



**Building Services
Consulting Engineers**

**RBC ARTHUR HILL
POOL REDEVELOPMENT**

AT

KING'S ROAD, READING

FOR

READING BOROUGH COUNCIL

UTILITIES STATEMENT

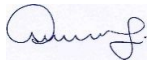
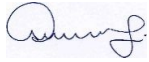


DOCUMENT REVISION RECORD

Original Document

Compiled by:	James Hicks / Martin Roberts	Date:	June 2020
Checked by:	Peter Sheppard / Mark Bowen	Date:	June 2020

Issue record

Reason for Issue:	Revision:	Date:	Chkd:
Preliminary Issue for Comment	P1	16.06.2020	
Summary Section Added	P2	22.06.2020	



Contents

1	PROJECT DESCRIPTION	4
1.1	Introduction	4
1.2	Summary	4
1.3	Site Address.....	4
1.4	Record Information.....	4
2	EXISTING SERVICES	6
2.1	Electricity - SSE	6
2.2	Gas - SGN	6
2.3	Water Mains – Thames Water	6
2.4	Sewers – Thames Water.....	6
2.5	Telecoms - Openreach	6
2.6	Telecoms – Virgin Media	6
3	PROPOSED UTILITY ALTERATIONS AND CONNECTIONS	7
3.1	Electricity - SSEN.....	7
3.2	Gas - SGN	7
3.3	Water – Thames Water	7
3.4	Telecoms - Openreach	8
3.5	Telecoms – Virgin Media	8
4	UTILITIES RECORDS	9
4.1	Search Area	9
4.2	Electricity – SSE (LV) Map	10
4.3	Electricity – SSE (HV) Map.....	11
4.4	Gas – SGN Map.....	12
4.5	Sewers – Thames Water Map	13
4.6	Water – Thames Water Map.....	14
4.7	Telecoms – Openreach Map	16
4.8	Telecoms – Virgin Media Map	17
4.9	Other – Zayo Group Map.....	18



1 PROJECT DESCRIPTION

1.1 INTRODUCTION

ION Consulting Engineers have been commissioned by Reading Borough Council to prepare a Utilities Report for 'Arthur Hill Swimming Baths' conversion/redevelopment.

The information and conclusions drawn in this report are based, in part, on information provided to ION Consulting Engineers by other parties. ION Consulting Engineers has proceeded in good faith that this information is accurate and accepts no liability for any inaccurate conclusions, assumptions or actions resulting from any inaccurate information prepared by third parties.

The purpose of this report is to determine whether or not the site can be serviced by existing utilities.

1.2 SUMMARY

The existing site services with close proximity to Arthur Hill Swimming Pool have been assessed. It can be confirmed that there are no restrictions to providing new electrical, water, telecoms (Openreach) and telecoms (Virgin Media) to the site via both King's Road and Norwood Road.

Electrical, water, gas, telecoms (Openreach) and telecoms (Virgin Media) services shall need to be disconnected from the existing building prior to demolition. There are no other services located within the site demise.

A new roadway entrance to the site shall be provided from King's Road. The depth of existing buried services with the footway is unknown, as such any requirement to lower the services cannot be confirmed at this time.

1.3 SITE ADDRESS

Arthur Hill Swimming Pool, 225 Kings Road, Reading, RG1 4LS.

1.4 RECORD INFORMATION

Enquires were made to the statutory undertakers and utilities providers in June 2020 regarding the proximity of their assets to the site. Responses were received in the form of letters and plans identifying the general arrangement of their assets. Copies of the plans provided are included in Part 4 of this report.

Assets confirmed close to site:

The following asset owners have confirmed they have services within the vicinity of the site boundary:

Asset Owner		
SSEN	Thames Water	SSE Enterprise Telecoms
SGN	Openreach (BT)	Zayo Group UK Ltd
Virgin Media		

Assets confirmed not close to site:

The following asset owners have confirmed they do not have services within the vicinity of the site boundary:

Asset Owner		
AWE Pipeline	Gamma	Premier Transmission Ltd (SNIP)
Balfour Beatty Investments Limited	Gateshead Energy Company	Redundant Pipelines - LPDA
BOC Limited	Gigaclear Ltd	RWE - Great Yarmouth Pipeline
BP Exploration	Gtt	RWEnpower
BPA	Heathrow Airport LTD	SABIC UK Petrochemicals



Carrington Gas Pipeline	Humbly Grove Energy	Scottish Power Generation
CATS Pipeline	IGas Energy	Seabank Power Ltd
Cemex	INEOS FPS Pipelines	SES Water
Centrica Storage Ltd	INEOS Manufacturing	Shell
Chrysaor Production (UK) Limited	INOVYN Enterprises Limited	Shell NOP
CLH Pipeline System Ltd	Intergen	SSE (Peterhead Power Station)
CNG Services Ltd	Mainline Pipelines Limited	SSE Utility Solutions Limited
Concept Solutions People Ltd	Manchester Jetline Limited	Tata Communications
ConocoPhillips (UK) Teesside	Manx Cable Company	Total
Diamond Transmission Corporation	Marchwood Power Ltd	Total Finaline Pipelines
DIO (MOD Abandoned Pipelines)	Melbourn Solar Limited	Transmission Capital
Drax Group	Murphy Utility Assets	UK Power Networks
E.ON UK CHP Limited	National Grid Gas & Electricity	Uniper UK Ltd
EirGrid	Northumbrian Water Group	Vattenfall
Electricity North West Limited	NPower CHP Pipelines	Veolia ES SELCHP Limited
ENI & Himor c/o Penspen Ltd	Oikos Storage Limited	Veolia ES Sheffield Ltd
EnQuest NNS Limited	Ørsted	Wales and West Utilities
EP Langage Limited	Perenco UK Limited	West of Duddon Sands Transmission
ESP Utilities Group	Perenco UK Limited	Western Power Distribution
ESSAR	Petroineos	Westminster City Council
Esso Petroleum Company Limited	Phillips 66	
Fulcrum Pipelines Limited	Portsmouth Water	

2 EXISTING SERVICES

2.1 ELECTRICITY - SSE

High Voltage

SSE HV (11kV) distribution cables are shown as buried in the footpath on the north side of King's Road, close to the site boundary.

