READING BOROUGH COUNCIL

NORTH STREET DEVELOPMENT

UTILTIES STATMENT

JUNE 2019

CONFIDENTIAL

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NORTH STREET DEVELOPMENT

UTILTIES STATMENT

TYPE OF DOCUMENT (VERSION) CONFIDENTIAL

PROJECT NO. 70012984

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CONTENTS

EXECUTIVE SUMMARY

INTRODUCTION 1

EXISTING SERVICES 2

CONSIDERED RISKS AND CONNECTIONS 6

PROPOSED UTILTY ALTERATIONS AND CONNECTIONS 10

APPENDICES

APPENDIX A

TOPOGRAPHICAL SURVEY

APPENDIX B

LOCATION PLAN

APPENDIX C

DRAINAGE STRATEGY

APPENDIX D

SCOTTISH AND SOUTHERN ELECTRICITY CORRESPONDENCE

APPENDIX E

SOUTHERN GAS NETWORKS CORRESPONDENCE

APPENDIX F

THAMES WATER CORRESPONDENCE

APPENDIX G

FIBRE OPTICS PROVIDERS RESPONSES

EXECUTIVE SUMMARY

WSP have been commissioned to provide a utilities report for a re-development of an existing site which is located off North Street Reading, postcode RG1 7DA. The proposed re-development will consist of 39 flats. The purpose of the report is to identify existing utilities within the site boundary or in close proximity to the site and based upon the proposed use of the site to summarise the costs of any diversionary works, connections costs and reinforcement costs, where applicable.

Contact name Darren Henson

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INTRODUCTION

WSP have been commissioned by Reading Brough Council to undertake a utility and drainage assessment of the development. This report has mentioned the location of existing public utilities that have been made available to WSP, by third party, in the form of asset plans and goes on to discuss the considered risks and proposed points of connection and costs.

The information and conclusions drawn in this report are based, in part, on information provided to WSP by other parties. WSP has proceeded in good faith that this information is accurate. WSP accepts no liability for any inaccurate conclusions, assumptions or actions resulting from any inaccurate information prepared by third parties. It should be further noted that WSP cannot take responsibility for any costing under taken by third parties and that costs are subject to further review as they are indicative at this stage.

When reading each section of this report there are often additional documents in the appendix relevant to assets and costs. This should be reviewed in conjunction to the report and any discrepancies should be reported to WSP and other relevant parties as soon as possible.

EXISTING SERVICES

1.1 EXISTING INFORMATION REFERED TO

- Enquires were made to the statutory undertakers and utilities providers, initially in august 2017, to obtain information on their assets. Responses were received in the form of letters and plans identifying the general arrangement of their assets in relation to the site and include;
  - Scottish and Southern Electric (SSE) high voltage (HV) and low voltage (LV) mains records
  - Southern Gas Networks (SGN) services plans
  - Thames Water sewer and water mains asset location maps
  - Openreach BT services plans
  - Instalcom services plans
  - CityFibre Existing Plan drawing
  - Zayo Group UK Ltd services plans
- It is noted that the utility plans provided by the statutory undertakers and utilities providers exceed six months in age and will therefore need to be renewed to confirm if any new services have been installed or diverted etc.
- A topographical survey has been completed on the site by Subscan Technology which does identify on site manholes, drainage channels and some underground services. However, the extents of services are not complete in areas due to a lost signal.

1.2 PUBLIC SERVICES

The North Street development is bounded by Weldale Street to the south of the development and North Street to the east of the development. The northern boundary is bounded by the Reading Ambulance Station and the western boundary is bounded by the Burford Court flat blocks.

1.3 ELECTRICITY - SSE

SSE plans (refer to Appendix D) do not show any HV and LV underground electrical cables within the site boundary however there are a number of underground services boarding the site.

There are no HV cables immediately adjacent to the site boundaries. The nearest HV cables are 11kv and located approximately 32m west from the southwest corner of the site in the eastern footway of Caroline Street, which fronts the Burford Court flats. The HV cables travel north for 90m where it turns east on the southern footway of Great Knollys Street, fronting the northern boundary of Reading Ambulance station. After a further 40m the HV cables connect to Great Knollys Street Substation which appears to be within the Reading Ambulance Stations boundary.

There is a second substation located circa 70m east of the southeast corner of the site called Weldale Street Substation located in a car park on the southside of Weldale Street. Two 11kv HV underground cables run north from the substation to the northern footway of Weldale Street and head east away for the site.

SSE plans show LV underground cables in the northern footway of Weldale Street along the length of the southern site boundary. At the southeast corner of the site the underground cables cross the junction between North Street and Weldale Street where they split to head north along the eastern footway of North Street and to continue east along the northern footway of Weldale Street where

after a further 62m the LV underground cables connect to the Weldale Street Substation. The LV cables in the eastern footway of North Street continue to the junction between North Street and Great Knollys Street where they split in three directions, one of which crosses the junction and after circa 58m the LV cables connect to the Great Knollys Street Substation. From the Great Knollys Street Substation several underground LV cables head west. After approximately 40m one site split off and head south along the same path as the previously mentioned 11 kv HV cables passing the frontage of the Burford Court flats before looping around to the northern footway of Weldale Street.

SSE plans also identify two underground fibre optic ducts located in Weldale Street along the entire length of the road. SSE occasionally show some other services on their plans which may not be under their ownership. It should be noted that CityFiber and Instalcon both show services in a similar location in this road.

1.4 GAS – SGN

SGN plans (refer to Appendix E) show a number of underground services boarding the site.

Between the eastern side of the Burford Court development and the western site boundary there is a two-inch Ø LP gas main which terminates at the southwest corner of the site. The two-inch Ø LP gas main appears to be outside the site boundary, this should be confirmed prior to any construction works.

There is a 63mm Ø LP main located in the southern footway of Weldale Street to the south of the site. The 63mm Ø LP main connects to a 180mm Ø LP main in the eastern footway of Caroline Street. The 180mm Ø LP main crosses the junction with Weldale Street and splits to head east along the northern footway of Weldale Street (terminating after circa 12m) and to continue north along the front of the Burford Court flats.

There is a 355mm Ø LP main located along the length of North Street. At the junction with North Street and Weldale Street the 355mm Ø LP main turns east along Weldale Street. There is also a 63mm Ø LP main originating approximately half way up the eastern footway of North Street which heads north into the southern footway of Great Knollys Street.

1.5 SEWERS – THAMES WATER

Thames Water asset plans (refer to Appendix F) identify several foul and surface water sewers in the roads surrounding the site however they do not show a point of connection for the existing development.

SURFACE WATER SEWERS

There is a 225mmØ surface water sewer within Weldale Street which falls east along the road. There is a manhole located on the 225mmØ surface water sewer adjacent to the southeast corner of the site with a cover level of 41.04m AoD and an invert level of 39.67m AoD.

A second 225mmØ surface water sewer is located at the south end of North Street originating at manhole 9652 and has a cover level of 39.98m AoD and an invert level of 38.18m AoD. The 225mmØ surface water sewer falls north along the road and connects to a 225mmØ surface water sewer in Great Knollys Street.

FOUL WATER SEWERS

There is a 225mm Ø foul water sewer located in Weldale Street falling east which originates at the junction between Caroline Street and Wedale Street. There is a second 225mm Ø foul water sewer located in North Street originating at the south end of North Street opposite the existing access. The manhole at the head of the run is 9604 and has a cover level of 39.96m AoD and an invert level of 36.78m AoD.

1.6 WATER MAINS – THAMES WATER

Thames Water asset plans (refer to Appendix F) shown a three-inch supply main along the length of Weldale Street. At the junction of Weldale Street and North Street a four-inch distribution main connects to the three-inch supply main and heads north along North Street connecting to a water main in Great Knollys Street. At the junction of North Street and Weldale Street a spur tee's off the four-inch distribution main and crosses the road to the western footway of North Street where it terminates just outside of the site boundary.

There is also a 12-inch Ø trunk main located within Great Knollys Street however this is approximately 55m north of the northeast corner of the site.

1.7 FIBRE OPTICS

Asset plans received from the following fibre-optic providers are shown in Appendix G.

OPENREACH BT

Openreach plans identify overhead cables along the southern boundary of the site. Midway along the southern boundary there is an Openreach pole at the back of the northern footway of Weldale Street which shows a connection into the site. A second pole exists at the southeast corner of the site where the cable splits to connect to a junction box at the same location and to cross the junction of North Street/Weldale Street. From the junction box the underground ducts run up North Street for approximately 67m where they terminate at a junction box adjacent to the Reading Ambulance Stations eastern development boundary. Approximately half way along the eastern site boundary there is another junction box which appears to be located in the footway according to street view however its shown to be in the road on the Openreach asset plans. At the northeast corner of the site a spur tees off the Openreach ducts running up North Street and enters the site terminating in the site.

INSTALCOM

Plans provided by Instalcom show assets running the length of Weldale Street. The plans do not denote if the service is below or above ground however a review of street view and other service maps provided such as Openreach plans suggests the cables are below ground. It's not clear if the Instalcom underground cablers are in the road or the footway.

CITYFIBRE

Plans provided by CityFibre show assets running the length of Weldale Street. The plans do not denote if the service is below or above ground however they are shown in the centre of the road and a review of street view and other service maps provided such as Openreach plans suggests the cables are below ground.

ZAYO GROUP UK LTD

Plans provided by Zayo were added to the affected package of utilities plans WSP were provided by Landmark. However, a review of the plans shows that the closes Zayo services are located in Great Knollys Street approximately 55m north of the northeast corner of the site.

1.8 ELECTRICITY - SSE

Diversion or Relocation considerations

SSE plans show LV underground cables along the northern footway of Weldale Street to the south of the site. However, the site plans do not show any new access points or parking to be made along that footway and therefore there are no anticipated impacts to the LV cables in this location.

Connection considerations

It is likely that a new connection will need to be made to an existing substation near the site and/or a new substation will need to be installed on the site. A HV connection could be made to the Weldale Street Substation, if a new substation were to be installed, or if there is sufficient capacity in the Weldale Street Substation an LV connection could be made to the development. This will require offsite works and is subject to C3 and C4 agreements with SSE.

An initial budget estimate provided by SSE indicates new connection cost to be £10,000. (Refer to Appendix D)

Capacity considerations

To determine capacity and gain a C3 or C4 quote SSE will require information on the loading/demand from the development and will need details on at least the following;

- What heating systems are the flats likely to use?
- Will there be air conditioning?
- Will there be car charging points? – how many and what spec?
- Will the kitchen facilities make use of gas or electric hobs, what other facilities will there be?
- Are there any other gas or electric requirements?
- Where will the meter boxes ideally be located?

Enquires have been sent out to SSE.

1.9 GAS – SGN

Diversion or Relocation considerations

According to SGN plans there are no gas mains in the surrounding footways of the development and therefore there will be minimal impact from onsite works. It is noted that there is a 63mmØ LP main located on the east side of the Burford Court flats just to the west of the western site boundary. The contractor shall take steps necessary to ensure that any works taking place near the LP main are safe and ensure they inform SGN of any planned work near the main.

Connection considerations

There does not appear to be an existing connection to the site. a new connection could be made to the 355mmØ LP main in North Street subject to agreement with SGN and sufficient capacity. C3

and C4 enquires should be undertaken to obtain a quote and agreement with SGN for any connection. Enquires have been sent out to SGN.

SGN have provide a budget estimate for new connections, for the proposed 39 dwellings, the cost is £31,785 (refer to Appendix E).

Capacity considerations

To determine capacity and gain a C3 or C4 quote SGN will require information on the loading/demand from the development and will need details on at least the following;

- What heating systems are the flats likely to use?
- Will the kitchen facilities make use of gas or electric hobs, what other facilities will there be?
- Are there any other gas or electric requirements?
- Where will the meter boxes ideally be located?

Enquires have been sent out to SGN.

1.10 SEWERS – THAMES WATER

Diversion or Relocation considerations

There are no Thames Water sewers located within the development and therefore no diversion or relocation of sewers are required.

Connection considerations

If the site is to consider having drainage adopted within the development a section 104 agreement with Thames Water will be required. If the site is to have private drainage and only make a connection to the Thames Water sewers in the road then a section 106 application can be made to Thames Water to agree that connection. private drainage will be designed to part H building regulations.

Surface water

Based on the information provided by Thames Water the ideal place to connect would be to the 225mmØ surface water sewer in North Street along the eastern site boundary. This is the deepest nearby sewer and will provide the most scope for the site drainage system. This is subject to an agreement with Thames Water for the connection and capacity of that sewer. This should be read in conjunction with the drainage strategy drawing (see Appendix C) and report prepared by WSP.

Foul Water

The ideal place to connect would be to the 225mmØ foul sewer in North Street which runs parallel to the surface water sewer in the road. in is noted that the foul sewer is approximately 1.4m deep at invert that the surface water sewer at the heads of run according to the Thames Water maps however this must be confirmed by the contractor or additional survey information before works commence.

Capacity considerations

Thames Water have bene contacted to determine if there is sufficient capacity to accept foul and surface water flows from the development. Please refer to the drainage strategy drawing (Appendix C) and report prepared by WSP.

1.11 WATER MAINS – THAMES WATER

Diversion or Relocation considerations

There is a spur end, from the four-inch Ø distribution main in North Street, located at the southeast corner of the site. The spur may be located under the proposed parking bays which will lower the existing kerb as part of the development proposals. Therefore, there is likely to be some minor works required to protect or remove the spur (if it's not used of the development)

Connection considerations

The spur at the southeast corner of the site could be considered as a possible point of connection however the size of the spur is not clear or its condition. An agreement with Thames Water will be required to make a connection to their main. If the spur is not suitable a new spur connection could be made to the four-inch Ø distribution main.

Enquires have been sent out to Thames Water.

Capacity considerations

As noted above the spur at the southeast corner of the site could be used as a connection however the size of the spur is not known and Thames Water will need to comment on the capacity of the water main and agree a connection.

Enquires have been sent out to Thames Water.

1.12 FIBREOPTICS

OPENREACH BT

Diversion or Relocation considerations

The Openreach plans provided to WSP are from August 2017 and appear to be different to what has been constructed in the site location. A review of street view shows what appear to be reasonable new chambers located in the footways around the development and it appears that some of the overhead cables have been removed. Updated plans have been requested but in lieu of the plans it's likely that there are ducts under the western footway of North Street, including a junction box, which will be affected by the lowering of the kerb to allow for the proposed parking spaces.

An enquiry has been sent out to Openreach to get their comments on the affected infrastructure.

Connection considerations

According to Openreach plans the site does benefit from two points of connection however the site has been demolished for some time and its therefore likely that the existing connections have been terminated or damaged. A new point of connect will need to be considered which could be made to

the junction box in the western footway of North Street. This subject to agreement with Openreach, initial enquires have been made.

An enquiry has been sent out to Openreach to get their comments.

INSTALCOM

A connection won't be required to the Instalcom network and based on the asset maps provided by Instalcom there should not be any affects to their network. If there are offsite works required for other utility connections then the location of the asset should be further considered.

CITYFIBRE

A connection won't be required to the Cityfibre network and based on the asset maps provided by Cityfibre there should not be any affects to their network. If there are offsite works required for other utility connections then the location of the asset should be further considered.

ZAYO GROUP

A connection won't be required to the Zayo Group network and based on the asset maps provided by Zayo Group there should not be any affects to their network. If there are offsite works required for other utility connections then the location of the asset should be further considered.

1.13 ELECTRICITY – SSE

WSP are waiting on a response from SSE in regard to the proposals to make a connection for the development and what form that will need to take.

It is currently envisaged the development will require a new substation on the site including a length of additional underground 11kv HV cables to connect to the Weldale Street Substation. SSE have been contacted requesting confirmation of this additional infrastructure.

1.14 GAS – SGN

WSP are waiting on a response from SGN in regard to the proposals to make a connection for the development and what form that will need to take.

It is anticipated that a connection to the 355mmØ in North Street subject to agreement with SGN and capacity availability when the formal/final agreement is made.

1.15 SEWERS – THAMES WATER

WSP are waiting on a response from Thames Water in regard to the proposals to make a connection for the development and what form that will need to take.

1.16 WATER MAINS – THAMES WATER

WSP are waiting on a response from Thames Water in regard to the proposals to make a connection for the development and what form that will need to take.

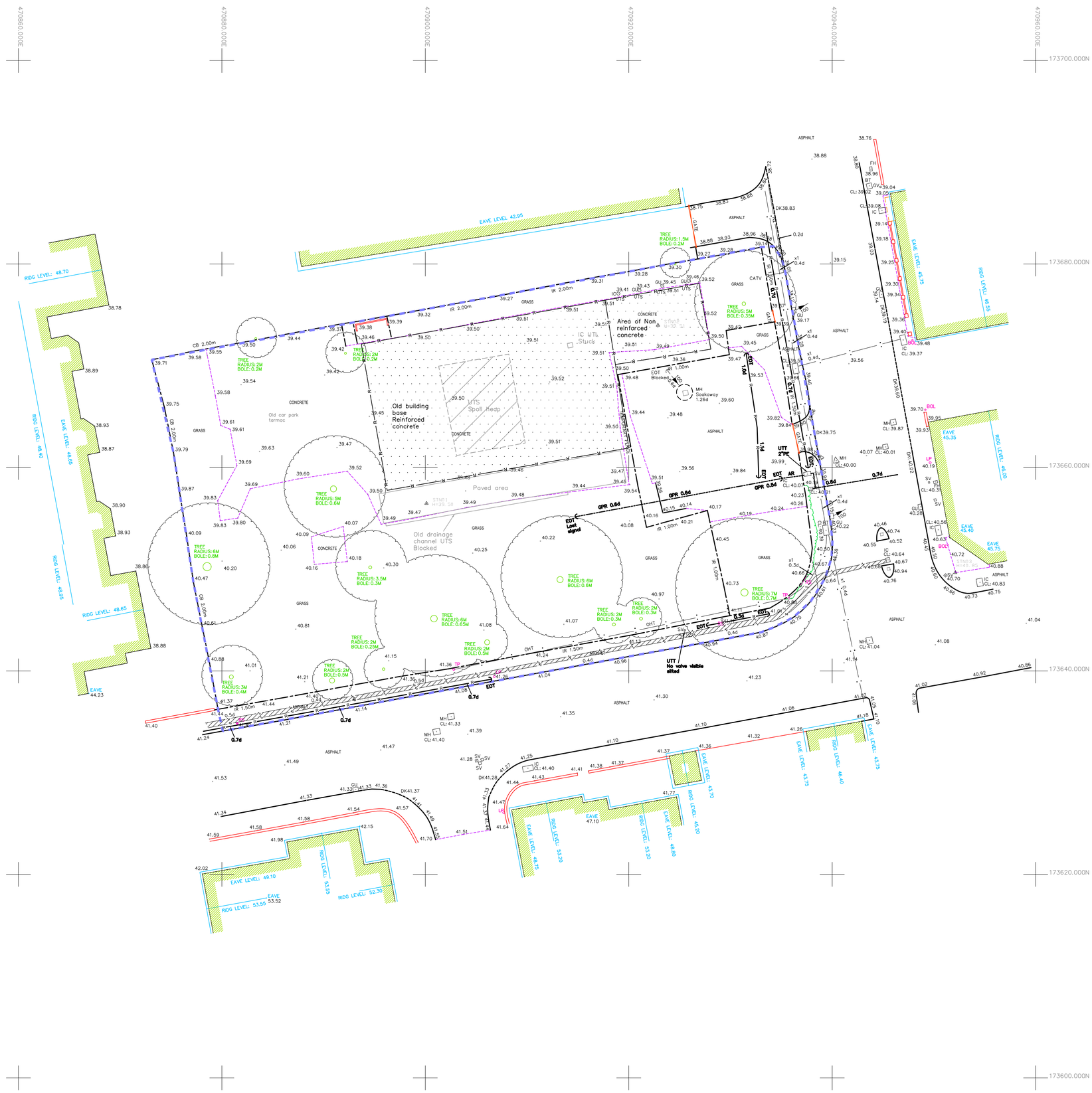
1.17 FIBREOPTICS – OPENREACH BT

WSP are waiting on a response from Openreach in regard to the proposals to make a connection for the development and what form that will need to take.

Appendix A

TOPOGRAPHICAL SURVEY

Confidential



Topographical Abbreviations

A/R	Assumed Route	MKR	Marker
BH	Borehole	MT	Mercury Telecom Cover
BOL	Bollard	OHC	Overhead Cable
BT	British Telecom Cover	OHP	Overhead Pipe
BW	Barbed Wire Fence	OSBM	Ordnance Survey Bench Mark
BWK	Brickwork	PB	Post Box
CATV	Cable TV Cover	PGM	Permanent Ground Marker
CB	Close Boarded Fence	PR	Post & Rail Fence
CCTV	Closed Circuit TV	PW	Post & Wire Fence
CHLK	Chainlink Fence	PWM	Post & Wire Mesh Fence
CHPL	Chestnut Paling Fence	RE	Rodding Eye
CL	Cover Level	RG	Road Gully
CM	Cable Marker	RN	Road Name
CP	Catch Pit	RS	Road Sign
CPL	Catch Pit Base Level	RW	Retaining Wall
DIA	Diameter	RWP	Rain Water Pipe
DK	Drop Kerb	SAP	Sapling
DP	Down Pipe	SC	Stop Cock
EJB	Electricity Junction Box	SPR	Spread
EC	Electricity Cover	STA	Traverse Station
EP	Electricity Pole	SV	Stop Valve
ER	Earthing Rod	SVP	Soil Vent Pipe
FH	Fire Hydrant	SW	Storm Water
FIG	Feed Into Ground	TB	Telephone Box
FW	Foul Water	TBM	Temporary Bench Mark
G	Gully	TFR	Token From Records
GV	Gas Valve	TJB	Telephone Junction Box
HT	Height	TPT	Trial Pit
IC	Inspection Cover	TL	Traffic Light
IL	Invert Level	TP	Telephone Pole
IR	Iron Railing Fence	UTL	Unable To Lift
KO	Kerb Outlet	UTT	Unable To Trace
LB	Litter Bin	VP	Vent Pipe
LC	Lamp Column	WKH	Water Key Hole
LP	Lamp Post	WM	Water Meter
MH	Manhole	WV	Water Valve

Survey Station Information

STA No.	Easting	Northing	Level	Type
STN01	470900.124	173656.464	39.497	Nail
STN02	470922.877	173673.984	39.508	Nail
STN03	470952.108	173649.669	40.846	Nail
STN04	470893.009	173637.213	41.361	Nail

Notes

The Grid is related to OS using GPS
All Levels are related to OS using GPS

NOTES;

Electromagnetic and/or Ground Penetrating Radar techniques have been used to locate/map underground utilities and features on this drawing. Subscan Technology Ltd has made every endeavour to make sure that the information contained within this drawing is accurate and of the highest quality. Subscan Technology Ltd has used any record drawings provided by the client or by the Statutory Utility Providers, at the client's request, at the time of the survey. Any information taken from these drawings (e.g. pipe sizes and position) is not guaranteed. Historic record information is often incomplete and inaccurate and cannot be relied upon.

