlement, which would subsequently damage the network. Backfill material adjacent to the network should be selected fine material or sand, containing no stones, bricks or lumps of concrete etc. and should be suitably compacted to give comparable support and protection to that provided before excavation. No power compaction should take place until 200mm cover of selected fine fill has been suitably compacted by hand tools.

8. If the road construction is close to the top of the network, GTC should be asked about necessary precautions. The road construction depth should not be reduced without permission from the local Highway Authority.
9. Costs incurred by GTC through direct or consequential damage will be recharged.

Precautions for Gas Networks

10. Plans do not always show the presence of gas pipes cables (from the gas main to premises) but their existence should be assumed.
11. The depth of cover for gas mains is normally 750mm in carriageways and grass verges and 600mm in footways. The depth of cover for gas services is normally 450mm. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.
12. Plastic gas pipes should be located by hand digging before mechanical excavation begins. When the positions and depth of the pipes have been determined, work can proceed.
13. The danger created by damaging a gas pipe with an excavator is much greater than if the damage is done with a hand-held power tool (the opposite is true for work near electricity cables and this is reflected in the different safe digging practices). Gas pipes may have projections such as valve housings, which are not shown on the plans and to allow for this mechanical excavators should not be used within 500mm of a gas pipe.
14. If a gas leak is suspected, the following action should be taken immediately:
 - Remove all people from the immediate vicinity of the escape. If the service connection to a building or the adjacent main has been damaged, warn the occupants to leave the building, and any adjoining building, until it is safe for them to return. It is important to note that a mechanical excavator may not only cause damage/leakage at the point of impact. For example, damage to a service connection outside the building may result in further, unseen damage to the connection inside the building. Gas leaking from the damage inside or gas travelling along the line of the service connection pipe from outside the building may cause a build-up of gas within the building.
 - Prohibit smoking, and extinguish all naked flames and other sources of ignition i.e. stop excavator and compressor engines within at least 5.0m of the leak.
 - Inform National Grid by dialling **0800 111 999**
 - Remain on site.
 - Assist National Grid staff, Police or Fire Services as requested.
15. Where gas pipes cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress in the pipe. For pipes parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the pipe from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the gas pipe or cause excessive loading over the gas pipe then GTC must be consulted.

16. No concrete or other hard material should be placed or left under or adjacent to any gas pipe as this can cause pipe fracture at a later date. Concrete backfill should not be used within 300mm of a gas pipe.
17. Where an excavation uncovers a gas pipe with a damaged wrapping, GTC should be told, so that repairs can be made to prevent future corrosions and leakage.
18. Pipe restraints or thrust blocks close to gas mains should never be removed.
19. Anyone who carries out work near underground gas plant should observe any specific requirements made by the site manager, and ensure that access to the plant by National Grid Gas and GTC staff is available at all times. No unauthorised repairs to gas pipes should be made.
20. Where excavation is within 5 metres proximity to above or below ground pressure control equipment, ground workers must be aware of the possibility of encountering small impulse pipe work that is more susceptible to damage.
21. Where PE pipes and cables have been exposed and it is intended hot work (e.g. welding, grinding, etc) be carried out, contact must be made with GTC to confirm additional precautions and actions that may require to be undertaken.
22. GTC should be consulted if it is intended to carry out any of the following activities:
 - using explosives within 30m of gas pipes or 400m of gas pressure reduction equipment
 - piling or boring within 15m of gas plant
 - excavating within 10m of pressure reduction equipment
 - reducing the cover or protection of a gas pipe
 - carrying out nearby deep excavations
 - working near our intermediate pressure (IP) mains.

Precautions for Electricity Networks

23. Plans do not always show the presence of electric service cables (from the electricity main to premises) but their existence should be assumed.
24. In most cases there will be no permanent surface marker posts or other visible indication of the presence of a buried cable. Even if no cables are shown on plans or detected by a locator, there may still be cables present, which could be live and a close watch should be kept for any signs which could indicate their presence such as marker tape, tape tile, concrete tiles and wooden battens. Any marker which is disturbed by our excavations must be replaced once work is completed.
25. Typically underground cables are laid in trenches between 450mm and 1.0m deep, although some high voltage cables will be deeper, however, depths should never be assumed.
26. A cable is positively located only when it has been safely exposed. Even then, digging should still proceed with care as there may be other cables adjacent or lower down.

27. Occasionally, cables are terminated in the ground by means of a seal, sometimes with external mechanical protection. These “pot ended” or “bottle ended” cables should be treated as live and should not be assumed to be abandoned or disused. They can be difficult to detect with locators even when “live”.
28. Using hand held power tools to break up hard surfaces often leads to accidents. Where practicable, such power tools should only be used 500mm or more away from the indicated line of a cable buried in or below a hard surface. Having done so, the cable should then be positively located by careful hand digging under the hard surface. The hard surface should be gradually removed until the cable is exposed. If the cable is not exposed then it must be assumed to be embedded within the surface. Where possible a cable locator should be used as a depth guide down the side of the excavation.
29. Because of the difficulty in confirming depth, hand held power tools should never be used over the cable unless either:
 - the cable has already been exposed by digging under the surface to be broken out and it is at a safe depth (at least 300mm) below the bottom of the hard surface material; or
 - physical precautions have been taken to prevent the tool striking the cable.
30. Excavating close to electricity cables buried in concrete is dangerous and should not be undertaken unless the cable(s) have been isolated. For this reason alone electricity cables should not be buried in concrete.
31. Using mechanical means to break up concrete can cause damage to cables and if the cable is live, anyone present is likely to be injured.
32. Where mechanical excavators are used in the possible vicinity of underground cables, the work should be arranged so that damage to cables is avoided so far as is reasonably practicable and so that everyone is kept well clear of the excavator bucket while it is digging. Drivers should have been instructed to stay in the cab if a cable is struck. If they have to leave the cab, they should jump clear. If drivers climb down, they may be electrocuted. When a cable is struck, a watch should be kept on the machine and no one should go down into the excavation or approach the mechanical excavator or the cable until GTC are contacted and arranged for the damaged cable to be made safe.
33. Where cables have been exposed:
 - any damage should be reported to GTC immediately on **0800 032 6990** and work should not be undertaken in the vicinity of a damaged cable until GTC has investigated its condition;
 - for more than 1.0m and they cross a trench, support should be provided. If the exposed cable length is shorter than 1.0m support should still be considered if joints have been exposed or the cable appears otherwise vulnerable to damage. Where advice and help is needed contact GTC;

- Suitable precautions should be taken to prevent damage from on-going work in the excavation. This may involve for example the use of physical means (e.g. timber boards, sandbags etc) to prevent mechanical damage. Materials or equipment which could damage or penetrate the outer sheath of the cable should not be used. Cables lying in the bottom of an excavation are particularly vulnerable and should be protected by nail free wooden planks, troughing or other suitable means;
 - cables should not be moved aside unless the operation is supervised by GTC;
 - Precautions should be taken to prevent access by members of the public.
34. GTC should be consulted if it is intended to carry out any of the following activities:
- using explosives within 30m of plant or substations piling or boring within 15m of electric plant
 - excavating within 10m of a substation
 - carrying out nearby deep excavations
 - working near our HV plant.

