

**Appendix D**  
**National Grid Gas Distribution Records**



Debbie Wigston  
Glanville Group  
Cornerstone House  
62  
Foxhall Road  
Didcot  
Oxfordshire  
OX11 7AD

Plant Protection  
National Grid  
Block 1; Floor 1  
Brick Kiln Street  
Hinckley  
LE10 0NA  
E-mail: [plantprotection@nationalgrid.com](mailto:plantprotection@nationalgrid.com)  
Telephone: +44 (0)800 688588

**National Grid Electricity Emergency Number:  
0800 40 40 90\***

**National Gas Emergency Number:  
0800 111 999\***

\* Available 24 hours, 7 days/week.  
Calls may be recorded and monitored.

[www.nationalgrid.com](http://www.nationalgrid.com)

**Date:** 08/07/2016

**Our Ref:** NL\_TW\_Z4\_3SWP\_251100

**Your Ref:** TR8151310

**RE: Proposed Works, TW10 7JH, ST MICHAELS CONVENT, HAM COMMON, RICHMOND**

Thank you for your enquiry which was received on 06/07/2016.  
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to National Grid Electricity Transmission plc's and National Grid Gas plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of National Grid's network areas please see the National Grid website (<http://www.nationalgrid.com/uk/Gas/Safety/work/>) or the enclosed documentation.

**As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. National Grid will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.**

**In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.**

## Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to National Grid Electricity Transmission plc (NGET) and National Grid Gas plc (NGG) apparatus. This assessment does **NOT** include:

- National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact National Grid.
- Gas service pipes and related apparatus
- Recently installed apparatus
- Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on the National Grid Website (<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>).

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to National Grid's easements or wayleaves nor any planning or building regulations applications.

NGG and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the National Grid Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

National Grid Plant Protection Team

# ASSESSMENT

## Affected Apparatus

The National Grid apparatus that has been identified as being in the vicinity of your proposed works is:

- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)
- Above ground gas sites and equipment

## Requirements

**BEFORE** carrying out any work you must:

- **Note the presence of an Above Ground Installation (AGI) in proximity to your site. You must ensure that you have been contacted by National Grid prior to undertaking any works within 10m of this site.**
- Carefully read these requirements including the attached guidance documents and maps showing the location of National Grid apparatus.
- Contact the landowner and ensure any proposed works in private land do not infringe National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- Ensure that all persons, including direct labour and contractors, working for you on or near National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at <http://www.hse.gov.uk>
- In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

# GUIDANCE

## **Excavating Safely - Avoiding injury when working near gas pipes:**

[http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe\\_leaflet3e2finalamends061207.pdf](http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe_leaflet3e2finalamends061207.pdf)

## **Standard Guidance**

### **Essential Guidance document:**

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

### **General Guidance document:**

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

### **Excavating Safely in the vicinity of gas pipes guidance (Credit card):**

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

### **Excavating Safely in the vicinity of electricity cables guidance (Credit card):**

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the National Grid Website:

<http://www.nationalgrid.com/uk/Gas/Safety/work/downloads/>



ID: NL\_TW\_Z4\_3SWP\_251100 View extent: 4120m, 2440m

USER: benjamin.moore

DATE: 08/07/2016

DATA DATE: 07/07/2016

REF: TR8151310

MAP REF: TQ1772

CENTRE: 517756, 172309

0m 200m  
Approximate scale 1:10000  
on A3 Colour Landscape

Some examples of Plant Items:

Valve Depth of Cover Syphon Diameter Change Material Change Out of Standard Service

**Map not to be used for construction**

This plan shows those pipes owned by National Grid Gas plc 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 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.

Map 1 of 1 (GAS)

MAPS Plot Server Version 1.9.0

**nationalgrid**

Requested by: Glanville Group

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. Ordnance Survey Licence number 100024886

# ENQUIRY SUMMARY

## Received Date

06/07/2016

## Your Reference

TR8151310

## Location

Centre Point: 517756, 172308

X Extent: 1215

Y Extent: 1075

Postcode: TW10 7JH

Location Description: TW10 7JH, ST MICHAELS CONVENT, HAM COMMON, RICHMOND

## Map Options

Paper Size: A3

Orientation: LANDSCAPE

Requested Scale: 10000

Actual Scale: 1:10000 (GAS)

Real World Extents: 4120m x 2440m (GAS)

