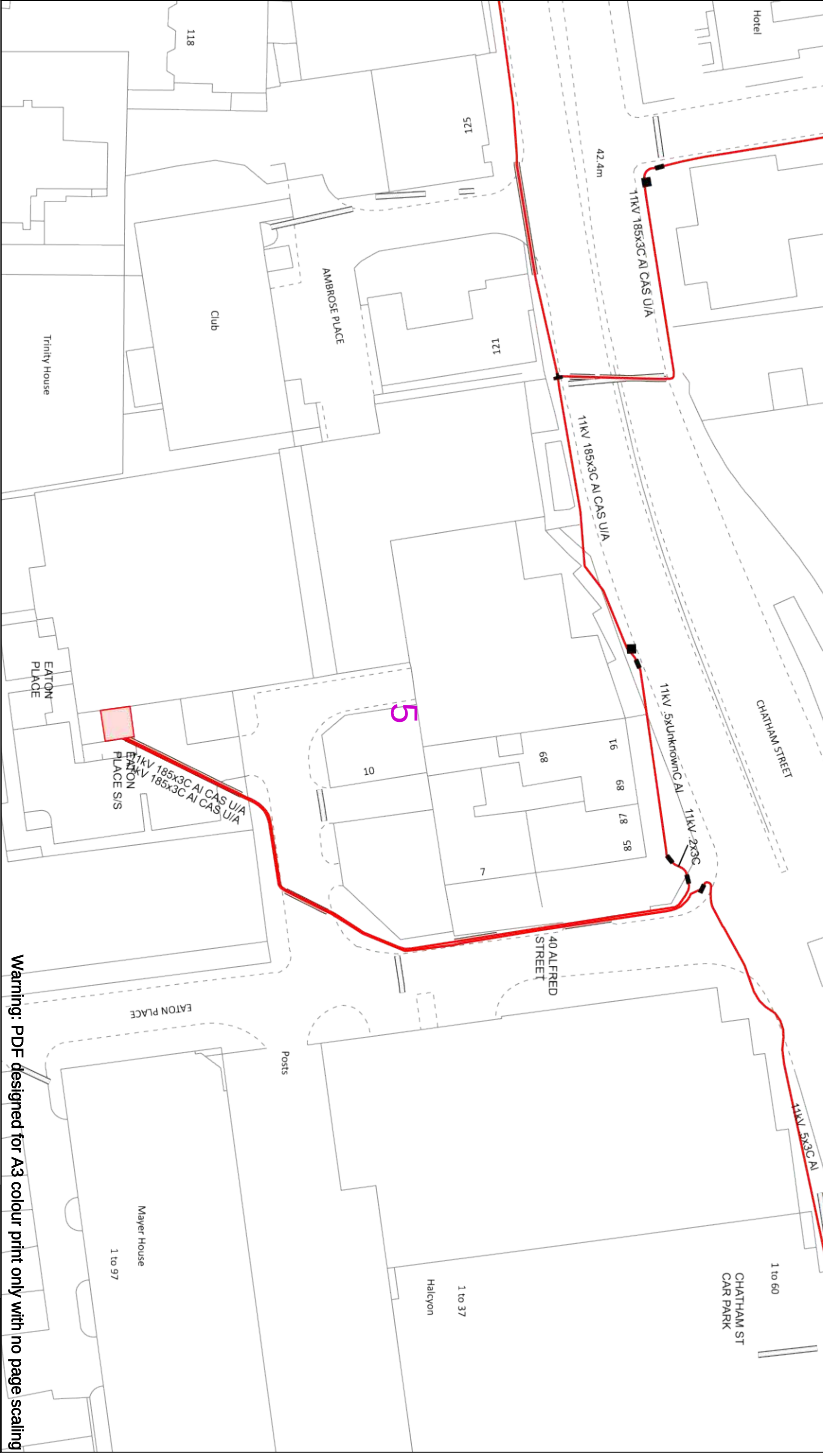




Dig Sites Area: Line:

WARNING

There may have been subsequent alteration to the surface levels. Trial holes must be undertaken to determine position and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work.

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTES G56 SHOULD BE CONSULTED (AVAILABLE FROM THE HSE WEBSITE)

Voltages (V)		Services (V)	
LV (Low Voltage)	and Services	Up to 1,000V	
EHV (High Voltage)		Over 1,000V to 11,000V	
EHV (Extra High Voltage)		22,000V to 132,000V	
Transmission		275,000V and 400,000V	
NORMAL DEPTH TO THE TOP OF THE CABLE WHEN Laid		Services	EHV
Footpath/Unmade	0.45m	0.45m	0.6m
Road Crossing	0.6m	0.6m	0.75m
Agricultural	1m	1m	1.1m

Legend

Service Cable

- LV (Low Voltage)
- 2 - 33kV
- 66kV
- 132kV
- 275kV
- 400kV
- Power Cable

Distribution Structures (Blended)

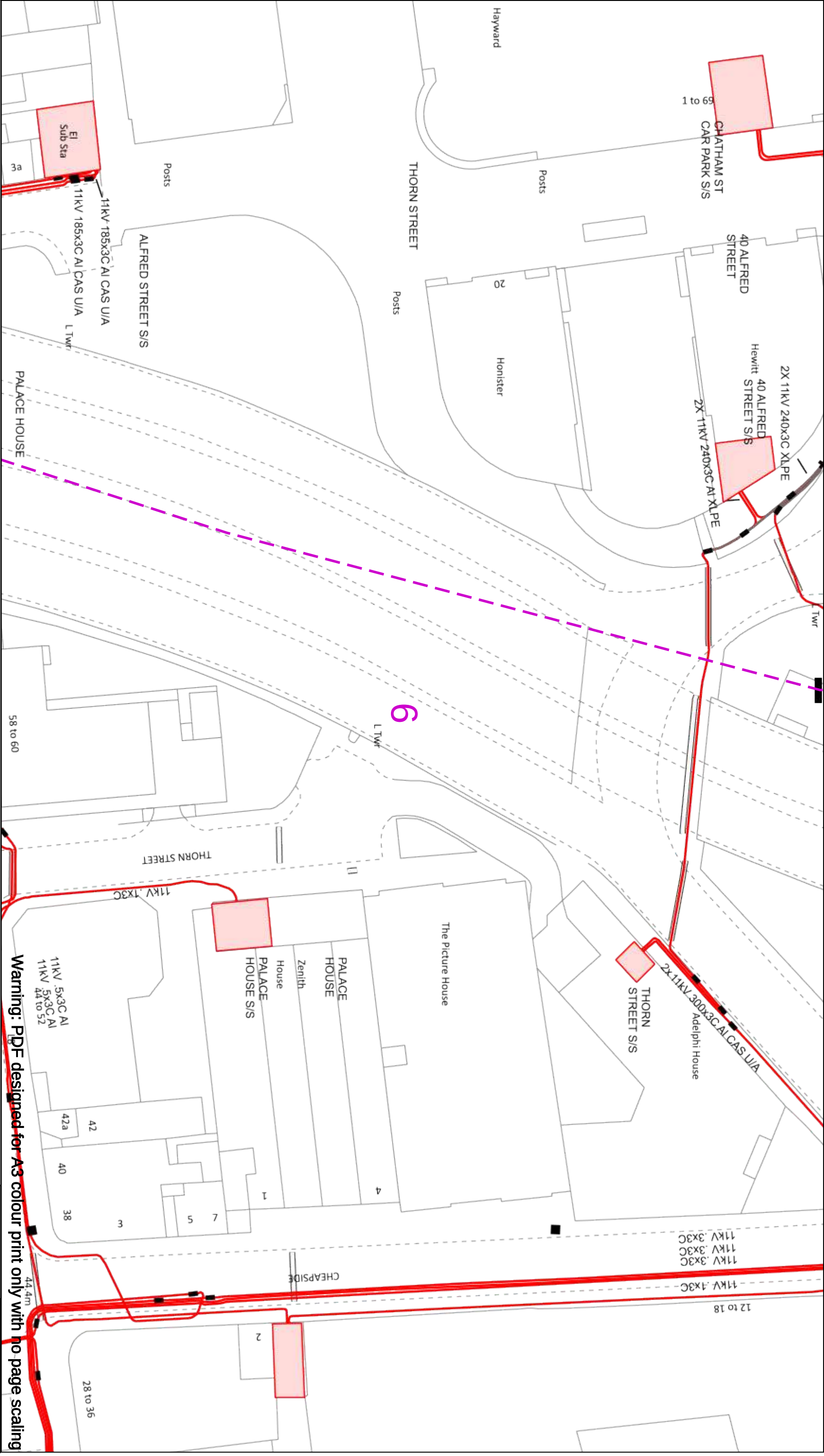
- Pole, Existing Location
- Pole Structure, Existing Location - Single
- Pole Structure, Existing Location - H
- Duct Route
- Cross Section Route

Scottish and Southern Energy Power Distribution Ltd.

Registered Office: Inverlornock House,
200 Dunkeld Road, Perth, PH1 3AQ
Registered in Scotland No SC213459

If you're unsure & need to seek advice before commencing excavations please contact:
General Enquiries: 0800 048 3316

Subject to revision – Master held by SSEN Asset Data Team:
AssetData@sse.com
01256 337 294



Dig Sites Area: Line:

WARNING

There may have been subsequent alteration to the surface levels. Trial holes must be undertaken to determine position and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work.

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTES G56 SHOULD BE CONSULTED (AVAILABLE FROM THE HSE WEBSITE)

Voltages (V)	
LV (Low Voltage) and Services	Up to 1,000V
EHV (High Voltage)	Over 1,000V to 11,000V
EHV (Extra High Voltage)	22,000V to 132,000V
Transmission	275,000V and 400,000V
NORMAL DEPTH TO THE TOP OF THE CABLE WHEN Laid	
Services	LV HV EHV
Footpath/Unmade	0.45m 0.6m 0.8m
Road Crossing	0.6m 0.75m 0.9m
Agricultural	1m 1m 1.1m

Legend	
Service Cable	Distribution Structures (Blended)
LV Mains	Pole, Existing Location
2 - 3kV	Pole Structure, Existing Location - Single
6.6kV	Pole Structure, Existing Location - H
11kV	
33kV	Duct Route
66kV	Cross Section Route
132kV	
275kV	
400kV	
Pilot Cable	