No HV cables are shown in within Norwood Road or the adjacent footpaths.

Low Voltage

SSE LV distribution cables are buried in the footpath on the north side of King's Road, close to the site boundary. There are no overhead SSE LV distribution or service cables within the King's Road side of the site demise.

SSE LV distribution cables are buried on the north side of Norwood Road and are therefore not in close proximity to the site boundary. There are no buried or overhead SSE LV distribution or service cables within the Norwood road side of the site demise.

The existing Swimming Pool building is served by a buried three-phase electrical service cable from the footpath on the north side of King's Road. The incoming cable rises internally within the south side (King's Road side) of the building.

2.2 GAS - SGN

SGN infrastructure network identifies that there is a three-inch PE LP gas main that runs along the footpath on the opposite side of the existing site within Norwood Road.

There is a 355mm Ø LP gas main located along the front of the property within King's Road which connects into a sixteen-inch CI LP gas main further along King's Road. There is a 125mm Ø LP gas main which tees off at the front of the property to serve the existing building.

This 125mm Ø LP main distributes across the front of the site and enters the building within the Basement.

2.3 WATER MAINS – THAMES WATER

Thames Water show a three-inch water main along the length of Norwood Road complete with a single hydrant in the road adjacent to the site.

There is a six-inch water main along the length of King's Road, however they do not show a point of connection for the existing building.

It is understood that the existing water main connects into the water supply within King's Road and distributes across the front of the site and enters the building within the Basement.

2.4 SEWERS – THAMES WATER

Thames Water identify foul and surface water sewers in both Norwood Road and King's Road roads, however they do not show a point of connection for the existing building.

It is understood that the existing foul drainage connects into the public foul sewer within King's Road and the existing surface water discharges into the public sewer in Norwood Road.

2.5 TELECOMS - OPENREACH

Openreach cabling is routed within the footpath to the north side of King's Road, close to the site boundary. Existing joint pits are located further east and west along the King's Road footpath and not immediately in-front of the site boundary. There is no overhead Openreach infrastructure close to or within the King's Road side of the site boundary.

Openreach cabling is routed within the road/footpath on the south side of Norwood Road, close to the site boundary. A wooden telecoms pole is located just outside the North-West site boundary. A number of overhead lines are provided from this pole to the north-west corner of the existing building.

2.6 TELECOMS – VIRGIN MEDIA

Virgin Media cabling is routed within the footpath to the north side of King's Road close to the site boundary. A three-lid joint box marked 'Mercury Communications' is located footpath in front of the building.

3 PROPOSED UTILITY ALTERATIONS AND CONNECTIONS

3.1 ELECTRICITY - SSEN

Each domestic property shall be provided with a single-phase supply and accompanying MPAN meter. Each resident shall be required to enter into individual energy contracts with the chosen supplier (i.e. NPower, EON, OVO etc.)

The new electrical service may be provided to the new development via extension of the existing below ground infrastructure on both north (Norwood Road) and south (King's Road) sides of the site. ION Consulting Engineers shall engage with SSEN to develop and agree the design of this infrastructure.

Groundworks shall be required with the public roadway and footpath by SSEN to extend the infrastructure to the site boundary. Groundworks within the site boundary shall be undertaken by the Contractor.

3.2 GAS - SGN

This existing gas supply serving the site has been disconnected, purged and capped off within the building and the gas meter has been removed.

A quotation has been provided by SGN to disconnect the existing 125mm Ø LP service from the main in King's Road.

There will be no new gas connection required for the new development.

3.3 WATER – THAMES WATER

Water

Each domestic property shall be provided with a water supply and accompanying inline water meter and be required to enter into individual contracts with Thames Water.

Block A shall be provided with a 2 way manifold within an internal service cupboard which shall include stop valve, inline meter, drain cock, double check valve assembly for each property.

Block B shall be provided with a 6 way manifold within an internal service cupboard which shall include stop valve, inline meter, drain cock, double check valve assembly for each property.

Block C and Block D shall be provided with a 3 way & 4 way manifold within an internal service cupboard which shall include stop valve, inline meter, drain cock, double check valve assembly for each property.

The new MDPE water supplies shall be provided to the new development via extension of the existing below ground infrastructure on both north (Norwood Road) and south (King's Road) sides of the site. ION Consulting Engineers shall engage with Thames Water to develop and agree the design of this infrastructure.

Works shall be required with the public roadway and footpath by Thames Water in Norwood Road and King's Road to extend the infrastructure to the site boundary. Installation of the necessary infrastructure within the site boundary shall be undertaken by the Contractor.

Sprinkler

Reading Borough Council require a full domestic town mains sprinkler system to be installed within each property on the development.

A separately metered water main (sprinkler) shall be provided to the new development via extension of the existing below ground infrastructure on both north (Norwood Road) and south (King's Road) sides of the site. ION Consulting Engineers shall engage with Thames Water to develop and agree the design of this infrastructure.

Each sprinkler main shall be supplemented by a booster pump set.

At each landing and/or riser level will require a supply off the boosted sprinkler riser, with a lockable valve and a non-return valve at each apartment valve set position.