Precautions for Water Networks

35. Plans do not always show the presence of water service cables (from the water main to premises) but their existence should be assumed.
36. The depth of cover for water mains is normally 750mm in carriageways and grass verges and 750mm footways. The depth of cover for water services is normally 450mm. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.
37. Water mains should be located by hand digging before mechanical excavation begins. When the positions and depth of the pipes have been determined, work can proceed.
38. The danger created by damaging a water pipe with an excavator is much greater than if the damage is done with a hand-held power tool (the opposite is true for work near electricity cables and this is reflected in the different safe digging practices). Water pipes may have projections such as valve housings, which are not shown on the plans and to allow for this mechanical excavators should not be used within 500mm of a water pipe.
39. If a water leak is suspected, the following action should be taken immediately:
- Remove all people from the immediate vicinity of the damage. It is important to note that a mechanical excavator may not only cause damage/leakage at the point of impact. For example, damage to a service connection outside the building may result in further, unseen damage to the connection inside the building.
 - Shut down all working plant and machinery in the vicinity of the damage
 - Inform IWNL by dialling **02920 028 711**.
 - Remain on site.

- Do not attempt to make a repair.
 - Assist GTC, approved contractors and Police or Fire Services as requested.
40. Where water pipes cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress in the pipe. For pipes parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the pipe from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the water pipe or cause excessive loading over the water pipe then GTC must be consulted.
 41. No concrete or other hard material should be placed or left under or adjacent to any water pipe as this can cause pipe fracture at a later date. Concrete backfill should not be used within 300mm of a water pipe.
 42. Where an excavation uncovers a water pipe with a damaged wrapping, GTC should be told, so that repairs can be made to prevent future corrosions and leakage.
 43. Pipe restraints or thrust blocks close to water mains should never be removed.
 44. Anyone who carries out work near underground water plant should observe any specific requirements made by the site manager, and ensure that access to the plant by GTC staff is available at all times. No unauthorised repairs to water pipes should be made.
 45. Where PE pipes and cables have been exposed and it is intended hot work (e.g. welding, grinding, etc) be carried out, contact must be made with GTC to confirm additional precautions and actions that may require to be undertaken.
 46. GTC should be consulted if it is intended to carry out any of the following activities:
 - using explosives within 30m of plant
 - piling or boring within 15m of water plant
 - excavating within 10m of water asset structures
 - reducing the cover or protection of a water main or service
 - carrying out nearby deep excavations

Precautions for Fibre Networks

47. Plans may not always show the presence of fibre ducts but their existence should be assumed if GTC advise they have fibre services deployed in the given area. Any planned excavation work should only proceed with due care and attention.
48. Chambers with IFNL marked lids can be used as an onsite indicator that GTC have fibre plant deployed in a given area however an exclusion of their presence does not necessarily mean there is no plant present.
49. In most cases there will be no permanent surface marker posts or other visible indication of the presence of a buried fibre duct. Even if no ducts are shown on plans there may still be ducts present which could have live fibre service installed. A close watch should be kept for any signs which could indicate duct presence such as marker tape. Any marker which is disturbed by our excavations must be replaced once work is completed.

50. The depth of cover for fibre duct is normally 350mm in footways and grass verges, 600mm in carriageways and 1000mm in agricultural deployments. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.
51. Fibre ducts should be located by hand digging before mechanical excavation begins. When the positions and depth of the ducts have been determined, work can proceed. Even then, digging should still proceed with care as there may be other ducts adjacent or lower down.
52. If fibre duct damage is suspected, the following action should be taken immediately:
 - Remove all people from the immediate vicinity of the damage. It is important to note that a mechanical excavator may not only cause damage at the point of impact. For example, damage to a fibre connection outside the building may result in further, unseen damage to the connection inside the building.
 - Shut down all working plant and machinery in the vicinity of the damage
 - Inform IFNL NOC immediately on **0845 051 1669**.
 - Remain on site.
 - Do not attempt to make a repair.
53. Where fibre ducts cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress on the duct. For ducts parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the duct from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the fibre duct or cause excessive loading over the fibre duct then GTC must be consulted.
54. No concrete or other hard material should be placed or left under or adjacent to any fibre duct as this can cause damage to the duct at a later date. Any backfill should comply with the requirements of NRSWA. Concrete backfill should not be used within 300mm of a fibre duct.
55. Anyone who carries out work near underground fibre plant should observe any specific requirements made by the site manager, and ensure that access to the plant by GTC staff is available at all times. No unauthorised repairs to fibre ducts should be made.
56. Where fibre ducts have been exposed and it is intended hot work (e.g. welding, grinding, etc) be carried out, contact must be made with GTC to confirm additional precautions and actions that may require to be undertaken.
57. GTC should be consulted if it is intended to carry out any of the following activities:
 - using explosives within 30m of plant or fibre asset structures
 - piling or boring within 15m of fibre plant
 - excavating within 10m of fibre asset structures (including the OSCP)
 - reducing the cover or protection of a fibre duct
 - carrying out nearby deep excavations

Hannah Stalley

From: Plant Enquiries <plantenquiries@energetics-uk.com>
Sent: 04 December 2015 09:33
To: Hannah Stalley
Subject: RE: Plant Enquiry - Hertford Gas Works

Dear Sir/Madam,

Thank you for submitting your recent plant enquiry.

Based on the information provided, I can confirm that Energetics **does not** have any plant within the area(s) specified in your request.

Please be advised that it may take around 10 working days to process enquiries. In the unlikely event that you have been waiting longer than 10 working days, or require further assistance with outstanding enquiries, please call 01698 404945.