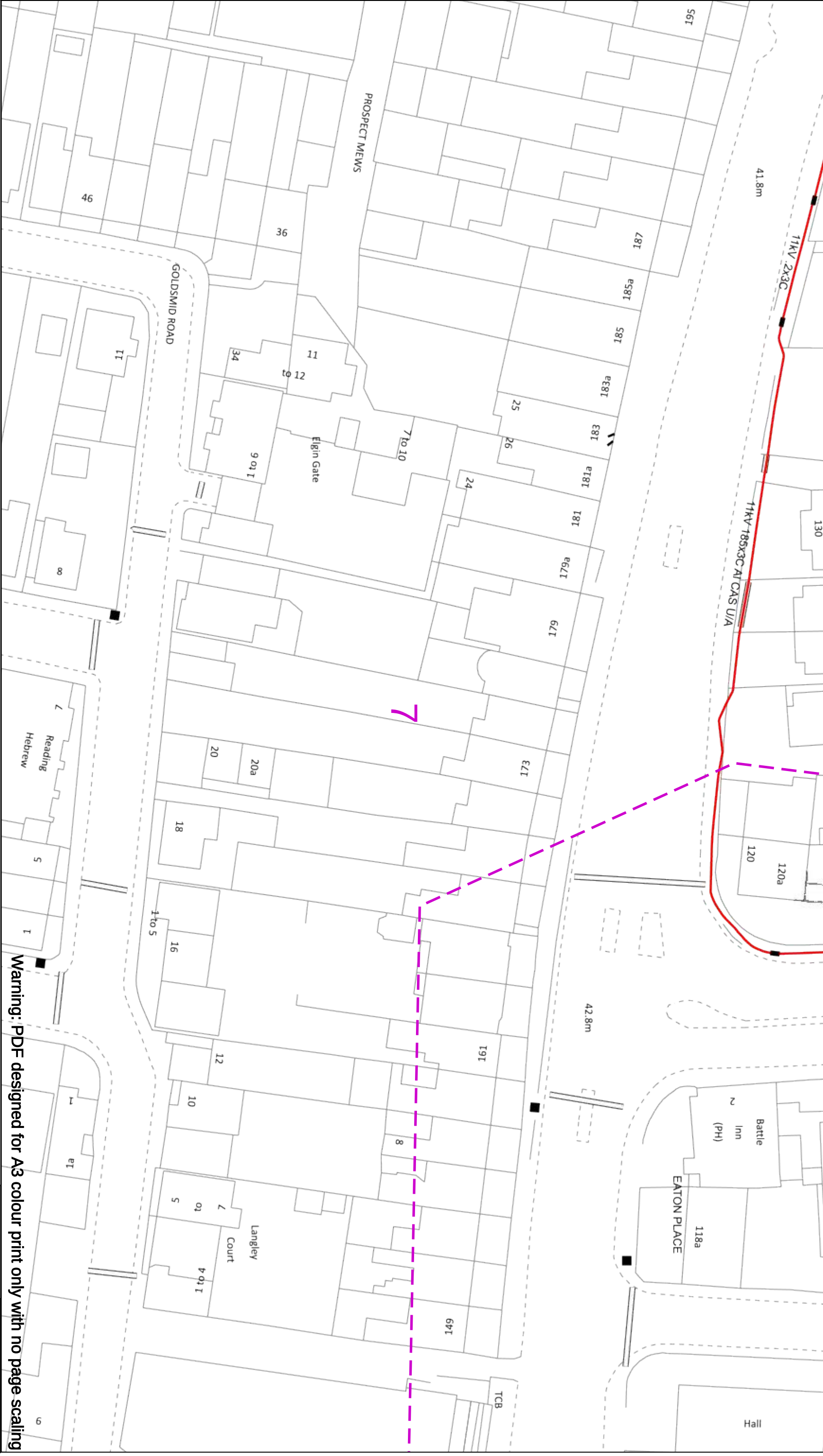
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Dig Sites Area: Line:

WARNING

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

Voltages (V)	
LV (Low Voltage) and Services	Up to 1,000V
EHV (High Voltage)	Over 1,000V to 11,000V
EHV (Extra High Voltage)	22,000V to 132,000V
Transmission	275,000V and 400,000V

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID	
Services	LV HV EHV
Footpath/Unmade	0.45m 0.6m 0.8m
Road Crossing	0.6m 0.75m 0.9m
Agricultural	1m 1m 1.1m

Legend

Service Cable

- LV Mains
- 2 - 33kV
- 66kV
- 11kV
- 138kV
- 275kV
- 400kV
- Pilot Cable

Distribution Structures (Black)

Pole, Existing Location

Pole Structure, Existing Location - H

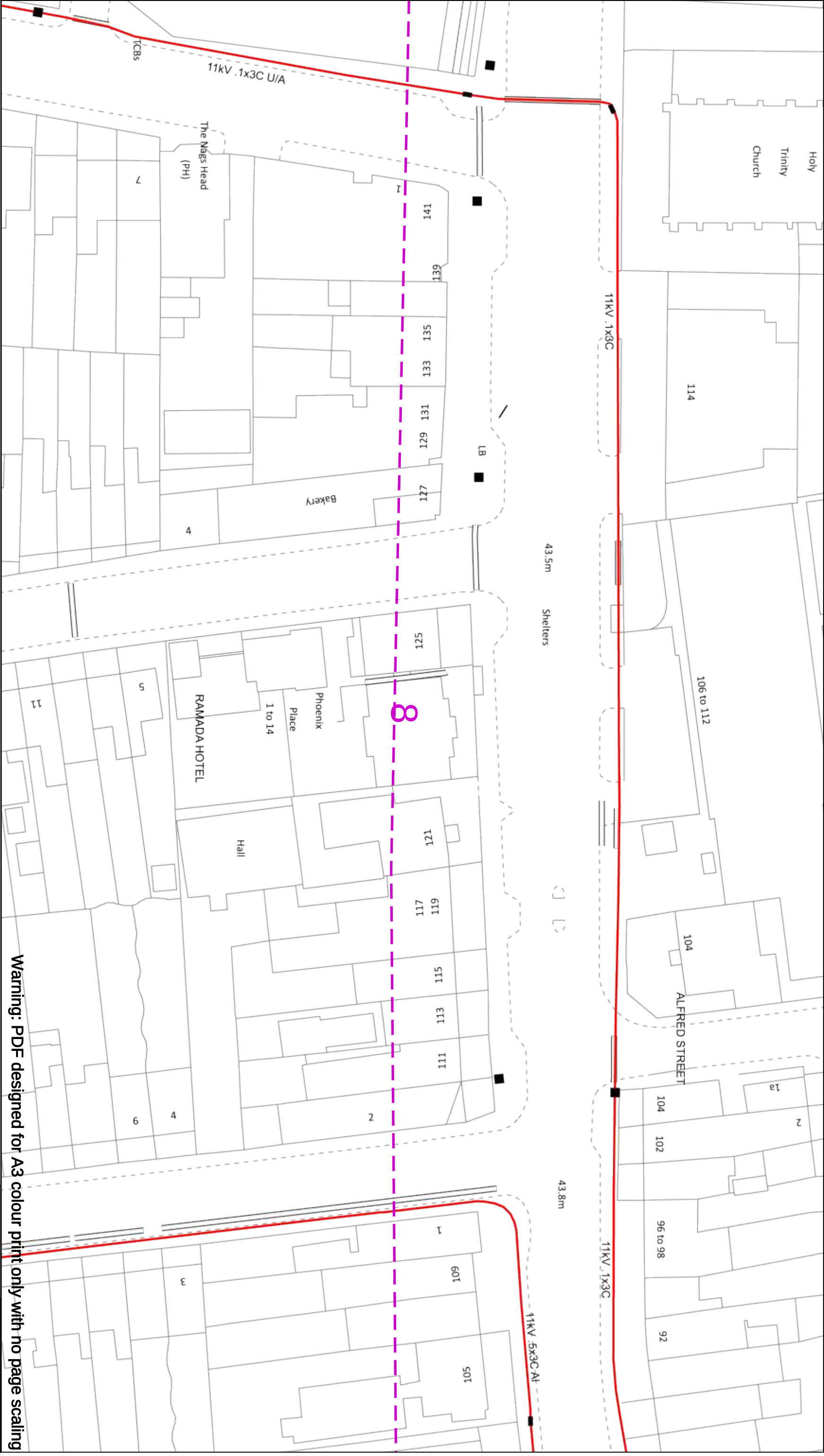
Duct Route

Cross Section Route



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Warning: PDF designed for A3 colour print only with no page scaling



Dig Sites Area: Line:

WARNING

There may have been subsequent alteration to the surface levels. Trial holes must be undertaken to determine position and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work.

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTES G56 SHOULD BE CONSULTED (AVAILABLE FROM THE HSE WEBSITE)

Voltages (V)	
LV (Low Voltage) and Services	Up to 1,000V
HV (High Voltage)	Over 1,000V to 11,000V
EHV (Extra High Voltage)	22,000V to 132,000V
Transmission	275,000V and 400,000V
NORMAL DEPTH TO THE TOP OF THE CABLE WHEN Laid	
Services	LV HV EHV
Footpath/Vinade	0.45m 0.6m 0.8m
Road Crossing	0.6m 0.75m 0.9m
Agricultural	1m 1m 1.1m

Legend

Service Cable

LV Mains

2 - 33kV

66kV

11kV

132kV

275kV

400kV

Power Cable

Private Cable

Distribution Structures (Blended)

Pole, Existing location

Pole Structure, Existing location - H

Duct Route

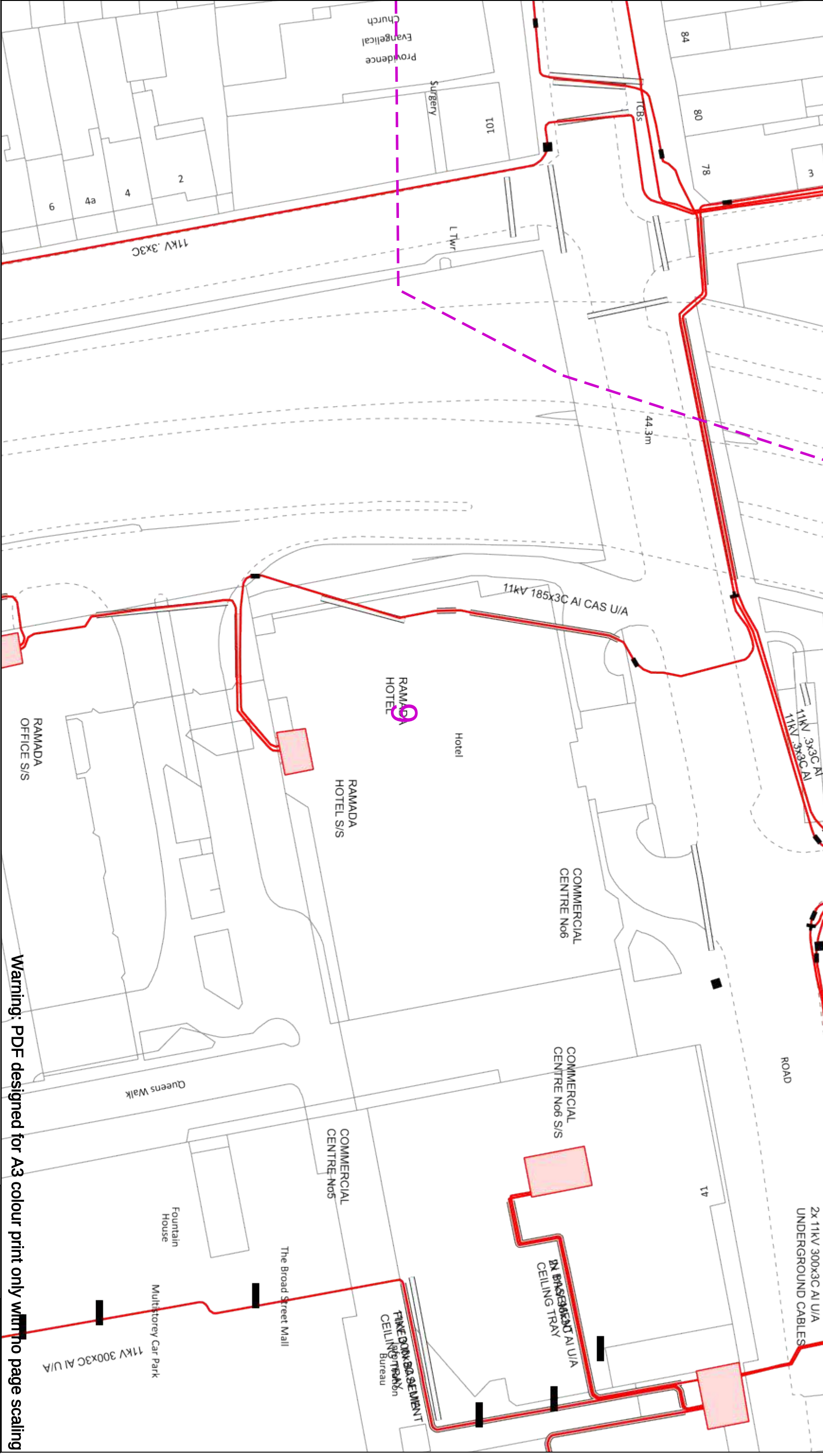
Cross Section Route



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Dig Sites Area: Line:

WARNING

There may have been subsequent alteration to the surface levels. Trial holes must be undertaken to determine position and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work.