An alarm indicating device shall be provided, test and drain point and all distribution pipework from that position shall be provided by the sprinkler specialist at each apartment valve set position. A fire alarm input interface shall be provided into the fire panel from the sprinkler alarm indicator to indicate a sprinkler activation event at each apartment valve set position.

3.4 TELECOMS - OPENREACH

Each domestic property shall be provided with an Openreach connection, allowing telephony, and internet services to be offered to the resident.

Openreach Services may be provided to the new development via extension of the existing below ground infrastructure on both north (Norwood Road) and south (King's Road) sides of the site. ION Consulting Engineers shall engage with Openreach to develop and agree the design of this infrastructure. The solution shall require installation of Openreach approved ducts and joint pits within the site demise, no infrastructure shall be routed to the new buildings above-ground

Works shall be required with the public roadway and footpath by Openreach to extend the infrastructure to the site boundary. Installation of the necessary infrastructure within the site boundary shall be undertaken by the Contractor.

3.5 TELECOMS – VIRGIN MEDIA

The "Employers Requirements – Reading Borough Council 2019 Zero Carbon Version 3 2019' document" states:

(C5.12.2.7) "Ensure that the alternative telecommunications supplier (e.g. Virgin, Telewest Broadband Eurobell, Cable and Wireless plc) provides connection facilities up to the main entry box of every incoming line which should be situated alongside and connected to the equivalent main BT entry box so that future occupants can use either supplier. Provide connecting ducting and draw-wires".

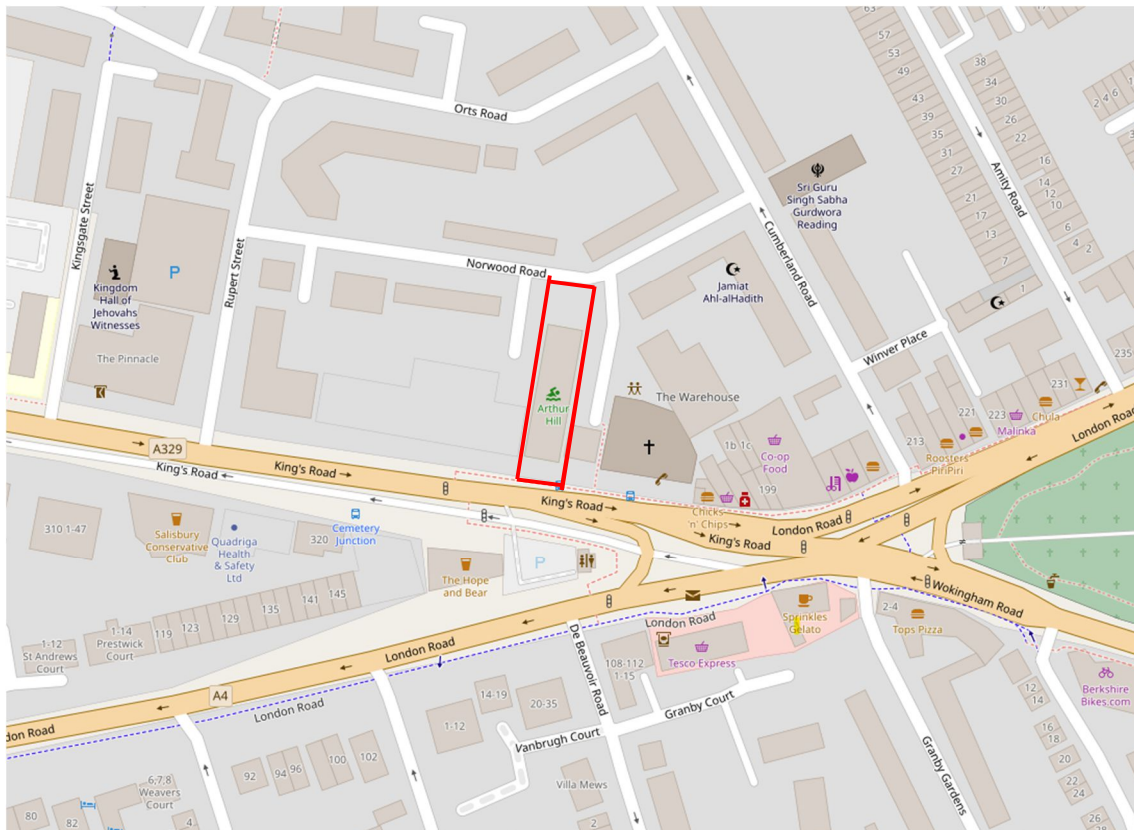
Each domestic property shall be provided with a Virgin Media connection, allowing telephony, internet and cable TV services to be offered to the resident.

Virgin Media Services may be provided to the new development via extension of the existing below ground infrastructure on both north (Norwood Road) and South King's Road) sides of the site. Ion Consulting Engineers shall engage with Virgin Media to develop and agree the design of this infrastructure. The solution shall require installation of Virgin Media approved ducts and joint pits within the site demise, no infrastructure shall be routed to the new buildings above-ground