## Recipients

pprsteam@nationalgrid.com

## Enquirer Details

Organisation Name: Glanville Group

Contact Name: Debbie Wigston

Email Address: DWigston@glanvillegroup.com

Telephone: 01235 515550

Address: Cornerstone House, 62 , Foxhall Road, Didcot, Oxfordshire, OX11 7AD

## Description of Works

Plans Only. db

## Enquiry Type

Proposed Works

## Activity Type

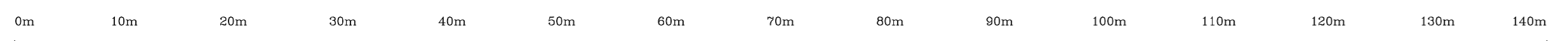
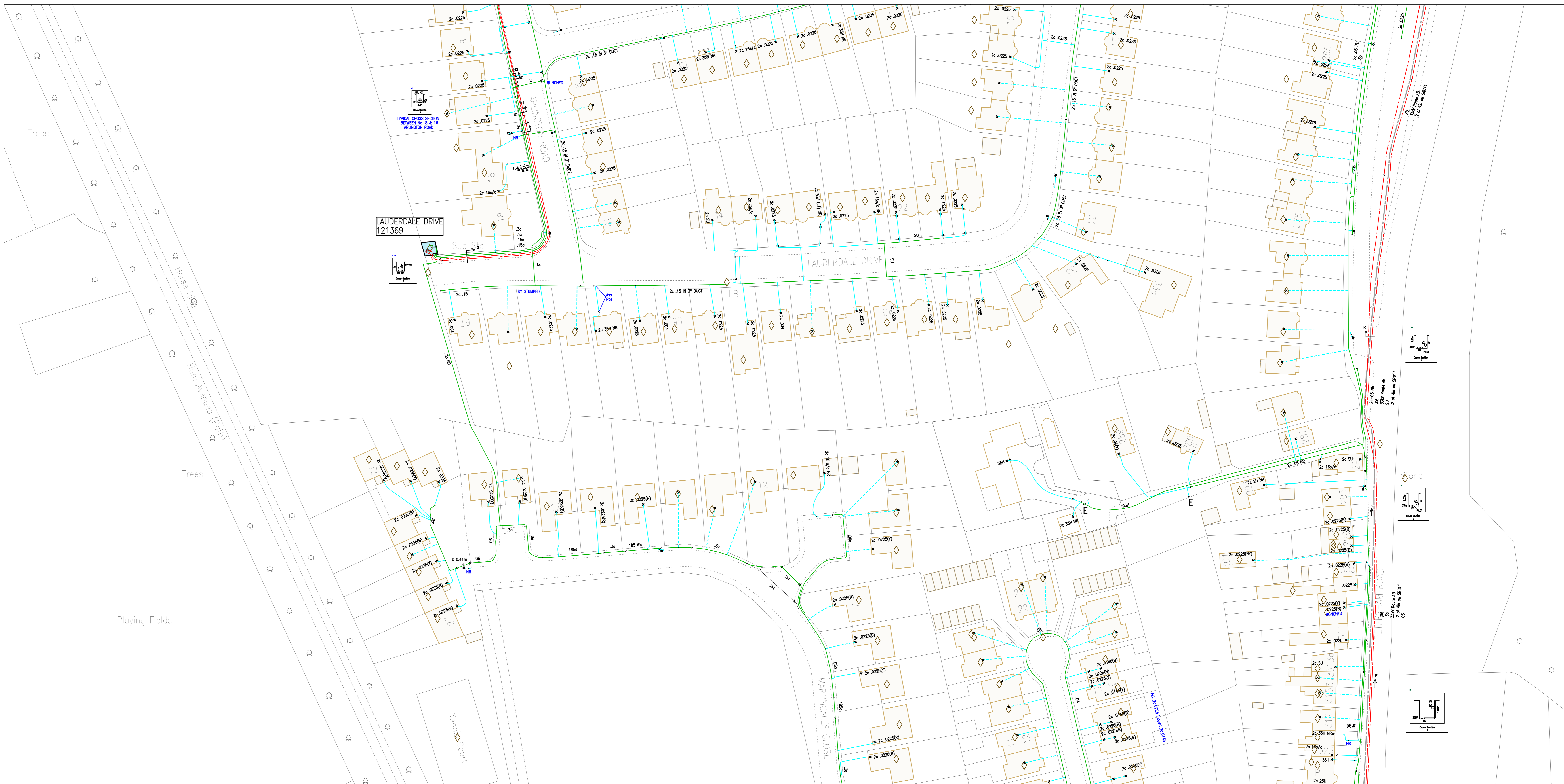
General Excavation