Subscan Technology Ltd is not liable for any topographical survey that has not been undertaken by us. Any inaccuracies relating to topographical plans/development plans/Ordnance Survey data that we have no control over is the liability of the customer. Where quoted, depth information of underground services/features is stated. Depths are generally within +/- 10% accurate, but cannot be guaranteed. Any depths shown are drains are usually to invert (base of drainage channel) unless otherwise stated.

At Subscan Technology Ltd we use skilled staff and modern, calibrated equipment to perform our surveys. However, the completeness of any underground survey cannot be 100% guaranteed and the results from these types of surveys are not infallible. If the location or depth of services/features is of particular importance to a project then it is strongly advised that discussions are held with Subscan Technology Ltd regarding any possible limitations or anomalies. It is also strongly advised that trial excavations should be undertaken to confirm survey results. We cannot be held responsible for any inaccuracies beyond those that could be reasonably expected by a competent company.

ABBREVIATIONS (Land & Utilities)

AR	ASSUMED ROUTE	KO	KERB OUTLET	SL	SIGNAL LOST
AV	AIR VALVE	Ley	LIFEBUOY	SP	SIGN POST
BB	BELISHA BEACON	Lok	LOCK GATE	SPS	SHEET PILING
BH	BOREHOLE	LC	LAMP COLUMN	SR	SIGN RAIL
BM	BED LEVEL	LH	LAMP HOLE	SH	SAMPLING POINT
BH	BOREHOLE	LP	LAMP POST	ST	STOP TAP
BHC	BRITISH HATCH COVER	LS	LAMP STANDARD	SV	SLUICE
Bin	LITTER / GRIT SALT BIN	Mpt	MOORING POST	SS	STRUCTURE TOP LEVEL
BL	BASEMENT LIGHT	met	METERS HIGH	Rip	STUMP (TREE)
BO	BOLLARD	MH	MANHOLE	Stp	STOP TAP
BP	BOUNDARY POST	MH	MANHOLE	SPH	STAY POST
BS	BUS STOP	Mkr	MARKER POST	SWV	STAY WIRE
CAB	BT/TELECOM CHAMBER	MkE	MARKER POST (ELECTRIC)	SLP	SOIL PIPE
CaG	CATENARY LEVEL	MkG	MARKER POST (GAS)	SVP	SOIL VENT PIPE
CATV	CABLE TV COVER	MkR	MARKER POST (RAILWAY)	TBM	TEMPORARY BENCH MARK
CB	CATCH BASIN	MkT	MARKER POST (TELECOM)	TCB	TELECOM CHAMBER
CBA	CONVEYOR BELT	MkW	MARKER POST (WATER)	TBL	TELECOM CHAMBER COVER
CC	COAL CHUTE	MP	MILE POST	TFR	TAKEN FROM RECORDS
CH	CHAINAGE	MS	MOTOR STARTER	Tk	TANK (FUEL)
Ch	CHAINAGE LEVEL	NC	NOT COATED	TP	TELEPHONE POLE
Chy	CHIMNEY	NP	NAME PLATE	TP	TELEGRAPH POLE
CI	CAST IRON	OAA	OUTSIDE SURVEY AREA	Tpt	TRIAL PIT
CL	COVER LEVEL	OSBM	O.S BENCH MARK	TR	TRIGGER
CLP	CABLE PIPE	OHC	OVERHEAD CABLE	UTT	UNABLE TO FIND
CP	CABLE PIT	OHCL	OH CABLE (UNIDENTIFIED)	UTOA	UNABLE TO GAIN ACCESS
CaL	COPING LEVEL	OHE	OVERHEAD CABLE (ELECTRIC)	UTL	UNABLE TO LIFT
CaP	CABLE POST	OHP	OVERHEAD PIPE	UTS	UNABLE TO SEE
CaW	CAMERA POST	OHP	OVERHEAD PIPE	UTS	UNABLE TO SURVEY
CR	CABLE RISER	OHT	OVERHEAD CABLE (TELECOM)	UTT	UNABLE TO TRACE
CS	CABLE STATION	P	PIPE (GENERAL)	VC	VEHICLE CLEAR
CUP	CULVERT PIPE	P	POST	VP	VENT PIPE
CWM	CABLE WINDING MACHINERY	Pb	PARK BENCH	VR	VAPOUR RECOVERY
D	DRAIN	PC	PIPE CLEAR	VV	VALVE / SLUICE
Dia	DIAMETER	PCrsg	PEDESTRIAN CROSSING	VW	VALVE / SLUICE WHEEL
DS	DIRECTION SIGN	PE	POLYETHALINE	WB	WEIGHBRIDGE
EC	ELECTRICITY JUNCTION COVER	PF	PUMP FIBRE	WC	WATER CLEAR
EoC	EDGE OF CANOPY	Pl	PILE	WM	WATER METER
EOR	END OF RECORDS	Pv	MOVEMENT DETECTOR	WO	WASH OUT VALVE
EP	ELECTRIC POLE	PV	PETROL VENT PIPE	WP	WATER PIPE
EP	ELECTRICITY POLE	PP	PETROL / DIESEL PUMP	WL	WEIR LEVEL
ER	EARTH ROD	PR	PIPE RISER	WPl	WEIR PLATE (TOP)
ESH	ELECTRICITY SHOWER	PSC	PUBLIC STOP COCK	WWP	WASTE WATER PIPE
ESP	ELECTRICITY SUPPLY POINT	PU	PUMP		
Esw	ELECTRICAL SWITCH	PV	PIPE (VERTICAL)	FENCE TYPES	
FB	FIBREGLASS	PVC	POLYVINYL CHLORIDE	AWF	ARMCO WIRE
FH	FIRE HYDRANT	Pu	POLYURETHANE	AWG	ARMCO GRID
FL	FLOOR LEVEL	Pz	PIEZOMETER	CBF	CLOSE BOARDED
FS	FLAG STAFF / POLE	RE	RODDING EYE	CF	CORRUGATED IRON
G	GULLY	RG	RAIN GAUGE	CLF	CHAIN LINK
GB	GAS BOX	RM	REFLECTOR MONITORING PNT	IRP	IRON PALING
GIP	GAS INLET PIPE	RP	REFLECTOR POST	IRF	IRON RAILING
GP	GUIDE POST	RS	ROAD SIGN	WF	INTERWOVEN
GPO	GENERAL G.P.R	RSP	ROAD SIGNAL POST	PBF	POST & BRASS
GR	GRILLE	RWP	RAIN WATER PIPE	PIF	POST & IRON RAIL
GV	GAS VALVE	S	SPRIGS	PRF	POST & RAIL
HC	HOP CLEAR	SA	SIGN ABANDONED	PWF	POST & WIRE
HR	HANDRAIL	SB	SIGN BOARD	SPF	STEEL PALLIASDE
HV	HIGH VOLTAGE	Shlt	SHELTER (BUS / TRAM)	WMF	WIRE MESH
IC	INSPECTION CHAMBER	SL	SIGNAL LEVEL	SURVEY SYMBOLS	
IL	INVERT LEVEL	SL	SOFFIT LEVEL	O.S BENCH MARK	
IP	INLET PIPE	SBL	SILT LEVEL (TOP)	SURVEY CONTROL STATION	
JN	JUNCTION	SMP	SETTLEMENT MONITORING PNT		

KEY

TV	CCTV / CABLE TELEVISION
450	COMBINED DRAINAGE
COM	COMMUNICATIONS CABLE
A	COMPRESSED AIR
	DUCTING
E	EARTH CABLE
A_c	ELECTRIC CABLE
EOT	END OF TRACE
150	FOUL DRAINAGE
F	FUEL PIPE
	GAS PIPE
G	GAUGE LINE
H	HEATING
O	OFFSET FILL PIPE
	PUMPING MAIN
R	RADAR AREA ANOMALY
R	RADAR UTILITY TRACE
300	SURFACE DRAINAGE
	SURVEY BOUNDARY
T	TELECOM CABLE
TL	TRAFFIC LIGHTS
U	UNIDENTIFIED
VR	VAPOUR RECOVERY
V	VENT PIPE
	WATER PIPE

A SINGLE LINE INDICATING A UTILITY MAY INDICATE THE PRESENCE OF MULTIPLE SERVICES WITHIN CLOSE PROXIMITY TO EACH OTHER. WHERE A SINGLE LINE TYPE IS SHOWN WE RECOMMEND HAND DIGGING WITHIN 0.5m TO EXPOSE HIDDEN SERVICES.

ISSUE	DATE	DESCRIPTION
A	26/06/14	Site cleared and re surveyed. Drawing Amended.

CLIENT: Hampshire County Council	DWG No: 24716	REV: A
TITLE: Car Park, North Street/ Weldale Street, Reading	SCALE: 1:200@A1	
	SURVEYED: JC	
	DRAWN: DB	
PAGE: 1 of 1	DATE: 18/06/14	

SURVEY TYPE

- TOPOGRAPHICAL [ ]
- DRAINAGE [X]
- UTILITY [X]

SUBSCAN TECHNOLOGY
9 Somers Road, Rugby, Warwickshire CV22 7DB
T: 01788 560017 F: 01788 551218 www.subscantech.co.uk
UNDERGROUND SURVEY SPECIALISTS

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Appendix B

LOCATION PLAN

wsp

TITLE:

North Street, Reading
Location Plan

FIGURE No:

Appendix B

File name \\UK.WSPGROUP.COM\CENTRAL DATA\PROJECTS\70012XXX\70012984 - RBC HOUSING SITES, READING\03 WIP\CV CIVIL ENGINEERING\02 CAD BIM MODELS\XREF\NORTHSTREETXLAYOUT.DWG,
printed on 26 September 2019 09:30:54, by McGilchrist, Drew

Appendix C

DRAINAGE STRATEGY

Confidential

NOTES

1. ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS SPECIFIED OTHERWISE.

2. ARCHITECTURAL LAYOUT IS BY SAUNDERS ARCHITECTS. ARCHITECT TO SHOW FINISHED FLOOR LEVELS AND EXTERNAL LEVELS FOR THE DEVELOPMENT. BUILDING LOCATION WILL BE POSITIONED BY THE ARCHITECT WHICH SHOULD TAKE ACCOUNT OF THE TOPOGRAPHICAL SURVEY.

3. THE DRAINAGE DESIGN WILL BE LOCATED BASED ON THE TOPOGRAPHICAL SURVEY. ANY DISCREPANCY SHOULD BE REPORTED TO THE ENGINEER AS SOON AS POSSIBLE.

4. THE EXISTING SITE AREA MEASURES 0.219 HA. THIS CONSISTS OF APPROXIMATELY 55% HARDSTANDING. THE PROPOSED HARDSTADING MEASURES 0.147ha AND 0.1617ha INCLUDING 10% ALLOWANCES FOR URBAN CREEP.

5. EXISTING FOUL AND SURFACE WATER SPURS ARE NOT SHOWN ON THE SURVEY. THEREFORE A NEW CONNECTION HAS BEEN SHOWN SUBJECT TO THAMES WATER AGREEMENT. IF EXISTING SPURS ARE LOCATED THEY WILL REQUIRE A CCTV AND MAPPING/DETECTION SURVEY TO IDENTIFY THEIR CONDITION, LINE AND LEVEL. THE PROPOSED DRAINAGE SHOULD THEN BE REVISED TO SUIT IF APPROPRIATE.

6. THE SURFACE WATER DRAINAGE STRATEGY IS BASED ON A POSITIVE CONNECTION TO THAMES WATER SEWER LOCATED IN NORTH STREET. THE PROPOSED SURFACE WATER DISCHARGE RATE IS BASED ON A 76mm DIAMETER VORTEX FLOW CONTROL PRODUCING A FLOW RATE OF 2.5 l/s. BASED UPON A 50mm/hr RAINFALL INTENSITY, THE EXISTING SW DISCHARGE RATE IS CALCULATED TO BE 16.7 l/s WHICH WILL RESULT IN A BETTERMENT OF 85%. THE STRATEGY IS SUBJECT TO LEVELS AND THAMES WATER S106 TECHNICAL APPROVAL. THE SURFACE WATER DRAINAGE CALCULATIONS HAVE BEEN ASSESSED UP TO THE 100 YEAR PLUS 40% CLIMATE CHANGE EVENT. IT IS NOTED THAT DUE TO THE SIZE OF THE SITE THE GREEN FIELD RUN OFF RATES, WHICH EQUATES TO 0.4 l/s, HAS BEEN CONSIDERED AND SUBSEQUENTLY DISCOUNTED AS IT WOULD CAUSE FREQUENT BLOCKAGE DUE TO THE SIZE OF THE FLOW CONTROL OPENING.

7. IT IS NOTED FROM AN EXISTING DESK TOP STUDY ON THE READING PLANNING PORTAL THAT THERE IS A PRESENCE OF CHALK INCLUDING THE READING CHALK MINE LOCATED CIRCA 652m FROM THE SITE. CIRIA 574 GUIDANCE STATES A MINIMUM OFFSET OF 10-20m SHOULD BE APPLIED TO ANY SOAKAWAYS IN CHALK IN LIEU OF ANY INFORMATION OF THE CHALK SUBSOILS. AS SUCH UNTIL A GROUND INVESTIGATION IS UNDERTAKEN ON THE SITE INFILTRATION IS TO HIGH A RISK AND THEREFORE NOT APPROPRIATE FOR THE PROPOSED DEVELOPMENT.

7.1. ON SITE INFILTRATION TESTING TO BRE 365 IS REQUIRED AS EARLY AS POSSIBLE TO DEMONSTRATE IF SOAKAWAYS ARE SUITABLE AS A METHOD OF DISCHARGE FOR THE PROPOSED DEVELOPMENT.

7.2. FURTHER BOREHOLES SHOULD BE COMPLETED AS PART OF A GEOTECHNICAL INVESTIGATION TO CONFIRM ONSITE CONDITIONS.

8. BASED UPON THE FRA SUMMARY, THE SITE IS WITHIN FLOOD ZONE 1 AND IS AT VERY LOW RISK OF SURFACE WATER FLOODING. IT IS ADVISED TO SET THE FINISHED FLOOR LEVELS AT LEAST 150mm ABOVE THE EXISTING GROUND LEVELS AND THAT LEVELS ARE SHAPED SUCH THAT OVERLAND FLOOD FLOW ROUTES ARE DIRECTED AWAY FROM BUILDING THRESHOLDS AND THE DEVELOPMENT.

9. FFLS AND EXTERNAL LEVELS ARE TO BE CONFIRMED BY THE ARCHITECT. NOTE MIN COVER LEVEL REQUIRED 39.80m AoD TBC AT DETAILED DESIGN.

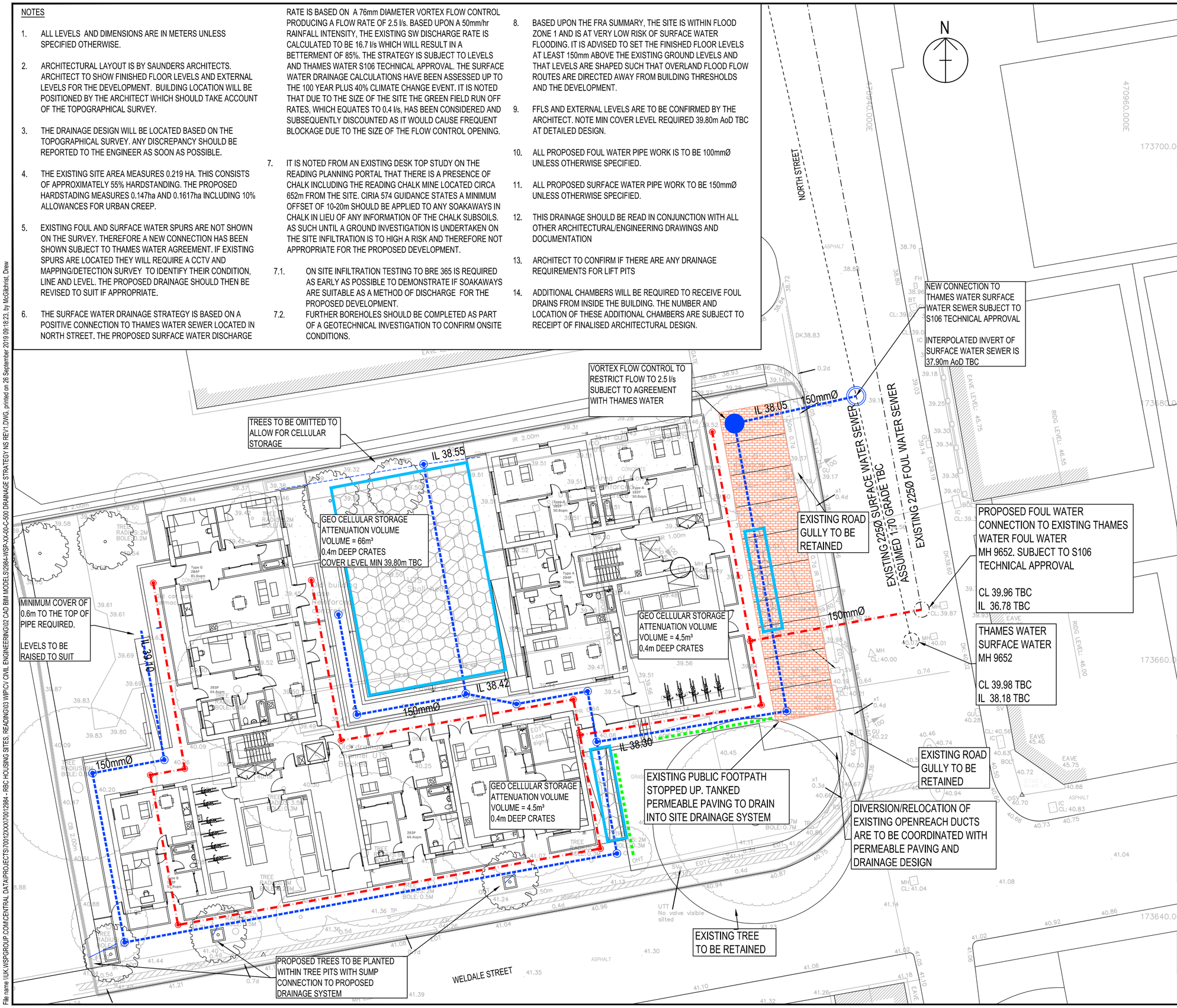
10. ALL PROPOSED FOUL WATER PIPE WORK IS TO BE 100mmØ UNLESS OTHERWISE SPECIFIED.

11. ALL PROPOSED SURFACE WATER PIPE WORK TO BE 150mmØ UNLESS OTHERWISE SPECIFIED.

12. THIS DRAINAGE SHOULD BE READ IN CONJUNCTION WITH ALL OTHER ARCHITECTURAL/ENGINEERING DRAWINGS AND DOCUMENTATION

13. ARCHITECT TO CONFIRM IF THERE ARE ANY DRAINAGE REQUIREMENTS FOR LIFT PITS

14. ADDITIONAL CHAMBERS WILL BE REQUIRED TO RECEIVE FOUL DRAINS FROM INSIDE THE BUILDING. THE NUMBER AND LOCATION OF THESE ADDITIONAL CHAMBERS ARE SUBJECT TO RECEIPT OF FINALISED ARCHITECTURAL DESIGN.



DO NOT SCALE

KEY

- SURFACE WATER DRAINAGE
- FOUL WATER DRAINAGE
- RODDING EYE
- FLOW CONTROL CHAMBER
- SURFACE WATER MANHOLE
- SURFACE WATER INSPECTION CHAMBER
- FOUL WATER INSPECTION CHAMBER
- GEO CELLULAR ATTENUATION SYSTEM WITH PERFORATED COLLECTION DRAIN
- TANKED PERMEABLE PAVING ON PARKING BAYS TO HAVE POSITIVE CONNECTION TO SURFACE WATER DRAINAGE
- ROOT PROTECTION BARRIER
- EXISTING FOUL WATER DRAINAGE
- EXISTING SURFACE WATER DRAINAGE

REV	DATE	BY	DESCRIPTION	CHK	APP
P02	25/09/2019	GBB	UPDATED MASTERPLAN	DH	KR
P01	03/07/2019	JCM	FIRST ISSUE	DH	KR

DRAWING STATUS: S0 - WORK IN PROGRESS

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wsp.com

CLIENT: READING BROUGH COUNCIL

ARCHITECT: SAUNDERS ARCHITECTS

PROJECT: NORTH STREET

TITLE: NORTH STREET DRAINAGE STRATEGY

SCALE @ A2:	CHECKED:		APPROVED:
1:200	DH		KR
PROJECT No: 70012984	DESIGNED: JCM	DRAWN: JCM	DATE: September 19

DRAWING No: 2984-WSP-XX-00-C-500 REV: P02

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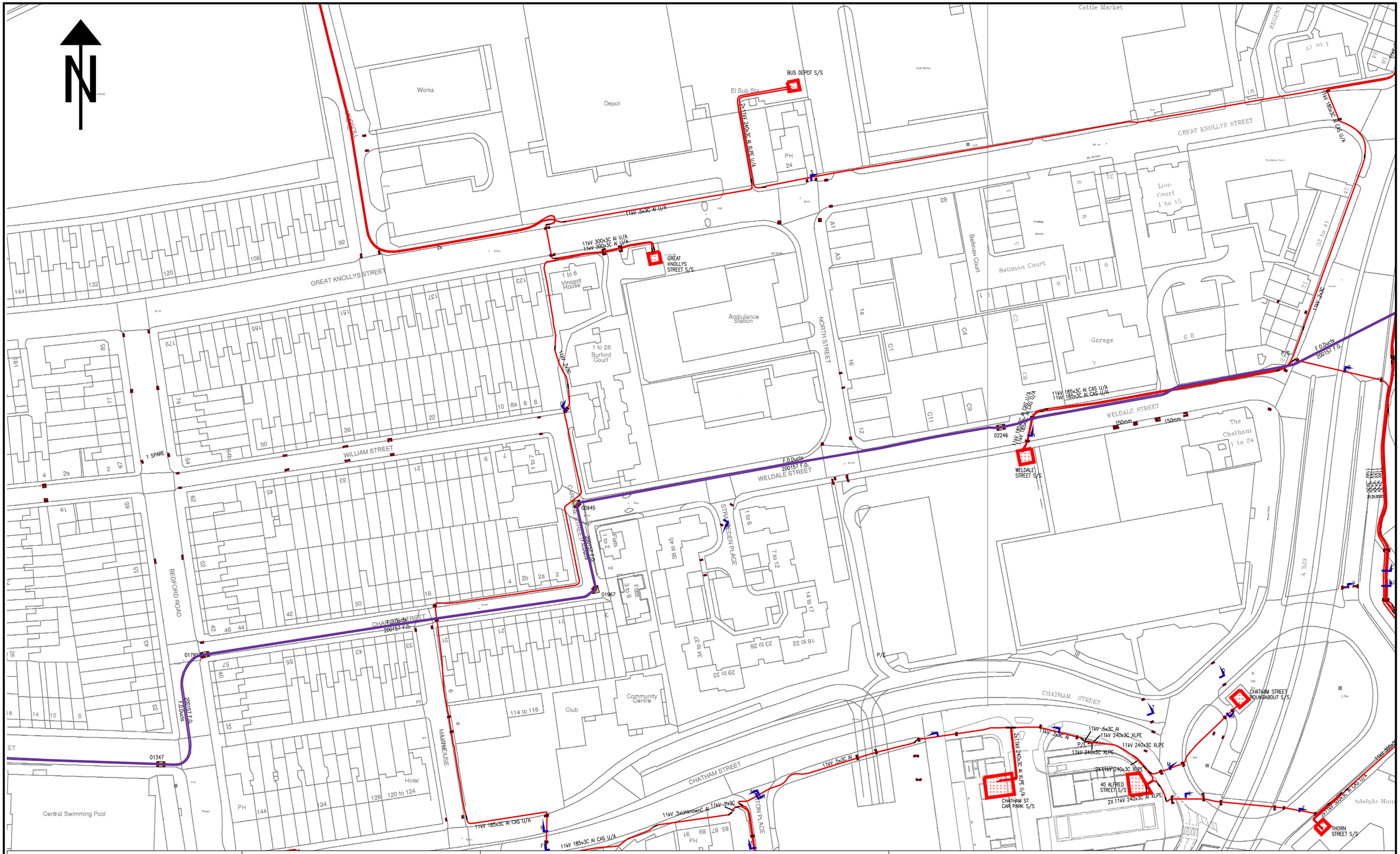
File name \\UK.WSPGROUP.COM\CENTRAL DATA\PROJECTS\70012XXX\70012984 - RBC HOUSING SITES, READING\03 WIP\CV CIVIL ENGINEERING\02 CAD BIM MODELS\2984-WSP-XX-00-C-500 DRAINAGE STRATEGY NS REV1.DWG, printed on 26 September 2019 09:18:23, by McGilchrist, Drew

Appendix D

SCOTTISH AND SOUTHERN ELECTRICITY CORRESPONDENCE



NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID				
	services	l.v.	h.v.	e.h.v.
FOOTPATH	0.40m	0.45m	0.60m	0.75m
ROAD CROSSING	0.60m	0.60m	0.75m	0.90m

l.v./services – up to 1000V.
h.v. – over 1000V. to 11,000V.
e.h.v. – 22,000V. to 132,000V.