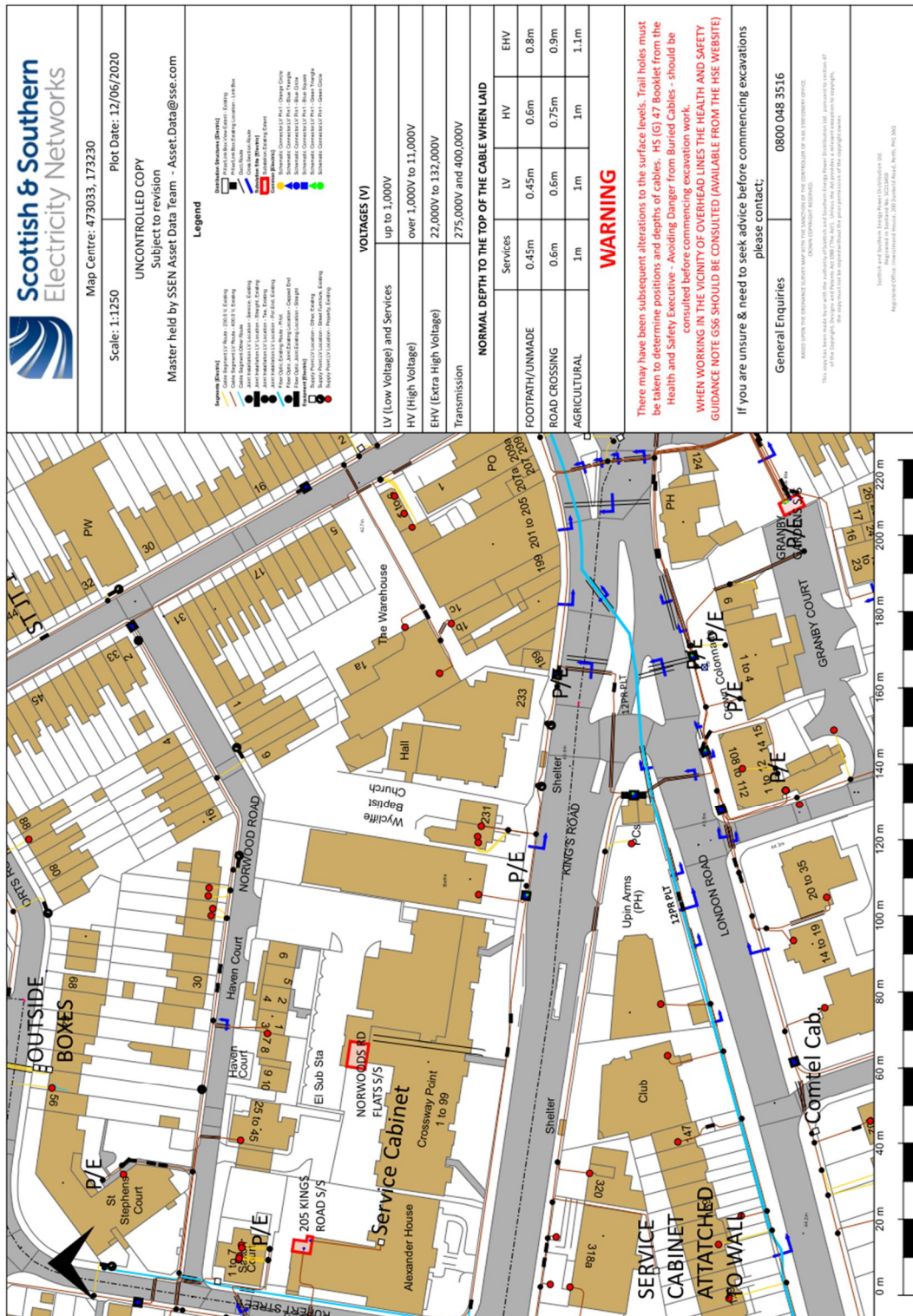
Works shall be required with the public roadway and footpath by Virgin Media extend the infrastructure to the site boundary. Installation of the necessary infrastructure within the site boundary shall be undertaken by the contractor.

4 UTILITIES RECORDS

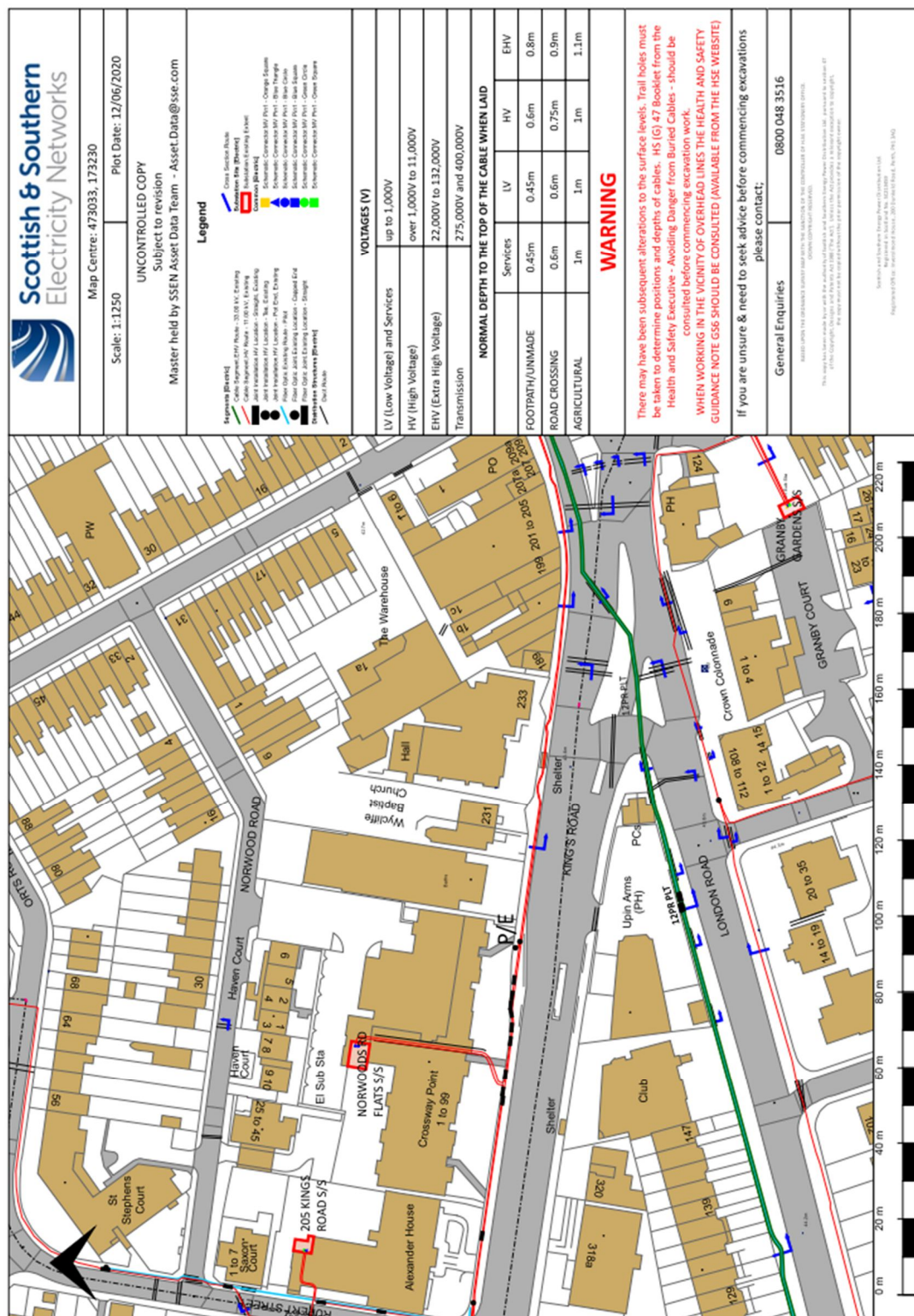
4.1 SEARCH AREA.