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTES G56 SHOULD BE CONSULTED (AVAILABLE FROM THE HSE WEBSITE)

Voltages (V)			
LV (Low Voltage) and Services		Up to 1,000V	
HV(High Voltage)		Over 1,000V to 11,000V	
EHV (Extra High Voltage)		22,000V to 132,000V	
Transmission		275,000V and 400,000V	
NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
Services	LV	HV	EHV
Footpath/Unmade	0.45m	0.6m	0.8m
Road crossing	0.6m	0.75m	0.9m
Agricultural	1m	1m	1.1m

Legend

Service Cable

- LV Mains
- 2 - 3kV
- 6.6kV
- 11kV
- 13kV
- 22kV
- 33kV
- 66kV
- 110kV
- 275kV
- 400kV
- Power Cable

Distribution Structures (Block)

Point, Existing Location

Point Structure, Existing Location - H

Duct Route

Cross Section Route



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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. 0800 0727282 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:

- ü **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.
- ü **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.**
- ü **do** ask for a cable to be made dead if it is buried in concrete.

- ü **do** backfill carefully, using stone-free soil around the cables, replacing marker-tapes and / or covers.
- ü **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.
- ü **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.
- ü **don't** operate a bulldozer, scraper, dragline or excavator, unless you are satisfied that there are no buried cables in the working area.
- ü **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.
- ü **don't** dig trial holes over the indicated route of the cable. Excavate alongside instead.
- ü **don't** use exposed cables as a convenient step or handhold.
- ü **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

- ü **do** carefully note the position of all overhead lines before commencing work.
- ü **do** co-operate with us during planning and sitework stages.
- ü **do** follow the advice given in HSE Guidance Note GS 6 when siting barriers, goal posts, bunting etc.
- ü **do** keep overhead lines in view when moving scaffolding or machinery and take special care when felling or lopping trees.
- ü **do** remember that the raising or slewing of a crane or excavator jib may cause danger when operating near an overhead line.

- ü **do** avoid any machinery that is in contact with an overhead line until we confirm that conditions are safe.
- ü **do** warn others to keep well clear.
- ü **don't** drive a high vehicle below an overhead line when an alternative route is available.
- ü **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.
- ü **don't** steady any suspended load until you are satisfied that there is no danger from overhead lines.
- ü **don't** handle or use scaffold platforms, poles, pipes or ladders unless they are at a safe distance from overhead lines.
- ü **don't** transport long objects beneath overhead lines, unless they are carried in a horizontal position.
- ü **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.

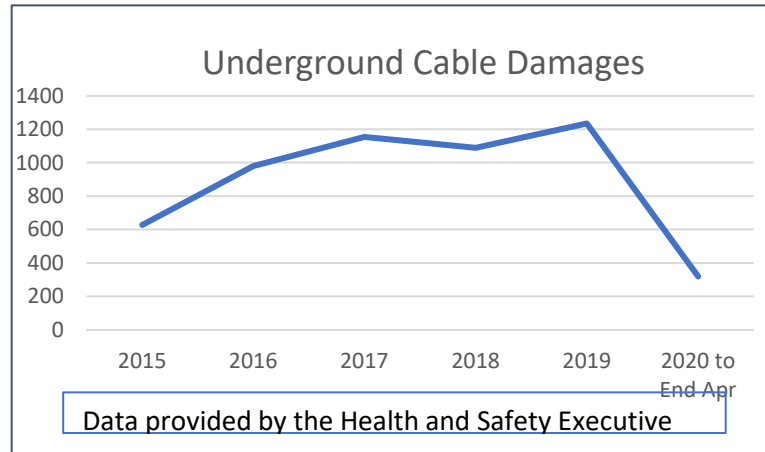
Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459, Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461, Scottish Hydro Electric Power Distribution plc Registered in Scotland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

‘Watch Out, Cables About!’

During the COVID-19 pandemic, construction work and projects across the UK have experienced a period of downtime, affecting the amount of excavation work undertaken. As a result, energy network companies have experienced a welcome reduction in third-party damages to their buried apparatus. In reality, this reduction in damage to underground cables, gas pipelines and other utility equipment, means a reduction in the risk of harm to those involved in the damage.

As lockdown restrictions begin to ease across the UK and work levels increase, it's essential that excavation teams remember the basic safety precautions necessary to ensure they stay safe.

When you are carrying out any excavations or work that involves breaking ground, **be aware of what is buried in the ground before you start. Work out how you are going to locate utility equipment and avoid the risk of damaging it.**



Follow the advice in Health and Safety Executive (HSE) [Guidance HSG47 'Avoiding danger from underground services'](#) and ENA's '[Watch Out, Cables About](#)' Safety advice leaflet. Complete your risk assessment before starting work and share the details of this with everyone involved in the work. Further guidance and advice is available via the Utility Strike Avoidance web site: <https://www.utilitystrikeavoidancegroup.org>

- Be aware of the location of underground utility equipment before digging or excavating.
- Request location details and plans from Utility Companies well in advance of work starting. Remember that these are a guide only – you are responsible for confirming the exact location of all equipment and avoiding damage.
- Use a cable avoidance tool to identify the presence of buried cables before you start to dig. Rescan the area as your work progresses. Hand Dig — use safe digging techniques to dig trial holes to establish the line and depth of underground utility equipment.
- Always assume underground cables are Live. If they appear to be damaged do not approach them and contact the Network Operator using 105 for GB (or 03457 643 643 in Northern Ireland). Take care when lowering the ground levels as there may be underground cables in the area.
- If you damage an underground cable, vacate the excavation immediately, phone your electricity network operator's emergency number and keep everybody clear.

In an emergency dial **999** and tell them electricity is involved. Call 105 for GB (or 03457 643 643 in Northern Ireland) if you have a safety concern related to the electricity network or if you spot damage to overhead power lines, underground cables and substations that could put you, or someone else, in danger. If you are in any doubt about whether an underground cable or other piece of equipment is safe, always assume it is live, keep away from it and contact your local electricity network operator.

Plan your work safely and help us to keep Britain's energy flowing.

To find the local electricity network operator, search 'electricity distribution map' on the ENA website at www.energynetworks.org.

GUIDE TO INTERPRETING MAINS RECORDS PLAN



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 FOLLOW 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 Electricity Networks refer to this guide & the key shown on the plan
- 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 Electricity Networks 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 ELECTRICITY NETWORKS

1. Overhead Line – These can be either High Voltage or Low Voltage, colour denotes voltage.
2. Poles.
3. Pole Mounted Transformer.

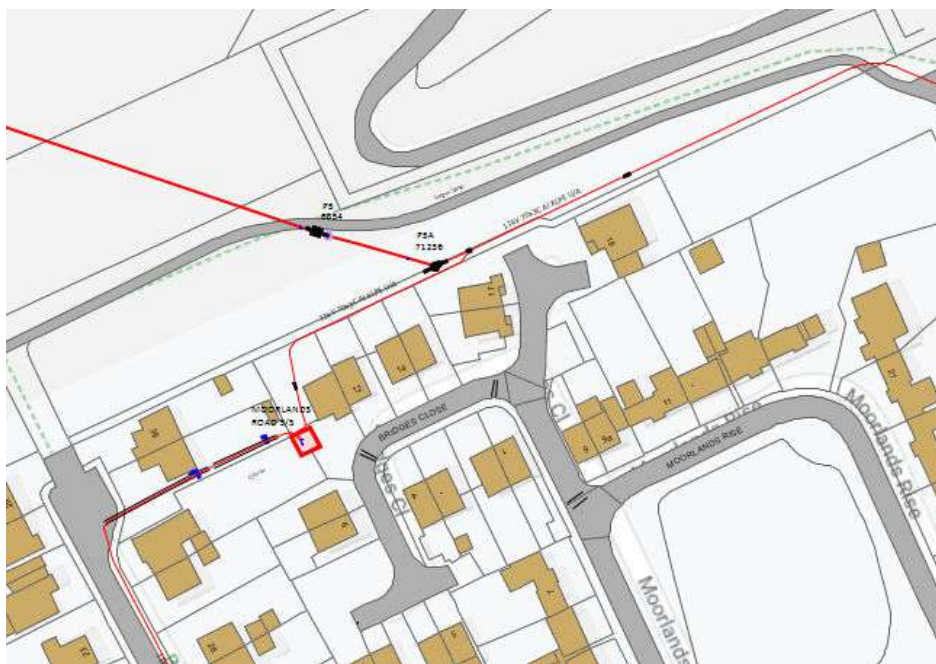
B) Typical example of Low Voltage cable records:



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.

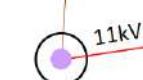
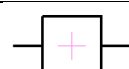
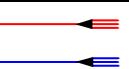
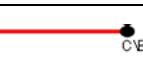
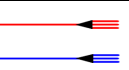
11. Services to properties: The service cable to an individual property are not always shown on the mains records that Scottish & Southern Electricity Networks supply. In some cases, a service can be looped from an adjacent property.

C) Typical example of High Voltage cable record.

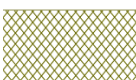


1. Sub Station
2. High Voltage Underground cable – Colour denotes voltage.
3. Straight Joint: This is where two separate cables are joined together.
4. Breech Joint: This is where another cable is attached to the main.
5. Cable terminations/Pole Box: Where underground cables are connected to overhead lines
6. Overhead Switch.