WARNING

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work. (available from the HSE)

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE GS6 SHOULD BE CONSULTED. (AVAILABLE FROM THE HSE)

BASED UPON THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE. CROWN COPYRIGHT RESERVED.

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Template: SIAS NRSWA COL A3 plot

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Registered Office: 55 Vastern Road,
Reading, Berkshire, RG1 8BU

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Scottish & Southern Electricity Networks

H.V. MAINS RECORD

READING
01189-126500

CHECKED

Grid Ref: SU70897365
Scale: 1:1250
Date: 05/08/2017

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID				
	services	l.v.	h.v.	e.h.v.
FOOTPATH	0.40m	0.45m	0.60m	0.75m
ROAD CROSSING	0.60m	0.60m	0.75m	0.90m

l.v./services – up to 1000V.
h.v. – over 1000V. to 11,000V.
e.h.v. – 22,000V. to 132,000V.

WARNING

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work. (available from the HSE)

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L.V. MAINS RECORD

READING
01189-126500

Grid Ref: SU70897365
Scale: 1:1250
Date: 05/08/2017

Watch it!

Safety advice brought to you by
Scottish and Southern Electricity Networks

These notes are intended to help all those who have to work in the vicinity of electrical apparatus. Employers have a legal obligation to ensure that their operatives are fully instructed in the correct procedures.

The Electricity at Work Regulations 1989 impose health and safety requirements upon employers, employees and self-employed persons with respect to electricity at work. The regulations impose restrictions on persons being engaged in work activities on or near live conductors.

Regulation 14 requires that: "No person shall be engaged in any work activity on or near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless:

♦ it is **unreasonable** in all circumstances for it to be dead; and
♦ it is **reasonable** in all circumstances for him to be at work on or near it while it is live; and
♦ suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury."

The purpose of the regulations is to require precautions to be taken against the risk of death or personal injury from electricity in work activities.

Publications

The Health and Safety Executive have produced a document entitled 'Avoiding Danger from Underground Services', and the Appendix 1 deals specifically with electric cables. Copies are available from the HSE's Accredited Agents and good booksellers, Ref. HS (G) 47.

Copies of Health and Safety Guidance note GS 6 relating to safe working in proximity to overhead lines, are available from the Health and Safety Executive's website - www.hse.gov.uk.

Note

In situations of emergency or danger, or where the advice contained in these notes cannot be followed, you must consult Scottish and Southern Electricity Networks immediately. Tel. 08457 708090 for southern England or 0800 300999 for Scotland.

Additional copies of these "Watch it!" leaflets can be obtained from our Asset Data Team office upon request. Tel. 01256 337294, or Fax 01256 337295.

You must read and accept the following safety notes as part of the contract to receive our network plans. You will have the option to print these and issue them to site staff.

Watch it! - Working in the vicinity of underground cables

Our plans show the positions and normal depths for the buried cables and pipes at the time when they were installed. However, alterations to road alignments surface levels and buildings may have occurred subsequently without our knowledge. If you discover plant or cables that are not marked or incorrectly marked, then you are required to contact us as soon as possible to give us the opportunity to amend our plans.

These plans show the equipment owned by Scottish and Southern Electricity Networks. There may be other privately owned plant in the area, which is outside of our control. You should always check with the Local Authority, National Grid Company, Department of the Environment, other Electricity Companies and other utilities before proceeding.

It is not intended that the issue of these plans will absolve either party from their obligation under any of the acts that control digging in the public highways.

Supplies To Properties, etc.

The location of cables supplying individual properties, street lighting, traffic signs, telephone kiosks etc. are not always shown on the plans. You should assume that each property, streetlight etc. will have its own supply cable.

Major Circuits

Where our plans indicate the presence of cables with a voltage exceeding 11,000 volts, you are advised to contact our local depot (telephone number is on the plans), before commencing any excavations within the vicinity of these cables. These major circuits form an extremely important link in Scottish and Southern Electricity Networks' networks, and damaging or modifying these circuits is a major and costly undertaking. Any development should therefore be designed to allow these circuits to remain undisturbed and accessible in their present location.

For your own and your workmates' safety, please follow the **do's** and **don'ts** listed below:

- ✓ **do** make sure you have plans of the underground cables in the area **before** any excavation work starts. Remember that some cables may not be shown on plans. If carrying out emergency work, excavate as though there are buried live cables in the vicinity.
- ✓ **do** use a cable locator to determine the position of existing cables in the work area. The positions should be marked and tests made as work proceeds. **If in doubt, get advice from your supervisor.**
- ✓ **do** ask for a cable to be made dead if it is buried in concrete.
- ✓ **do** watch for signs of cables as work progresses. Note any marker-tape or cable-cover, which may be exposed

- ✓ **do** backfill carefully, using stone-free soil around the cables, replacing marker-tapes and / or covers.
- ✓ **do** notify us immediately if you accidentally damage our cables. Arrange to keep people well clear of a cable that has been damaged until we have confirmed it has been made safe.
- ✓ **do** make sure before starting to demolish a building that all cables have been disconnected. We welcome prior notice of the intention to demolish buildings. This enables us to ensure that the site has been made safe electrically.
- ✓ **don't** operate a bulldozer, scraper, dragline or excavator; unless you are satisfied that there are no buried cables in the working area.
- ✓ **don't** use picks, pins, forks or pointed instruments in soft clay or soil when cables are present. Exercise extreme caution where such instruments are used to free lumps of stone, or break up firmly compacted ground. **Never** throw a fork or sharp instrument into the ground.
- ✓ **don't** dig trial holes over the indicated route of the cable. Excavate alongside instead.
- ✓ **don't** use exposed cables as a convenient step or handhold.
- ✓ **don't** handle or attempt to alter the position of any cable.

Remember that a damaged cable may cause extensive loss of supplies, make expensive repairs necessary and cause serious or even fatal injury.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make cables dead without interrupting supplies to our customers. But given adequate notice, we will wherever possible, give advice regarding special precautions which may be necessary on any site where particular problems are likely to be encountered. The right is reserved to make a charge for this service.

Electricity cables can exist anywhere - under paths or roads, in gardens or driveways, on new housing or industrial development sites or even farmland.

Watch it! - Working in the vicinity of overhead lines

For your own and your workmates' safety, please follow the **do's** and **don'ts** listed below

- ✓ **do** carefully note the position of all overhead lines before commencing work.
- ✓ **do** co-operate with us during planning and sitework stages.
- ✓ **do** follow the advice given in HSE Guidance Note GS 6 when siting barriers, goal posts, bunting etc.
- ✓ **do** keep overhead lines in view when moving scaffolding or machinery and take special care when felling or lopping trees.
- ✓ **do** remember that the raising or slewing of a crane or excavator jib may cause danger when operating near an overhead line.
- ✓ **do** avoid any machinery that is in contact with an overhead line until we confirm that conditions are safe.
- ✓ **do** warn others to keep well clear.
- ✓ **don't** drive a high vehicle below an overhead line when an alternative route is available.
- ✓ **don't** raise the bed of a tipper lorry beneath an overhead line or drive under the line with the body of the vehicle raised.
- ✓ **don't** steady any suspended load until you are satisfied that there is no danger from overhead lines.
- ✓ **don't** handle or use scaffold platforms, poles, pipes or ladders unless they are at a safe distance from overhead lines.
- ✓ **don't** transport long objects beneath overhead lines, unless they are carried in a horizontal position.
- ✓ **don't** approach or touch any broken or fallen overhead lines.

Always remember that:

- Electricity can jump gaps.
- Contact or near contact with a crane jib, scaffold or ladder can cause a discharge of electricity with a risk of fatal or severe shock and burns to any person in the vicinity.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make overhead lines dead without interrupting supplies to customers. However, provided adequate notice is given, then we will, whenever possible, give advice regarding special precautions which may be necessary on site where specific problems may be encountered. The right is reserved to make a charge for this service.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460 (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at 55 Vastern Road Reading Berkshire RG1 8BU which are members of the SSE Group www.ssen.co.uk

GUIDE TO INTERPRETING

MAINS RECORDS PLANS

PRODUCED BY MAPPING SERVICES

INTRODUCTION

The Health & Safety Executive have produced a document entitled ‘Avoiding danger from underground services’. Copies are available from HMSO’s accredited agents and good booksellers, Ref HS(G)47, ISBN 0118854925.

WHEN WORKING IN THE VICINITY OF ELECTRICITY CABLES AND OVERHEAD LINES PLEASE FOLOW THE DO’S & DON’T’S LISTED BELOW.

DO’S

Do Make sure that you have plans of the cables in the area before any excavation work starts. Remember that some cables such as service cables may not be shown on the plans. Cables owned by other companies are not shown, e.g. local authorities, Department of the Environment, National Grid Co. etc.

Do Make sure that you understand the plans that have been supplied to you. For detailed explanation of the symbols used by Scottish & Southern Energy to display the cable information see
Appendices.

Do Use a cable avoidance tool (CAT) to determine the position of the existing cables in the work area. The positions should be clearly marked and further tests made as work proceeds. **If in doubt, get advice from your supervisor.**

Do Hand dig trial holes over the indicated route of the cable, excavate alongside.

Do Ask for a cable to be made dead if it is buried in concrete. Please note that this is likely to be a costly process.

Do Watch for signs of cables as work progresses, such as marker tapes or cable covers which may be exposed.

Do Backfill carefully using stone free soil around cables, replacing marker tapes and covers.

Do Ensure that there is maximum clearance above all cable & joints.

Do Notify Scottish & Southern Energy immediately should accidental damage to cables occur however large or small. Arrange to keep people well clear of the cable that has been damaged. Do not backfill an area where cable damage has occurred.

DON’T’S

Don’t Operate a bulldozer, scraper, dragline or excavator unless you are satisfied that there are no buried cables or overhead lines in the working area.

Don’t Use picks, forks or pointed instruments in soft clay or soil where cables are present, exercise extreme caution where such instruments are used to free lumps of stone or to break up firmly compacted ground.

Don’t Use exposed cables as a convenient step or handhold.

Don’t Handle or attempt to alter the position of any cable.

REMEMBER THAT A DAMAGED CABLE MAY CAUSE EXTENSIVE LOSS OF SUPPLIES, MAKE EXPENSIVE REPAIRS NECESSARY AND CAUSE SERIOUS OR EVEN FATAL INJURY.

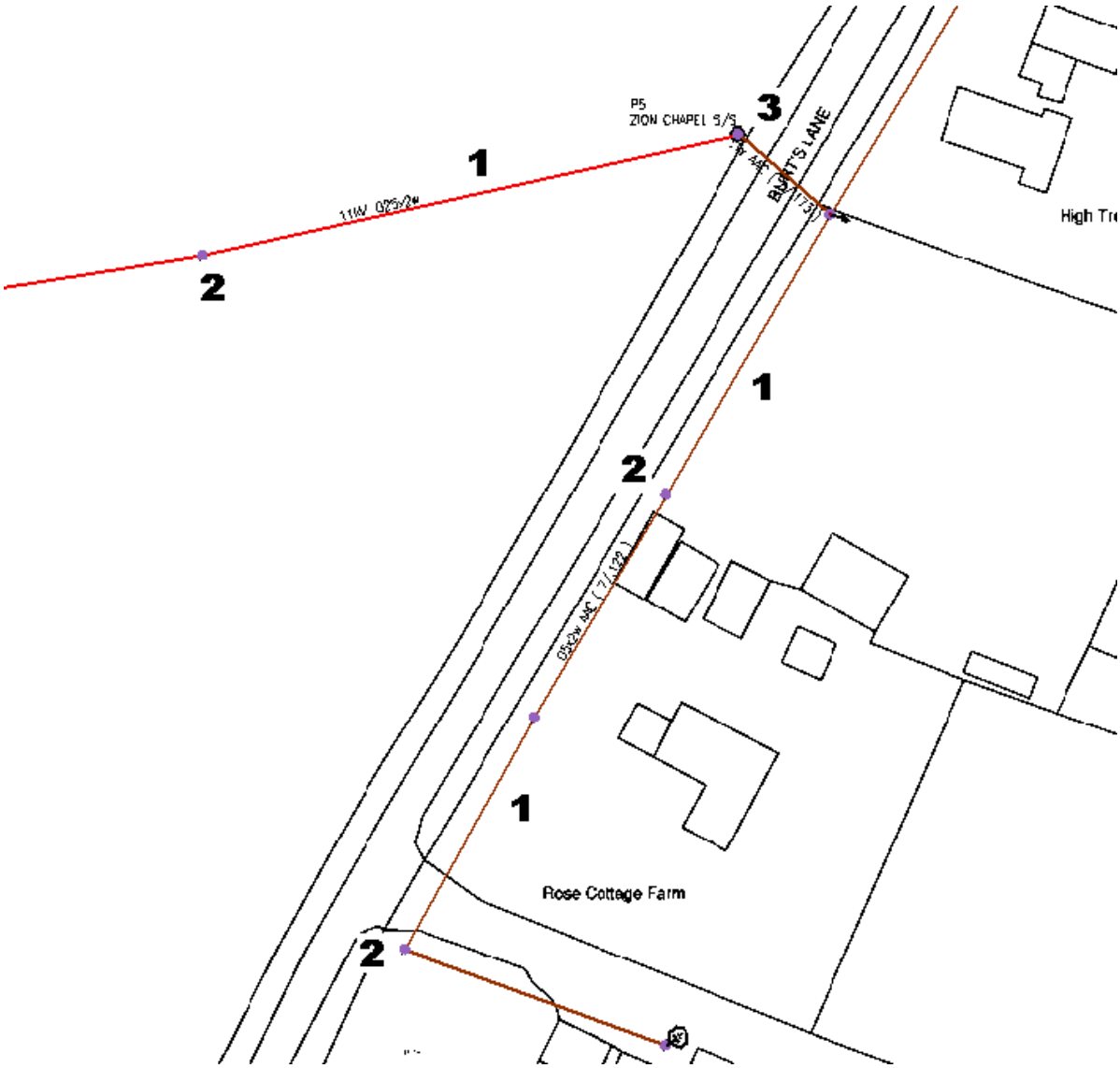
IF IN DOUBT ASK SCOTTISH & SOUTHERN ENERGY.

UNDERSTANDING THE CABLE INFORMATION ON THE PLANS.

AVERAGE DEPTH OF CABLES: Footpaths 0.6 metres
Road Crossings 0.75metres
NB These depths are only approximate, depths may vary. It should also be noted
That surface levels can change subsequent to the cables being laid.

Mains records symbols definitions and examples:

A) Overhead lines & Poles – These are depicted as follows:

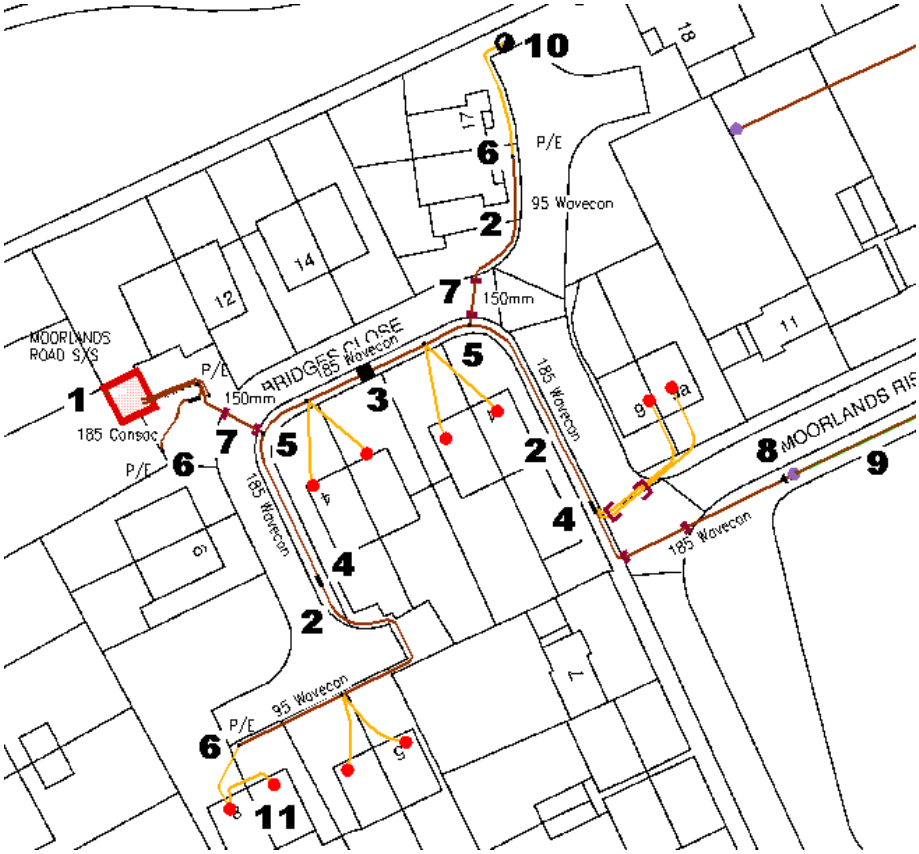


1. Overhead Line – These can be either High Voltage or Low Voltage, colour denotes voltage.

2. Poles.

3. Pole Mounted Transformer.

B) Typical example of Low Voltage cable records:



1. Sub Station

2. Low Voltage Underground cable.

3. Link Boxes: This is a box with a manhole cover marked as belonging to Scottish & Southern Energy containing links. Either two or four cables will lead away from a link box.

4. Straight Joint: This is where two separate cables are joined together.

5. Breech Joint: This is where another cable is attached to the main.

6. Pot End:This is the end of the cable. In certain circumstances service cables to properties can be taken from the pot end. These services may not be shown on the plans.

7. Road crossing duct where a cable is routed under a path or road.

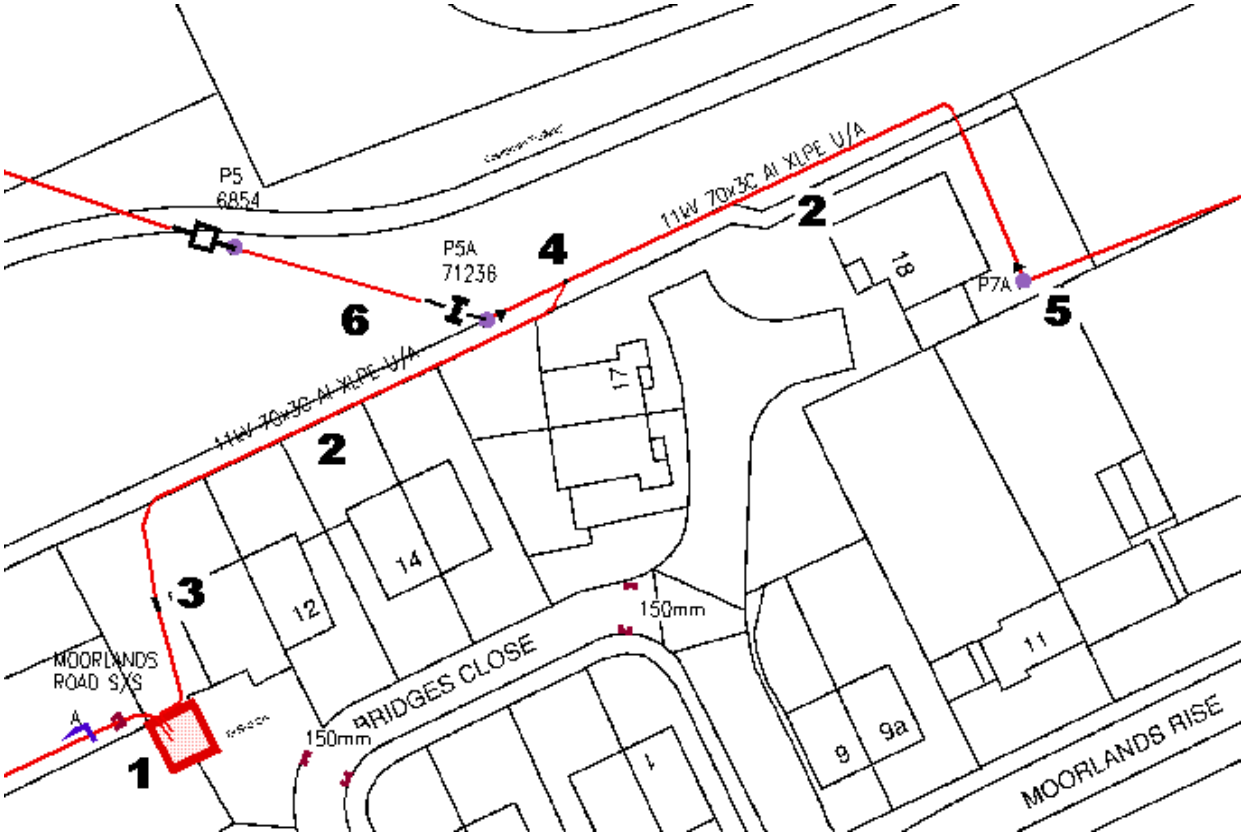
8. Cable terminations/Pole Box: Where underground cables are connected to overhead lines

9. Overhead line.

10. Street Lamps.

11. Services to properties: The service cable to an individual property are not always shown on the mains records that Scottish & Southern Energy supply.
In some cases a service can be looped from an adjacent property.
Some services are laid through ducts from the mains to the meter positon when laid.

C) Typical example of High Voltage cable record.