## Work Types

Work Type: Plans Only

**Appendix E**  
**UK Power Networks Records**

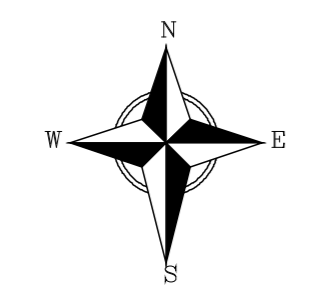




Plotted On : 14/07/2016  
 Plotted By : Tracy Gilbert  
 Plot Description: ST MICHAELS CONVENT HAM COMMON  
 RICHMOND TW10 7JH  
 2016/2227310  
 Map Centre : TQ1772SE



UK Power Networks  
 Plan Provision  
 Fore Hamlet  
 IPSWICH  
 Suffolk  
 IP3 8AA  
 Tel 0800 0565 866  
 Fax 08701 963782



For details of the symbology please refer to  
<http://www.ukpowernetworks.co.uk/safety-emergencies/in-the-workplace/understanding-safety-symbols.shtml>

**PRIMARY CABLES**  
 EXTRA HIGH VOLTAGE CABLES (EHV) 22,000 TO 132,000 Volts

Depth normally 750mm cover in carriageway & 600mm cover in footway.  
 Before digging within one metre of these cable routes  
 Telephone 0800 056 5866 in order that the Company's apparatus may be located  
 on site and any necessary protection works agreed.

N.B. THRUST BORERS OR MOLES MUST NOT BE USED WITHIN THE VICINITY OF ANY  
 CABLES BELONGING TO UK POWER NETWORKS WITHOUT FIRST CONTACTING THIS  
 COMPANY.

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 each property and item of street furniture has an electricity supply. Service cables shown only where known.
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 Ltd does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks Ltd does not exclude or limit its liability if it causes the death of a 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 Ltd has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise howsoever for any loss, damage, costs, claims, demands or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

Reproduced by permission of Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2016. All rights reserved. Ordnance Survey Licence number 100019450. 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) South 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.