Please ensure all plant enquiries are sent to plantenquiries@energetics-uk.com

Regards

Gillian Hare

Technical Clerical Team

Energetics Design & Build
International House
Stanley Boulevard
Hamilton International Technology Park
Glasgow
G72 0BN

t: 01698 404979

f: 01698 404940

e: gillian.hare@energetics-uk.com

w: www.energetics-uk.com

From: Hannah Stalley [mailto:hannah.stalley@premierenergy.co.uk]
Sent: 24 November 2015 15:05
To: 'NRSWA'; 'PlantEnquiries@instalcom.co.uk'; 'plantenquiries@catelecomuk.com'; 'osp-team@uk.verizonbusiness.com'; 'telenttelia.plantenquiries@telent.com'; 'interoute.enquiries@plancast.co.uk' (interoute.enquiries@plancast.co.uk); Plant Enquiries
Subject: Plant Enquiry - Hertford Gas Works

Dear Plant Enquiries,

Please check for your plant:

Site: Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ
OS Ref: TL 33207 13216



Unit 1 The Depot, Mayes Lane,
Sandon, Chelmsford,
Essex CM2 7RP
Phone: 07860 503882, Fax: 01245 222212
Email: Carys.Kyei@awh-utilityservices.ltd.uk

18 January 2016

Hannah Stalley
Premier Energy Services Ltd
4 The Courtyard
Pondtail Farm
West Grinstead
Horsham
RH13 8LN

Dear Hannah

Reference: AWH5738-2
Project: Commercial Development at Marshgate Drive, Hertford, Hertfordshire SG13
7AQ

Thank you for your recent enquiry for provision of a new gas service to your development. I am pleased to submit to you, my bespoke budget quotation, based upon the information provided.

Should you require any further details, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Carys Kyei', written in a cursive style.

Carys Kyei
Senior Account Manager
Carys.Kyei@awh-utilityservices.ltd.uk



Proposal

Subject to the attached terms and conditions AWH Utility Services Limited will, as outlined in the Scope of Works supply and install the gas infrastructure to the development at Marshgate Drive for: £13,334.10.

When comparing our quotation please be aware that it is a budget offer with no hidden charges or extras and includes:

- Streetworks Licence
- GIRs design, submission, authorisation & asset adoption
- Cost of the connection to the existing main
- Standard traffic management
- Project Management

Note: No road and / or lane closures will be required (by the Local Authority) and / or working outside of normal working weekday hours to facilitate the Works by AWH. If road / lane closures or working outside of normal working hours (`Normal Working Hours` are deemed: Monday to Friday inclusive – 0830 to 1630 hours, excluding evenings, weekends, public and bank holidays) are required (by the Local Authority / or the Customer / or the Police / or traffic management companies [Transport for London – TfL]) additional costs and extended lead times will apply.

The proposal is based on:

The proposal is based on:

- A. Single visit per 10 services or unless otherwise stated
- B. Section 50 Licence fee included where applicable.
- C. Standards Traffic Management in line with Chapter 8 including 2 way lights where applicable.
- D. Should a local authority require additional traffic management, direct supervision or bonds, any costs will be presented as a variation on an open-book basis as costs are rarely known at the quotation stage.
- E. Where easements are anticipated, standard legal fees are included but are not inclusive of any additional tripartite GT/iGT fees that may be required.



Scope of Works

Budget quote for 2 new gas supplies to residential and commercial units

All on site excavation works to be completed by CLIENT.

All off site excavation works to be completed by AWH.

Any customer connected to this network will have the complete freedom of choice of supplier.

All gas infrastructures will be to adopting network operator's standard specification and will be designed and constructed in accordance with all relevant legal and regulatory obligations.

Connection Works

See Design Plan for connection points

The quotation is based upon mapping systems supplied. The quotation is based upon information supplied by the appropriate gas transporter indicating that they are able to supply the gas required via the existing system without any reinforcement charges, this may be subject to change. The quotation is based on a single connection only; if this cannot be achieved then a charge may be applicable for any further connections made. by the appropriate gas transporter. The quotation is based on a single connection only; if this cannot be achieved then a charge may be applicable for any further connections made.