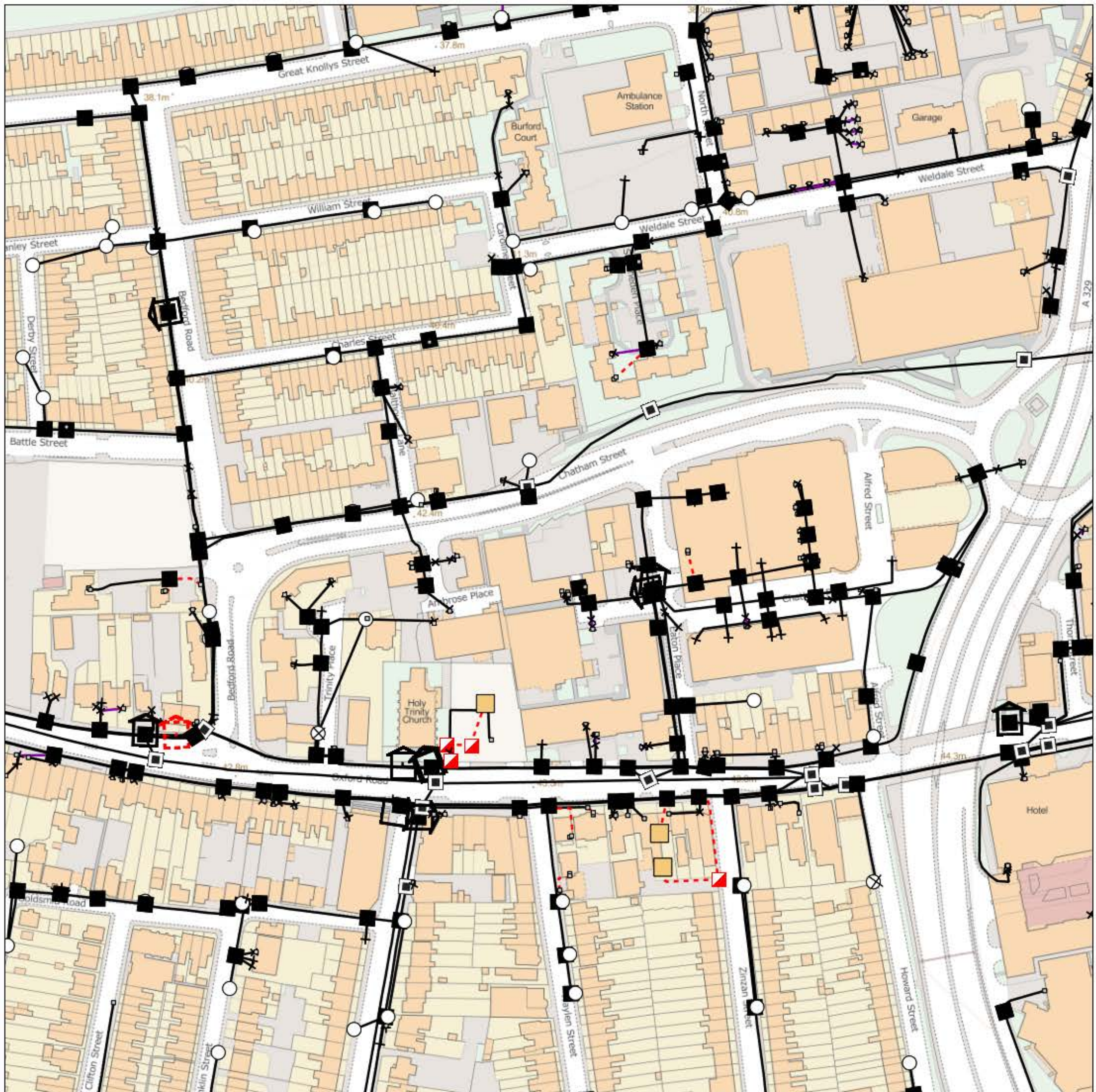
GIS ELECTRIC SYMBOLS

Service cable		Single Poles	
LV Mains		H Poles	
LV Mains and Services (Split Phase)		3 Poles	
2-3.3kV		Tower	
6.6kV		Pole Mounted Transformer	
11kV		Circuit Breaker	
22kV		Switch Disconnecter/ OH Air Break	
33kV		Pole Box	
66kV		Straight Joint	
132kV		Mains Breech Joint (Tee)	
275kV		Service Breech Joint	
320 kV		Trifurcating Joint	
400kV		Pot End	
Fibre Optic		Capped End	
Pilot Cable		Sealing End	

Assumed Route		Surge Diverters	
Out of Service		Pillar	
Service Connector Joint		Substation	
Overhead Connector		Non Electrical Item	
Wall Box Joint		Street Furniture	
Flying Stay		LV Link Box	
Stay		LV Supply Point	
PME Earth		Oil Pipeline	
Neutral Earth		Gas Pipeline	
Ducting		Areas of Outstanding Natural Beauty	
Pit		National Park	
Embedded Network		Borehole	
Other Network		ASLs	
Water Extraction Point		Sensitive Waterway	

Source Protection Zone		Site of Special Scientific Interest (SSSI)	
Vulnerability Zone		National Nature Reserve (NNR)	
Access		RAMSAR Special Area of Conservation (SAC)	
Ownership		Special Protection Area (SPA)	
Monuments		Ancient Woodland	
Flood Area		Restricted Access	

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

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

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

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

KEY TO BT SYMBOLS

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

BT Ref : ARC07145S

Map Reference : (centre) SU7086973490

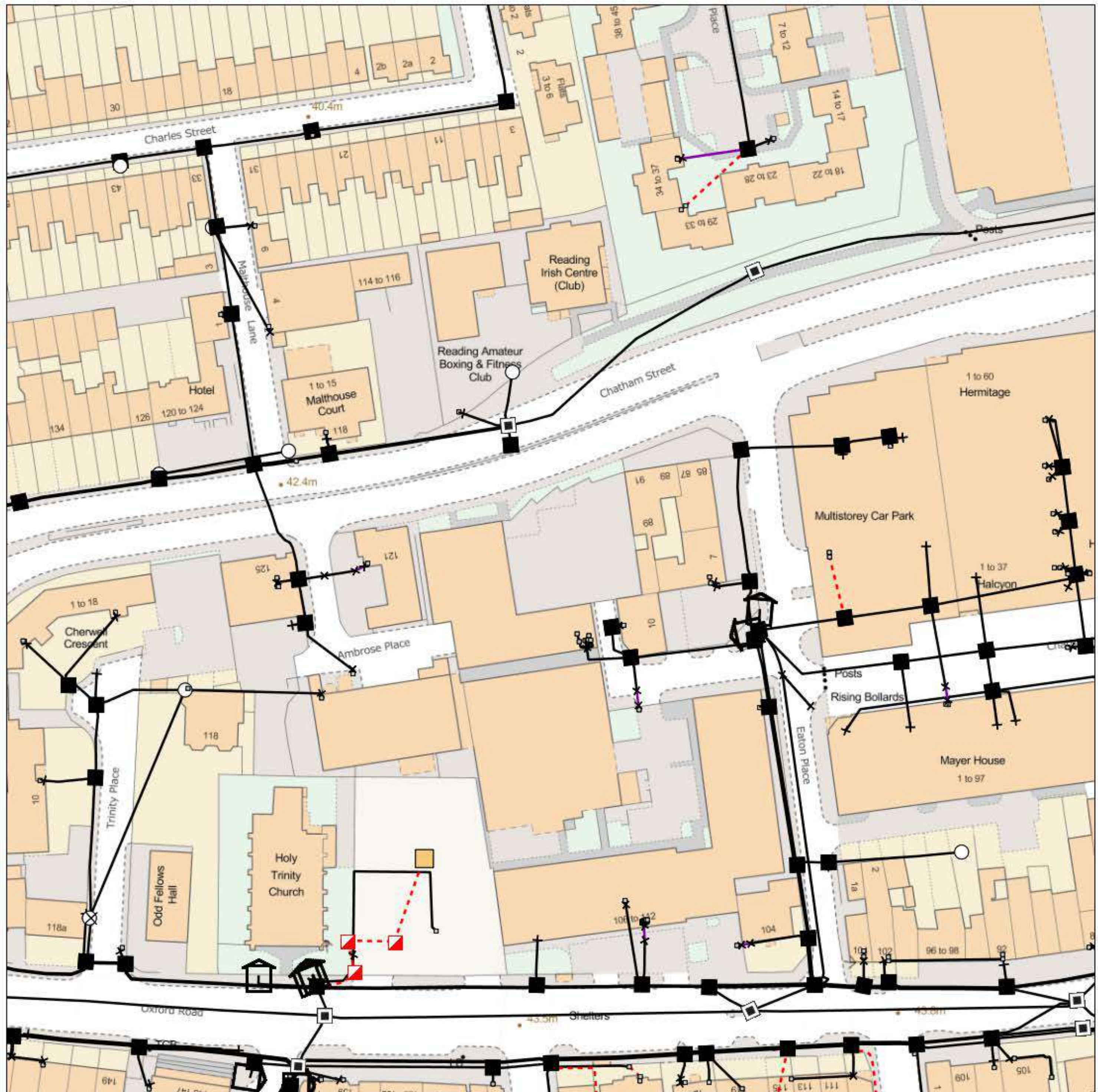
Easting/Northing : (centre) 470869,173490

Issued : 06/01/2021 19:14:40

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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

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

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

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

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KEY TO BT SYMBOLS

	Planned	Live	Change Of State	+	Hatchings	
PCP			Split Coupling	×	Built	
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	Pending Add	In Place	Pending Remove	Not In Use		
Power Cable						
Power Duct				N/A		

BT Ref : DIT07145I

Map Reference : (centre) SU7086973490

Easting/Northing : (centre) 470869,173490

Issued : 06/01/2021 19:15:03

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Identifying our equipment



If you're planning or building a new development, working on a regeneration project or undertaking roadworks it's likely that you'll come across some of our network infrastructure.

This guide includes images and descriptions of the most common types of equipment (past and present) to help you identify what's on your site so we can best advise you if you need anything moved or removed.

If you're not sure, please contact us – ideally sending a photo of the plant on your site – before you start work.

Poles and attachments

There are currently three materials used for poles: wood, steel and fibreglass.

Wooden poles vary in length from 7 to 15m depending on the span the lines need to cover.

There are two types of pole in use:

- **Radial Distribution Poles:** typically to serve a number of properties in a street
- **Carrier Poles:** typically found in more rural locations, these are often used to provide an overhead route from A to B.



Pole markings



Owner of the pole – In this case BT. Older poles may also be marked as GPO or PO

Pole length and class (light, medium or stout)
– 10L = 10m light

Year of preservation – 97

Supplier marker and type of wood – 2I
= supplier 2 and Imported (I)



The punch hole sign is a testing cycle sign. This label is for internal Openreach use.

The pole reference number:

Distribution Pole – The letters DP, plus a number, in this case 19.

Carrier Pole – No letters, just a number will be shown.

You may also see square metal labels with a letter on a pole, i.e. C, D, H, SD and Z. These indicate the status of the pole to a visiting engineer.

Street covers and cabinets

Street covers and cabinets (PCP) have changed over the years, from cast iron to fibreglass to pressed steel. Sizes vary and all are made in single door versions. The most common examples are:



Cast iron cabinet



Fibreglass cabinet



Single door cabinet (with replacement steel door)



Steel cabinet



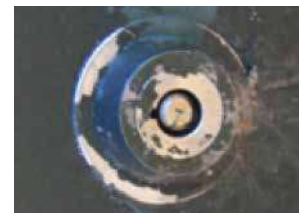
All-in-one cabinet

How to spot one of our cabinets: keys and markings

Openreach and Virgin Media both have street cabinets and they look quite similar. Often the only difference is the type of key needed to open them. Openreach cabinets have a triangular or star shaped insert, while Virgin Media use conventional keys (see below).



Openreach keys



Virgin Media key

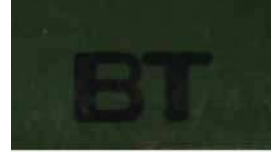
All Openreach cabinets, frames and covers, are marked to show who owns them. Examples of these markings and the materials cabinets are made of are shown below.



Cast iron GPO marking



Fibreglass Telecom marking



Steel BT marking

Carriageway covers

These boxes generally contain small customer connections. The old type of covers were made of concrete with a concrete lid while current covers are made of fibreglass and have a steel lid.

There are generally two types of carriageway covers. Those with a T-shaped key, the Silent Night, and those with a D-shaped key, the Elkington. Both types were supplied in all sizes and while the design varied slightly all have ownership markings on them.

All sizes are approximate.

Carriageway covers with two triangular lids



CW No.1
Silent Night
680mm x 680mm



CW No.1
old type (Elkington)
inserts vary



Very old round
CW no.1

Carriageway covers with four triangular lids



CW No.2 Silent Night
1220mm x 680mm



CW No.2 old type
(Elkington)

Carriageway covers with six triangular lids



CW No.3 current type



CW No.3 Silent Night type



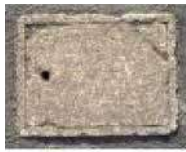
CW No.3 Elkington type

Footway covers

Footway covers come in six basic sizes: small, medium, large, square, twin and triple, although there are size variants within some types. All sizes are approximate.