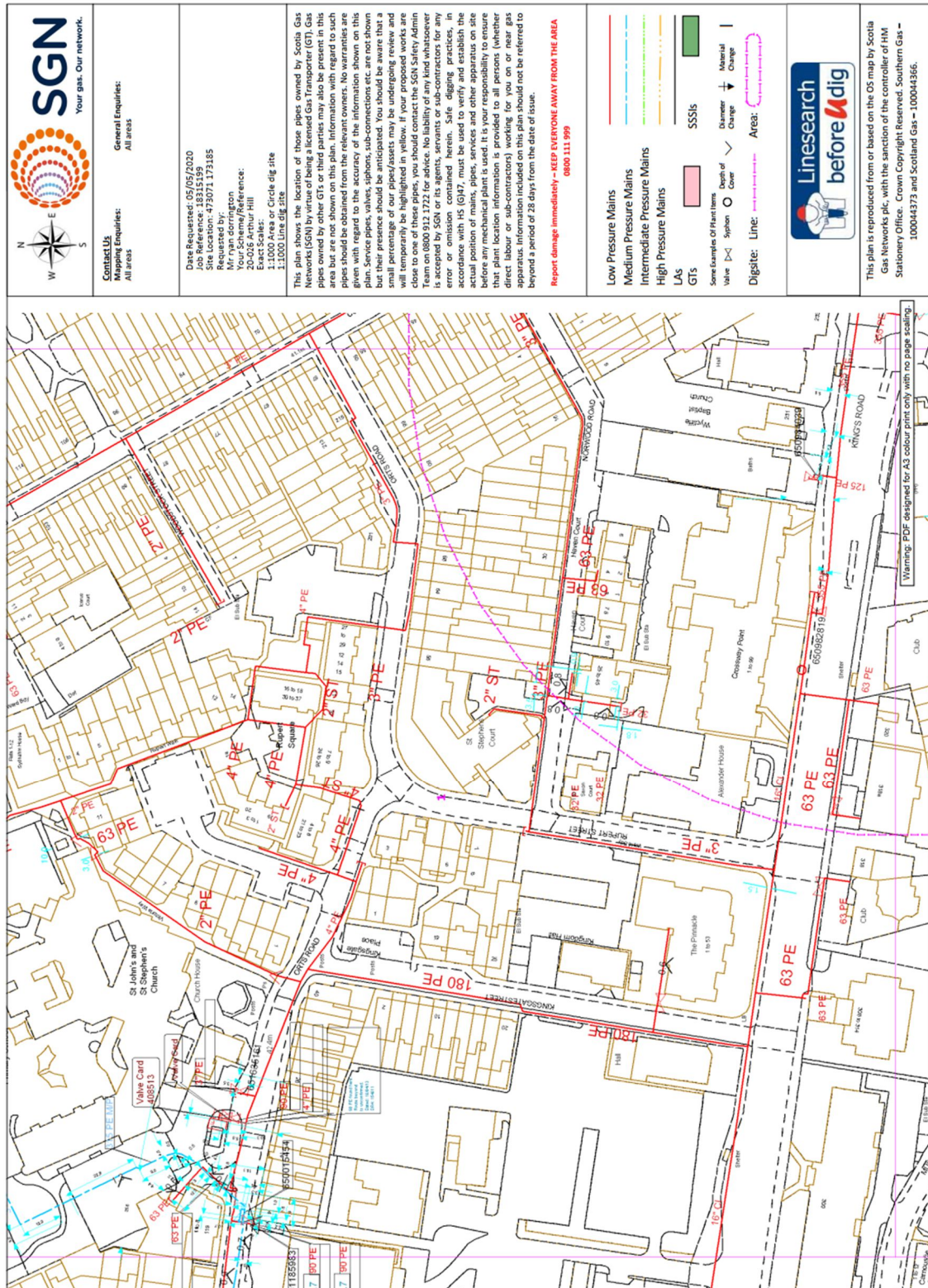
4.2 ELECTRICITY – SSE (LV) MAP



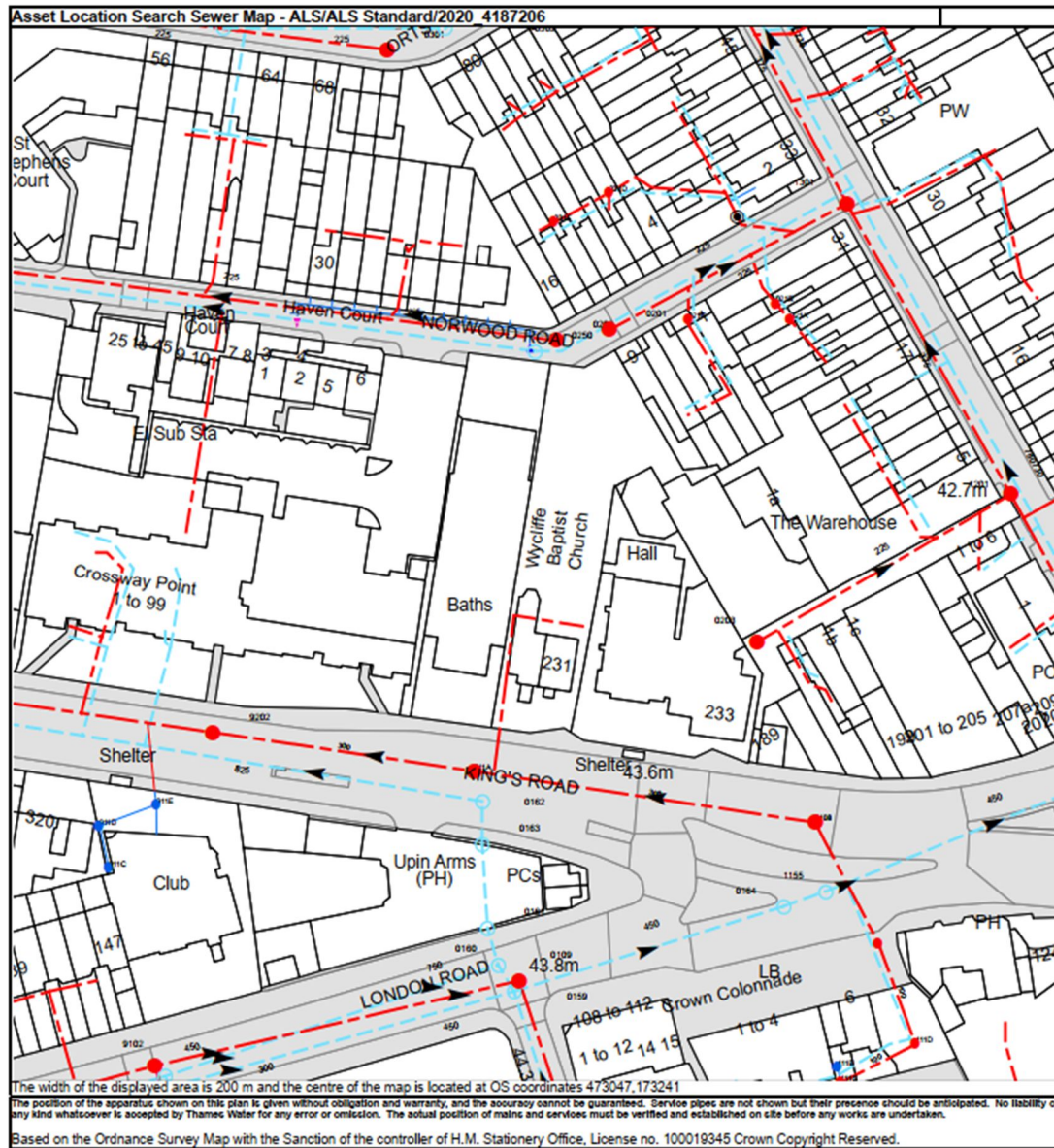
4.3 ELECTRICITY – SSE (HV) MAP



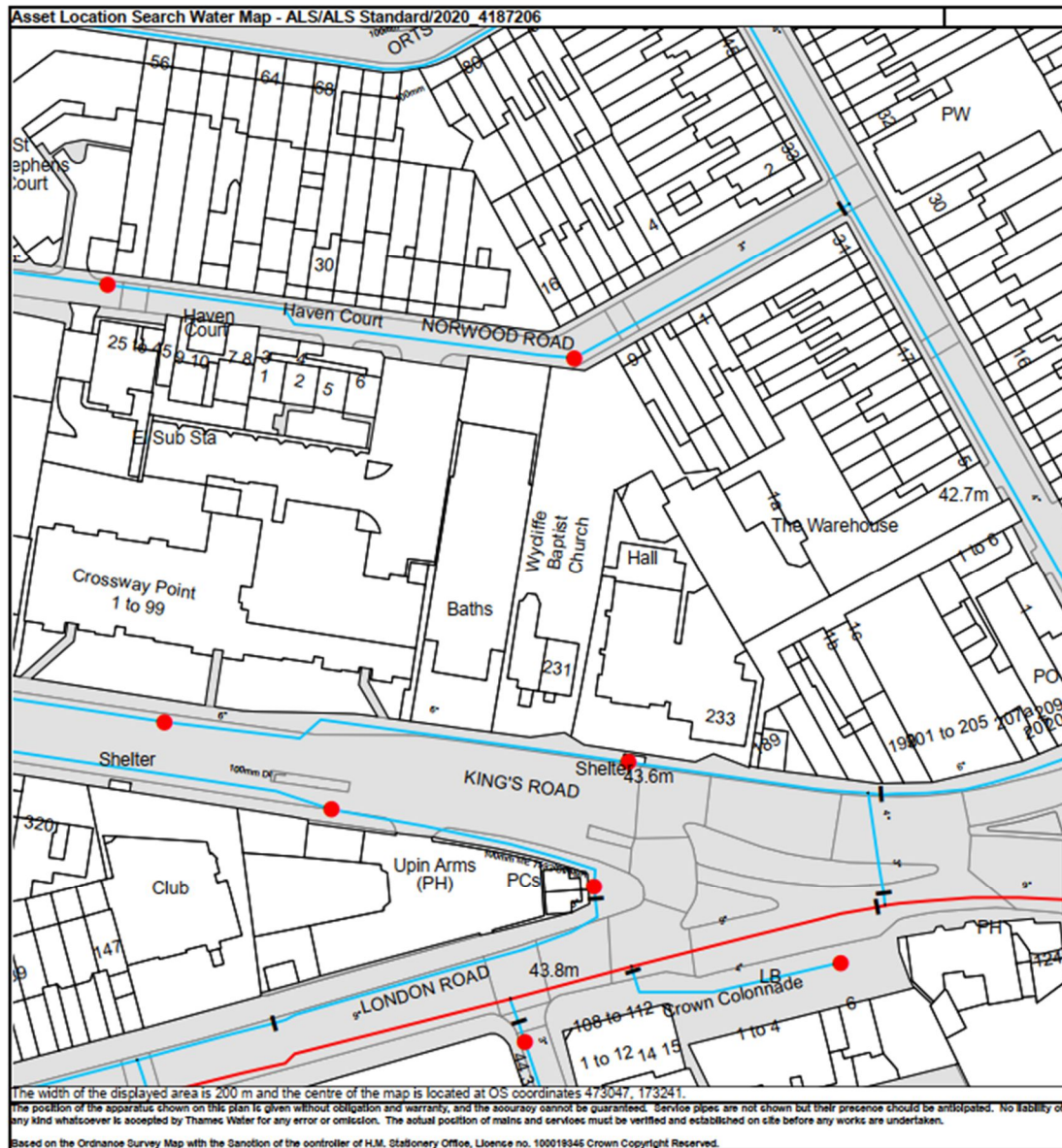
4.4 GAS – SGN MAP



4.5 SEWERS – THAMES WATER MAP



4.6 WATER – THAMES WATER MAP





Water Pipes (Operated & Maintained by Thames Water)