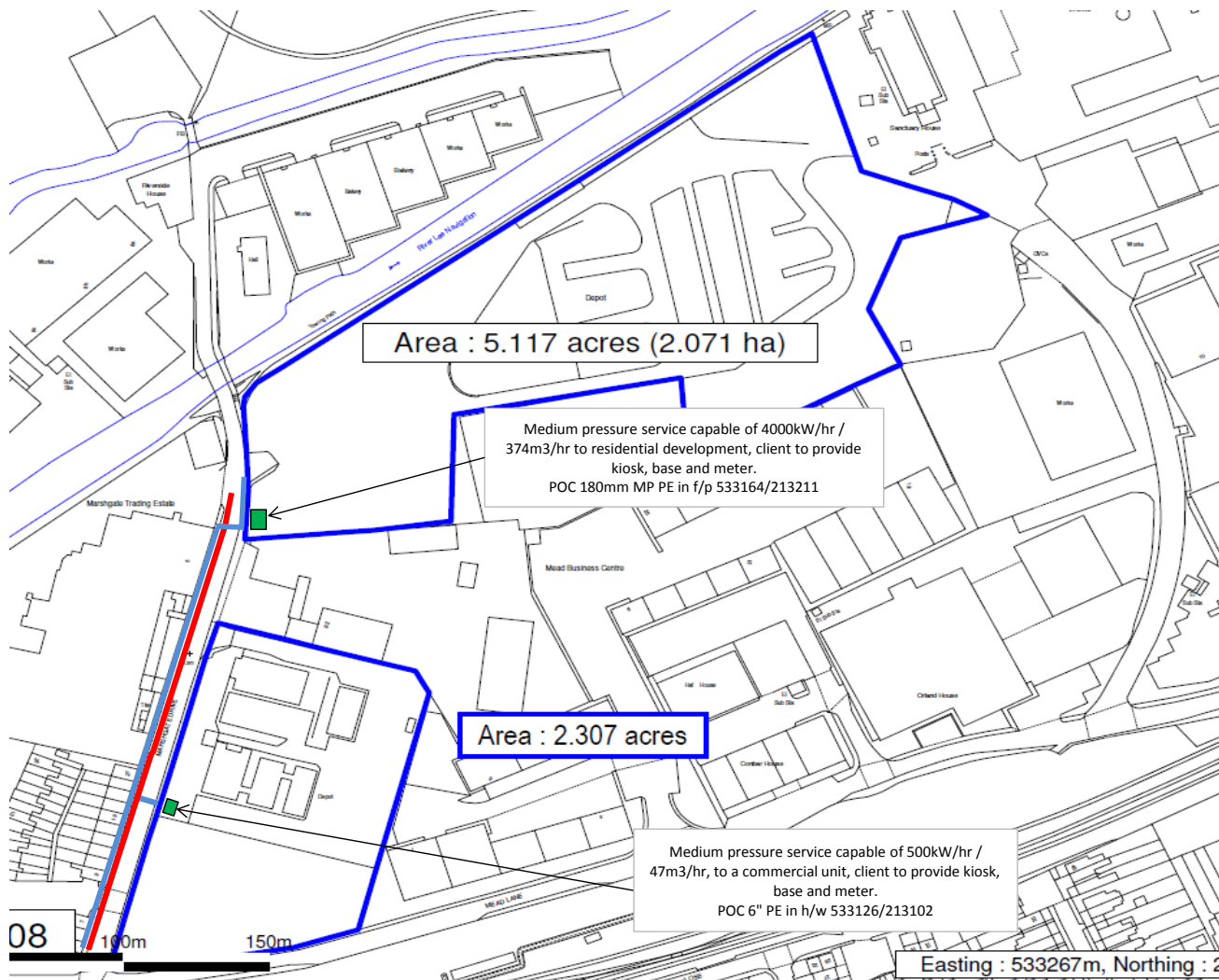
Assumptions

- The Developer is to ensure that all existing mains and services on site are disconnected and cut back at the site boundary.
- Any unidentified easements or permission required to carry out the proposed works may be subject to further costs or delays.
- On site ground has been assumed to be non-contaminated.
- Costs do not take into account or include for any unidentified Specialist Works e.g. Bridge Crossings etc.
- Off Site is defined as all works outside the property boundary in the public adopted verge, footway or road. All excavation, backfill, reinstatement to HUAC requirements and disposal of arisings to an approved centre is included. There is also an allowance for the application of the road-opening permit.
- On Site is defined as all works on private property not publicly adopted.
- All site works are completed in an open trench and all on site civils work is the responsibility of the developer.
- It is assumed that all works, both off and on site, from the point of connection will be in areas adopted or to be adopted under NRSWA or within dedicated service strips.

Payment Terms

Unless otherwise agreed our normal conditions of business are payment with order.

All prices quoted are exclusive of any VAT liability. This quotation is open for acceptance for 90 days from the date of this letter and is subject to AWH Utility Services Limited Standard Terms and Conditions. Please note: If work does not physically start within 180 days of the acceptance date, AWH Utility Services Limited reserves the right to review the quotation and pass any additional connection costs AWH may incur from the Network Owner to the customer.



Date	18 January 2016
AWH Project Reference	AWH5738-2
Sub Reference	-
Project Address	Marshgate Drive, Hertford, Hertfordshire SG13 7AQ
Scope of Works	Budget quote for 2 new gas supplies to residential and commercial units
Disconnection included	N/A
Off-site Excavation	UIP
On-site Excavation	CLIENT
Public Distance	10 m
Private Distance	6 m
Service Isolation Valve	Mixed
Service Termination Point	External in Kiosk
ECV Size	MIXED
Kiosk	Client Supplied / Built Housing
Kiosk Base	Pre-Cast by CLIENT
Meter Included	NO
Upstream GT / iGT	NGG
Connection Point	See Design
Easting / Northing of POC	See Design
Mains Pressure	MP (>75mbar to 2.00 Bar)
Special Terms & Conditions	-
Engineering Difficulties	-
Easements	NOT KNOWN
SHQ kW	4500.0
AQ kW	T.B.A
Hourly Gas Load m3/hr	419.83 m3/hr
Post Acceptance Security of Supply Check Required	YES as PID/Pk6 exceeds the criteria of Table A.1 in T/SP/NP/14
Completed By	Robert Maxwell

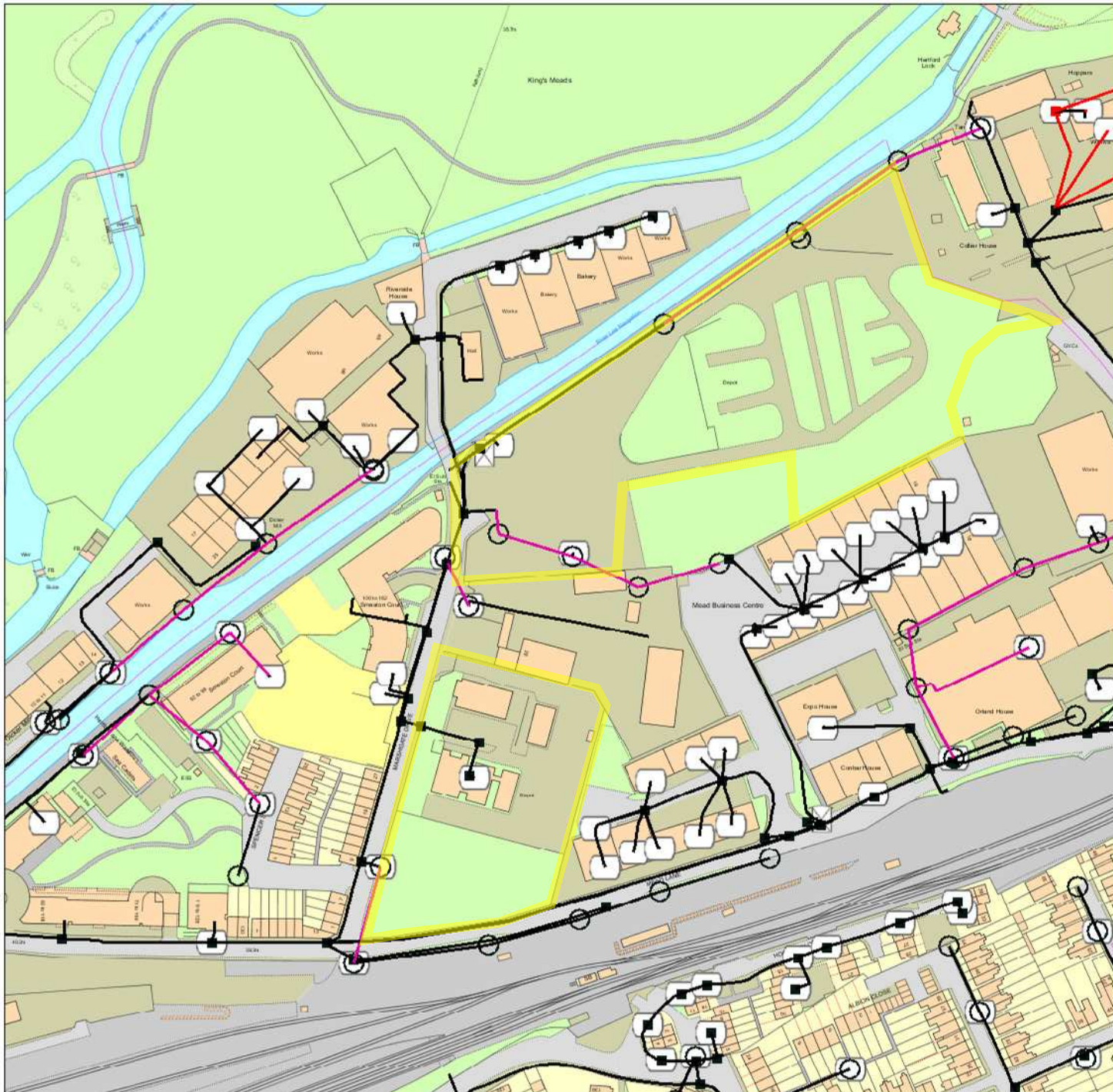
As this is a medium pressure installation there must be a 3m proximity around all medium pressure pipework and meter/kiosks.