1. Sub Station

2. High Voltage Underground cable – Colour denotes voltage.

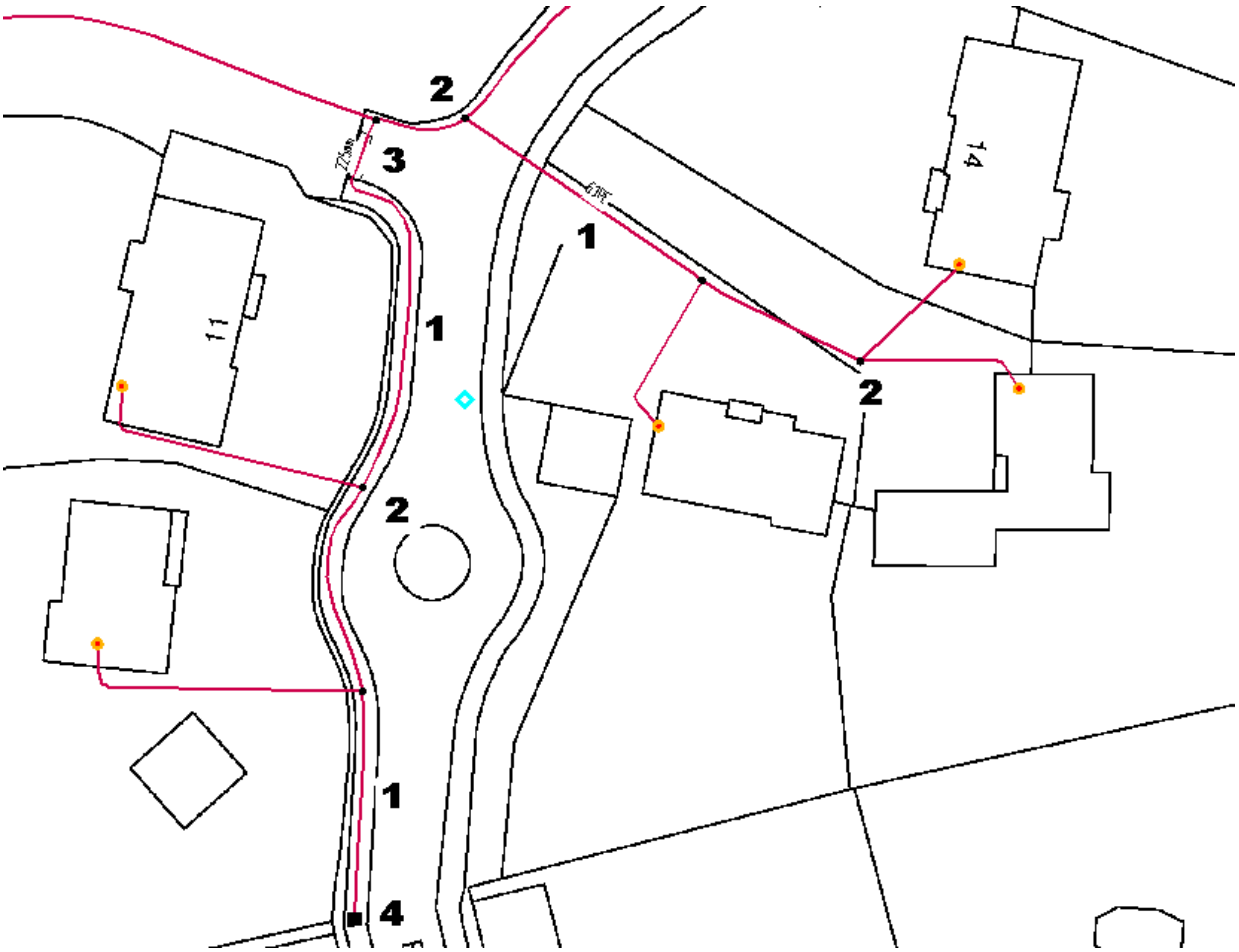
3. Straight Joint: This is where two separate cables are joined together.

4. Breech Joint: This is where another cable is attached to the main.

5. Cable terminations/Pole Box: Where underground cables are connected to overhead lines

6. Overhead Switch.

D) Typical example of Gas pipe record



1. Gas Pipes- Colour denotes pressure.

2. Gas joint

3. Road crossing duct where a pipe is routed under a path or road.

4. Connection Point. Position where network is connected to national gas suppliers network.

Further Notes.

The various sizes of cables and pipes are shown alongside the routes.

IF IN DOUBT ASK SCOTTISH & SOUTHERN ENERGY

GIS ELECTRIC SYMBOLS (SOUTH)

LV UNDERGROUND SERVICE CABLE
LV UNDERGROUND MAINS CABLE
2KV-3.3KV UNDERGROUND CABLE
6.6KV UNDERGROUND CABLE
11KV UNDERGROUND CABLE
22KV UNDERGROUND CABLE
33KV UNDERGROUND CABLE
66KV UNDERGROUND CABLE
132KV UNDERGROUND CABLE
LV OVERHEAD LINE
2-3.3KV OVERHEAD LINE
6.6KV OVERHEAD LINE
11KV OVERHEAD LINE
22KV OVERHEAD LINE
33KV OVERHEAD LINE
66KV OVERHEAD LINE
132KV OVERHEAD LINE
FIBRE OPTIC CABLE
PILOT CABLE
CIRCUIT BREAKER
SWITCH DISCONNECTOR
POLE BOX
STRAIGHT JOINT
TEE JOINT

TRIFURCATING JOINT
P/E POT END JOINT
C/E CAPPED END JOINT
SEALING END JOINT
SERVICE CONNECTOR JOINT
O/H CONNECTOR JOINT
WALL BOX JOINT

POLE
POLE MOUNTED TRANSFORMER

SUBSTATION
LINK BOX
PILLAR

MAJOR PIPELINE
ASSUMED ROUTE

A
CROSS SECTION

DUCTING
FS
FLYING STAY
PME EARTH
NEUTRAL EARTH
OIL/GAS GAUGE
OIL/GAS TANK
BALANCER
REGULATOR

PIT
SCHEMATIC CONNECTOR
SUPPLY LOCATION-PROPERTY
SUPPLY LOCATION-OTHER
SUPPLY LOCATION-STREET FURNITURE

GIS ELECTRIC SYMBOLS (NORTH)

FIBRE OPTIC CABLE

PILOT CABLE

6.6/11kV UNDERGROUND CABLE

33kV UNDERGROUND CABLE

132kV UNDERGROUND CABLE

LOW VOLTAGE UNDERGROUND CABLE

6.6/11kV OVERHEAD LINE

33kV OVERHEAD LINE

132/275kV OVERHEAD LINE

LOW VOLTAGE OVERHEAD LINE

POLES

TOWER

POLE TERMINATION

JOINTS

DUCTING

LINK BOX

PILLAR

SUBSTATION

WATER PIPELINE

OIL PIPELINE

GAS PIPELINE

SWITCH DISCONNECTOR

CIRCUIT BREAKER

SUPPLY POINT

GIS Gas Symbols

Medium Pressure Pipe

Low Pressure Pipe

Gas Ducting

Gas Supply Point

Gas Joint

End Closure

Pressure Reduction Station

Gas Utility Connection Point

Valve

GIS Environmental Guide

Countryside Agency

- Areas of Outstanding Natural Beauty (AONB)
- National Park

Environment Agency

- Borehole
- Water Extraction Point
- Sensitive Waterway
- Source Protection Zone
- Vulnerability Zone

Forestry Commission

- Access
- Ownership

English Heritage/Historic Scotland

- Monuments

SEPA

- Flood Area
- Flood Location

English Nature/Scottish Natural Heritage

- Site of Special Scientific Interest (SSSI)
- National Nature Reserve (NNR)
- RAMSAR
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Ancient Woodland

Areas of Concern

- Contaminated
- Cadmium
- Methane
- Heavy Metal-Unclassified
- Asbestos
- Ordnance
- Mercury
- Restricted Access

Scottish & Southern Electricity Networks

North of Scotland 0800 048 3515

Central Southern England 0800 048 3516

Our reference: EPK932

SSEN
Primary Road
Chalvey
Slough
SL1 2UD

01753 695 712

01753 695 751

Ruth.mwadime@sse.com

www.ssepd.co.uk

WSP
Jack Mason
KINGS ORCHARD
1 QUEEN STREET
BRISTOL
BS2 0HQ

10/07/2019

Dear Jack Mason,

Budget Quotation for New Supply at: NEW DEVELOPMENT, NORTH STREET, READING, RG1 7DA.

Thank you for your recent enquiry. I am pleased to provide you with my budget estimate for the new electricity connections at the above development. My initial proposals will be subject to our obtaining all necessary legal consents to carry out the work as indicated, including any consents required from third parties.

£ 9,000 – 11,000 This budget estimate has been calculated exclusive of VAT and does not constitute an offer of terms

You should be aware that this estimate reflects the current situation and cannot be guaranteed into the future. Before making any financial commitments based on the indicative price above, please contact me to request a firm quotation.

The budget estimate has been calculated based on a high level assessment, my local knowledge and experience, the information you have provided and the assumptions listed overleaf. It is my best estimate of the costs you would incur for this proposal and is intended for budgetary proposes only.

I trust the information I have provided is of assistance and if I can help further please do not hesitate to contact me. Alternatively, you may find answers to any questions you may have on our web site www.ssepd.co.uk.

Yours sincerely,

Ruth Mwadime
Connections Designer

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No. 1 Forbury Place 43 Forbury Road Reading RG1 3JH which are members of the SSE Group www.ssen.co.uk

New Supply at: NEW DEVELOPMENT, NORTH STREET, READING, RG1 7DA.

Additional assumptions and charges

- I have assumed that there is no need for reinforcement works to accommodate your new connections. This may not be the case. I can include these costs (or confirm that none apply) if you pay for a feasibility study or request a firm quotation.
- All on site excavation and reinstatement will be provided by the developer.
- All internal containment for rising mains cables (flats) will be provided by the developer.
- Legal consent, from third parties, may not be readily forthcoming and could cause delays in providing your connection. This may also affect the cost for the proposed connection.
- Some Highway Authorities are proposing to introduce "Lane Rental Charges" where Utility Companies carry out excavations in the Public Highway. These costs will be passed through to you, together with a small administration cost, should this affect your connection. This charge has not been included in this estimate.

Important notice: Traffic Management Act - Street Works Permit schemes

Local Authorities in England and Wales are likely to introduce a new Permit Scheme for street works that will include charges for providing the permits. It is not clear at this time which Local Authorities will introduce this scheme, when the scheme will be introduced, which streets will be affected or what the level of charges will be. These charges are not within Southern Electric Power Distribution plc's control, and cannot be absorbed by us.

This quotation excludes any charges that may be levied by the Local Authority in respect of these charges. It is important to note that any such charges which are relevant to this project will be subsequently passed on to you through a separate invoice. In addition to the actual charges from the Local Authority, we will charge £25.00 + VAT to cover our administrative charges. Acceptance of this quotation means that you also accept these additional charges.

You may wish to seek clarification on how these charges may affect you from the relevant Local Authority.

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Scottish & Southern Electricity Networks

North of Scotland 0800 048 3515

Central Southern England 0800 048 3516

Safety

We ask you to take note of the following:-

In accordance with the Health & Safety Guidance Note GS6, you are required to take every precaution to ensure that cranes, tipper lorries, scaffolding, ladders and other plant employed on your works are kept at a safe distance from overhead electric lines and their supports and that such supports are not disturbed by excavations. Goal posts with height restriction will need to be placed at appropriate locations for vehicles passing underneath Scottish and Southern Energy Power Distribution's overhead lines.

In accordance with Health & Safety Executive Guidance Note HS (G) 47 care will also be necessary when digging in proximity to underground cables, particular if mechanical excavators are used.

Overhead lines, underground cables and other electrical plant must be regarded as being "live". Before commencing work in proximity to such plant written notification must be given to Scottish and Southern Energy Power Distribution.

If during the course of your works, any cable should be damaged by you/or your contractors, then this fact must be reported to our Emergency Service Centre on 08000 72 72 82 (Southern Electric Power Distribution plc) immediately. The cost of any repairs will be fully rechargeable.

Locating cables on site

To obtain the latest copies of our cable records please send a plan of the area in question together with your contact details to:

Mapping Services
Scottish and Southern Energy Power Distribution
P O Box 6206
BASINGSTOKE
RG24 8BW

Tel: 01256 337294
Fax: 01256 337295

requesting details of any Scottish and Southern Energy Power Distribution plant and cables in the area. You must excavate hand-dug trial holes to establish the actual positions of all cables before any mechanical excavation works commence.

Scottish and Southern Energy Power Distribution is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; S+S Limited Registered in Scotland No. SC214382 (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at 55 Vastern Road Reading Berkshire RG1 8BU which are members of the SSE Group
www.ssepd.co.uk

Appendix E

SOUTHERN GAS NETWORKS CORRESPONDENCE

Confidential

CHECKED

Our Ref: 10935699 Your Ref: LM 57007/SuC

Wednesday, 02 August 2017

Christina Elliott
500 Park Avenue Aztec West
Almondsbury
Bristol
BS32 4RZ

Dear Christina Elliott

Thank you for your enquiry dated Wednesday, 02 August 2017

Please find an extract from our mains records for your proposed work area, any SGN assets are described in the map legend. On some occasions blank maps may be sent to you, this is due to your proposed work being in a no gas area but within our operational boundaries.

This mains record only shows the pipes owned by SGN in our role as a Licensed Gas Transporter (GT). Please note that privately owned gas pipes or pipes owned by other GTs may be present in this area and information regarding those pipes needs to be requested from the owners. If we know of any other pipes in the area we will note them on the plans as a shaded area and/or a series of x's.

The information shown on this plan is given without obligation or warranty and the accuracy cannot be guaranteed. Service pipes, valves, siphons, stub connections etc. are not shown but their presence should be anticipated. Your attention is drawn to the information and disclaimer on these plans. The information included on the plan is only valid for 28 days.

On the mains record you may see the low/medium/intermediate pressure gas main near your site. There should be no mechanical excavations taking place above or within 0.5m of a low/medium pressure system or above or within 3.0m of an intermediate pressure system. You should, where required confirm the position using hand dug trial holes.

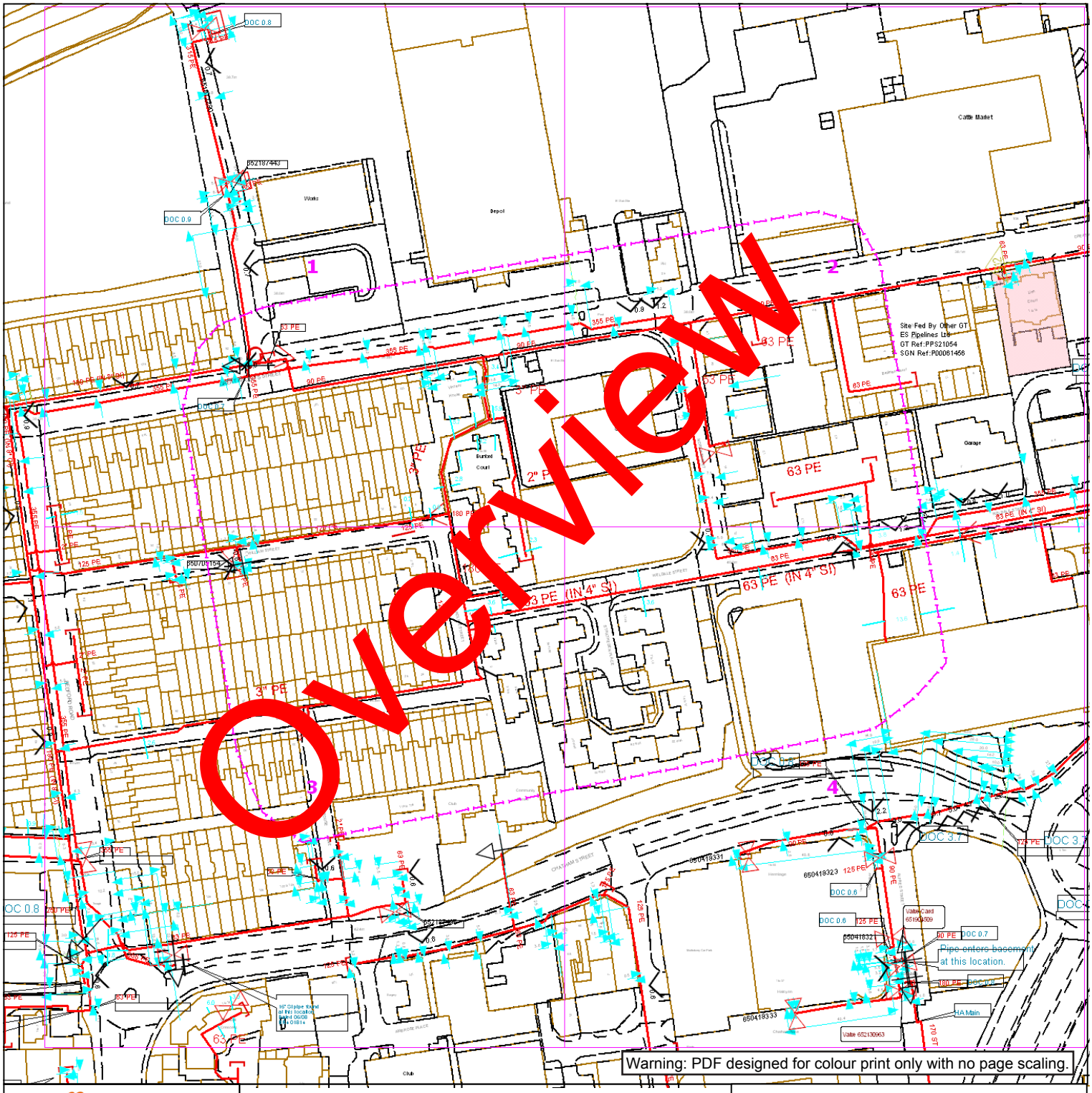
A colour copy of these plans and the gas safety advice booklet enclosed should be passed to the senior person on site in order to prevent damage to our plant and potential direct or consequential costs to your organisation.

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

It must be stressed that both direct and consequential damage to gas plant can be dangerous for your employees and the general public and repairs to any such damage will incur a charge to you or the organisation carrying out work on your behalf. Your works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your operations.

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

Yours sincerely,
The Safety Admin Team
For more information, visit our Dig Safely pages on sgn.co.uk
Tel: 0800 912 1722



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Contact Us

SGN Safety Admin Team:
0800 912 1722
Email:
plantlocation@sgn.co.uk

Date Requested: 02/08/2017
Job Reference: 10935699
Site Location: 470889 173657
Requested by:
Ms Christina Elliott
Your Scheme/Reference:
LM 57007/SuC

Low Pressure Mains
Medium Pressure Mains
Intermediate Pressure Mains
High Pressure Mains
History Data
LAs
GTs
SSSIs

Some Examples Of Plant Items

Valve
Syphon
Depth of Cover
Diameter Change
Material Change

Warning: PDF is designed for colour print only, with no page scaling. This information is given as a guide only and its accuracy cannot be guaranteed.

Linesearch before Udig

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Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 111 999

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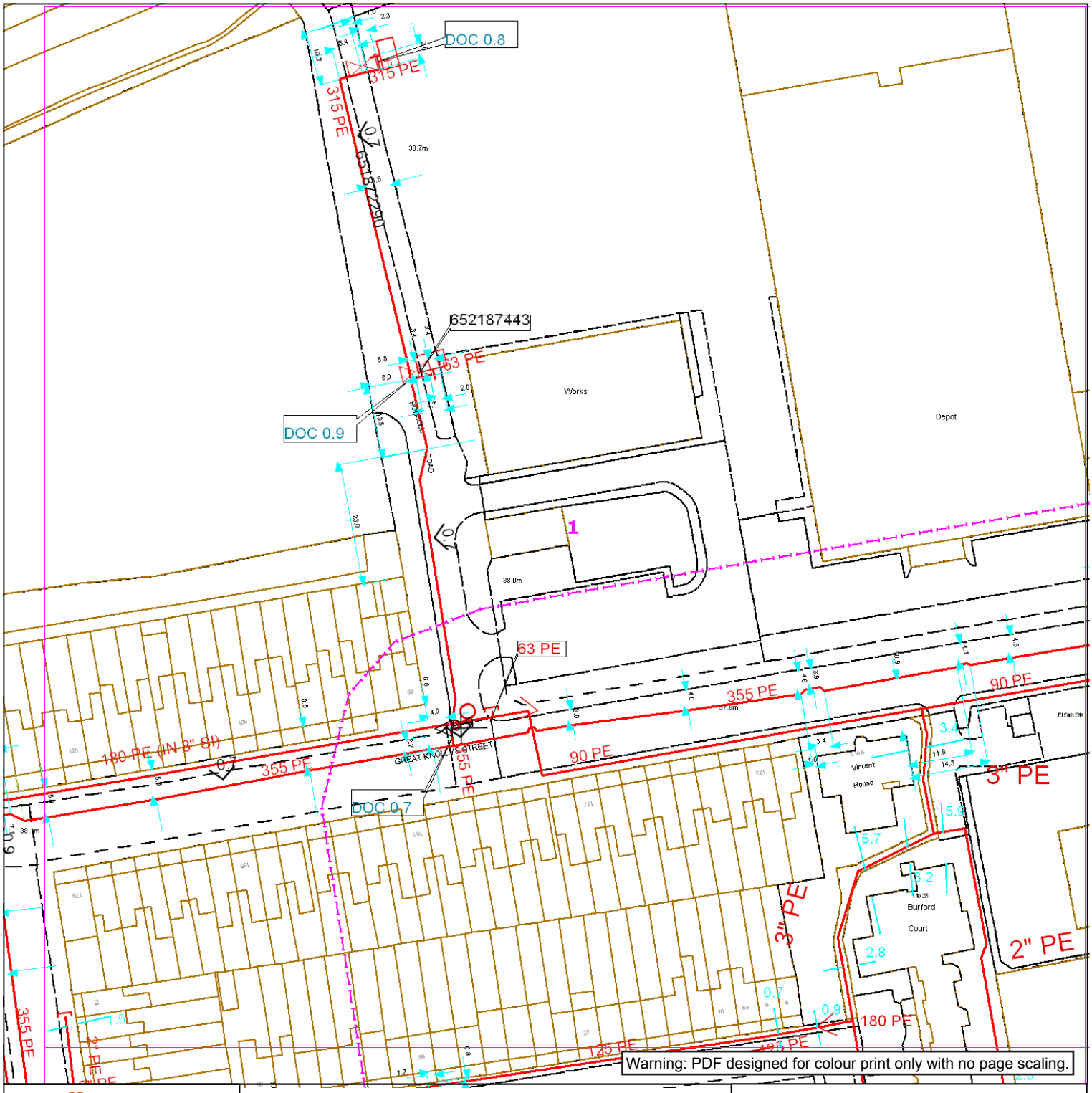

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Exact Scales:
1:1000 Area or Circle dig site
1:1000 Line dig site