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

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.

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

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

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' 6")
600mm and bigger (24" plus)	1200mm (4')

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

Operational Sites

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

Other Symbols

- Data Logger

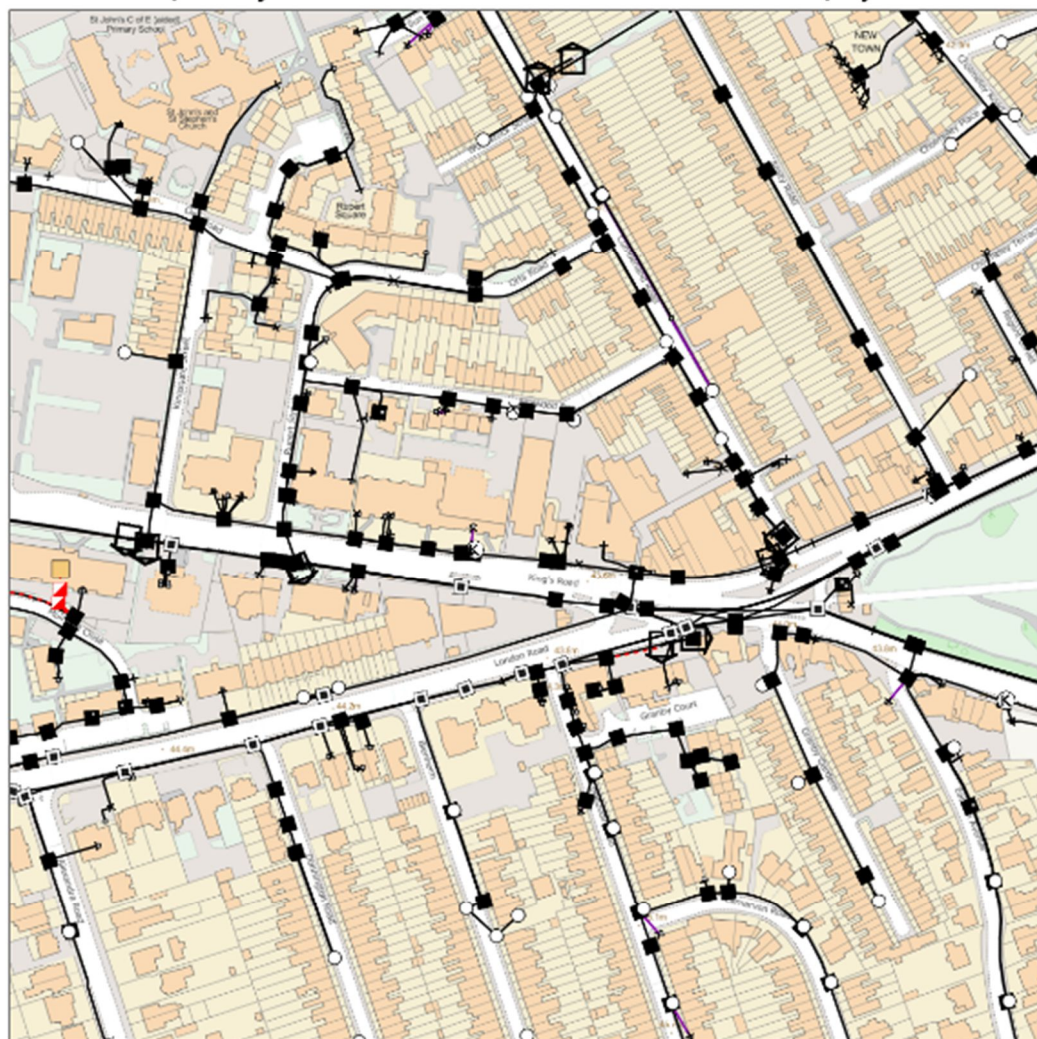
Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company pipes may overlap the border of our clean water coverage with other mains or other pipes, 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.