Pressure and Capacity checks required. If reinforcement is applicable then this will be fully chargeable to the client

Proposed MP ———
Proposed LP ———
Existing MP ———
Existing LP ———

© 2015 THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL AND IS THE COPYRIGHT OF AWH UTILITY SERVICES LTD. IT MUST NOT BE COPIED OR REPRODUCED FOR TRANSMISSION TO OTHER PARTIES WITHOUT THE WRITTEN PERMISSION OF AWH UTILITY SERVICES LTD. 19/06/15 (v1.28)

Maps by email 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 exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office
(C) Crown Copyright British Telecommunications plc 100028040

KEY TO BT SYMBOLS

	UNDERGROUND PLANT		POLE
	OVERHEAD PLANT		CABINET
	JOINT BOX		BURIED JOINT
	DISTRIBUTION POINT		JOINTING POST
	MANHOLE		PROPOSED U/G
	DP BOUNDARY		PROPOSED O/H
	OTHER BT BOUNDARY		PROPOSED BOX

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 at the time of preparation.

openreach
a BT Group business

BT Ref : YZV04197F

Map Reference : (centre) TL3320713216

Easting/Northing : (centre) 533207,213216

Issued : 23/11/2015 16:19:46

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL nnhc@openreach.co.uk BEFORE PROCEEDING WITH ANY WORK IN THE HATCHED AREA

1 Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ

Not yet! Sorry, you can't get BT Infinity right now

✓ Tell me when I can get BT Infinity

You can still get **standard BT Broadband**

You could get

8Mb

Estimated download speed*

0Mb – 0Mb

Estimated download speed range*

0Mb

Minimum guaranteed speed*



Premier Energy
4 The Courtyard
Pondtail Farm
West Grinstead, Horsham
West Sussex
RH13 8LN

Virgin Media
Field Services
Units 1-12
Broad Lane
Mayfair Business Park
Bradford
Yorkshire
BD4 8PW

Tel: 0870 888 3116 Opt 2

Plant Enquiry Ref: VM.134092
Letter Date 24.11.2015
Your Ref: TL 33207 13216
Date:
01.12.2015

Hello,

Enquiry Location Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ

Thank you for your enquiry regarding work at the above location.

I enclose a copy of our above referenced drawing, marked to show the approximate position of plant owned and operated by Virgin Media.

You will be aware that you have a duty to ensure that no damage results to this equipment as a result of your proposed works. Please note that this apparatus may contain Fibre Optic, Coaxial and/or 240v Power Cables and as such, special care must be taken when excavating this area.

Should you require Virgin Media apparatus to be diverted to accommodate your works and require a detailed estimate, please send a cheque to the value of £720.00 (Bus) / £240.00 (Res) Inc VAT to:

Diversionary Works, Virgin Media, 1 Dove Wynd, Strathclyde Business Park Bellshill ML4 3AL

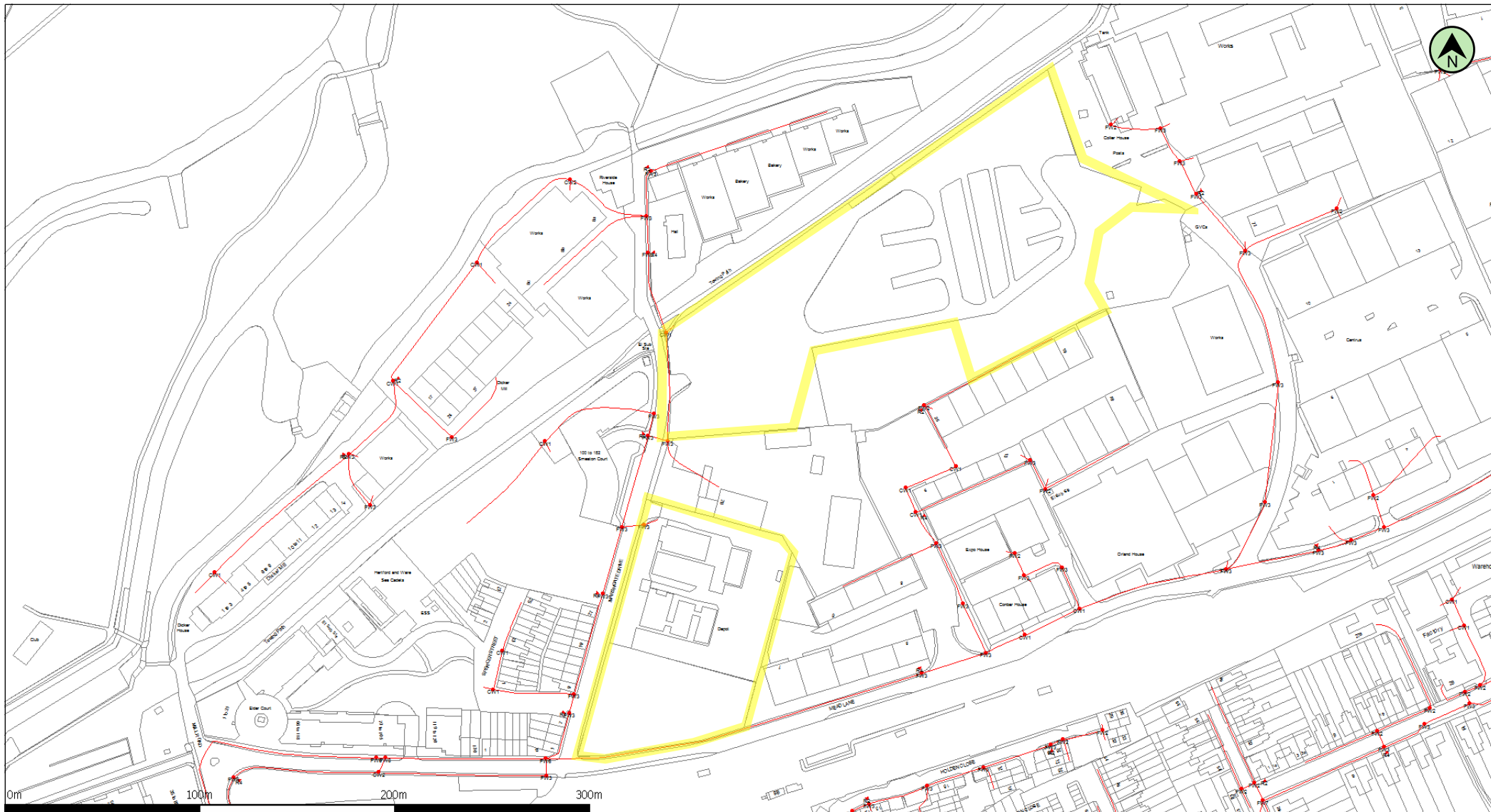
Or Call the Diversionary Team on: 0800 408 0088 Option 1