Small covers

These lids cover boxes which generally contain small customer connections. Previously the boxes and lids were made of concrete, but the current footway boxes are made of fibreglass and have steel lids.



JB21 31x41cm



JB22 41x61cm



JB23 28x50cm

Medium covers

There is only one size of cover in this category. This lid can be found on a fibreglass preformed box, JB26, as well as a concrete/brick chamber, JF2. As with the JB 23 small footway box above the JB26 will have a thin white edge around the cover while the JF2 has a fillet.



Old style cast iron and
concrete 38x80cm



JF2/JB26
34x80cm

Large covers

Along with the twin, this is probably the most common footway type in the network. Originally the covers were made of cast iron and concrete but now they're just made of concrete.



JF4 current type 55x100cm



JF4 old type 55x100cm

Square covers

These covers are placed over manholes and are found in the footways and verges.



JF5 70x70cm



JF5 old type 70x70cm

Twin covers

This cover shown in the section is probably the most common footway type in our network. Originally the cover was made of cast iron and concrete but now they're just made of concrete. You can see variations to the inserts and markings below.



JF6
70x140cm



JF6 old cast and concrete
type 70x140cm

Triple covers

The two sizes of triple lid covers are shown here.



JF10 80x240cm



JF11 80x140cm

Inserts and markings

In this section you can see examples of the markings that you would expect to find on our equipment.

Footway

Examples of the current JF4 and JF5 inserts are shown below. The number '4' or '5' shown on the right hand side of the insert identifies the type. The letters 'DW' shown on the top right hand corner of the JF5 box indicate that this is a drive way lid built to stand further loading.



JF4



JF5

The following examples show the changes undertaken from GPO to BT.



Carriageway

The current marking is shown below, with some of the older versions beneath.

Current marking



Older markings



Non-standard plant

Some locations have used bespoke cover infills which improve the aesthetics of the area, enhance paving designs or accommodate high tactile surfacing. The scope of these type of covers is endless.

Maintenance for these covers may not reside with Openreach as often the responsibility remains with the Authority.

A small selection of non-standard footway and carriageway covers are shown below.



FW No.4



CW No.3 insert type



FW No.6



Detail of legend built into frame



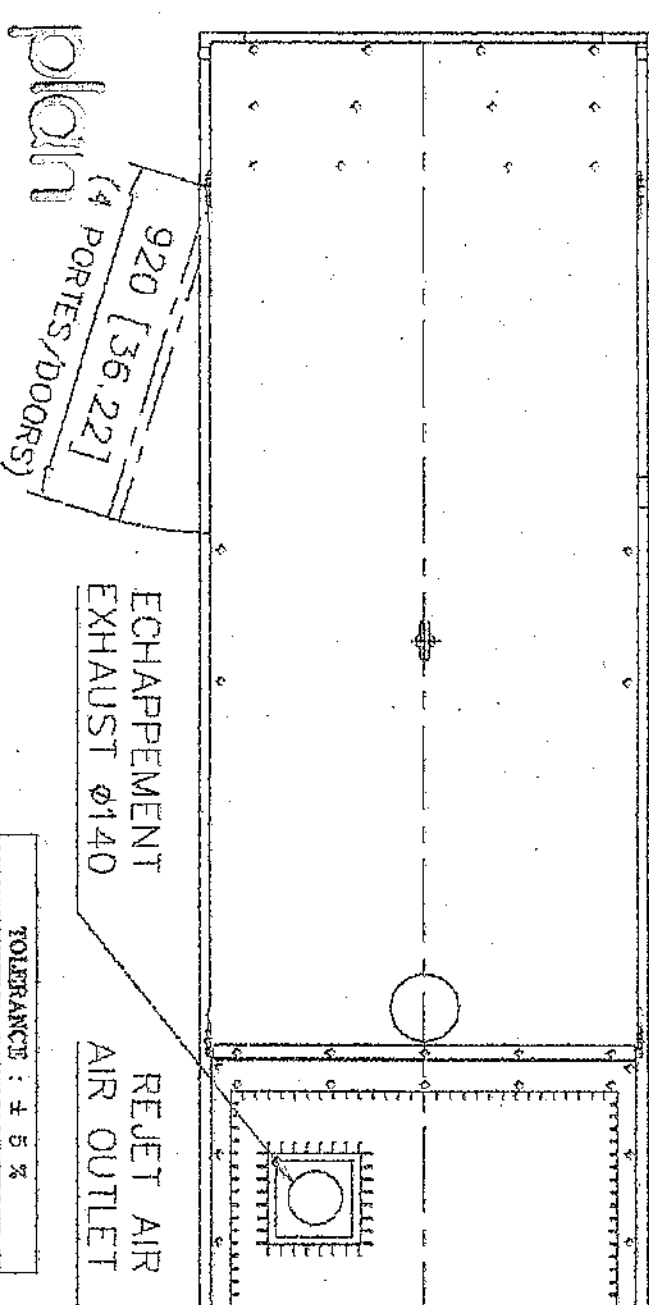
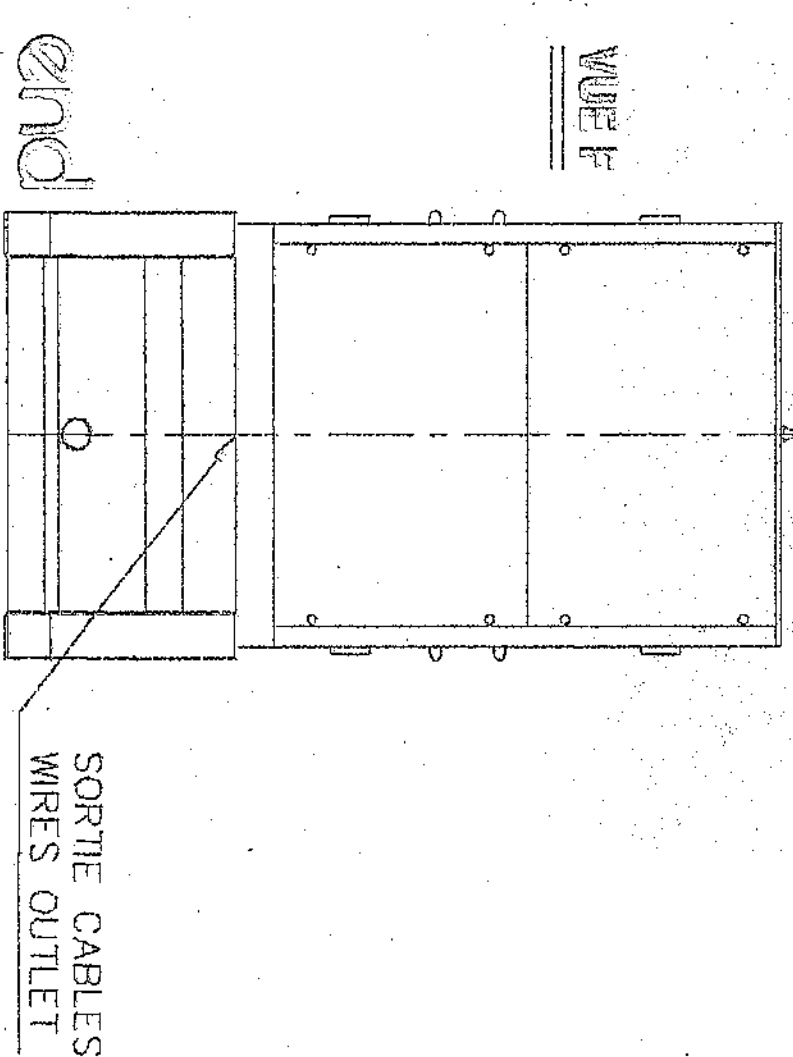
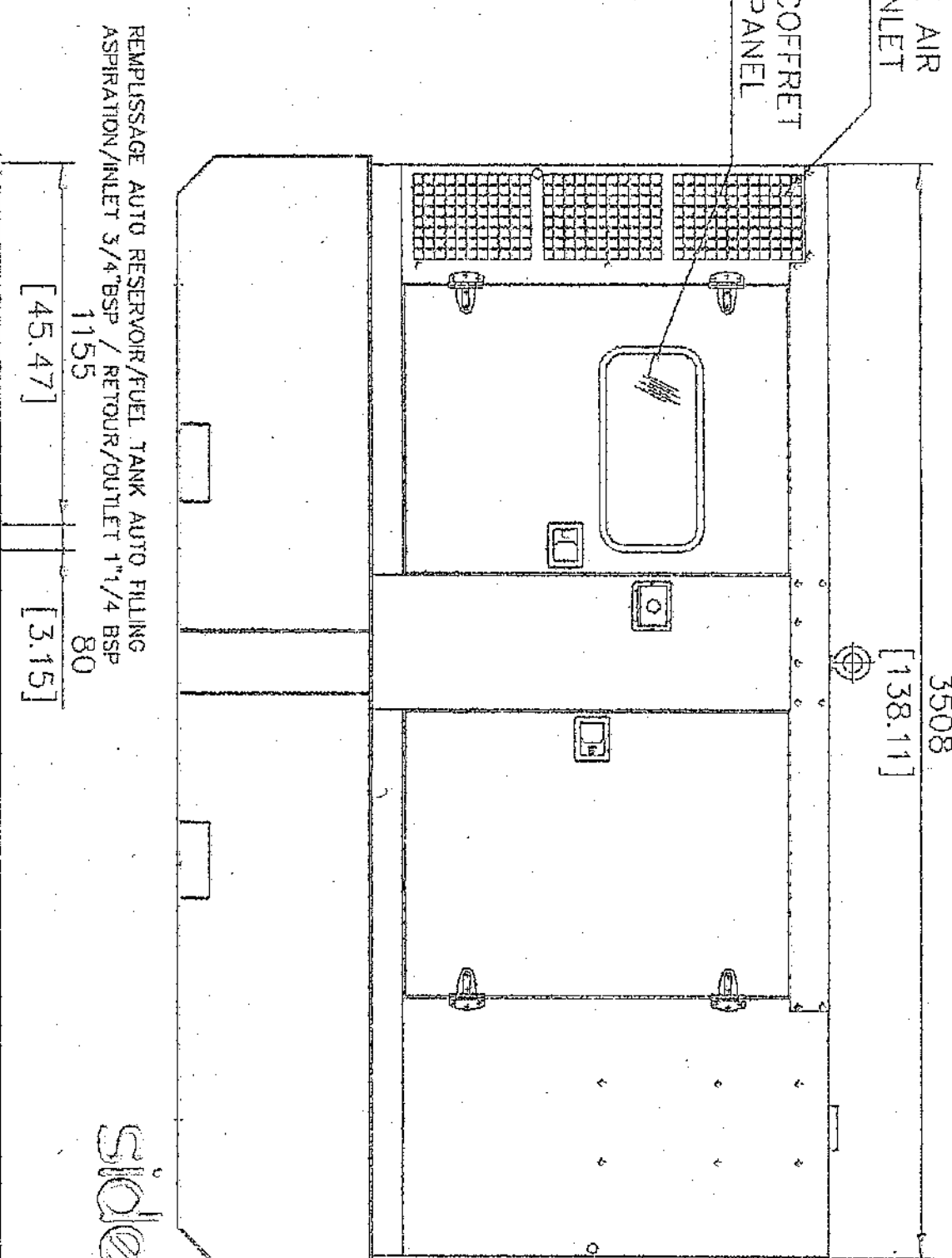
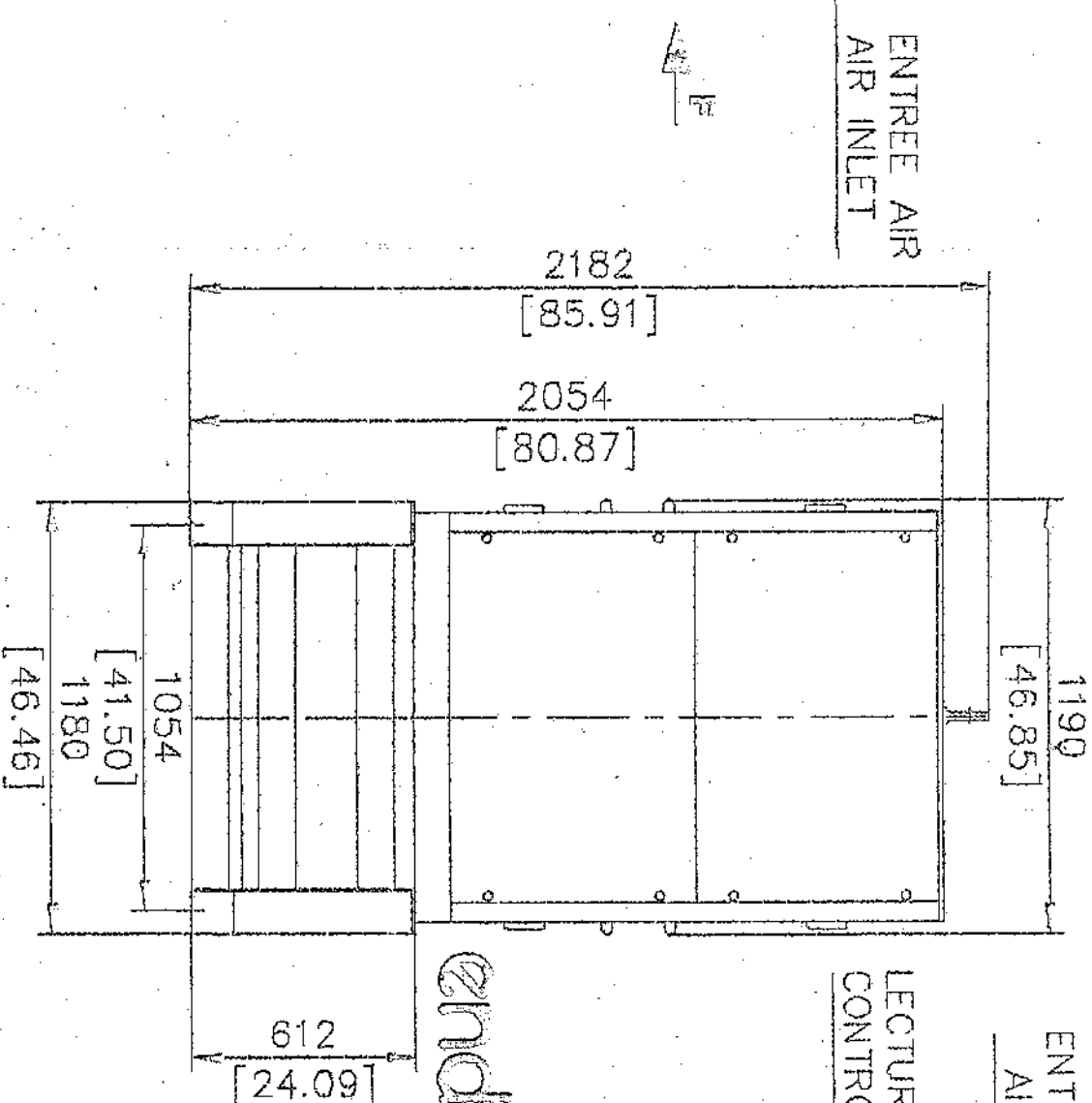
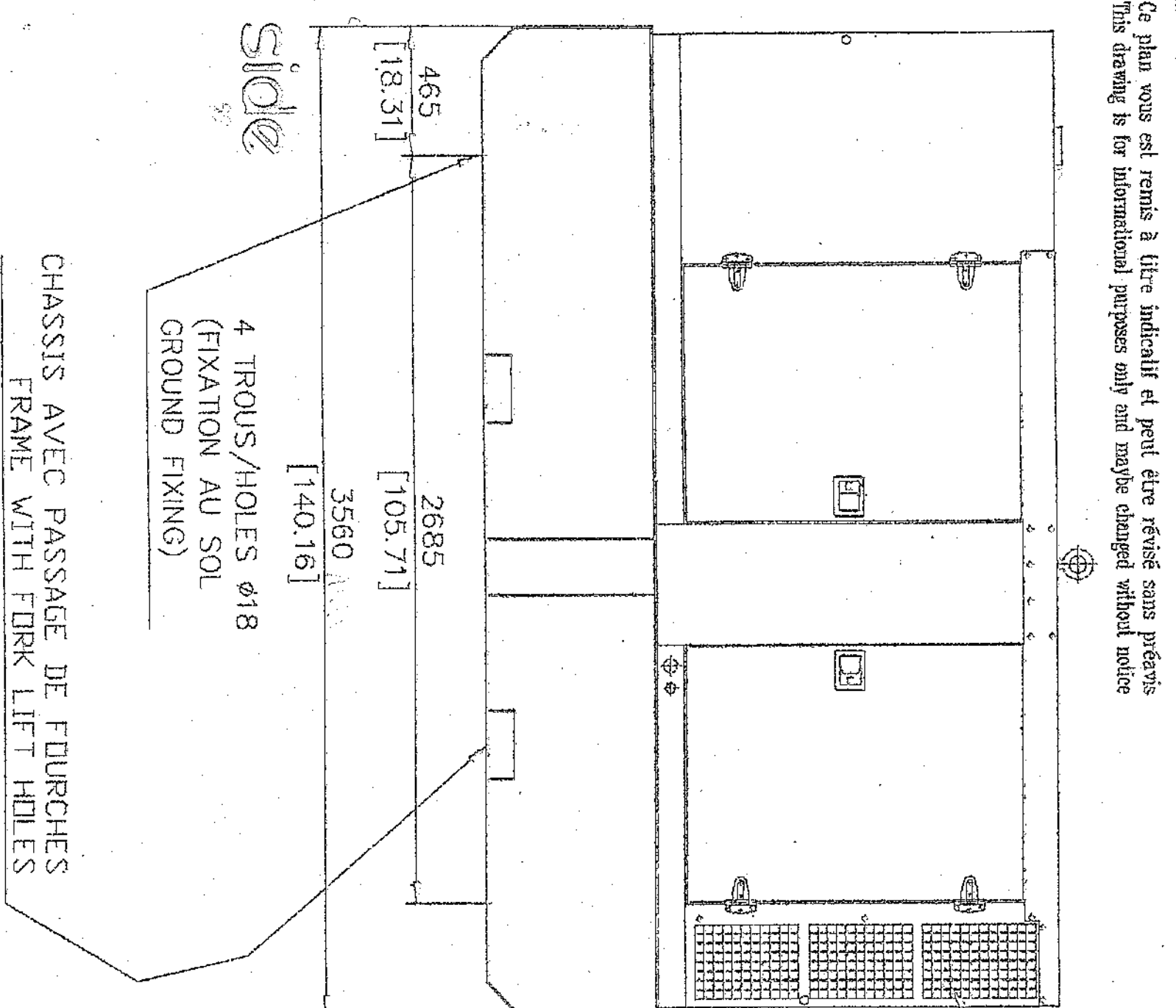
National Telephone
Company Limited