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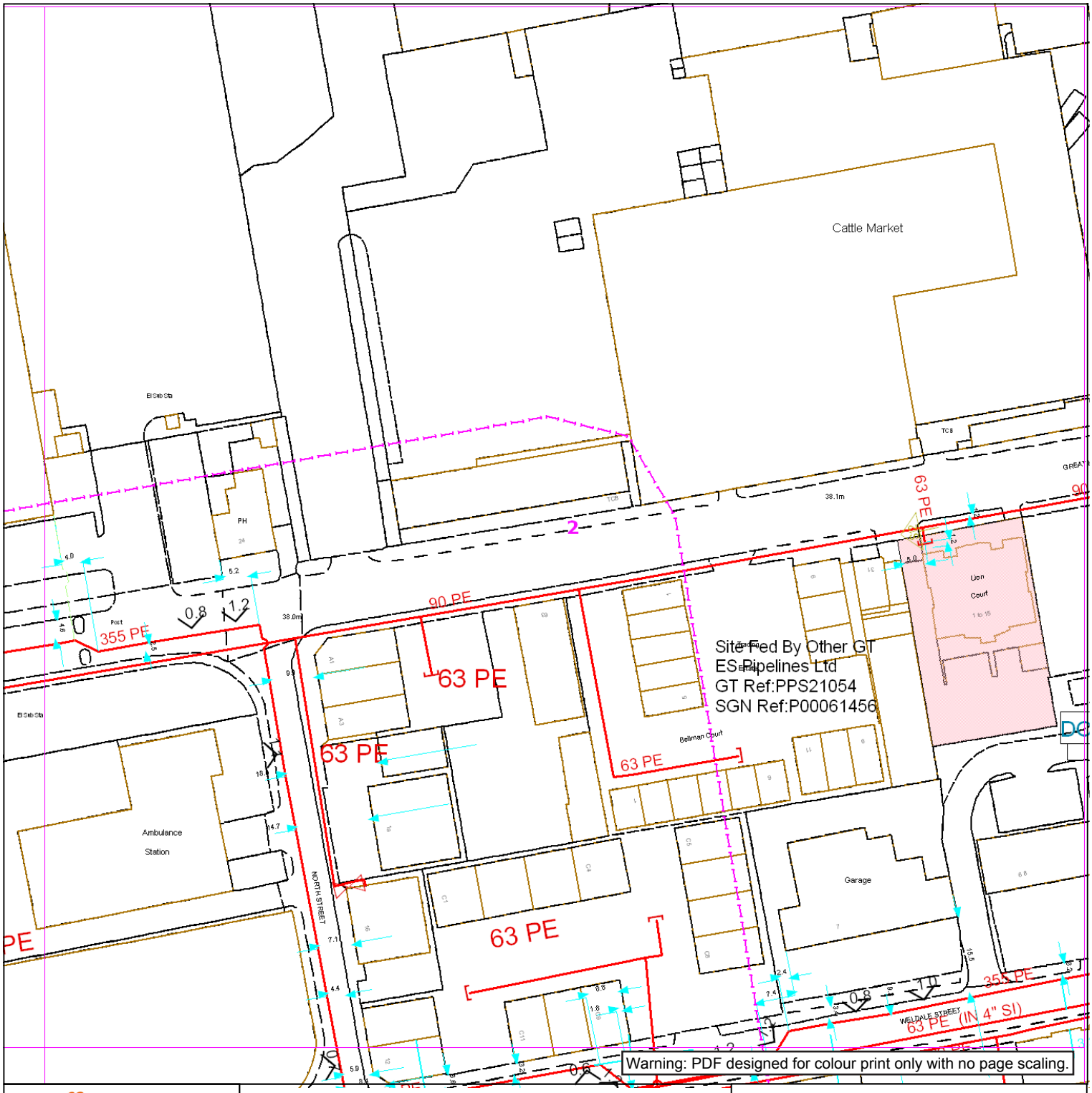

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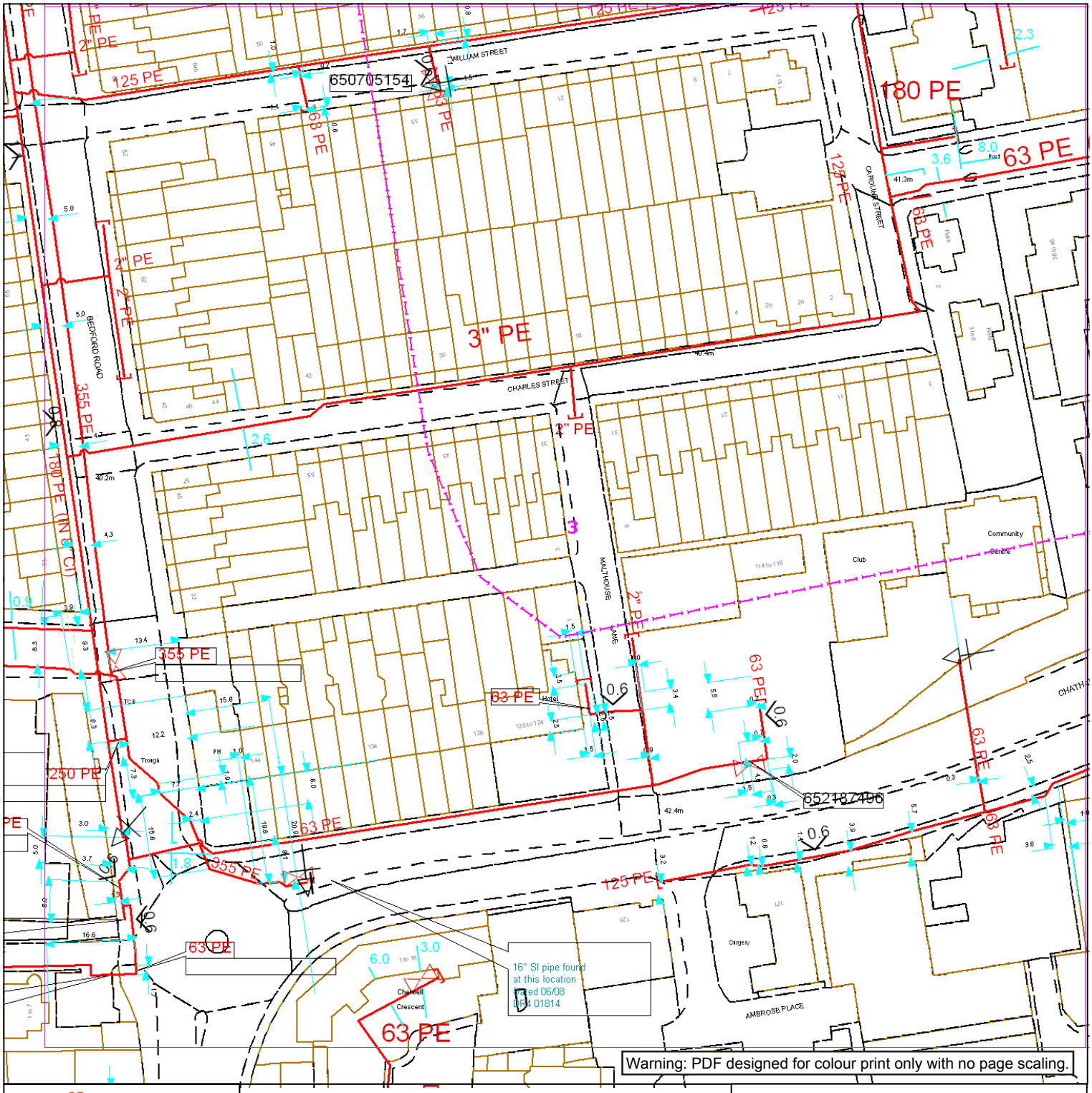

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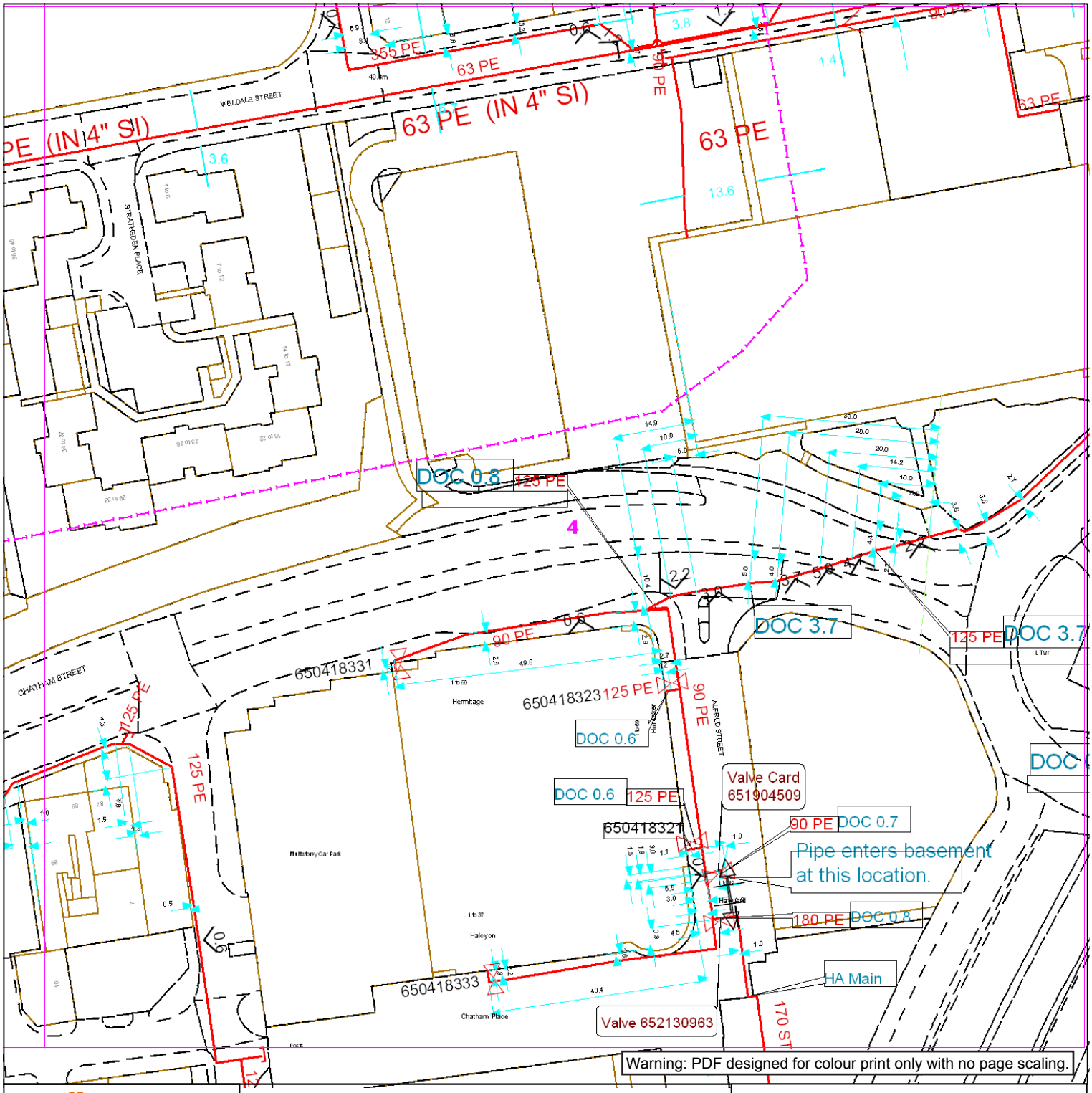

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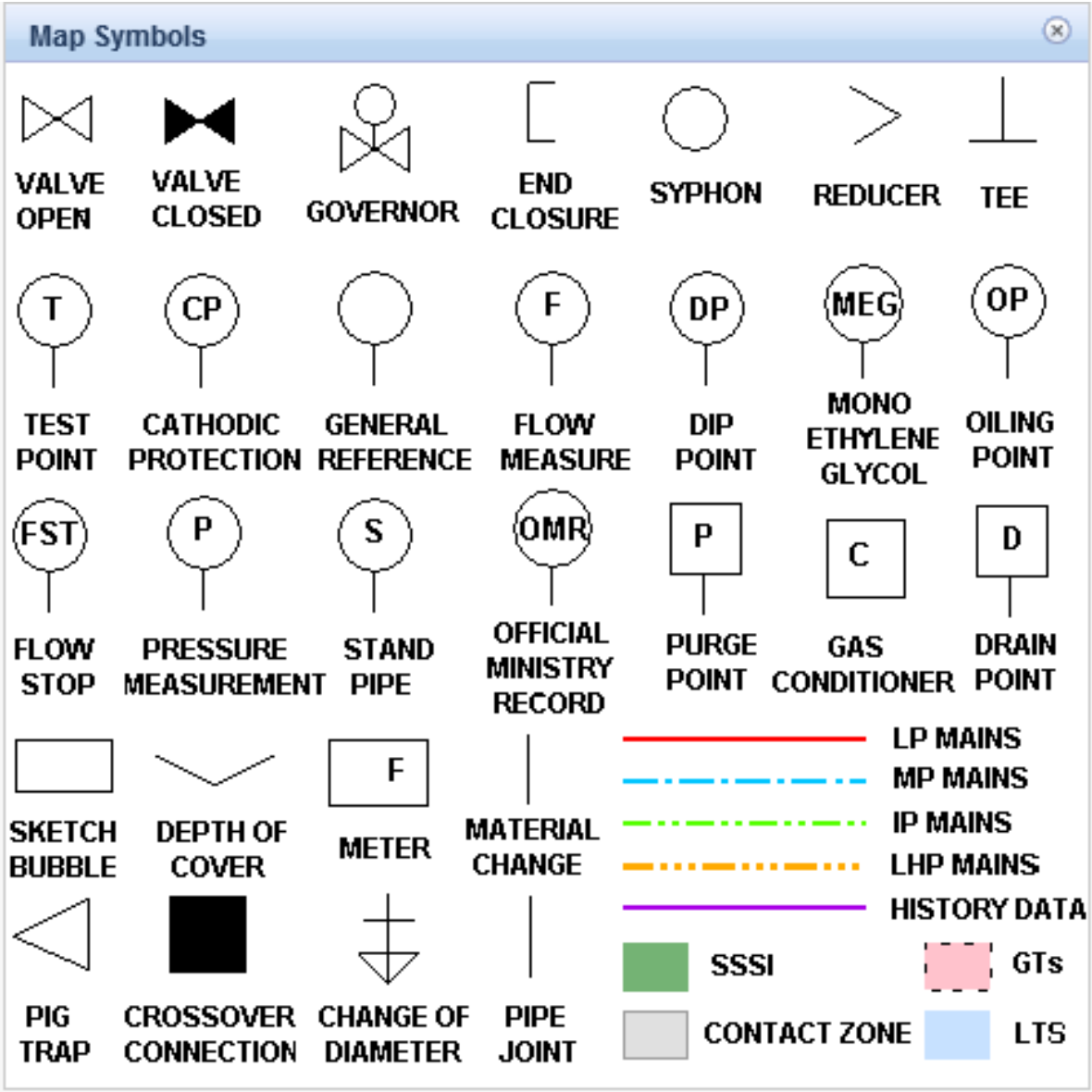

Map Symbols
VALVE OPEN
VALVE CLOSED
GOVERNOR
END CLOSURE
SYPHON
REDUCER
TEE
T
TEST POINT
CP
CATHODIC PROTECTION
GENERAL REFERENCE
F
FLOW MEASURE
DP
DIP POINT
MEG
MONO ETHYLENE GLYCOL
OP
OILING POINT
FST
FLOW STOP
P
PRESSURE MEASUREMENT
S
STAND PIPE
OMR
OFFICIAL MINISTRY RECORD
P
PURGE POINT
C
GAS CONDITIONER
D
DRAIN POINT
SKETCH BUBBLE
DEPTH OF COVER
F
METER
MATERIAL CHANGE
LP MAINS
MP MAINS
IP MAINS
LHP MAINS
HISTORY DATA
PIG TRAP
CROSSOVER CONNECTION
CHANGE OF DIAMETER
PIPE JOINT
SSSI
GTs
CONTACT ZONE
LTS

SGN

Your gas. Our network.

Dig safely

Measures to avoid injury and damage to gas pipes

The following protective and precautionary measures MUST be taken when working in the vicinity of gas mains and services.

It is the responsibility of the property owner or company carrying out the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance, eg HS(G)47. In practice, this means that whoever is carrying out the work MUST obtain gas mains location information and/or maps showing the indicative position of the gas network before any work takes place.

To avoid injury to yourself, your employees, colleagues and the general public you MUST suitably mark the position of the pipes on site.

HS(G)47 outlines best practice that should be followed to ensure you work safely:

1. Plan the work, obtain maps.
2. Detecting, identifying and marking underground services.
3. Safe excavation and safe digging practices.

In addition to the requirements under the Health and Safety At Work etc. Act 1974 to prevent injuries to employees and others (not employed), it is an offence under regulation 15 of the Pipelines Safety Regulations 1996 to cause damage to a pipeline (which includes gas mains and services as well as higher pressure pipelines) so as to give rise to a danger to persons.

You MUST make sure that current full colour copies of our maps are issued to all relevant personnel on site and they're aware of the presence and location of our gas mains and services prior to any excavation.

In a gas emergency

If you cause a gas leak or suspect a main or service pipe or equipment is leaking, you MUST take the following emergency actions immediately:

- **Ask people to move away from the area of the gas escape.**
- **Call 0800 111 999 immediately.**

1. **Don't** attempt to repair the escape or stop the leakage.
2. As gas may enter buildings, ask people in the surrounding premises to **leave** until it's safe for them to return.
3. **Stop** anyone going near the immediate vicinity of the gas escape.
4. **Prohibit** smoking and extinguish all naked flames.
5. **Don't** use mobile phones or other ignition sources.
6. **Assist** our representatives and other emergency services such as the police, ambulance, and fire service as requested.

Additional reference material

- SGN guidance for Safe Working in the Vicinity of Pipelines & Associated Installations operating >7barg. Applicable for HP only.
- HS(G)47 **Avoiding Danger from Underground Services** available from **hse.gov.uk**
- NJUG **Utilities Guidance on Positioning and Colour Coding of Apparatus** available from **njug.org.uk**

Making an enquiry for gas mains or services maps

Please visit our **Dig safely** pages on **sgn.co.uk** for plant protection information and links to our online mapping system and other associated information and guidance.

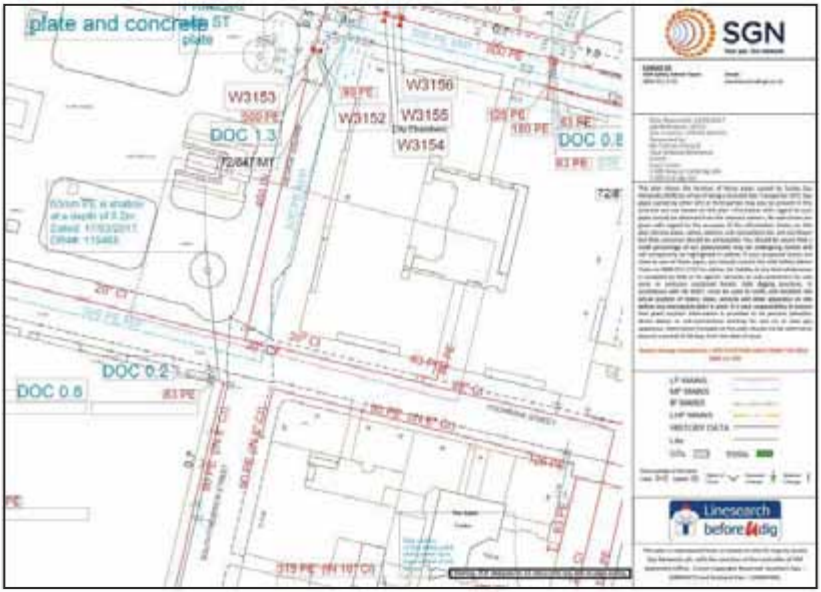
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

You'll need to register/log in and provide a few details about your site location and the work you'll be carrying out. We'll respond immediately by email.

What you're likely to be sent

You'll be sent an email with a map. This will be an extract from our gas mains record, showing your site and any of our gas pipes as well as relevant safety information.

We always send out safety information, however we may forward your enquiry on to a local plant protection officer or a pipelines engineer to make direct contact with you depending on the work location.



Example of a gas map

Note: Service pipes are not shown on our maps

When working near our gas mains and services

Safe system of work

To satisfy ourselves that work in the vicinity of our gas mains is being carried out safely, we may ask for a copy of your risk assessment and/or method statement paperwork.

Where work falls under the Construction (Design and Management) Regulations 2015 reference to our gas mains and services MUST be made within your site Health and Safety file.

Financial

Every reasonable precaution MUST be taken to avoid personal injury or damage to our gas network at all times.

If we incur any costs to repair direct or consequential damage or divert any gas main or service, you'll be recharged in full.

HSE

Any damage to our gas mains or services will be subject to legislative reporting responsibilities to the Health and Safety Executive under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013, Gas Safety Management Regulations 1996, and the Pipelines Safety Regulations 1996.

Minimum safe working distances

Depending on the activity being undertaken and the gas mains or services you are working within the vicinity of, there are different safe distances that MUST be adhered to. SGN plant protection officers or pipeline engineers will inform you of these if required.

Surface boxes and manholes

Do not bury or move our surface boxes. Free access MUST be maintained during and after your work. No manhole cover or other structure can be built over, around or under a gas main, and no work is to be carried out that results in a reduction or increase in cover or protection without prior written agreement.

Deep excavations

Adequate protection, approved by us, MUST be applied for any deep excavations in the vicinity of our gas mains and services that may affect its security and integrity. Ground movement around gas mains MUST be prevented. We MUST be contacted if a sewer trench or any other water authority is to be constructed at greater than 1.5 metres depth near a buried gas main or service pipe. You MUST give us detailed drawings showing the line and width of the proposed sewer or other trench, together with the soil group classification of the area concerned.

Crossing our mains or services

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over our gas mains is prohibited unless specifically agreed protective measures (ie the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned. You MUST NOT carry out any work in servitudes/easements without our prior written consent.

Exposed plant

Where excavations in the vicinity of our gas mains affect its support, the plant MUST be adequately supported and protected in consultation with us and to our satisfaction. It MUST be protected from impact, restraints and thrust blocks, and supports MUST NOT be removed without our agreement.

Hot work

One of our representatives should be present when welding or other hot work involving naked flames is being carried out near our gas mains, as there's potential for heat damage to plastic pipeline/coatings.

Backfilling

Concrete backfill should not be placed closer than 300mm to our mains. No concrete or hard material should be placed under or adjacent to any of our gas mains. Shuttering MUST be constructed to maintain the stated clearances and prevent fresh concrete encasing our mains or services. Material used for backfill around our gas mains MUST conform to the following:

- If sand, it MUST be well-graded in accordance with BS EN 12620:2002.
- It MUST NOT contain any sharp particles (stones, bricks, lumps or corrosive materials).
- Foamed concrete MUST NOT be used.
- It MUST be laid to a minimum depth of 250mm above the crown of the gas main.

Note: Power ramming MUST NOT take place until a 300mm hand rammed layer has been completed over the crown of the main.

Access

Free access to our sites, mains and services, including temporary structures and spoil heaps MUST be available at all times.