Should your request be in relation to a new development and you require an estimate to be prepared for Virgin Media to service your proposed development, please submit this request for costs along with site drawings (scale 1:500) to the New Build Team also at the above address.

Yours faithfully

National Plant Enquiries Team, email: plant.enquiries.team@virginmedia.co.uk

Please note: National Plant Enquiries are now able to accept all major cards with the exception of American Express for credit/debit card payments. If you wish to use this facility please contact us at the above telephone number. Please note: National Plant Enquiries Team (Bradford) cover and respond to plant enquiries for all ex ntl:Telewest franchise areas.



(c) Crown copyright and database rights 2015 Ordnance Survey 100019209 Date: 01/12/15 Scale: 1:2771 Map Centre: 533207,213216 Data updated: 01/11/15 Telecoms Plan A4

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 2015 Ordnance Survey 100019209.

Duct, Trench



Chamber



Cabinet



shalini.akshintala@virginmedia.co.uk



Hannah Stalley

From: Khandke, Harshita <Harshita.Khandke@atkinsglobal.com>
Sent: 25 November 2015 11:13
To: Hannah Stalley
Subject: RE: Plant Enquiry - Hertford Gas Works

Please accept this email as confirmation that Vodafone: Fixed **does not** have apparatus within the vicinity of your proposed works detailed below.

Many thanks.

Plant Enquiries Team
T: 01454 662881
E: osm.enquiries@atkinsglobal.com

ATKINS working on behalf of Vodafone: Fixed



This response is made only in respect to electronic communications apparatus forming part of the Vodafone: Fixed electronic communications network formerly being part of the electronic communications networks of Cable & Wireless UK, Energis Communications Limited, Thus Group Holdings Plc and Your Communications Limited.

PLEASE NOTE:

The information given is indicative only. No warranty is made as to its accuracy. This information must not be solely relied upon in the event of excavation or other works carried out in the vicinity of Vodafone plant. No liability of any kind whatsoever is accepted by Vodafone, its servants, or agents, for any error or omission in respect of information contained on this information. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to Vodafone's apparatus and all claims made against them by Third parties as a result of any interference or damage.

IMPORTANT - PLEASE READ:

Diversionary works may be necessary if the existing line of the highway/railway or its levels are altered, where apparatus is affected. Where apparatus is affected and requires diversion, you must submit draft details of the proposed scheme with a request for a 'C3 Budget Estimate' to c3requests@vodafone.com. These estimates should be provided by Vodafone normally within 20 working days from receipt of your request. Please include proof of this C2 response when requesting a C3 (using the 'forward' option).

From: Hannah Stalley [mailto:hannah.stalley@premierenergy.co.uk]
Sent: 24 November 2015 20:38
To: National Plant Enquiry's <OSM.enquiries@atkinsglobal.com>
Subject: Plant Enquiry - Hertford Gas Works

Dear Plant Enquiries,

Payment confirmation attached.
Transaction ID: 1MF809895C936024E
Our ref: 600478 - Hertford Gas Works

Site: Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ

Hannah Stalley

From: Plantenquiries <plantenquiries@catelecomuk.com>
Sent: 02 December 2015 10:26
To: Hannah Stalley
Subject: RE: Plant Enquiry - Hertford Gas Works

Please Note: Our search criteria has changed. We previously searched for Colt Network which was within 200 metres, this has now changed to 50 metres. The negative response will be for all enquiries that the network is 50 metres or more away from the place of enquiry.

Dear Sir/Madam,

Thank you for your enquiry for the above reference.

We can confirm that Colt Technology Services do not have apparatus near the above location.

Search is based on Overseeing Organisation Agent data supplied; we do not accept responsibility for O.O. Agent inaccurate data.

If we can be of any further assistance please do not hesitate to contact us.

Kind regards,

Plant Enquiry Team



Please consider the environment before printing this email.

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the intended recipient(s). If you are not the intended recipient, you must not copy, distribute or take any action based on this communication. If you have received this communication in error please contact plantenquiries@catelecomuk.com and delete this communication and any copies of it. Any views or opinions presented are solely those of the author and do not necessarily represent those of C A Telecom LTD. C A Telecom LTD monitors e-mails to ensure that its systems operate effectively and to minimise the risk of viruses.

From: Hannah Stalley [mailto:hannah.stalley@premierenergy.co.uk]
Sent: 24 November 2015 15:05
To: 'NRSWA' <NRSWA@bskyb.com>; 'PlantEnquiries@instalcom.co.uk'; Plantenquiries <plantenquiries@catelecomuk.com>; 'osp-team@uk.verizonbusiness.com'; 'telenttelia.plantenquiries@telent.com'; 'interoute.enquiries@plancast.co.uk' (interoute.enquiries@plancast.co.uk) <interoute.enquiries@plancast.co.uk>; 'plantenquiries@energetics-uk.com' <plantenquiries@energetics-uk.com>
Subject: Plant Enquiry - Hertford Gas Works

Hannah Stalley

From: Sandra Lakin <Sandra.Lakin@mcnicholas.co.uk>
Sent: 15 December 2015 13:49
To: Hannah Stalley
Subject: FW: PLANT ENQUIRY RESPONSES - NOT AFFECTED - KPN & TATA

The locations below are NOT AFFECTED by KPN & TATA apparatus.