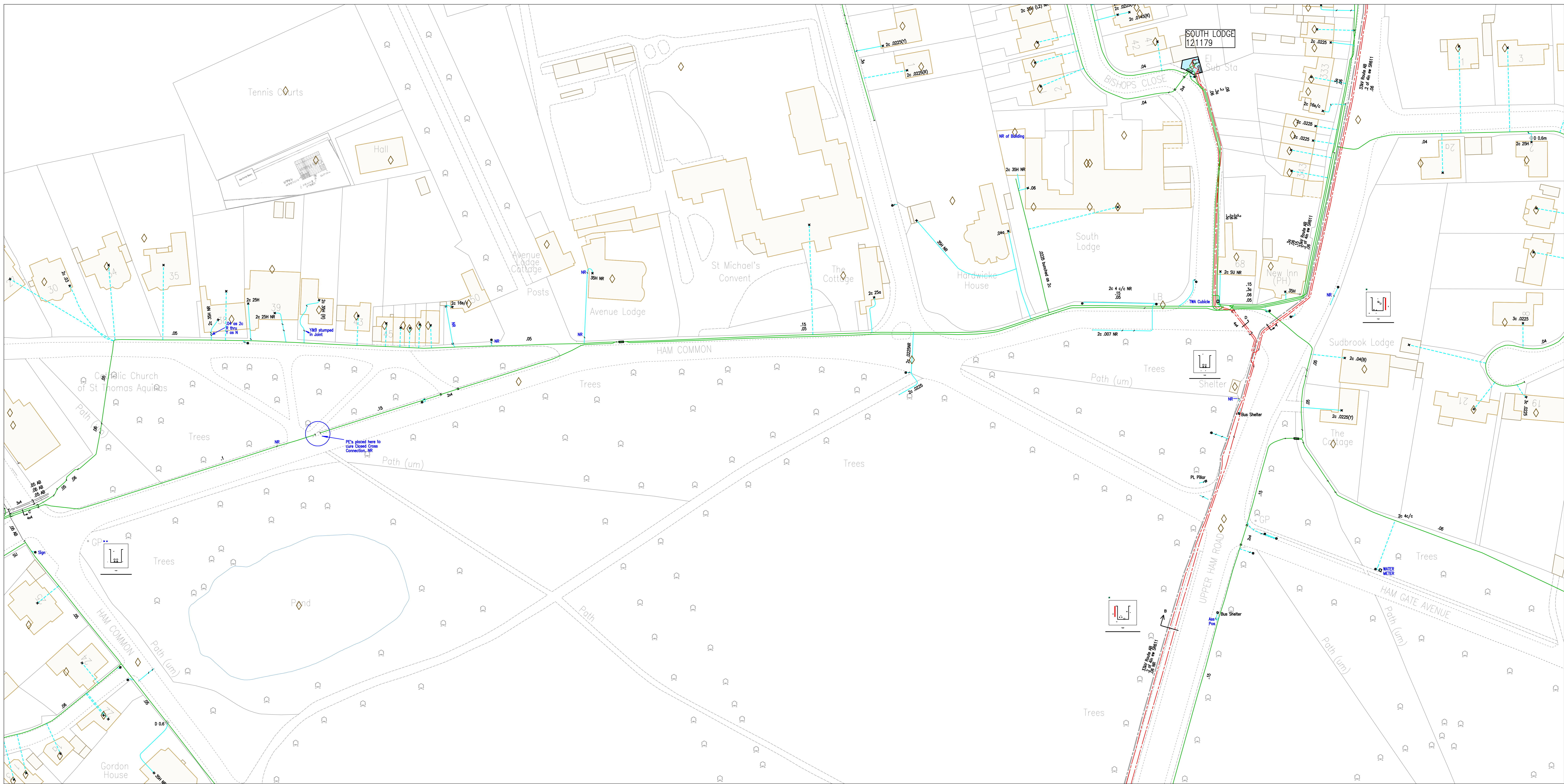
**ADVICE TO CONTRACTORS ON AVOIDING DANGER FROM BURIED ELECTRICITY CABLES.**

- 1) Do have cable drawings with you on site and check them before you start the excavation.
- 2) Do have a cable locator tool on site and use it to help you.
- 3) Mark out the location of electricity cables.
- 4) Do not use a mechanical excavator within 0.5m of electricity cables.
- 5) Use spades and shovels in preference to other tools.
- 6) Never disturb electricity cables and joints or their protective covers.

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

These basic safety precautions are explained in detail in the HSE booklet HS(G)47 – Avoiding Danger from Underground Services, a copy of which may be obtained from your supervisor or HMSO.

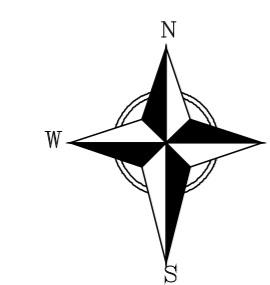
Please be aware that electric lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.



Plotted On : 14/07/2016  
 Plotted By : Tracy Gilbert  
 Plot Description: ST MICHAELS CONVENT HAM COMMON  
 RICHMOND TW10 7JH  
 2016/2227310  
 Map Centre : TQ1772SE



UK Power Networks  
 Plan Provision  
 Fore Hamlet  
 IPSWICH  
 Suffolk  
 IP3 8AA  
 Tel 0800 0565 866  
 Fax 08701 963782



For details of the symbology please refer to  
<http://www.ukpowernetworks.co.uk/safety-emergencies/in-the-workplace/understanding-safety-symbols.shtml>

**PRIMARY CABLES**  
 EXTRA HIGH VOLTAGE CABLES (EHV) 22,000 TO 132,000 Volts

Depth normally 750mm cover in carriageway & 600mm cover in footway.  
 Before digging within one metre of these cable routes  
 Telephone 0800 056 5866 in order that the Company's apparatus may be located on site and any necessary protection works agreed.

N.B. THRUST BORERS OR MOLES MUST NOT BE USED WITHIN THE VICINITY OF ANY CABLES BELONGING TO UK POWER NETWORKS WITHOUT FIRST CONTACTING THIS COMPANY.

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 each property and item of street furniture has an electricity supply. Service cables shown only where known.
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 Ltd does not warrant that the information provided to you is correct. You rely upon it at your own risk.
2. UK Power Networks Ltd does not exclude or limit its liability if it causes the death of a 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 Ltd has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise howsoever for any loss, damage, costs, claims, demands or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

Reproduced by permission of Ordnance Survey on behalf of HMSO. (c) Crown copyright and database right 2016. All rights reserved. Ordnance Survey Licence number 100019450. 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) South 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.

**ADVICE TO CONTRACTORS ON AVOIDING DANGER FROM BURIED ELECTRICITY CABLES.**

- 1) Do have cable drawings with you on site and check them before you start the excavation.
- 2) Do have a cable locator tool on site and use it to help you.
- 3) Mark out the location of electricity cables.
- 4) Do not use a mechanical excavator within 0.5m of electricity cables.
- 5) Use spades and shovels in preference to other tools.
- 6) Never disturb electricity cables and joints or their protective covers.