Mechanical excavation

Mechanical excavators (including breaker attachments) MUST NOT be used within the following distances from the confirmed location of our gas mains and services shown on our gas maps without prior agreement:

Type of mains and services	Gas map identification	Hand excavation required inside	Pipe pressure indication shown on map
Low Pressure (LP)	0 – 75mbar	0.5 metres	
Medium Pressure (MP)	75mbar to 2 bar	0.5 metres	
Intermediate Pressure (IP)	2 – 7 bar	3.0 metres	
High Pressure (HP)	Above 7 bar	You must seek approval from us prior to any work	

Major accident hazard pipelines

High pressure pipeline

No work is to take place near an HP pipeline until it is agreed with us. After agreement and before any work does take place, the location of our pipeline MUST be marked up and its position confirmed by digging trial holes with our personnel in attendance.

Pipeline markers

High pressure

We will be involved in any work taking place near high pressure pipelines. We will provide you with additional information that you MUST familiarise yourself with before carrying out any work.

The default method of excavating near high pressure gas pipelines MUST always be by hand.

Wind turbines

The UK Onshore Pipelines Operations Association (UKOPA) has identified the appropriate exclusion zone (distance from the base of the wind turbine mast to the edge of the pipeline) as 1.5 times the turbine height. Contact MUST be made with us during the planning stages of a wind turbine or wind farm.

Tree planting

If trees or shrubs are to be planted in the vicinity of our gas mains and services, the selection of tree or shrub type and how it's planted MUST be considered carefully. This is to avoid root damage to buried mains or services, and to ensure our subsequent excavations for main repair and maintenance won't damage the trees or shrubs.

Written approval from us MUST be obtained before any tree planting is carried out on a servitude/easement. Any approval we grant to plant trees

The following trees and those of similar size (deciduous or evergreen) MUST NOT be planted within 6m of the centre line of the main: ash, beech, birch, most conifers, elm, maple, lime, horse chestnut, oak, and sycamore. Apple and pear trees are also included in this category.

Dwarf apple stocks may be planted up to 3m of the centre line of the main.

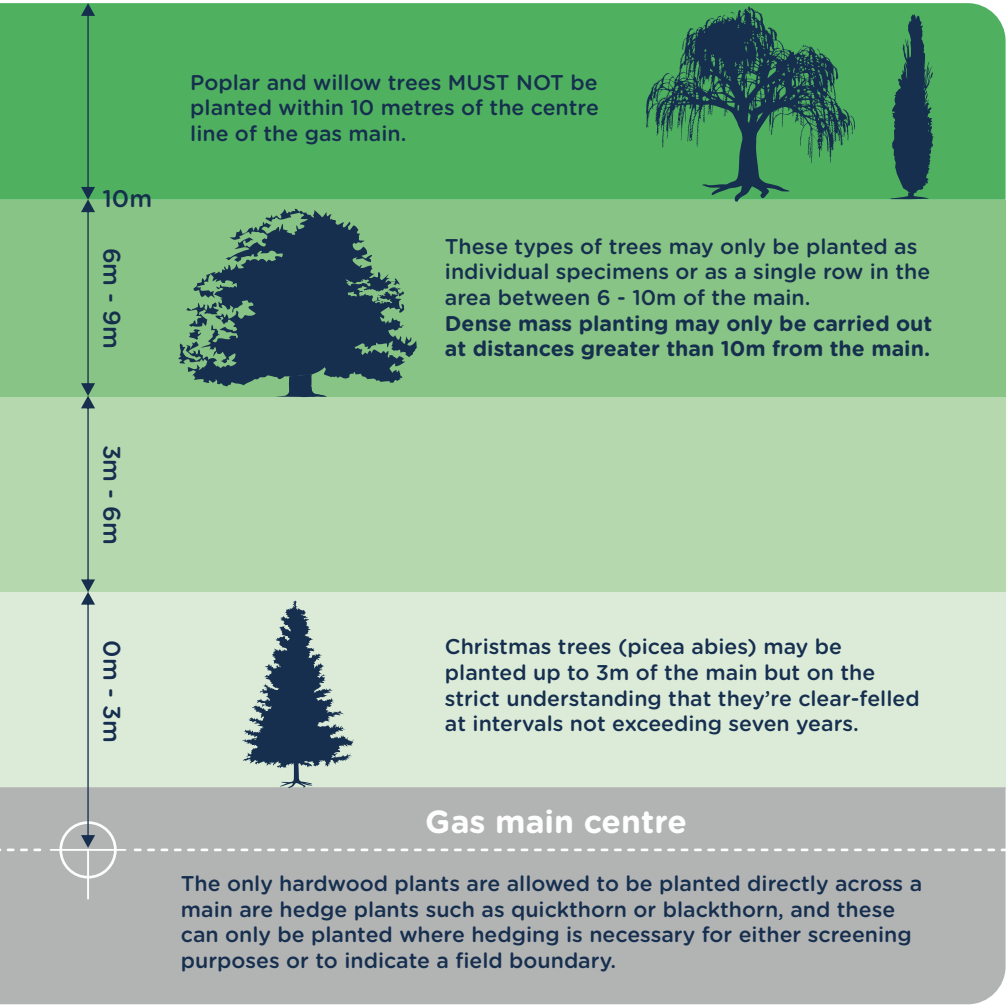
In cases where screening is required, the following are shallow rooting and may be planted close to the gas mains and services: blackthorn, broom, cotoneaster, elder, hazel, laurel, quickthorn, privet, snowberry and most ornamental shrubs.

Gas main centre

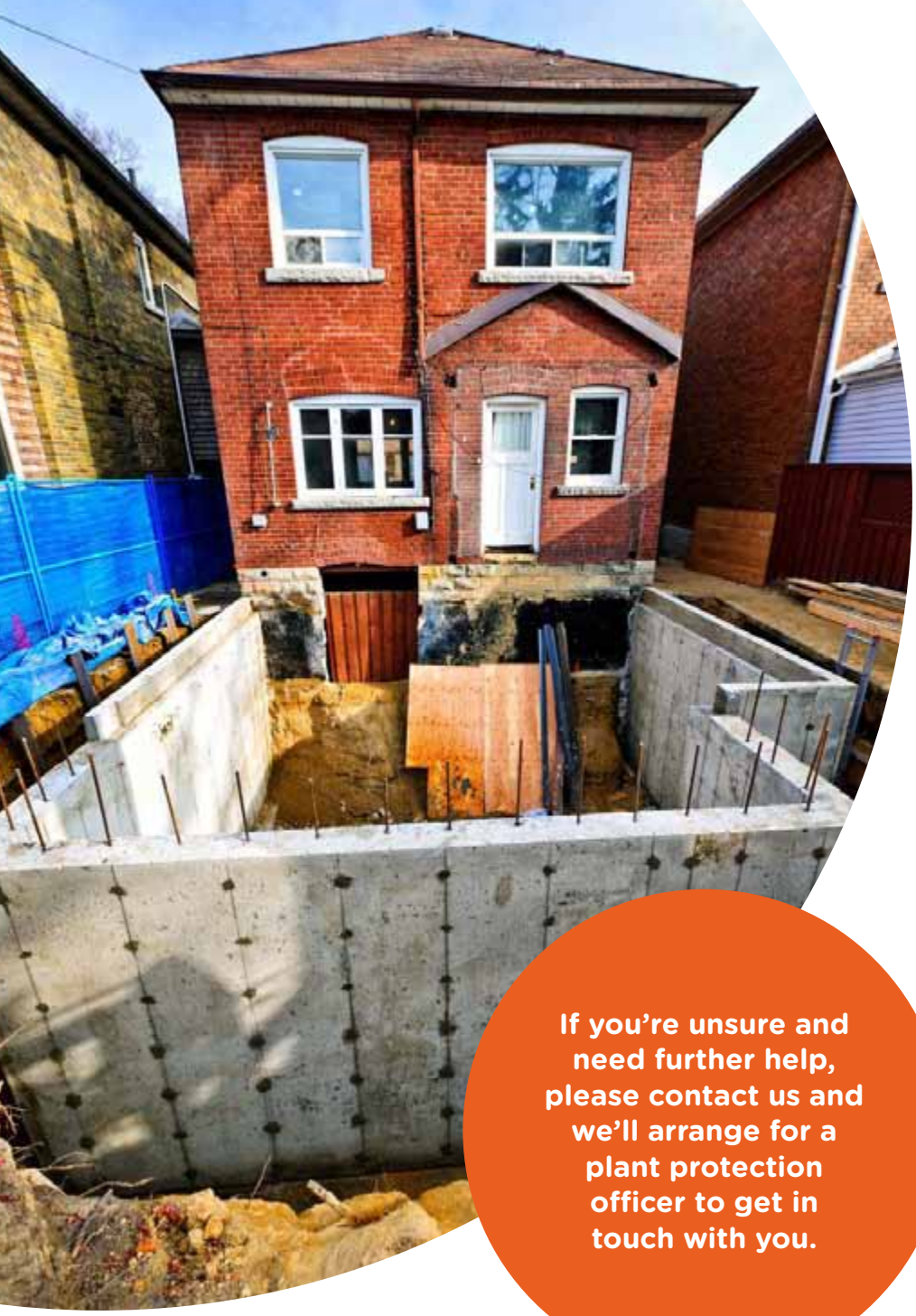
Raspberries, gooseberries and blackcurrants may be planted on the gas main, but a four metre strip, centred on the main, MUST be left clear at all times.

on a servitude/easement will be subject to us retaining the right to remove any tree, which in our opinion may become a danger to our mains in the future.

The written consent to plant trees will state what area may be planted and also the type of tree. The diagram details the specific species and the distances they MUST be planted from gas mains or services. You MUST contact us for further information.



Note: For further guidance, please refer to NJUG 10.

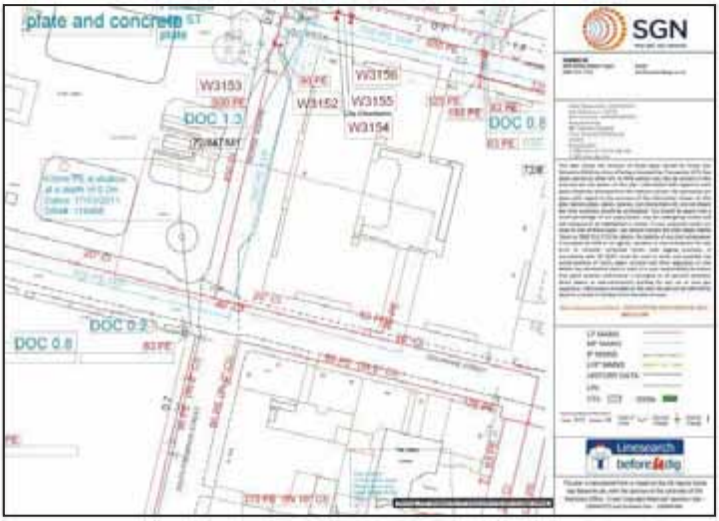


If you're unsure and need further help, please contact us and we'll arrange for a plant protection officer to get in touch with you.

Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf, we may send you a site map of our gas mains and services but your own gas service won't be marked.

The simplest way to understand the location of your gas service is to know where it enters your house.



< Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing.

We provide a free plant location enquiry service and we're always happy to help.

www Visit our **Dig safely** pages on **sgn.co.uk**

0800 912 1722 *

*All calls are recorded and may be monitored

SGN064N (03/17)

Safety Advice - Valves

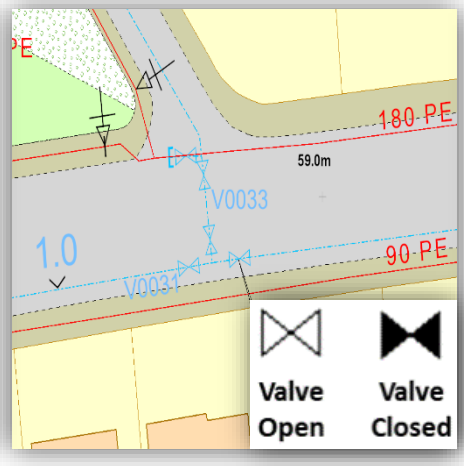
Guidance when undertaking work near gas valves in our network areas

SGN manages the network that distributes gas to 5.8 million homes and businesses across Scotland and the south of England.

Due to a manufacturing issue, we are currently replacing or upgrading certain valve types that are at risk of bolt failure. In extreme cases, this can lead to gas escapes. This is a safety hazard and we have produced this guide to ensure you undertake adequate safety precautions when working near gas valves.

Identifying gas valves

The images below are an illustration of typical gas valves. Please note, valves come in various colours, shapes and sizes, and you may come across a valve that looks different to those found in the images.



What should you do?

When planning to work in our network areas, please observe the following points:

1. You must contact us before starting any work activity within **3.0m** of a gas valve identified on our maps.
2. If an unexpected gas valve is exposed you must immediately stop excavation works and report this to us.
3. To protect yourself against the risks associated with exposing a valve, we advise that you contact us when in doubt.

Contact details

If you require further information or need assistance please contact us:

Safety Admin Team: **0800 912 1722**
plantlocation@sgn.co.uk

Valve enquiries will be forwarded to a local engineer who will provide further safety information.

SGN

Your gas. Our network.

Know what's below

Protecting you and your family

Protecting you and your family

Are you planning on carrying out any home improvements such as building a conservatory, an extension, a new pond, decking, concreting, landscaping, fencing or planting trees in your garden? You must make sure you have drawings/maps showing any pipes or cables around your home. To obtain copies of our gas drawings/maps please visit our **Dig safely** pages on **sgn.co.uk** and follow the link to our online system.

This service is free of charge.

Our Dig safely page is also where you'll find advice on any protective measures you may need to take before you start work, whether you're planning on doing it yourself or hiring a professional.

Damaging gas pipes is dangerous and could lead to a fire or an explosion. It could also cause large-scale loss of gas supply to the local community and is potentially very expensive.

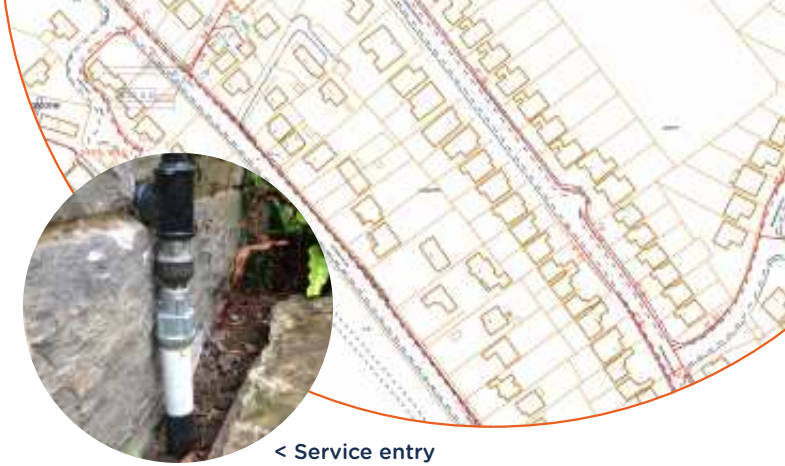
Responsibilities

It's the responsibility of whoever is doing the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance.

In practice, this means anyone carrying out work must obtain a copy of any available colour drawings showing the position of buried utilities for reference before and during the project.

Non-recording of service pipes >
Individual service pipes are not normally recorded pm gas network drawings. This is accepted practice and reinforced by guidance given in Design, construction and installation of service pipes – approved code of practice, published by the HSE, and IGE/TD/4 – Gas Services, published by the Institute of Gas Engineers and Managers.

What you need to do when planning a conservatory or house extension, landscaping, fencing or any other groundworks



< Service entry

It's the responsibility of whoever is undertaking the work to check with utility companies before the work starts.

If you're planning any building or digging work remember that gas pipes, power cables, water pipes and sewers all run underground and could be right beneath your feet. Construction or excavation work can damage underground services or prevent further maintenance.

Remember that obtaining planning permission or a building warrant from your local authority doesn't normally involve consultation with utility companies so you should get in touch with them when you start planning your project. This will help keep everyone safe.

Please visit our **Dig safely** pages on **sgn.co.uk** for more information and our online mapping system.

Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf and you have requested a map from us, **your own gas service may not be marked**. The simplest way to understand the location of your gas service is to know where it enters your house, as pictured.

Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing above.

If you're unsure and need further help, please contact us and we'll arrange for a Plant Protection officer to contact you.

Any damage, however minor, must be reported to the National Gas Emergency Service

Planting a tree or landscaping your garden

Tree roots can damage utilities.

If you're planting trees or shrubs, make sure you consider the type of plant, root type and their location in relation to buried gas pipes to avoid any damage. We may need access to repair and maintain our pipes and equipment in the future, and we reserve the right to remove any tree or bush if we need to.

What happens if you damage a pipe?

If you damage a gas pipe:

- Call the National Gas Emergency Service on **0800 111 999** immediately
- **DON'T** attempt to make repairs yourself
- **DON'T** handle or attempt to alter the position of the exposed pipe

Damaging a gas pipe can result in:

- Major fire/explosion leading to death or serious injury
- Asphyxiation due to gas exposure leading to death or serious injury
- Loss of gas supply to individuals or communities
- Financial costs to you for repair and remedial work
- Enforcement action by the HSE

We will recover all reasonable costs incurred in repairing damaged gas pipes.

Delivering gas safely, reliably and efficiently

Your safety is our top priority

We manage the network that distributes natural and green gas to over 5.9 million customers in Scotland and the south of England.

We own and operate 74,000km of gas mains, and associated plant and equipment. We're committed to delivering gas safely, reliably and efficiently to every one of our customers.

All our engineers and contractors carry a photo ID card with our company logo on it. Don't be afraid to check with our Security team on **0800 015 5170** that the person on your property is supposed to be there.

Service entry

Meter box

Accidental damage to our pipes could put you or members of the public at risk.

Help

If you're planning any work on or around your property and you need more information, you'll find everything you need on our Dig Safely pages.

www sgn.co.uk

0800 912 1722

Smell gas? 0800 111 999

Follow these six steps if you smell gas:

- ✓ DO open windows and doors to help ventilate the gas
- ✓ DO turn off the gas supply at the meter and make sure any gas appliances are turned off
- ✓ DO call the **National Gas Emergency number** on **0800 111 999**. Lines are open 24 hours a day, 365 days a year
- ✗ DON'T smoke or use any naked flames
- ✗ DON'T touch any electrical switches. Turning a switch on or off could ignite a gas leak
- ✗ DON'T enter a cellar if you smell gas, even if your gas meter is located in the cellar

SGN Connections

11 July 2019

Our Ref: 1864531
Your Ref: N/A

SGN Connections
St Lawrence House
Station Approach
Horley
Surrey
RH6 9HJ

Customer Service **0800 912 1700***

WSP
Kings Orchard
1 Queen Street
St. Philips
Bristol
Avon
BS2 0HQ

Dear Jack Mason

39x New connections at North Street Reading Berkshire RG1 7DA

Thank you for choosing us to give you a budget indication for 39x new connections at the above site, and please find our estimate below.

Work to be carried out
SGN Connections to install appropriately sized gas infrastructure to suitable locations. SGN Connections to carry out all the necessary excavation and reinstatement work. No meters/meter works is included.

Your budget indication is £ 31,785.00 (inc VAT)

Please note that this figure is a budget indication only, it is based upon an hourly load of 1,170.00 kW and an annual quantity of 585,000.00 kWh along with any other information you've given us, and doesn't represent an offer to carry out the work.

Upon acceptance of your order, SGN will need to run further analysis to ensure that the existing gas infrastructure can manage your new gas loads (Security of Supply Check). If the existing infrastructure requires reinforcement to accommodate your loads, then this will incur time delays to the installation of your gas supplies. Reinforcement costs will be met by SGN and we will contact you where required.

Important: Please note this property is within Third Party pipeline area and this quote is subject to the Third Party Hazardous Underground Plant Notification Form (see attached). Lead times subject to approval from Third Party Underground Plant Owner.

We're assuming no easements or third party permissions are required to carry out the work.

Please note that this budget indication doesn't allow for any diversion of our existing infrastructure if we find it's necessary. You can get further detail on this by calling our customer service line on the number at the top of this page and asking to speak with the Mains Diversions and Isolations team.

If you have any further questions, please feel free to contact me by calling our customer service team on the number at the top of this letter and asking to speak with the undersigned.

Yours sincerely

Ella Barry
Technical Assistant, Connections

* All calls are recorded and may be monitored

Appendix F

THAMES WATER CORRESPONDENCE

Asset location search

Property Searches

Atkins Telecoms
Stats Enquiries Team The Hub
500Park Avenue
BRISTOL
BS32 4RZ

CHECKED

Search address supplied Site at North Street, Reading
RG1 7DA

Your reference 57007

Our reference ALS/ALS Standard/2017_3628702

Search date 9 August 2017

Keeping you up-to-date

Knowledge of features below the surface is essential in every development. The benefits of this not only include ensuring due diligence and avoiding risk, but also being able to ascertain the feasibility for any commercial or residential project.

An asset location search provides information on the location of known Thames Water clean and/or wastewater assets, including details of pipe sizes, direction of flow and depth. Please note that information on cover and invert levels will only be provided where the data is available.

Thames Water Utilities Ltd
Property Searches, PO Box 3189, Slough SL1 4WW
DX 151280 Slough 13

searches@thameswater.co.uk
www.thameswater-propertysearches.co.uk

0845 070 9148

searchcode

Asset location search

Property Searches

Search address supplied: Site at North Street, Reading, RG1 7DA

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 searchprovides 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

Waste Water Services

Asset location search

Property Searches

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.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.

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.