None Given Premier Energy Hertford Gas works Marshgate Drive Hertford SG13 7AQ

Please quote these references on any correspondence.

Please note:

McNicholas, on behalf of our client, accept no liability for claims arising from inaccuracies, omissions or errors contained within your plant enquiry request.

If you require further information please do not hesitate to contact us.

Kind Regards,



McNicholas Plant Enquiry Team

Telephone – 0330 055 8466/8469
Facsimile – 01923 802704

Website - www.mcnicholas.co.uk

Our team. Your solution.

Hannah Stalley

From: NRSWA <NRSWA@sky.uk>
Sent: 24 November 2015 15:12
To: Hannah Stalley
Subject: Sky Telecommunications Services Ltd Plant Enquiry - PEN-15-11-2553 : Premier Energy - Hertford Gas Works

Attention: Hannah Stalley - Premier Energy

Dear Sir/Madam,

RE: Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ

Thank you for your enquiry.

Please be advised that Sky Telecommunications Services Ltd will not be affected by these works.

Best endeavours have been made to ensure accuracy, however if you require further information, please contact us.

If you would like to submit your plant enquiries electronically, please send them to nrswa@sky.uk

Please be advised that our fax number has changed to 0207 032 3252.

Regards

NRSWA Department

Network Infrastructure and Planning
BSKYB Telecommunications Services Ltd
70 Buckingham Avenue
SLOUGH
SL1 4PN

T +44 (0) 207 032 3234/250

F +44 (0) 207 032 3252

E nrswa@bskyb.com

Information in this email including any attachments may be privileged, confidential and is intended exclusively for the addressee. The views expressed may not be official policy, but the personal views of the originator. If you have received it in error, please notify the sender by return e-mail and delete it from your system. You should not reproduce, distribute, store, retransmit, use or disclose its contents to anyone. Please note we reserve the right to monitor all e-mail communication through our internal and external networks. SKY and the SKY marks are trademarks of Sky plc and Sky International AG and are used under licence. Sky UK Limited (Registration No. 2906991), Sky-In-Home Service Limited (Registration No. 2067075) and Sky Subscribers Services Limited (Registration No. 2340150) are direct or indirect subsidiaries of Sky plc (Registration No. 2247735). All of the companies mentioned in this paragraph are incorporated in England and Wales and share the same registered office at Grant Way, Isleworth, Middlesex TW7 5QD.

Hannah Stalley

From: Interoute Enquiries <interoute.enquiries@plancast.co.uk>
Sent: 25 November 2015 15:27
To: Hannah Stalley
Subject: RE: Plant Enquiry - Hertford Gas Works

This response does not include Vtesse plant, please continue to use Vtesse details for their enquiries

To whom it may concern

Thank you for your enquiry regarding the above proposals at the above location

We would advise that we are unaware of any Interoute plant or services in this Location as indicated in your enquiry.

We bring to your attention the fact that whilst we try to ensure the information we provide is accurate, the information is provided Without Prejudice and Interoute and its Agents accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response.

All responses are only valid for 28 days

Yours faithfully

PLANCAST Plant Enquiry Department



The Old Haybarn
Rosebery Mews, Mentmore
Bedfordshire LU7 0UE

T: 01296 662647
www.plancast.co.uk

Save Paper - Do you really need to print this email? This email and any attachments are or may be confidential and legally privileged and are sent solely for the attention of the addressee(s). If you have received this email in error, please delete it from your system: it's use, disclosure or copying is unauthorised. Statements and opinions expressed in this email may not represent those of PLANCAST. Any representations or commitments in this email are subject to contract.

Registered office: 1st Floor, The Old Haybarn, Rosebery Mews, Mentmore LU7 0UE.
Registered in England and Wales with number 4455025 VAT No. 8567 195 80

From: Hannah Stalley [mailto:hannah.stalley@premierenergy.co.uk]
Sent: 24 November 2015 15:05
To: 'NRSWA' <NRSWA@bskyb.com>; 'PlantEnquiries@instalcom.co.uk'; 'plantenquiries@catelecomuk.com'



CIVILS AND CABLING INSTALLATION SPECIALIST

Instalcom Ltd, Borehamwood Ind Park, Rowley Lane, Borehamwood, Herts WD6 5PZ.

Telephone: 020 8731 4600 Fax: 020 8731 4601 Email: enquiries@instalcom.co.uk

30 November 2015

Dear Sir or Madam,

Your Ref: Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ
Our Ref: E11-15-4483

With reference to your enquiry regarding the above noted location, I can confirm that LEVEL 3, GLOBAL CROSSING (UK) LTD, GLOBAL CROSSING PEC FIBERNET UK LTD and FIBRESPAN LTD networks **DO NOT** have any apparatus within the immediate proximity of your proposed works.

Instalcom responds to plant enquiries for LEVEL 3, GLOBAL CROSSING (UK) LTD, GLOBAL CROSSING PEC and FIBERNET UK LTD and FIBRESPAN LTD simultaneously and therefore you only need send one copy of a plant enquiry to cover all of these companies. If you would like to query the location further, please email us accordingly and we can arrange an in depth survey, which will be charged at a cost. As we are moving towards a fully electronic database we urge our customers to request plant enquiries by email which will result in a higher level of service, please forward future plant enquiries to plantenquiries@instalcom.co.uk

If you require any further information, please do not hesitate to contact me.

Plant Protection Administrator

Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood,
WD6 5PZ
E mail: - plantenquiries@instalcom.co.uk
Phone: - 020 8731 4600
Fax: - 020 8731 4601
Web: - www.instalcom.co.uk



Certificate Number 7604
ISO 9001
ISO 14001
OHSAS 18001

DIRECTORS: T.G. & T.J. O'Connor, J.T. McVeigh, D.J. Dix, P.M. Alderton.
INSTALCOM LIMITED REGISTERED IN ENGLAND No. 3421543



Part of OCU Group

Hannah Stalley

From: UK OSP-Team <osp-team@uk.verizon.com>
Sent: 24 November 2015 15:25
To: Hannah Stalley
Cc: UK OSP-Team
Subject: RE: Plant Enquiry - Hertford Gas Works

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

We have reviewed your plans and have determined that Verizon (Formally known as MCI WorldCom, MFS) has no apparatus in the areas concerned.

If you have any further queries please do not hesitate to get in touch.