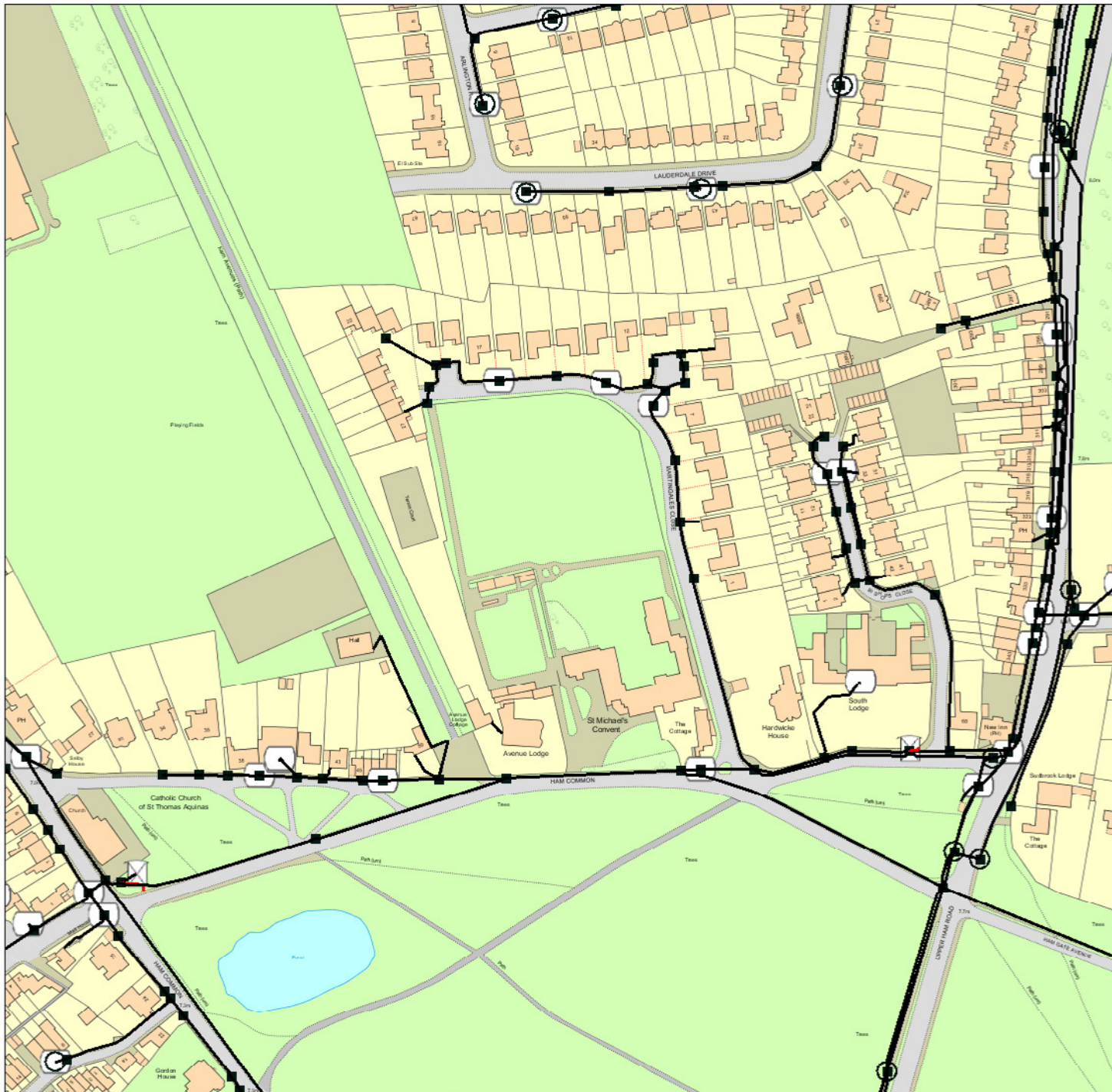
IF IN DOUBT – ASK! PHONE 0800 056 5866  
 EMERGENCY – If you damage a cable or line Phone 0800 780 0780 (24hrs) URGENTLY

These basic safety precautions are explained in detail in the HSE booklet HS(G)47 – Avoiding Danger from Underground Services, a copy of which may be obtained from your supervisor or HMSO.