Disclaimer

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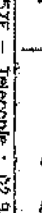
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		TOLERANCE: $\pm 5\%$		
	MASS/LENGTH (kg/lbs)			
	A vite DW	QOM	Met	
ACETYLIC/GENEAL	ACRYLIC/GENEAL			
6068T	6068T	LSA442MS7	2960 / 5643	3443 / 7550
6068H	6068H	LSA442MS7	2615 / 5765	3468 / 7711
6068H	6068H	LSA442MS7	2710 / 5975	3560 / 7854
6068H	6068H	LSA442MS7	2660 / 5864	3560 / 7854
6068H	6068H	LSA442112	2770 / 6107	3390 / 7515
6068H	6068H	LSA462MS	2810 / 6195	3630 / 8003
6068H	6068H	LSA462MS	2860 / 6285	3670 / 8081
6068H	6068H	LSA462MS	2730 / 6084	3643 / 8031
6068H	6068H	LSA462MS	2930 / 6460	3760 / 8239
TA0733	TA0733	LSA462MS	2910 / 6415	3740 / 8235

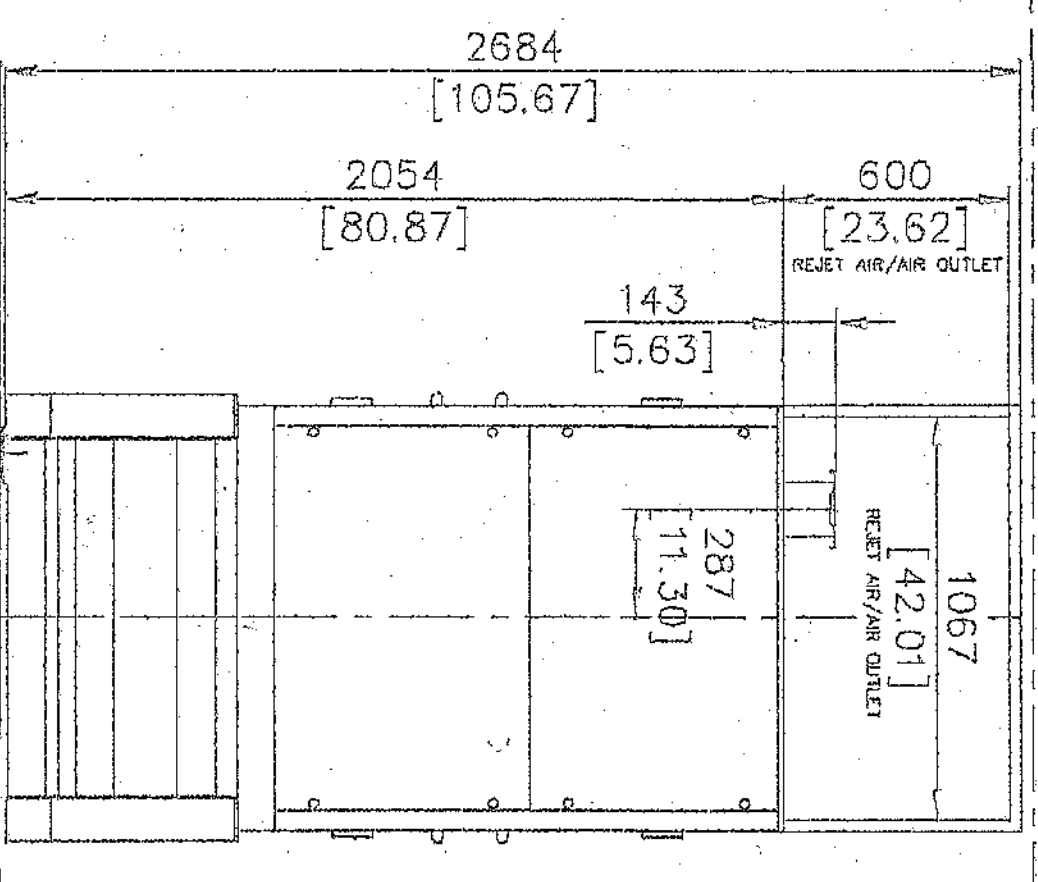
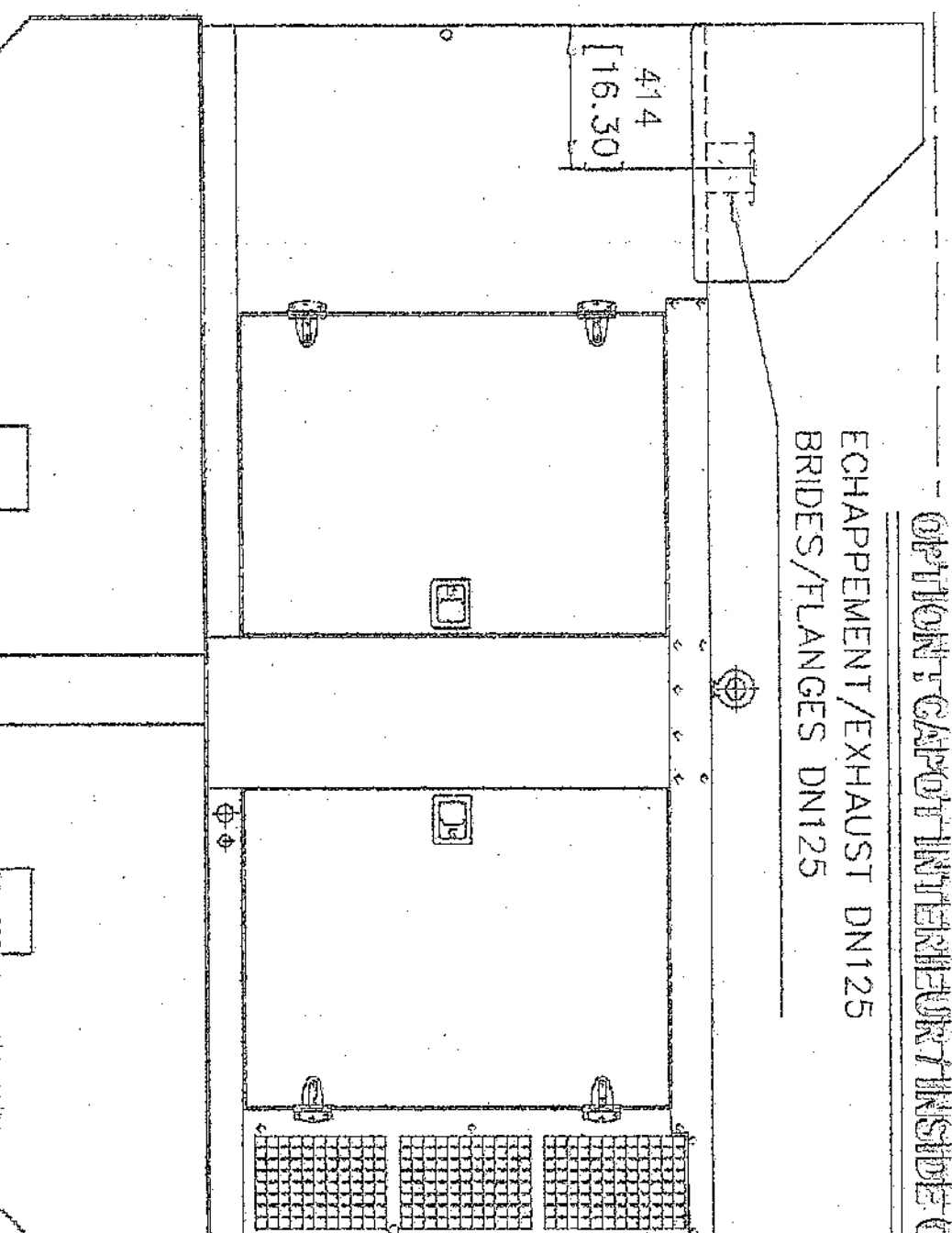
NO.	DESCRIPTION DE LA MODIFICATION	DATE	VERIFIER	DATE	VERIFIER
F	RAJOUTER UNE PAGE TABLEAU DES MASSES	22/08/07	EL SAWADY	22/08/07	P. SIMON
E	RAJOUTER UNE PAGE TABLEAU DES MASSES	22/08/07	CASCIOTI	22/08/07	P. SIMON
D	CHANGER LE RELEVÉ LOTIER	21/03/07	P. SIMON		
C	4.001 VOLEU NO 723	06/07/04	P. SIMON		
B	MISE A JOUR TABLEAU DES MASSES	05/03/06	P. SIMON		
A	CRÉATION DU DOCUMENT	07/07/04	P. SIMON		

MATIERE :		FORMAT : A2
REPLACEMENT :	SCALE 1/20	ECHELLE : 1/20
TOLERANCE :		TOLDO : 1/1
DESIGNATION :	M226 DOUBLE WALL - 868 L	MASSE (Mde/Plein) kg
 3-00-01-3410-01-F		

SDMO

[illegible]

Specifications :
Frequency meter, Asynmeter, Voltmeter
Altimeter and Isalco Oil pressure, water temperature, No
start-up, Over-speed, Minimum oil pressure, Airflow
battery voltage, Low fuel level, Emergency stop
Engine oil pressure, Engine Oil pressure, Water
temperature, Engine speed, engine vibration, Fuel flow



SDMO

[illegible]

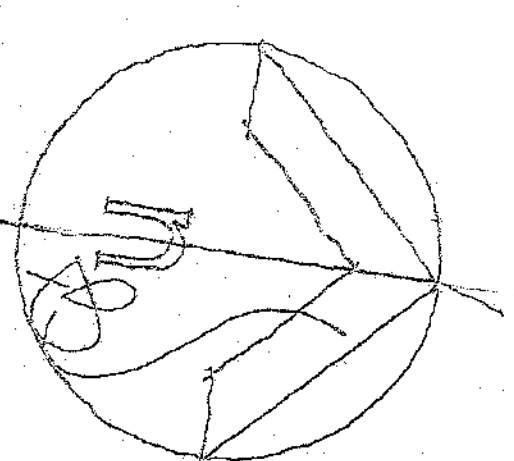
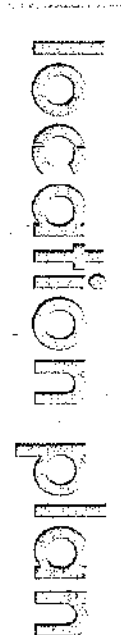
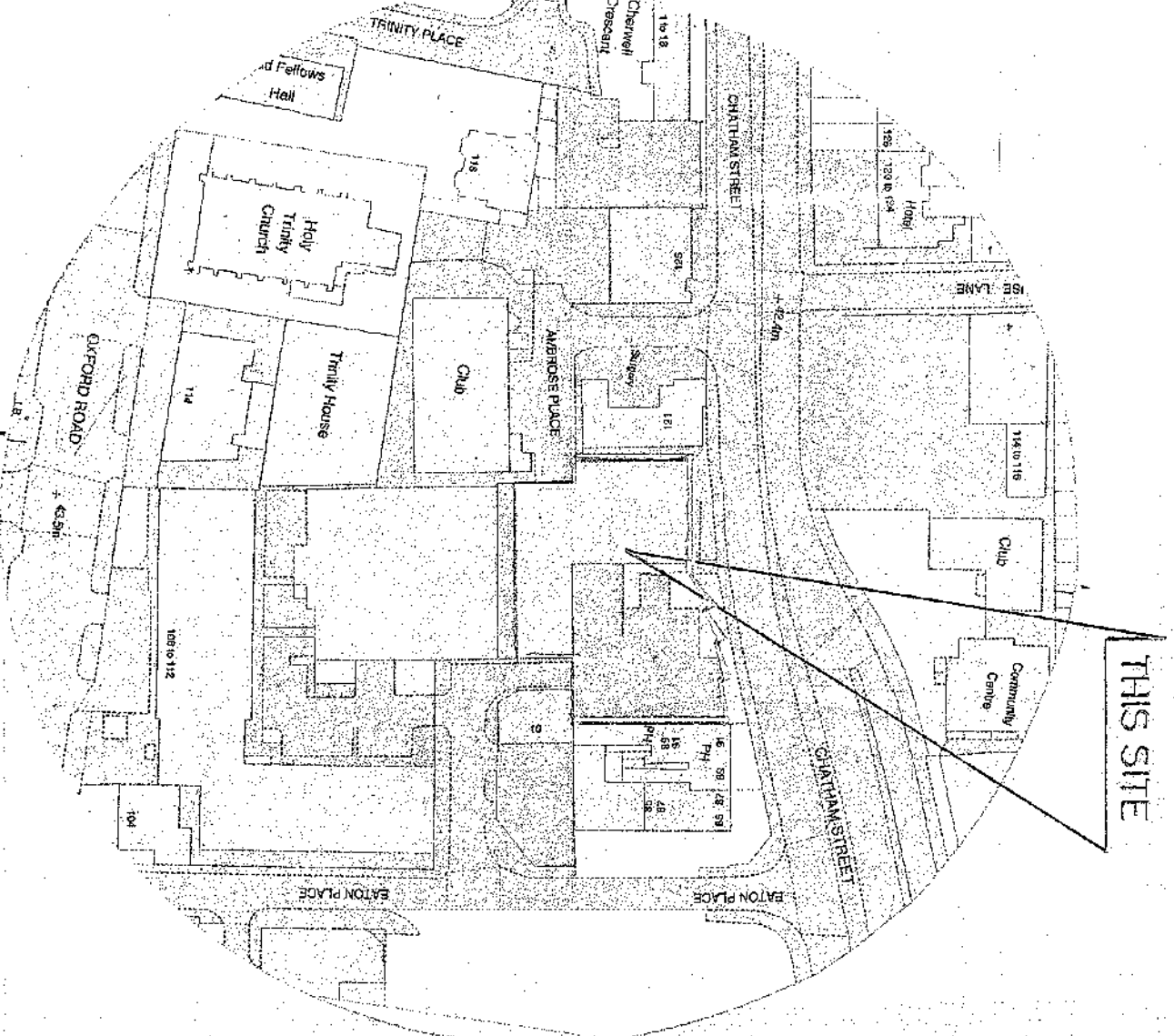
Category	Item	Quantity	Unit Price	Total Price
Material	Concrete (C20)	1000	1500	1500000
	Reinforcement Steel (HRB335)	500	3000	1500000
Material	Gravel (5-25mm)	2000	750	1500000
	Sand (0.075-4.75mm)	1500	1000	1500000
Material	Waterproofing Membrane	100	15000	1500000
	Formwork (Timber)	200	7500	1500000
Material	Formwork (Aluminum)	100	15000	1500000
	Formwork (Steel)	50	30000	1500000
Material	Formwork (Plastic)	20	75000	1500000
	Formwork (Concrete)	10	150000	1500000
Material	Formwork (Brick)	5	300000	1500000
	Formwork (Masonry)	2	750000	1500000
Material	Formwork (Glass)	1	1500000	1500000
	Formwork (Metal)	0.5	3000000	1500000
Material	Formwork (Wood)	0.2	7500000	1500000
	Formwork (Paper)	0.1	15000000	1500000
Material	Formwork (Fabric)	0.05	30000000	1500000
	Formwork (Leather)	0.02	75000000	1500000
Material	Formwork (Rubber)	0.01	150000000	1500000
	Formwork (Silicone)	0.005	300000000	1500000
Material	Formwork (Carbon)	0.002	750000000	1500000
	Formwork (Diamond)	0.001	1500000000	1500000
Material	Formwork (Titanium)	0.0005	3000000000	1500000
	Formwork (Gold)	0.0002	7500000000	1500000
Material	Formwork (Silver)	0.0001	15000000000	1500000
	Formwork (Copper)	0.00005	30000000000	1500000
Material	Formwork (Zinc)	0.00002	75000000000	1500000
	Formwork (Nickel)	0.00001	150000000000	1500000
Material	Formwork (Chromium)	0.000005	300000000000	1500000
	Formwork (Manganese)	0.000002	750000000000	1500000
Material	Formwork (Iron)	0.000001	1500000000000	1500000
	Formwork (Cobalt)	0.0000005	3000000000000	1500000
Material	Formwork (Selenium)	0.0000002	7500000000000	1500000
	Formwork (Tellurium)	0.0000001	15000000000000	1500000
Material	Formwork (Polonium)	0.00000005	30000000000000	1500000
	Formwork (Astatine)	0.00000002	75000000000000	1500000
Material	Formwork (Francium)	0.00000001	150000000000000	1500000
	Formwork (Radium)	0.000000005	300000000000000	1500000
Material	Formwork (Actinium)	0.000000002	750000000000000	1500000
	Formwork (Thorium)	0.000000001	1500000000000000	1500000
Material	Formwork (Protactinium)	0.0000000005	3000000000000000	1500000
	Formwork (Uranium)	0.0000000002	7500000000000000	1500000
Material	Formwork (Neptunium)	0.0000000001	15000000000000000	1500000
	Formwork (Plutonium)	0.00000000005	30000000000000000	1500000
Material	Formwork (Americium)	0.00000000002	75000000000000000	1500000
	Formwork (Curium)	0.00000000001	150000000000000000	1500000
Material	Formwork (Berkelium)	0.000000000005	300000000000000000	1500000
	Formwork (Californium)	0.000000000002	750000000000000000	1500000
Material	Formwork (Einsteinium)	0.000000000001	1500000000000000000	1500000
	Formwork (Fermium)	0.0000000000005	3000000000000000000	1500000
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	Formwork (Nobelium)	0.0000000000001	15000000000000000000	1500000
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	Formwork (Rutherfordium)	0.00000000000002	75000000000000000000	1500000
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	Formwork (Seaborgium)	0.000000000000005	300000000000000000000	1500000
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Material	Formwork (Meitnerium)	0.0000000000000005	3000000000000000000000	1500000
	Formwork (Darmstadtium)	0.0000000000000002	7500000000000000000000	1500000
Material	Formwork (Roentgenium)	0.0000000000000001	15000000000000000000000	1500000
	Formwork (			