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/2017_3628702

The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 470911,173657

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
1751	n/a	n/a
1701	n/a	n/a
181B	38.5	36.63
1652	39.44	38.24
161A	n/a	n/a
1551	43.35	41.1
1402	44.41	41.28
141A	n/a	n/a
041E	n/a	n/a
041D	44.55	41.55
041C	44.5	41.5
041F	n/a	n/a
0451	43.06	42.02
0455	n/a	n/a
1453	43.69	41.86
1406	43.44	40.66
051G	n/a	n/a
051E	n/a	n/a
051F	n/a	n/a
951A	n/a	n/a
0551	36.74	34.98
1554	44.25	41.29
051C	n/a	n/a
051D	n/a	n/a
051A	44.6	41.03
9558	n/a	n/a
051B	44.07	40.63
9552	45.24	43.87
051H	n/a	n/a
1553	44.31	41.19
0555	44.07	42.09
1502	44.36	40.65
0558	44.6	41.79
9553	45.29	44.09
9559	n/a	n/a
0450	44.05	42.34
941D	n/a	n/a
941C	n/a	n/a
0462	n/a	n/a
1403	44.18	40.97
0403	44.24	41.02
0402	45.02	42.4
1404	44.11	40.93
1451	44.08	42.22
041G	n/a	n/a
041H	n/a	n/a
9403	44.2	41.3
9455	44.15	42.77
0475	n/a	n/a
041A	44.13	42.03
041B	44.5	41.84
0452	39.56	38.63
9402	44.35	41.7
9454	44.32	42.95
941A	n/a	n/a
941B	n/a	n/a
9453	44.4	43.06
9401	44.4	42.22
9452	44.36	43.14
7452	41.71	40.08
7402	41.47	38.28
7451	41.45	39.85
8451	42.54	41.01
7403	41.94	n/a
9451	44.41	43.25
8503	42.44	39.34
75JJ	n/a	n/a
8552	42.72	41.2
75JK	n/a	n/a
851D	n/a	n/a
8553	43.73	41.78
851C	n/a	n/a
8554	43.89	42.48
9566	n/a	n/a
8501	41.62	38.82
9554	44.65	43.23
7551	40.83	39.32
6551	40.75	39.46
851B	n/a	n/a
7552	40.8	38.39
7501	40.72	37.37
851A	n/a	n/a
7502	40.18	36.78
6652	38.51	36.42
6602	38.37	35.62
6601	38.49	35.58
6654	39.26	37.12
6604	39.23	36.23
6651	38.33	36.45
7553	40.02	38.9
76KJ	n/a	n/a

Manhole Reference	Manhole Cover Level	Manhole Invert Level
76JN	n/a	n/a
761A	n/a	n/a
771A	n/a	n/a
771B	n/a	n/a
7752	37.9	36.95
7751	38.03	36.43
76HL	n/a	n/a
7503	40.18	37.44
7554	40.12	39.27
761B	n/a	n/a
76FN	n/a	n/a
8752	n/a	37.17
8603	39.82	37.24
8602	41.18	38.42
8601	41.49	38.8
8751	37.91	37.04
9605	41.39	38.43
9655	41.34	40.04
9601	41.73	39.71
9654	41.81	40.38
7405	43.21	n/a
741A	n/a	n/a
741B	n/a	n/a
641A	n/a	n/a
741D	n/a	n/a
741C	n/a	n/a
7463	n/a	n/a
7464	n/a	n/a
7462	n/a	n/a
7401	42.06	38.84
7404	42.75	39.79
7465	n/a	n/a
9753	37.91	37.03
9701	38.07	35.13
9852	38.74	36.52
9755	38.48	36.64
9756	38.37	36.66
9754	38	36.98
9757	38.16	36.64
0751	38.24	37.06
0752	38.31	36.94
0760	38.44	36.9
1755	38.72	37.59
1754	38.43	37.53
1753	38.55	36.84
1862	38.34	34.4
1863	38.36	34.4
1761	n/a	36.29
0556	n/a	n/a
9560	43.88	40.72
0559	n/a	n/a
1556	n/a	n/a
0560	41.48	40.26
1555	n/a	n/a
0561	n/a	n/a
0651	42.03	39.38
1654	43.17	39.14
1657	42.13	39.43
1604	43.33	38.57
1656	n/a	n/a
1605	42.88	38.69
1606	n/a	n/a
1662	n/a	n/a
9651	41.04	39.67
1603	41.07	37.47
1653	39.51	38.65
06NL	n/a	n/a
9652	39.98	38.18
9604	39.96	36.78
1602	39.48	37.13
1601	39.77	36.86
1651	39.73	37.99
1702	39.32	36.22
1752	39.25	37.63
9752	37.99	37.13
9851	38.71	36.32
1801	38.37	36.13
1851	38.4	n/a
0802	n/a	n/a
0801	n/a	n/a
0851	n/a	n/a
0803	n/a	n/a
7753	38.18	36.67
7754	38.13	35.41

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

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

Gulley

Culverted Watercourse

Proposed

Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

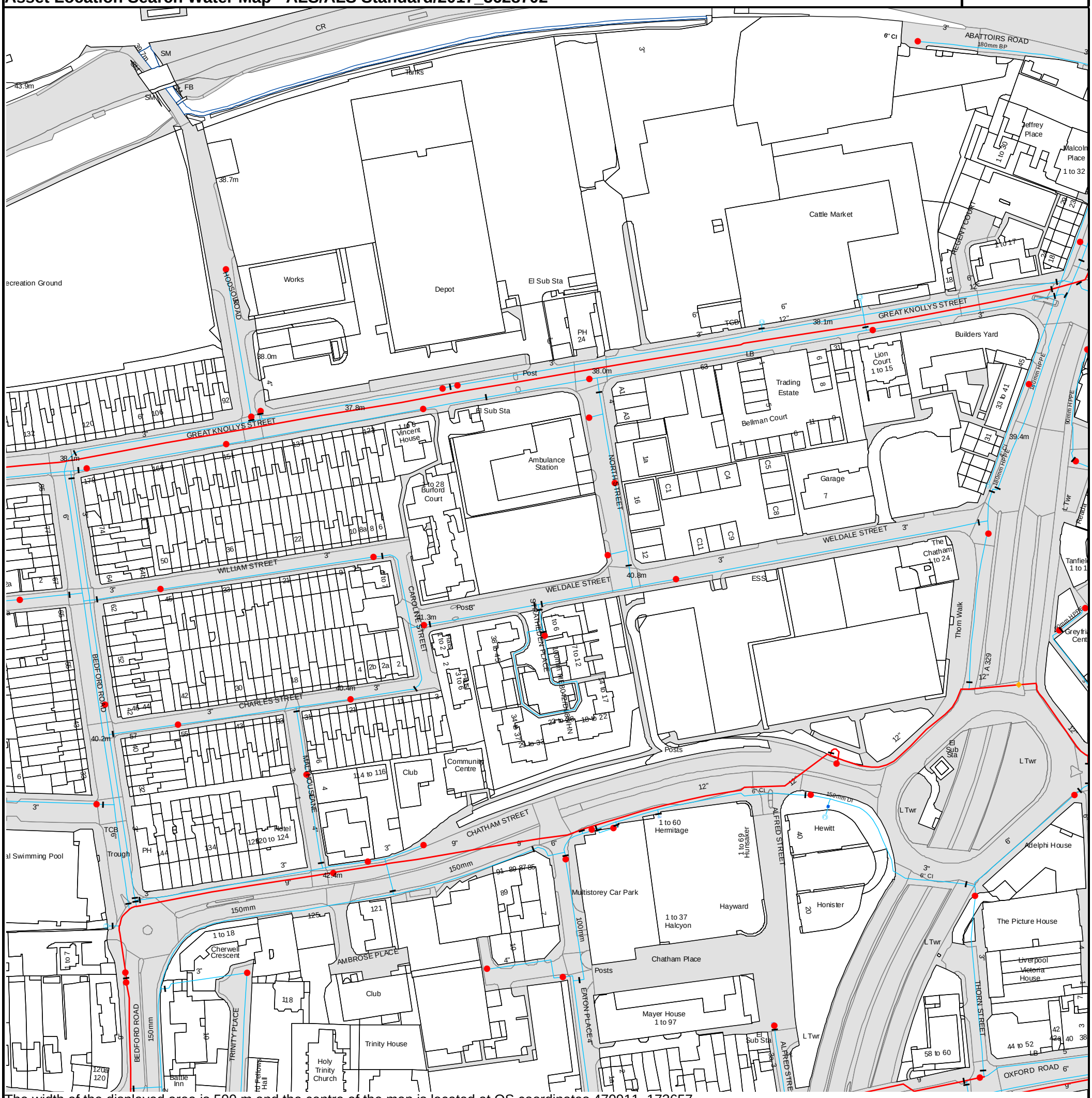
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

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 milimetres. 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.

Asset Location Search Water Map - ALS/ALS Standard/2017_3628702



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 470911, 173657.

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')

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 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: Indiates 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.

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 her 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 / OSS	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

Appendix G

FIBRE OPTICS PROVIDERS RESPONSES

Confidential

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openreach
a BT Group business

Our Ref: Ref shown on map

email: nnhc@openreach.co.uk

Date of issue shown on map

Dear Customer,

NR & SW ACT 1991 – PROPOSED WORKS AT:

Prior to commencement of work: for free onsite guidance and accurate up to date location of BT plant please contact our Plant Protection Service by the following methods
Email Dial before you dig CBYD@openreach.co.uk
Visit the website www.openreach.co.uk/cbyd

Thank you for your request of describing the above proposals.

Enclosed are copies of our drawing marked up to show the approximate locations of BT apparatus which is present in the immediate vicinity of your works. It 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 made near to British Telecommunications plc apparatus which may exist at various depths and may deviate from the marked route.

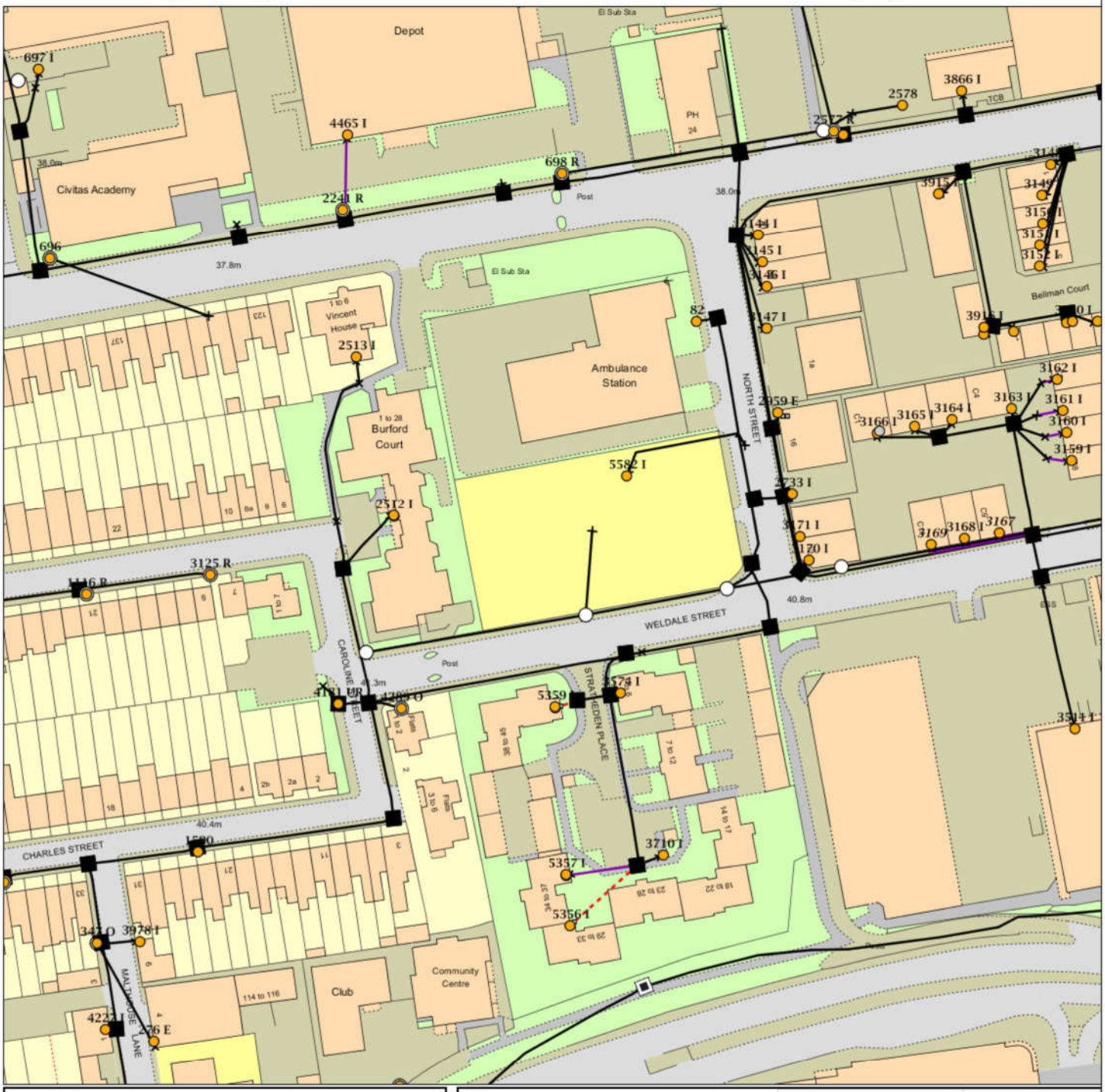
To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of British Telecommunications plc plant. If scaffolding is erected, please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by the scaffolding.

In the event of BT apparatus being in the area of works we recommend that your plant/vehicle crossing is either resited, or apply for a budget estimate by submitting detailed plans to the above address, these will be forwarded to the appropriate department for their comments.

Please ensure you quote our reference on any future correspondence.

Yours faithfully,

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 BT

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/cbyd

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(C) Crown Copyright British Telecommunications plc 100028040

KEY TO BT SYMBOLS

DP	Pole
Planned DP	Planned Pole
PCP	Joint Box
Planned PCP	Change Of State
Built	Split Coupling
Planned	Duct Tee
Inferred	Planned Box
Building	Manhole
Kiosk	Planned Manhole
Hatchings	Cabinet
	Planned Cabinet

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach
a BT Group business

BT Ref : ECR07333V
Map Reference : (centre) SU7089573656
Easting/Northing : (centre) 470895,1736
Issued : 05/08/2017 07:33:58

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

openreach

WSP
Kings Orchard
1 Queen Street
Bristol
BS2 0HQ

Our Ref: ACTS820668
Your Ref:
15th July 2019

FAO: Jack Mason

Dear Sir,

Development at North Street, Reading, Berkshire
The Electronic Communications Code ("The 2017 Code"), Schedule 2, Transitional Provisions of the Digital Economy Act 2017.

Thank you for your enquiry forwarded from our Openreach NewSites office.

An initial investigation of the above site proposals has been completed, and a detailed survey is now required to confirm that anticipated alterations to Openreach apparatus are the most cost effective means of protecting our network. Your proposals have been registered as works applicable to The Electronic Communications Code ("the 2017 Code"), Schedule 3A of the Communications Act 2003 and in line with Paragraph 16, Schedule 2, Transitional Provisions of the Digital Economy Act 2017

The estimated cost to provide a detailed estimate and specification for this work is **£1370.52** (inclusive of VAT), which we will require in advance although the actual costs will be charged, whether more or less than this.

Because we consider a detailed investigation is essential to ensure our network is protected, we will contact you within 30 working days if payment has not been received unless you inform us that your proposals or circumstances have changed.

After receipt of payment, we will contact you where necessary and if there is no alternative to the alterations work, we will provide a single detailed estimate of the costs and a specification. However, if your proposals are not suitably detailed, then we may agree to provide a budget costing in advance of this. We would normally expect to complete this within 25 working days when we will also inform you of the next steps. If our expense is likely to exceed the advance payment you have made, particularly if additional or alternative costings are required, then further payments will be requested from you.

After provision of the final detailed estimate and your agreement to the associated specification, we will review our expenditure and provide a final invoice to settle the costs for this work before moving on to the next stage of the project.

If you have not already done so, please ensure you include preferred contact details, detailed plans and any supporting information for your proposals along with the advance payment.

See over for payment details.

Please note that we offer a site visit service to locate and mark the position of Openreach apparatus within your work area. To arrange a site visit from a Plant Protection Officer email cbyd@openreach.co.uk

Openreach provides a “Maps-by-Email” service to enable you to receive a copy of our plant records. If you haven’t used this service before and would like to, please go to the following URL: http://www.ournetwork.openreach.co.uk/locating-our-network/maps-by-email.aspx

Yours faithfully

Jon Taylor
Repayments Project Engineer

Repayments (Alterations)
PP 203
Reading Central ATE
41 Minster Street
Reading
RG1 2JB

email: jonathan.m.taylor@openreach.co.uk
tele: 02087262165
mob: 07801 034296

Openreach Limited
Registered Office: Kelvin House
123 Judd Street, London WC1H 9NP
Registered in England and Wales no. 10690039

Payment Details

There are three ways to pay the standard charge (£1370.52 including VAT).

1. By Cheque
   - This is our preferred method of payment
   - Please make cheques payable to **British Telecommunications Plc**
   - Send your cheque with your order / letter of authorisation to proceed with the works to the Project Engineer shown below (order not to contain contractual conditions)
   - If an invoice is required to make payment, then contact the project engineer shown below, otherwise a retrospective invoice will be dispatched to you.
   - Write your cheque number here: _____
   - Write the cheque amount here: £_____

2. Using Bank Automated Clearing Services (BACS)
When your order / letter of authorisation to proceed with the works has been received an invoice for payment will be returned with the necessary BACS payment details.

3. Telephone Credit Card Payments, to pay by credit card simply call our dedicated card payment team on Freephone 0808 100 0834, the opening hours are 9am to 4.30pm Monday to Friday.

Please quote the Openreach reference number / invoice number for all methods of payment otherwise payment may not be allocated to your job.

N.B. For either method of payment please complete this form and return with your order / letter of authorisation to the Project Engineer, address below. Please remember, however you pay, the works will not commence until this form and your payment have been received.

Title/Location of Work	Development at North Street
Project Engineer Name	Jon Taylor
Postal Address	Openreach, Reading Central ATE, 41 Minster Street, Reading, Berkshire RG1 2JB
Openreach Reference	ACTS820668
Client's Company Name	WSP
Client Billing Address	Kings Orchard, 1 Queen Street, Bristol BS2 0HQ
Client Contact	Jack Mason
Client Tel	01392 26 7527

For advice or assistance in completing this form please call Jane Goodison 0131 345 0016 for all other queries contact the Project Engineer named above.

Our VAT number is **245719348**

CHECKED

Statutory Enquiries

From: Plantenquiries <Plantenquiries@instalcom.co.uk>
Sent: 08 August 2017 16:54
To: Statutory Enquiries
Subject: RE: E08-17-1414 Plant Enquiry - 57007 - Site at North Street, Reading - Please respond by 10/08/2017
Attachments: 57007.pdf; Guide to Excavation.pdf

Dear Sir or Madam,

With reference to your enquiry regarding the above noted location, we enclose the drawing(s) indicating the approximate position of services in this area.

We would draw your attention to the fact that while the position of the plant has been shown as accurately as possible, the information is intended as a general guide only and must not be relied upon in the event of any excavations or other work in the vicinity. **We would remind you that the onus remains on you to determine the exact position for example by a hand excavated trial hole.** Instalcom accepts no liability for claims arising from any inaccuracy, omissions or errors contained herein. 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. Enclosed is a guide to excavation works around existing plant.

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.

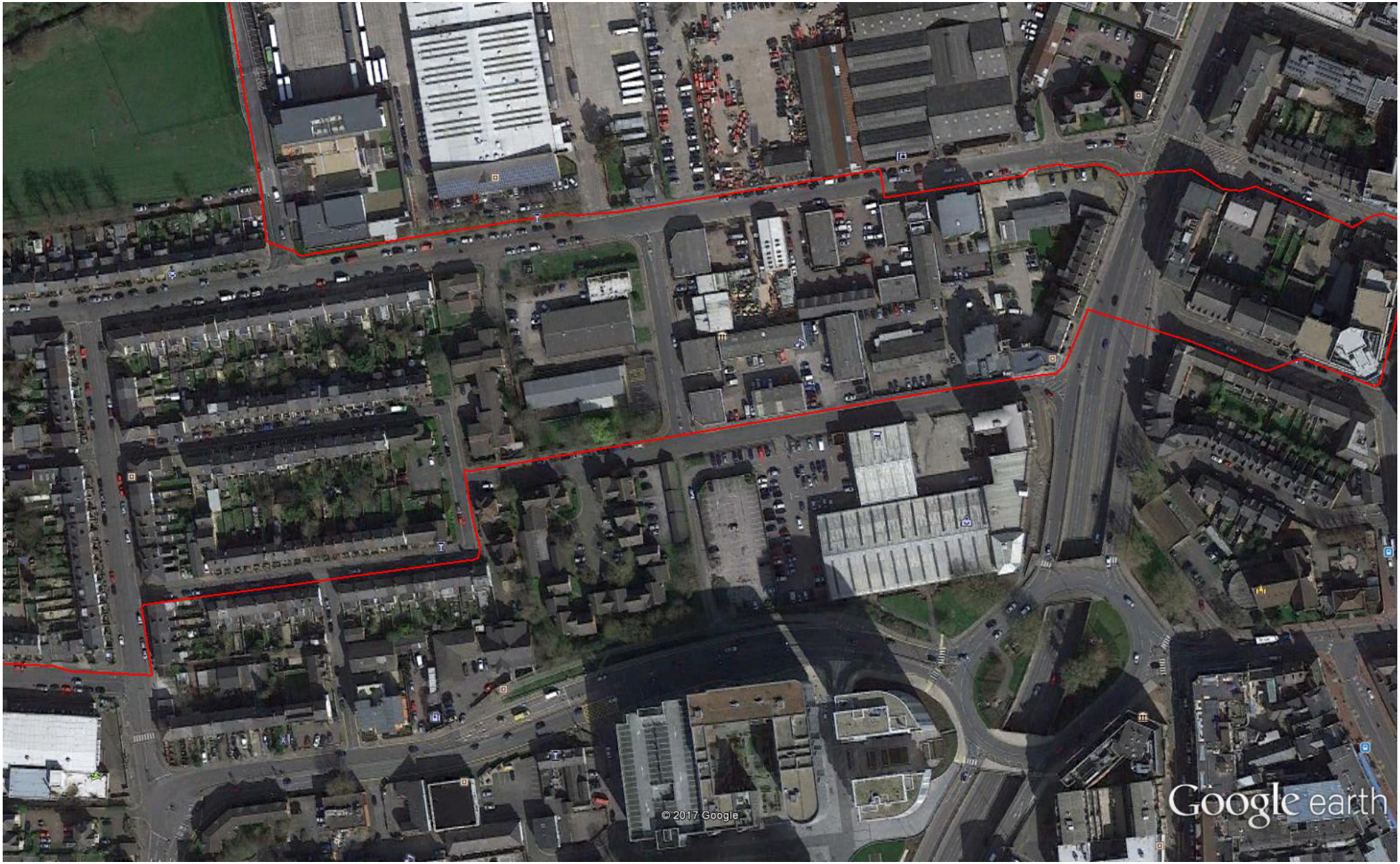
Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

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

Regards

Plant Enquiries Dept
Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: plantenquiries@instalcom.co.uk
Web: http://www.instalcom.co.uk



Google earth

feet 1000

meters 400

SPECIAL REQUIREMENTS IN RELATION TO LEVEL 3 PLANT

1. In this special requirement, the following terms shall have the meanings assigned to it :-

   a. "Company" means Level 3.

   b. "Company Representative" means the staff of Level 3 or its Authorized Representatives and Agents.

   c. "Apparatus" means all surface or sub-surface equipment and plant including any associated cabling and/or ducting owned leased or rented by Level 3.

2. Before commencing any work or moving heavy plant or equipment over any portion of the site, the contractor shall confirm details of the Apparatus, owned, leased or rented by the Company, within the site with the Company Representative, who can be contacted at the following point: -

Instalcom Limited
Borehamwood Industrial Park
Rowley Lane
Borehamwood
Hertfordshire
WD6 5PZ
Tel: 0208 731 4600
Fax: 0208 731 4601
E-mail: plantenquiries@instalcom.co.uk

3. Where such details show that the works or the movement of plant or equipment may endanger the Apparatus of the Company the Contractor must give the Company Representative at least 7 days written notice of the date on which it is intended to commence such works of the movement of plant and equipment in order that the presence of any sub-surface apparatus can be indicated by markers to be supplied by the Company and placed by the Contractor under the supervision of a Company Representative. The Contractor shall ensure that all Company Apparatus, particularly surface running cabling is adequately protected from damage and such protective measures shall be approved by the Company Representative.

4. In the event of a Company marker being disturbed for any reason, it shall not be replaced other than in the exact position of its former depth unless the repositioning is carried out at the direction and under the supervision of a Company Representative.