Please be aware that electric lines belonging to other owners of licensed electricity distribution systems may be present and it is your responsibility to identify their location.

**Appendix F**  
**BT Openreach Records**

# 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](mailto:dbyd@openreach.co.uk)  
Website: [www.dialbeforeyoudig.com](http://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
	A/C, DW or W OVERHEAD PLANT		CABINET
	JOINT BOX		BURIED JOINT
	DISTRIBUTION POINT		JOINTING POST
	MANHOLE		PROPOSED U/G
	DP BOUNDARY		A/C, DW or W 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.



BT Ref : III11116G

Map Reference : (centre) TQ1771372246

Easting/Northing : (centre) 517713,172246

Issued : 06/07/2016 11:11:41

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

**Appendix G**  
**Virgin Media Records**



Glanville  
Cornerstone House, 62 Foxhall Road, Didcot,  
Oxfordshire,  
OX11 7AD

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.152299  
Letter Date 06.07.2016  
Your Ref: TR8151310  
Date: .....  
07.07.2016

Hello,

Enquiry Location: ST MICHAELS CONVENT, HAM COMMON, RICHMOND, TW10 7JH

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](mailto: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 2016 Ordnance Survey 100019209

Date: 07/07/16

Scale: 1:9323

Map Centre: 517713,172246

Data updated: 01/05/16

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 2016 Ordnance Survey 100019209.