Yours faithfully

Plant Protection Officer E.mail osp-team@uk.verizon.com

From: Hannah Stalley [mailto:hannah.stalley@premierenergy.co.uk]
Sent: 24 November 2015 15:05
To: 'NRSWA'; 'PlantEnquiries@instalcom.co.uk'; 'plantenquiries@catelecomuk.com'; 'osp-team@uk.verizonbusiness.com'; 'telenttelia.plantenquiries@telent.com'; 'interoute.enquiries@plancast.co.uk' (interoute.enquiries@plancast.co.uk); 'plantenquiries@energetics-uk.com'
Subject: Plant Enquiry - Hertford Gas Works

Dear Plant Enquiries,

Please check for your plant:

Site: Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire, SG13 7AQ
OS Ref: TL 33207 13216
National Grid Ref: Easting: 533207 Northing: 213216

Location plan attached.

Please confirm if, or if not, your plant will be affected by the works.

Should you have plant in close proximity please provide record drawings either by email attachment, or post.

Please provide your information as soon as possible. Many thanks.

Kind regards,

Ofcom uses cookies to ensure that we give you the best experience on our site. If you continue without changing your browser settings, we'll assume that you are agreeing to our use of cookies. Find out more by reading our [cookies policy](#).
Hide

Enter the location that you wish to search for (eg Postcode, Town or Street)

SG13 7AQ

Search

Hertford, Hertford, Hertfordshire SG13 7AQ, UK



Click on a station to see the details.	Single Operator GSM technology	Single Operator UMTS technology	Single Operator TETRA technology	Base stations with more than one operator or more than one technology
	0	2	0	0

Transmitter

Name of Operator	Vodafone
Operator Site Ref.	40214
Station Type	Macrocell
Height of Antenna	15 Metres
Frequency Range	2100 MHz
Transmitter Power	29.1 dBW
Maximum licensed power	35 dBW
Type of Transmission	UMTS

From: Interoute Plant Enquiries <do-not-reply@interoute.com>
Sent: 24 November 2015 15:28
To: Hannah Stalley
Subject: Your Interoute (Vtesse) Plant Enquiries order from 24th November 2015 is complete

Your order is complete

Your recent order on Interoute (Vtesse) Plant Enquiries has been completed. No results were found in the specified search criteria. Your order details are shown below for your reference:

Order #1125

Product	Quantity	Price
Standard Enquiry Search Radius: 250m Urgent Request: No Address: Hertford Gas WorksMarshgate DriveHertford, Hertfordshire SG13 7AQUnted KingdomMap It Eastings: 533241 Northings: 213233 Description: re-development Reason for Enquiry: New Development. Residential Supporting Documentation: ["https://plant.interoute.com/wp-content/uploads/gravity_forms/2-ef3c1fd00acb16b354efe70e960ec381/2015/11/Location-Plan10.pdf"] Your Reference: 600478	1	£55.00
Subtotal:		£55.00
VAT:		£11.00
Payment Method:		Credit Card via SagePay

telent
Crompton Close
Basildon
Essex
SS14 3BA
United Kingdom

Telephone: +44 (0)800 526 015
Facsimile: +44 (0)1268 507 569

www.telent.com

Date 24/11/2015
Our Ref LPENQ0000074658

Dear Sir/Madam

Teliasonera Line Plant Enquiry.

Thank you for your correspondence enclosing details of your proposals as per your reference below.

Hertford Gas Works, Marshgate Drive, Hertford, Hertfordshire

Our client's apparatus, Teliasonera, is not located within the vicinity of the above reference and we therefore have no further interest in this current location.

Please note that all enquiries relating to the Teliasonera line plant should be forwarded to:

By post – to, telent,

Teliasonera line plant enquiries,

Crompton Close,

Basildon,

Essex

SS14 3BA

By email - to, telenttelia.plantenquiries@telent.com

By phone – to, 0800 526 015

Yours faithfully

Telent CCO

Basildon

Enquirer			
Name	Miss Hannah Stalley	Phone	01403 740240
Company	Premier Energy	Mobile	Not Supplied
		Fax	Not Supplied
Address	4 The Courtyard Pondtail Farm West Grinstead West Sussex RH13 8LN		
Email	hannah.stalley@premierenergy.co.uk		
Notes	Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.		

Enquiry Details			
Scheme/Reference	600478 - Hertford gas Works		
Enquiry type	Planned Works	Work category	Development Projects
Start date	20/12/2015	Work type	Housing
End date	20/12/2015	Site size	59637 metres square
Searched location	XY= 533207, 213216 Easting/Northing	Work type buffer*	25 metres
Confirmed location	533242 213207		

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. **These LSBUD Members will either:**
 - i. **Ask for further information ("Email Additional Info" noted in status).** The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. **Respond directly to you ("Await Response").** In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 2 bar asset and all National Grid Electricity Transmission asset. For National Grid Gas below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

No LineasearchbeforeUdig Asset Owners within the Zone of Interest

LSBUD members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD members make regular changes to their assets.

List of not affected LSBUD members

AWE Pipeline	FibreSpeed Limited	Perenco UK Limited (Purbeck Southampton Pipeline)
BOC Limited (A Member of the Linde Group)	Gamma	Phillips 66
BP Midstream Pipelines	Humbly Grove Energy	Premier Transmission Ltd (SNIP)
BPA	HV Cables	Redundant Pipelines - LPDA
Carrington Gas Pipeline	IGas Energy	RWEpower (Little Barford and South Haven)
Centrica Energy	Ineos Enterprises Limited	SABIC UK Petrochemicals
Centrica Storage Ltd	INEOS Manufacturing (Scotland and TSEP)	Scottish Power Generation
CLH Pipeline System Ltd	Lark Energy	Seabank Power Ltd
ConocoPhillips (UK) Ltd	Lightsource SPV Limited	Shell Pipelines
Coryton Energy Co Ltd (Gas Pipeline)	Mainline Pipelines Limited	Total (Finaline, Colnbrook & Colwick Pipelines)
CSP Fibre c/o Centara	Manchester Jetline Limited	Transmission Capital
EirGrid	Manx Cable Company	Vattenfall
Electricity North West Limited	Marchwood Power Ltd (Gas Pipeline)	Western Power Distribution
E-on UK Plc (Gas Pipelines Only)	National Grid Gas (above 2 bar) and National Grid Electricity Transmission	Wingas Storage UK Ltd
ESP Utilities Group	Northumbrian Water Group	Zayo Group UK Ltd c/o JSM Group Ltd
ESSAR	NPower CHP Pipelines	
Esso Petroleum Company Limited	Oikos Storage Limited	