5. The Contractor shall take particular care in relation to the protection of Company Apparatus, where such Apparatus includes the presence within the site of optical fibre cabling. The contractor should particularly note that the damage to such Apparatus is extremely disruptive to the Company network and costly to reinstate. The Contractor shall make every effort to avoid the disturbance of Company Apparatus more than is absolutely necessary for the completion of the works in accordance with the contract.

6. When excavating around, moving or backfilling around Company Apparatus, the Company Representative shall be given adequate notice, which shall not be less than 3 days, of the contractor's intentions in order that he may supervise the works. The Contractor should note that the normal depth of cover for Company Apparatus and ducts are as follows: -

   a. Carriageways 600mm

   b. Footways 350mm

   c. Verges 450mm

   These minimum depths of cover should be maintained wherever possible.

   Where the minimum depths of cover cannot be maintained, the Contractor shall carry out the instructions of the Company Representative for the protection of Company Apparatus.

   Where cables are not in duct and the required depth of cover cannot be maintained, such cables as are affected shall be enclosed and protected in UPVC duct or equivalent materials as supplied by the Company and by the method directed by the Company Representative.

   With regard to excavation in the vicinity of Company Apparatus the Contractor should have particular regard to the possibility of reduced cover and the encountering of such Company Apparatus at depths of cover less than that given at **a, b and c above**.

7. All excavation adjacent to Company Apparatus is to be carried out by hand until the exact extent and/or location of Company Apparatus is known. Mechanical borers and/or excavators shall not be used within 1.0m of Company Apparatus without the supervisory presence of a Company Representative, To prevent any movement of Company Apparatus during excavations, complete shuttering shall be used as directed by the Company Representative if:-

   a. Excavation is deeper than the depth of cover of adjacent Company Apparatus.

   b. Excavation is within 1.0m of Company Apparatus in stable ground.

   c. Excavation is within 5.0m of Company Apparatus in unstable ground.

   If for the completion of the works, the Contractor intends using any of the following: -

   a. Pile driving equipment within 10.0m of Company Apparatus.

   b. Explosives within 20.0m of Company Apparatus.

   c. Laser equipment within 10.0m of Company Apparatus.

   The Contractor shall advise the Company Representative, giving at least 7 working days written notice in order that any special protective measure for the Company Apparatus affected may be arranged.

8. All Company manhole, joint box and /or other access points and chambers within the site shall be kept clear and unobstructed. Access for vehicles, winches, cable drums and/or further equipment required by the Company for the maintenance of it's Apparatus, must be maintained at all reasonable times. The Contractor should particularly note that footway type jointing chambers are not specified for carriageway loadings and will need to be adequately protected and/or demolished and rebuilt under the supervision of a Company Representative where such chambers are likely to be placed at risk, either temporarily or permanently, from the movement of plant and/or equipment on the site.

9. The covers to Company chambers and/or Apparatus shall only be lifted by means of appropriate keys obtained from the Company Representative and under the direct supervision of the Company Representative. No employee of the Contractor or of any sub-contractor employed by the Contractor shall enter any chamber and/or Apparatus of the Company unless under the supervision of the Company Representative and in any case not before the mandatory gas check has been carried out in the presence of the Company Representative and such checks have shown it to be safe to enter the chamber and/or Apparatus of the Company.

   The Company Representatives shall be given reasonable access to all Company Apparatus and chambers when required.

10. In the event of any damage whatsoever to Company Apparatus, the Contractor shall immediately inform the Company Representative and report the occurrence immediately by contacting the Company as follows:-

Telephone:-

0208 731 4600
Mon-Fri Office Hours (Instalcom Head Office)

0208 510 3111/3101
Out of Office Hours (24Hr Level 3 Network Operations Centre)

11. The above requirements do not relieve the Contractor of any of his obligations under the Contract.

The accuracy of information on the plans cannot be guaranteed and no liability can be accepted for errors or omissions.

Damage to Communications Plant is Expensive – Please Take Care.

CHECKED

Sahu, Tanushree

From: online.plantenquiries@cityfibre.com
Sent: 05 August 2017 12:06
To: Statutory Enquiries
Subject: CityFibre Plant Enquiry, issued on 05/08/17 07:36. Reference 3hf0crtol606loi.
Attachments: emap.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

You recently requested information pertaining to the above location and in relation to CityFibre Holdings Ltd plant.

Reference 3hf0crtol606loi
User: OYScelliott
Title: LM 57007
Comment:

Please find attached a plan of the area of your interest that may contain plant which may be affected by your proposed works.

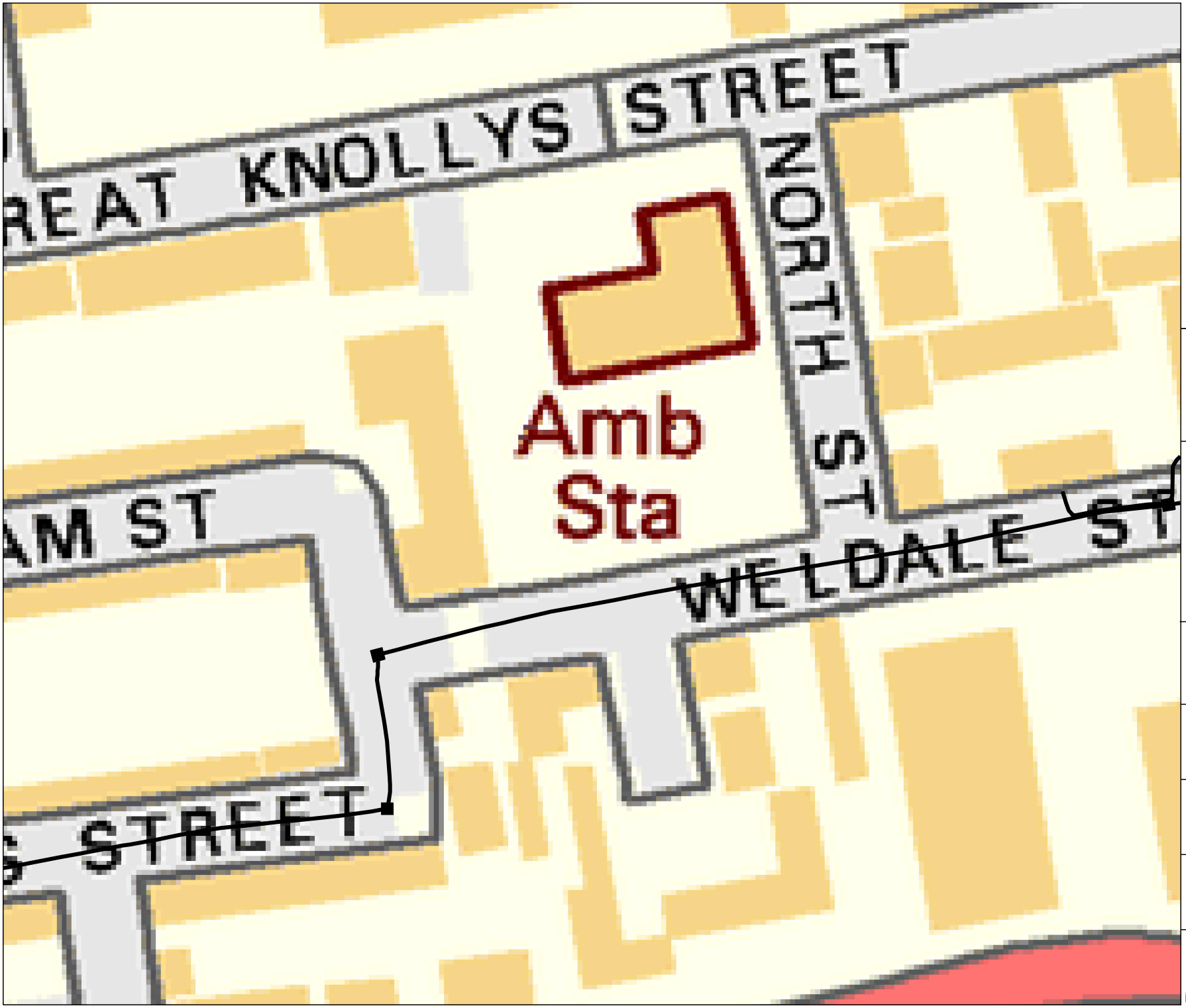
The validity of this response is 6 weeks, after such time a new enquiry would need to be made.

Please see the points of contact below if they are required:

Plant Enquiries
Rutherford House
Birchwood Park
Warrington
WA3 6ZH
asset.team@cityfibre.com

Please quote the Reference ID in the subject line in any correspondence.

Please be aware that all information included in this eMap is the property of the sender and subject to copyright.
It is illegal to copy or send this information to any third party without the permission of the sender.



CityFibre

LEGEND

EXISTING PLANT

EXISTING PLANT

Select a bitmap

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Licence No. OS 0100031673

Head Office
CityFibre Holdings Ltd
15 Bedford Street,
London,
WC2E 9HE

Tel: 0845 293 0774
Web: www.cityfibre.com

Asset Office
CityFibre Holdings Ltd,
Rutherford House,
Birchwood,
Warrington,
WA3 6ZH

Email: asset.team@cityfibre.com

Disclaimer:

Information shown on this plan is for general guidance only. No warranty is made as to its accuracy.
This plan must not be solely relied upon in the event of excavation or other works being carried out in the vicinity of Cityfibre plant.
No liability of any kind is accepted by Cityfibre, its agents or servants for any error, omission, discrepancy or deviation. This information is valid for the date printed.

Project

Plant Enquiry

Drawing

Existing Plant

Drawn by:

smallworld

Date: 05/08/2017

Drawing No.

CFH_EP_000001

Revision

001

Scale: 1:1250

A4

0m 9m 18m 27m 36m 45m

N

CHECKED

Ms Christina Elliott
Atkins
500 Park Avenue Aztec West
Almondsbury Bristol
BS32 4RZ

Zayo Plant Protection Centre
c/o JSM Group Ltd
Plant Protection Department
Sterling House
Mutton Lane
Potters Bar
Herts, EN6 3AR

Date: 02/08/2017

Our Reference: 10935699
Your Reference: LM 57007/SuC

Dear Ms Christina Elliott,

ZAYO GROUP UK LTD AFFECTED C2 PRELIMINARY PLANT ENQUIRY

We acknowledge with thanks your request dated 02/08/2017 06:15:30 AM for information on the location of our services.

Please find enclosed plan(s) showing the approximate position of our apparatus known to be in the vicinity of this site.

We confirm we have reviewed your proposed plan, and have enclosed maps of the area in which Zayo Group UK Ltd have apparatus.

Please note these maps indicate approximate location only and their accuracy cannot be guaranteed. To determine the exact location a trial hole must be dug using extreme caution and hand dig methods only. Please refer to the attached document "Guide to Excavation within the vicinity of Zayo Apparatus".

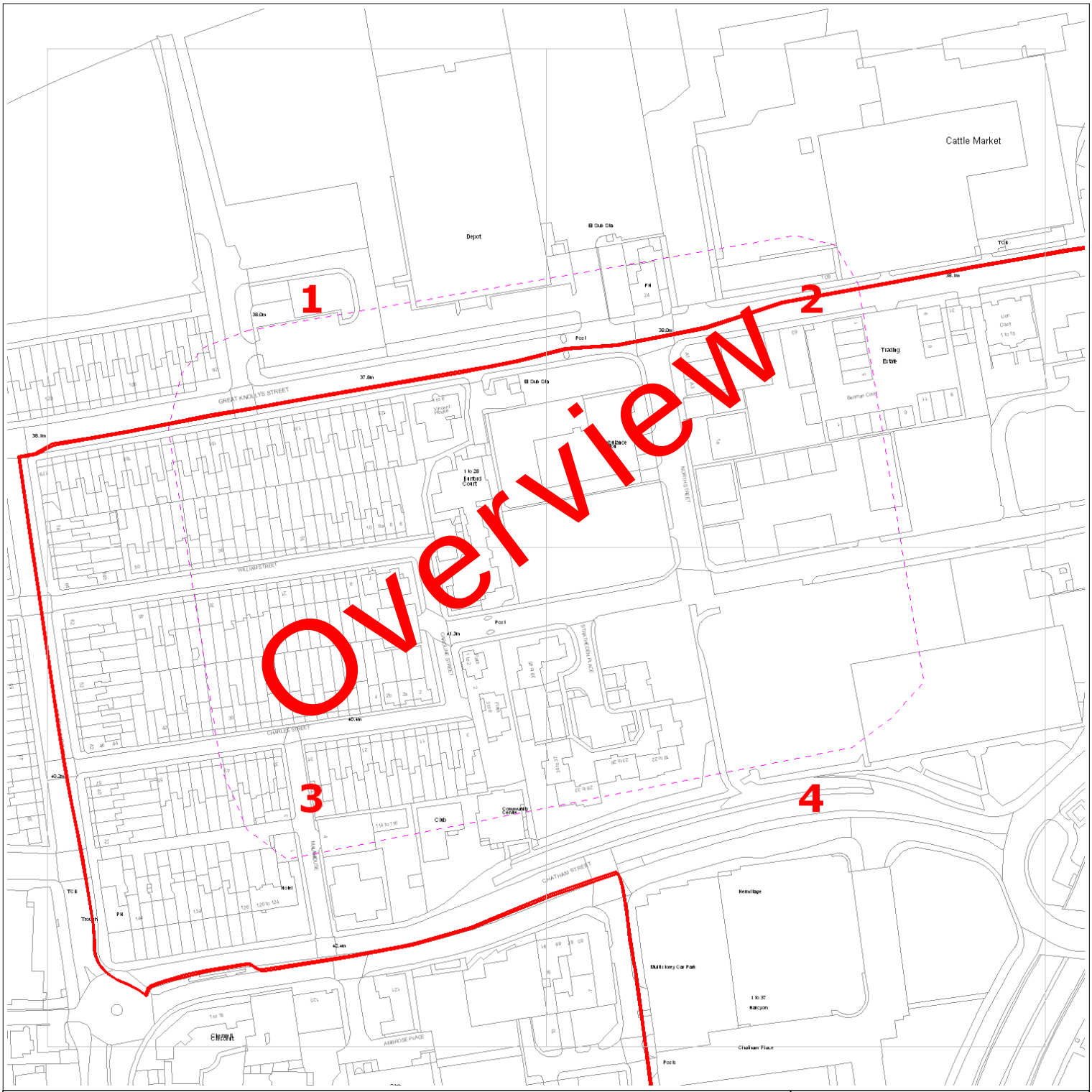
If you would like a Supervisor on site to mark the trench, or to supervise works around the apparatus, please call 5 days in advance to schedule a site meeting. Please note this maybe chargeable.

Please forward all C3 and C4 Diversionary Estimate requests for diversionary works under the New Roads and Street Works Act 1991 "Measures necessary where apparatus is affected by Major Works (Diversionary Works), A Code of Practice", to zayodiversions@jsmgroup.com.

Please do not hesitate to contact us for further assistance.

Regards,

Zayo Group UK Ltd c/o JSM Group Ltd
JSM Plant Protection Department
T: 01992 655 919
zayoplantenquiries@jsmgroup.com



Date Requested: 02/08/2017

Requested by: Christina Elliott

Company: Atkins

Job Reference: 10935699

Your Scheme/Reference: LM 57007/SuC

ZAYO DUCT

or ZAYO CHAMBER

Dig Sites: Line Area

Scale on A4 paper: 1:1000

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Linesearch before dig

Protecting Lives, Cables & Pipes

Warning: PDF designed for colour print only with no page scaling. This Information is given as a guide only and its accuracy cannot be guaranteed

N

In Emergency Only and if Zayo Plant or Cables damaged call: 0800 169 1646

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zayo GROUP

4th Floor Harmsworth House
13-15 Bouverie Street
London EC4Y 8DP

JSM

JSM Group Ltd
Sterling House
Mutton Lane, Potters Bar
Hertfordshire, EN6 3AR
T: 01992 788 019
zayoplantenquiries@jsmgroup.com

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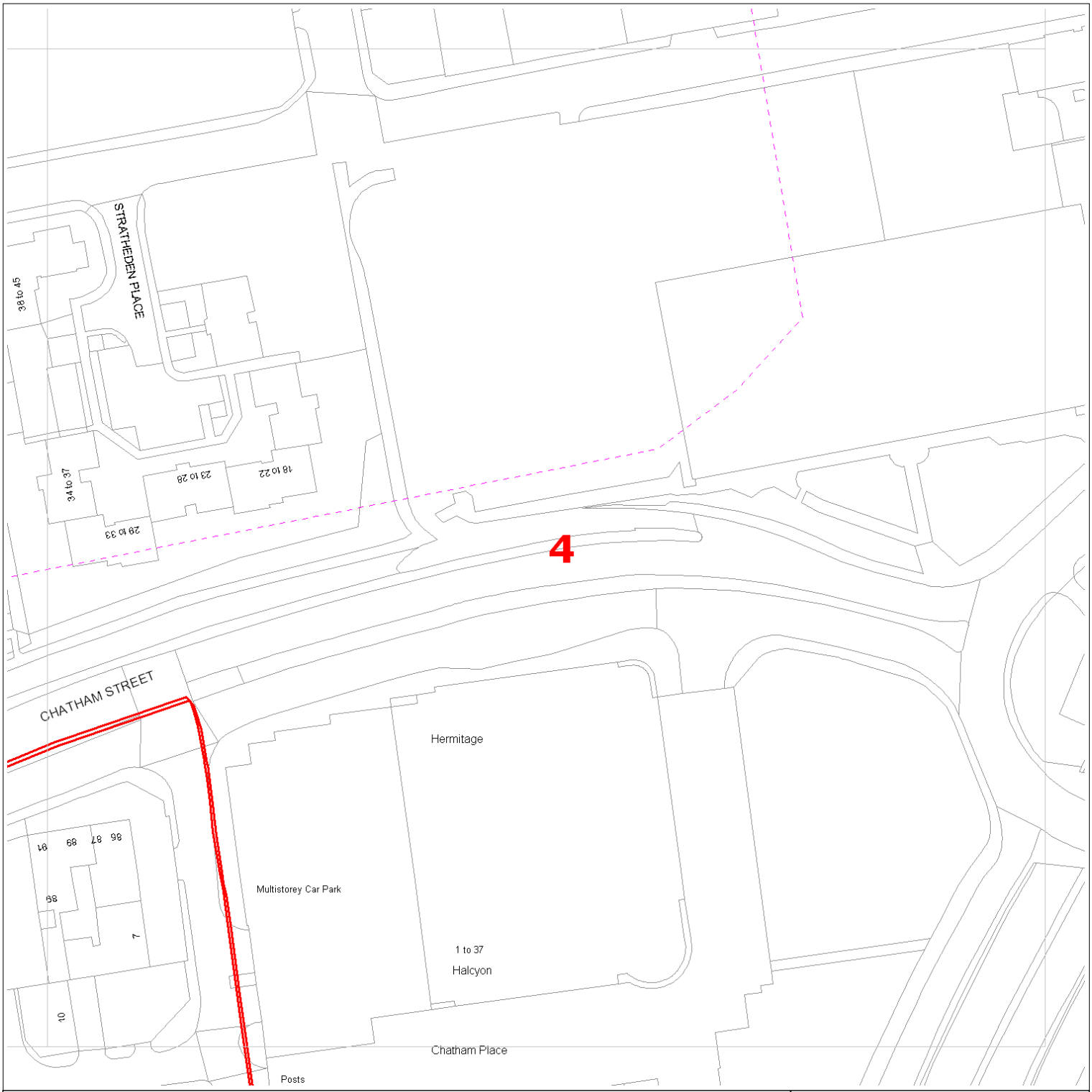

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T: 01992 788 019
zayoplantenquiries@jsmgroup.com

GUIDE TO CONTRACTORS UNDERTAKING EXCAVATIONS IN THE VICINITY OF ZAYO PLANT

1. Prior to commencing any work or moving heavy plant or equipment over any portion of the site, the Contractor shall confirm details of the location of the Zayo apparatus by contacting and requesting utility drawings from LinesearchbeforeUdig

   All Enquirers should register free of charge for the Zayo plant enquiry service at LinesearchbeforeUdig http://www.linesearchbeforeudig.co.uk/

   Or follow the direct link to register at http://onecall.linesearchbeforeudig.co.uk/RegisterNewUser and start your search there.

   If you have any queries or wish to speak to a member of the JSM Plant Protection Team please call 01992 655 919.

   The accuracy of information on the plans cannot be guaranteed and no liability can be accepted for errors or omissions.

2. Where the utility drawings show that the works or the movement of plant or equipment may endanger the Zayo Apparatus the Contractor must mark out the location of the Zayo Apparatus and ensure the apparatus is adequately protected from damage.

3. The contractor should note that damage to Zayo's Fibre-optic network is extremely disruptive and costly to reinstate. The Contractor shall make every effort to avoid the disturbance of Zayo's apparatus for the completion of the work.

4. When excavating, moving or backfilling around Zayo's apparatus The Contractor should note that the normal depth of cover for Zayo ducts are as follows:

   - Carriageway 600mm
   - Footway 350mm
   - Verge 350mm

5. With regard to excavation in the vicinity of Zayo's apparatus the Contractor should be aware of the possibility of reduced cover and the possibility of encountering Zayo apparatus at depths of cover less than that given above.

6. All excavation adjacent to Zayo apparatus is to be carried out by hand until the exact extent and/or location of the Zayo apparatus is known. Use spades and shovels in preference to other tools.

7. Do NOT use Mechanical borers and/or excavators within 0.5m of Zayo Apparatus.

8. To prevent any movement of Zayo apparatus during excavations, complete shuttering shall be used if:

   - The excavation is deeper than the depth of cover of the adjacent Zayo apparatus.
   - The excavation is within 1.0m of Zayo apparatus in stable ground.
   - The excavation is within 5.0m of Zayo apparatus in unstable ground.

9. If for the completion of the works the Contractor intends using any of the following:

   - Pile driving equipment within 10.0m of Company Apparatus.
   - Explosives within 20.0m of Company Apparatus.

   Then the Contractor shall advise the Zayo Plant Protection Centre giving a minimum 10 working days written notice.

10. All Zayo manhole, joint box and /or other access points and chambers within the site shall be kept clear and unobstructed at all times to allow access by Zayo and /or their Contractor to carryout maintenance on the network. The Contractor should particularly note that footway type jointing chambers are not specified for carriageway loadings and will need to be adequately protected and/or demolished and rebuilt by Zayo where such chambers are likely to be placed at risk, either temporarily or permanently, from the movement of plant and/or equipment on the site.

11. The covers to Zayo chambers and/or apparatus shall only be lifted by means of appropriate manhole keys under the direct supervision of a Zayo Representative. No employee of the Contractor or of any sub-contractor employed by the Contractor shall enter any Zayo chamber and/or apparatus unless under the supervision of a Zayo Representative.

12. In the event of any damage whatsoever to Zayo apparatus, the Contractor shall immediately report the incidence to Zayo by contacting Zayo as follows:

    Telephone: 0800 169 1646 (Zayo 24Hr Network Operations Centre)

Damage to Communications Plant is Expensive – Please Take Care

Please note these basic safety details are explained in detail in the HSE booklet HS(G)47 – Avoiding Danger from Underground Services.

Kings Orchard
1 Queen Street
Bristol
BS2 0HQ

wsp.com

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