Duct, Trench



Chamber



Cabinet

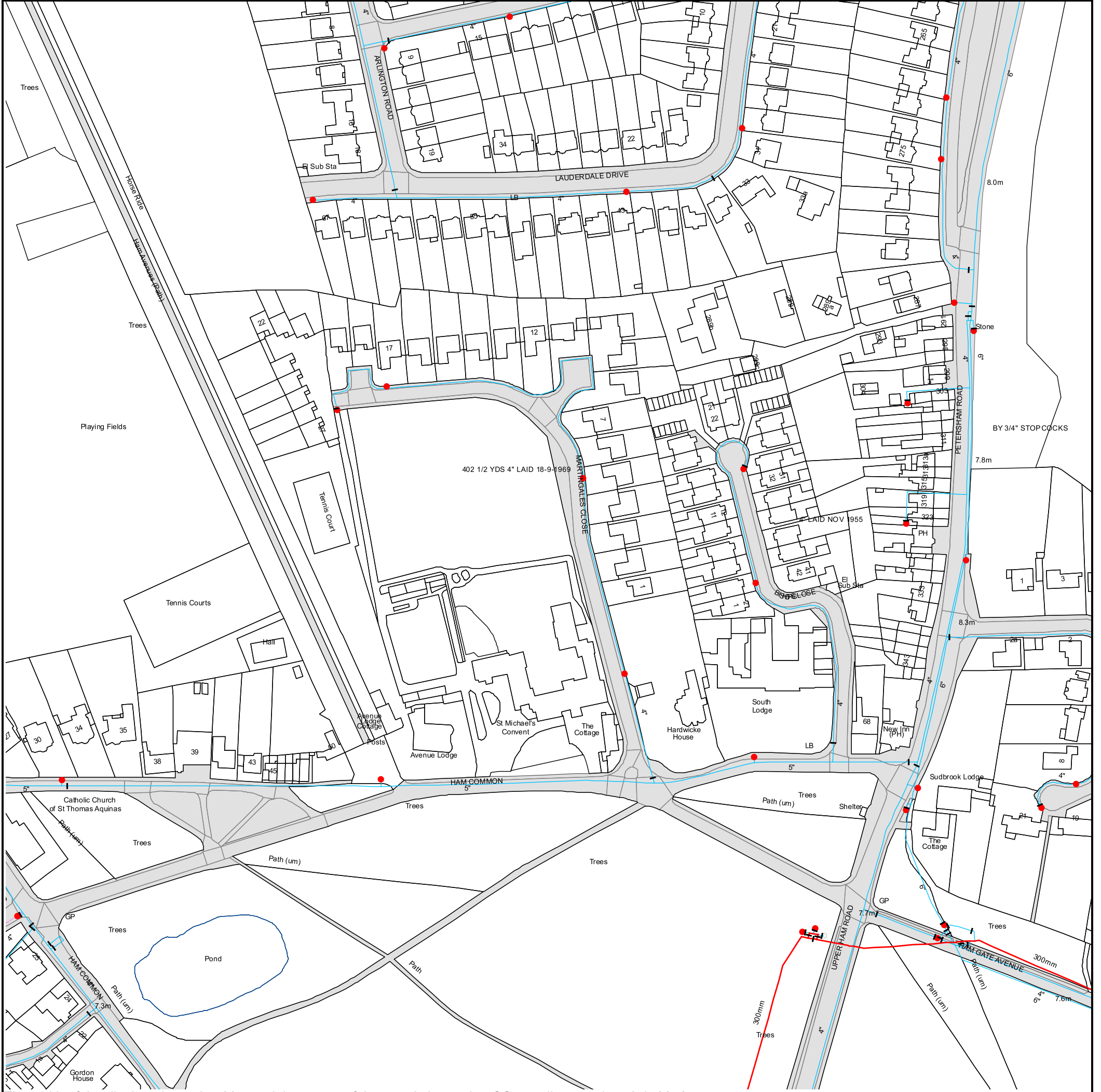


shalini.akshintala@virginmedia.co.uk



**Appendix H**  
**Thames Water Potable Water Records**





The width of the displayed area is 500m and the centre of the map is located at OS coordinates 517750,172250

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.