4.7 TELECOMS – OPENREACH MAP

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.



openreach

CLICK BEFORE YOU DIG

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

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED

(Office hours: Monday - Friday 08.00 to 17.00)

www.openreach.co.uk/locate

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office

(C) Crown Copyright British Telecommunications plc 100028040

KEY TO BT SYMBOLS

	Planned	Live	Change Of State	+	Hatchings
PCP			Split Coupling		Built
Pole			Duct Tee		Planned
Box			Building		Inferred
Manhole			Kiosk		Duct
Cabinet			Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Planning BT Plant may not be required. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.		
	Pending Add	In Place	Pending Remove	Not In Use	
Power Cable					
Power Duct				N/A	

BT Ref : QGC03284P

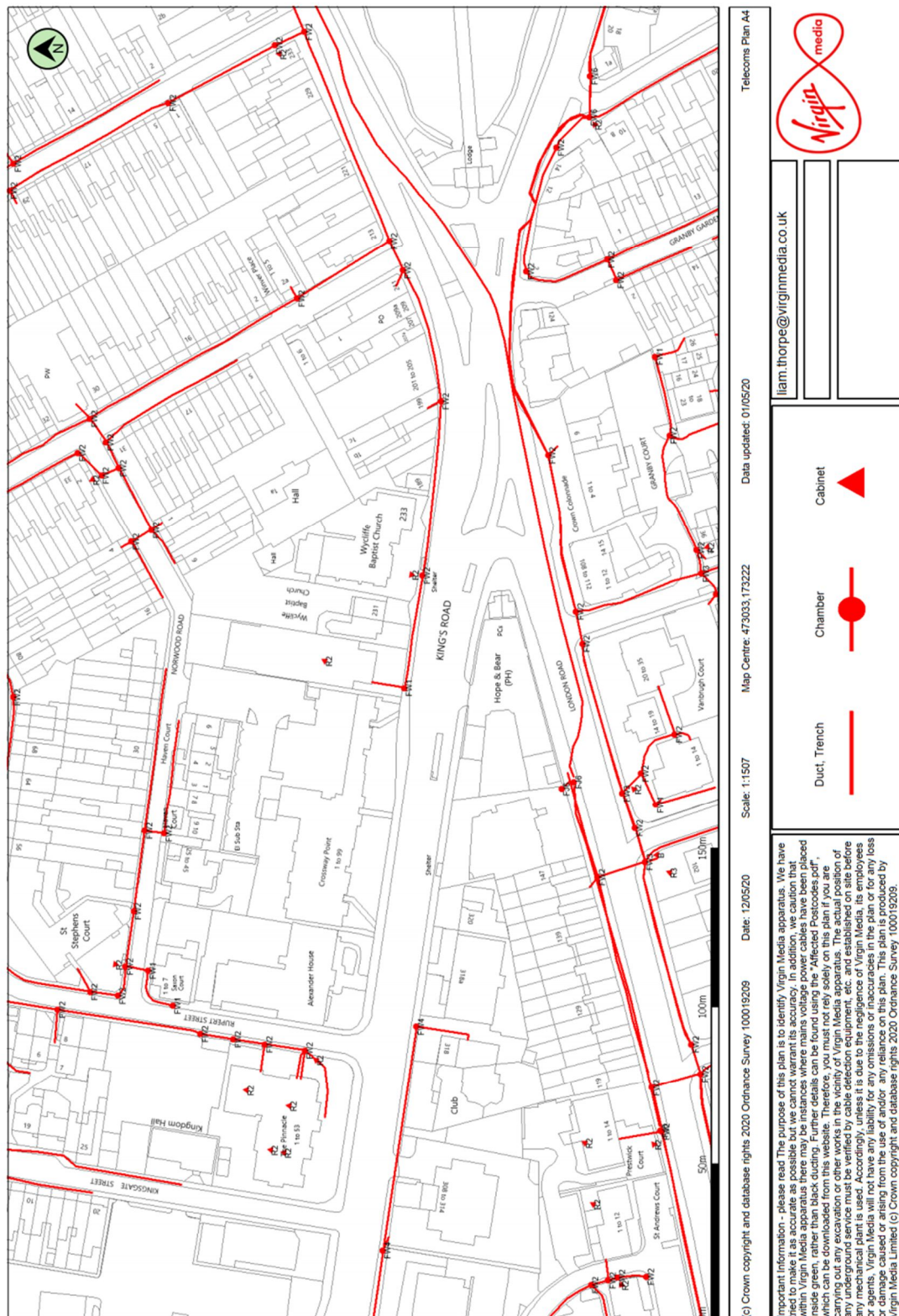
Map Reference : (centre) SU7303373222

Easting/Northing : (centre) 473033,173222

Issued : 05/05/2020 15:28:50

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

4.8 TELECOMS – VIRGIN MEDIA MAP



4.9 OTHER – ZAYO GROUP MAP