# ALS Water Map Key

## Water Pipes (Operated & Maintained by Thames Water)

**4"** **Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

**16"** **Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

**3" SUPPLY** **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.

**3" FIRE** **Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

**3" METERED** **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

**Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

**Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

## Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

## Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

## Hydrants

- Single Hydrant

## Meters

- Meter

## End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

## Other Symbols

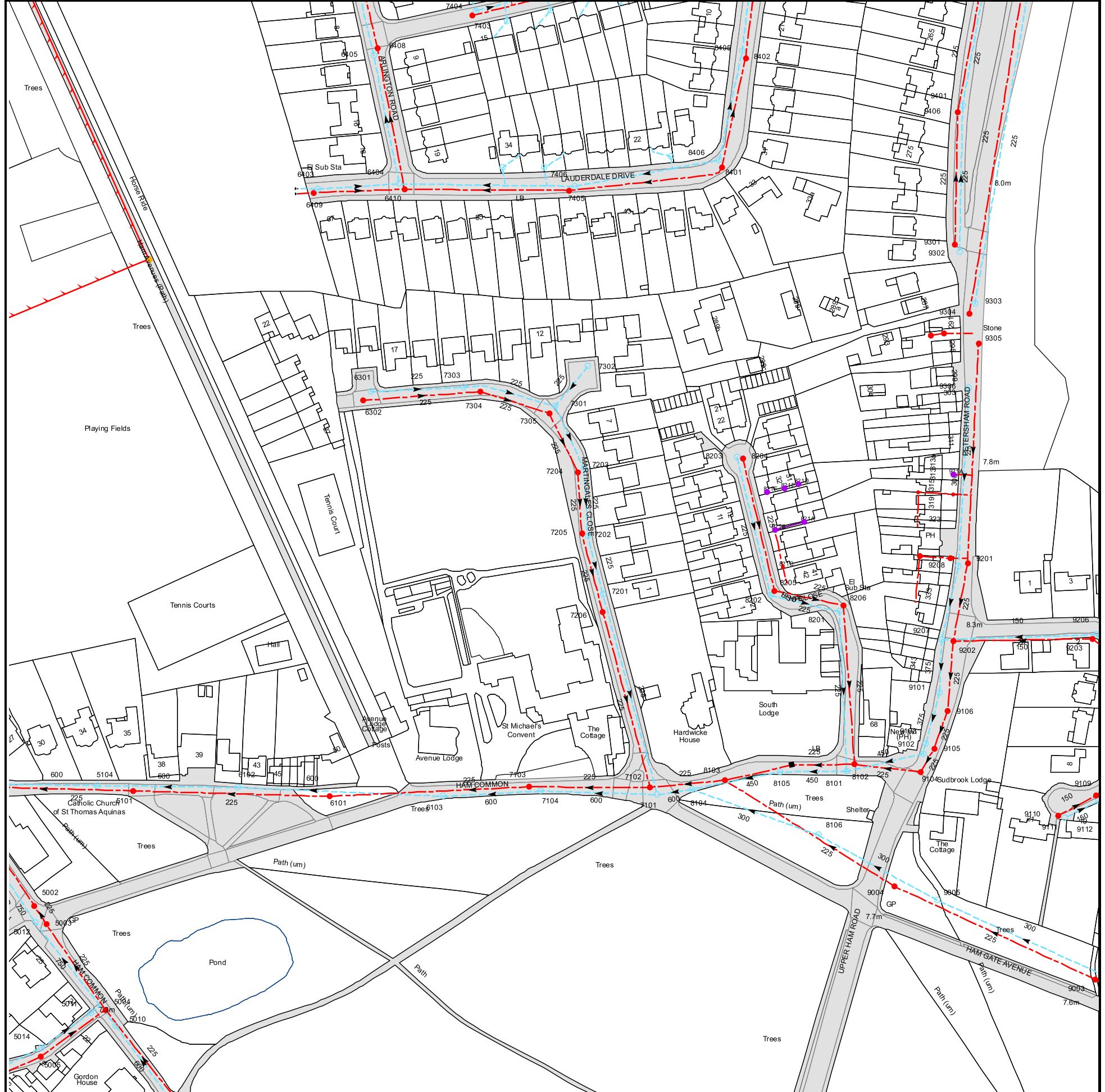
- Data Logger

## Other Water Pipes (Not Operated or Maintained by Thames Water)

**Other Water Company Main:** Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

**Private Main:** Indicates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

**Appendix J**  
**Thames Water Sewer Records**



The width of the displayed area is 500m and the centre of the map is located at OS coordinates 517750,172250

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
9406	8.46	5.48
9401	8.47	6.09
8402	8.78	6.1
8405	8.68	6.27
6409	7.32	6.05
7405	8.19	6.46
6410	7.7	5.8
6403	7.33	5.88
7406	8.21	6.23
6404	7.72	5.56
74XZ	n/a	n/a
74YT	n/a	n/a
8401	8.72	6.99
8406	8.73	7.03
84ZX	n/a	n/a
6405	7.59	5.28
6408	7.56	5.51
74ZS	n/a	n/a
7403	7.86	6.51
7404	7.88	6.76
74ZV	n/a	n/a
9206	7.79	5.7
8201	7.4	5.41
8206	7.58	5.04
8202	7.07	5.55
8205	7.07	5.16
821C	n/a	n/a
9208	8.14	5.01
9201	8.44	5.31
92ZV	n/a	n/a
92ZW	n/a	n/a
821B	n/a	n/a
821A	n/a	n/a
921C	n/a	n/a
921B	n/a	n/a
821F	n/a	n/a
821E	n/a	n/a
821D	n/a	n/a
921A	n/a	n/a
8204	6.89	5.42
9306	7.59	5.3
9305	7.56	5.58
93ZX	n/a	n/a
93ZW	n/a	n/a
9304	7.53	5.68
9303	7.57	5.87
9302	7.82	6.42
9301	7.68	5.9
9003	7.18	5.82
9005	7.49	4.98
9004	7.44	5.41
8106	7.44	4.8
9111	7.44	6.57
9110	7.42	6.56
9112	7.47	6.39
9109	7.45	6.5
8105	6.92	4.79
9104	8.14	4.64
8101	7.34	4.84
8102	7.42	4.54
9102	8.12	4.39
9105	8.31	4.78
9103	8.29	4.96
9106	8.44	4.88
9101	8.44	5.01
9202	8.46	5.11
9207	8.45	5.11
9203	7.82	5.63
5002	7.62	3.6
5012	7.67	4
5005	7.4	4.4
5014	7.33	6.06
5003	7.6	3.7
5011	7.4	6.06
5104	6.8	4.06
5004	7.18	3.83
5010	7.23	4.15
5101	6.82	3.69
6102	7.13	4.19
6101	7.08	4.08
6302	6.79	5.34
6301	6.28	5.6
6103	7.08	4.08
7303	6.72	5.4
7304	6.8	5.08
7103	7.11	4.2
7104	7.03	4.57
7305	6.84	5.01
7301	6.81	5.28
7204	6.9	4.87

Manhole Reference	Manhole Cover Level	Manhole Invert Level
7205	6.97	4.82
7203	6.87	5.18
7202	7.07	5.18
7302	7.14	5.5
7206	7.26	4.68
7201	7.24	4.98
7102	7.22	4.3
7101	7.22	4.66
8104	7.16	4.74
8103	7.01	4.49
8203	6.9	6.03

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)

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

## 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

### 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.
- 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.

## 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
<b>Areas</b>	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



Cornerstone House, 62 Foxhall Road,  
Didcot, Oxon OX11 7AD

Tel: (01235) 515550

Fax: (01235) 817799

[Postbox@glanvillegroup.com](mailto:Postbox@glanvillegroup.com)

[www.glanvillegroup.com](http://www.glanvillegroup.com)

- Structural Engineering
- Civil Engineering
- Transport & Highways
- Geomatics (Land Surveying)
- Building Surveying
- CDM Consultants