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LEROY-SOMER
 LSA6226
 0.8
 1000 m
 2260 mm
 SHUNT

Time	Temp	Flow	Pressure	Detector	Response
0.00	25.0	1.0	1.0	1.0	1.0
0.05	25.0	1.0	1.0	1.0	1.0
0.10	25.0	1.0	1.0	1.0	1.0
0.15	25.0	1.0	1.0	1.0	1.0
0.20	25.0	1.0	1.0	1.0	1.0
0.25	25.0	1.0	1.0	1.0	1.0
0.30	25.0	1.0	1.0	1.0	1.0
0.35	25.0	1.0	1.0	1.0	1.0
0.40	25.0	1.0	1.0	1.0	1.0
0.45	25.0	1.0	1.0	1.0	1.0
0.50	25.0	1.0	1.0	1.0	1.0
0.55	25.0	1.0	1.0	1.0	1.0
0.60	25.0	1.0	1.0	1.0	1.0
0.65	25.0	1.0	1.0	1.0	1.0
0.70	25.0	1.0	1.0	1.0	1.0
0.75	25.0	1.0	1.0	1.0	1.0
0.80	25.0	1.0	1.0	1.0	1.0
0.85	25.0	1.0	1.0	1.0	1.0
0.90	25.0	1.0	1.0	1.0	1.0
0.95	25.0	1.0	1.0	1.0	1.0
1.00	25.0	1.0	1.0	1.0	1.0
1.05	25.0	1.0	1.0	1.0	1.0
1.10	25.0	1.0	1.0	1.0	1.0
1.15	25.0	1.0	1.0	1.0	1.0
1.20	25.0	1.0	1.0	1.0	1.0
1.25	25.0	1.0	1.0	1.0	1.0
1.30	25.0	1.0	1.0	1.0	1.0
1.35	25.0	1.0	1.0	1.0	1.0
1.40	25.0	1.0	1.0	1.0	1.0
1.45	25.0	1.0	1.0	1.0	1.0
1.50	25.0	1.0	1.0	1.0	1.0
1.55	25.0	1.0	1.0	1.0	1.0
1.60	25.0	1.0	1.0	1.0	1.0
1.65	25.0	1.0	1.0	1.0	1.0
1.70	25.0	1.0	1.0	1.0	1.0
1.75	25.0	1.0	1.0	1.0	1.0
1.80	25.0	1.0	1.0	1.0	1.0
1.85	25.0	1.0	1.0	1.0	1.0
1.90	25.0	1.0	1.0	1.0	1.0
1.95	25.0	1.0	1.0	1.0	1.0
2.00	25.0	1.0	1.0	1.0	1.0
2.05	25.0	1.0	1.0	1.0	1.0
2.10	25.0	1.0	1.0	1.0	1.0
2.15	25.0	1.0	1.0	1.0	1.0
2.20	25.0	1.0	1.0	1.0	1.0
2.25	25.0	1.0	1.0	1.0	1.0
2.30	25.0	1.0	1.0	1.0	1.0
2.35	25.0	1.0	1.0	1.0	1.0
2.40	25.0	1.0	1.0	1.0	1.0
2.45	25.0	1.0	1.0	1.0	1.0
2.50	25.0	1.0	1.0	1.0	1.0
2.55	25.0	1.0	1.0	1.0	1.0
2.60	25.0	1.0	1.0	1.0	1.0
2.65	25.0	1.0	1.0	1.0	1.0
2.70	25.0	1.0	1.0	1.0	1.0
2.75	25.0	1.0	1.0	1.0	1.0
2.80	25.0	1.0	1.0	1.0	1.0
2.85	25.0	1.0	1.0	1.0	1.0
2.90	25.0	1.0	1.0	1.0	1.0
2.95	25.0	1.0	1.0	1.0	1.0
3.00	25.0	1.0	1.0	1.0	1.0
3.05	25.0	1.0	1.0	1.0	1.0
3.10	25.0	1.0	1.0	1.0	1.0
3.15	25.0	1.0	1.0	1.0	1.0



manufacturers details

10015

PACKER DESIGN PARTNERSHIP
47 CHESTNUT AVENUE ANDOVER SP 02026
STUART PACKER
(01264) 781838
ARCHITECTURAL SERVICE & GRAPHICS

[illegible]

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BOTTOMLINE TECHNOLOGY
115 CHATHAM STREET
READING

DEKSHINE
RG1 7JX
SITE PLAN

GENERAL
AND MANUFACTURERS DETAILS

AS INDICATED	DEC / 2008
081125 / 01	

DESIGN PAPER

PACKET 47
STUDENTS
838
ENDS HERE

1264) 1
SCS

RECEIVED
INTELLIGENCE AND OVERSIGHT
SEP 10 2 10 PM '84
GRAND

[illegible]

Dear Sir/Madam,

With regards to your enquiry, Network Rail does not believe there is any Network Rail owned apparatus or underground services within the area you have defined. As there is always the possibility that new works could be planned and undertaken in this area by Network Rail this information is valid as at today's date and is supplied for general guidance only.

Please be aware that this response is based on Network Rail's records and knowledge and no guarantee can be given regarding accuracy or completeness. CAT scans, safe digging practices (as contained in HSE publications) and other appropriate investigative techniques should always be carried out.

There may be other apparatus or underground services owned or operated by Utility Companies and accordingly you should contact individual utilities for information.

If, in connection with your investigations and/or work, you become aware of Network Rail apparatus or underground services within your area of work, please ensure these are notified to our Asset Protection team via the following link as a matter of urgency so that appropriate measures for avoidance of risk and damage can be put in place.

Contact details can be found in the following link: [Network Rail Asset Protection Teams](#)

If you require any further clarification on any of the information please contact opburiedservicesenquiries@networkrail.co.uk.

Regards,

Gareth Milne

Distribution Administrator



Worksite Survey | Asset Information Services

National Records Centre | Audax Road | York YO30 4US

T: 01904 386353 | E: gareth.milne@networkrail.co.uk

W: www.networkrail.co.uk

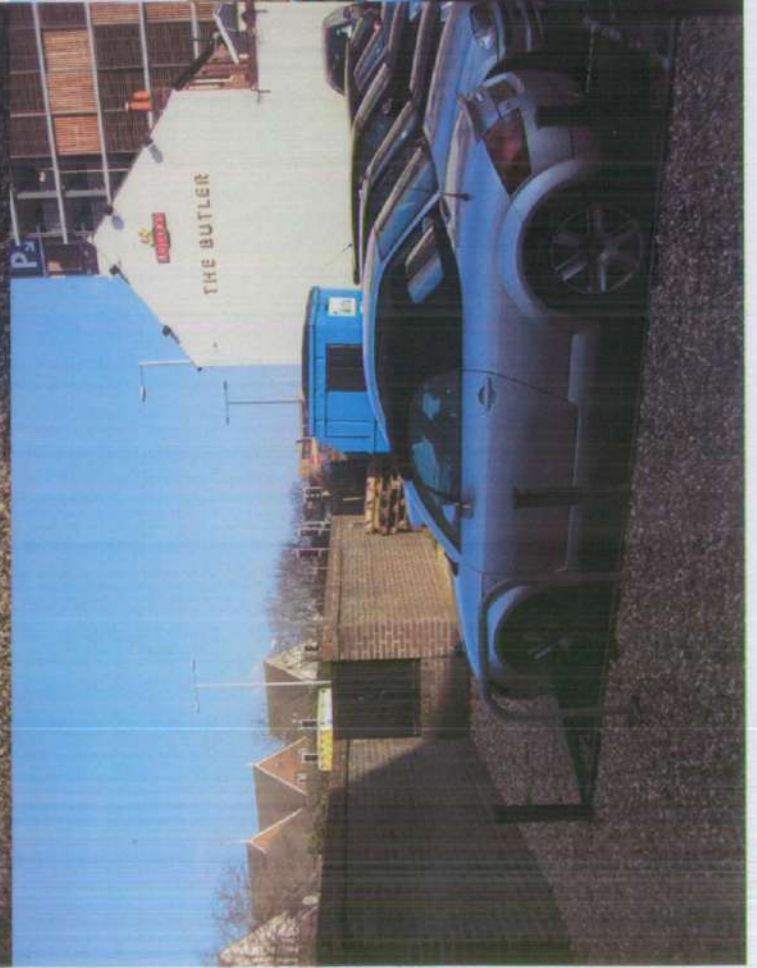
Council Historical Ref Only

115 Chatham St.

Generator.

Photo

081174/FUL



Dear Customer

You may need an environmental permit if you intend to carry out work in, under, over or near to a main river flood or sea defence. You can find more information about this at:

<https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>

Although the Environment Agency is classed as a statutory undertaker for certain purposes, we do not generally have plant equipment or pipelines situated in the public highway.

We have drafted this reply without conducting a specific search of our records. We ask that you make the necessary checks and if you have reason to think that your proposal will affect land or equipment which we own or is close to a watercourse as defined above, please resubmit your enquiry making this clear in your reply.

Kind regards

Liam Morris

Environment Agency

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Flood map for planning

Your reference
Chatham St.

Location (easting/northing)
470869/173490

Created
7 Jan 2021 13:19

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

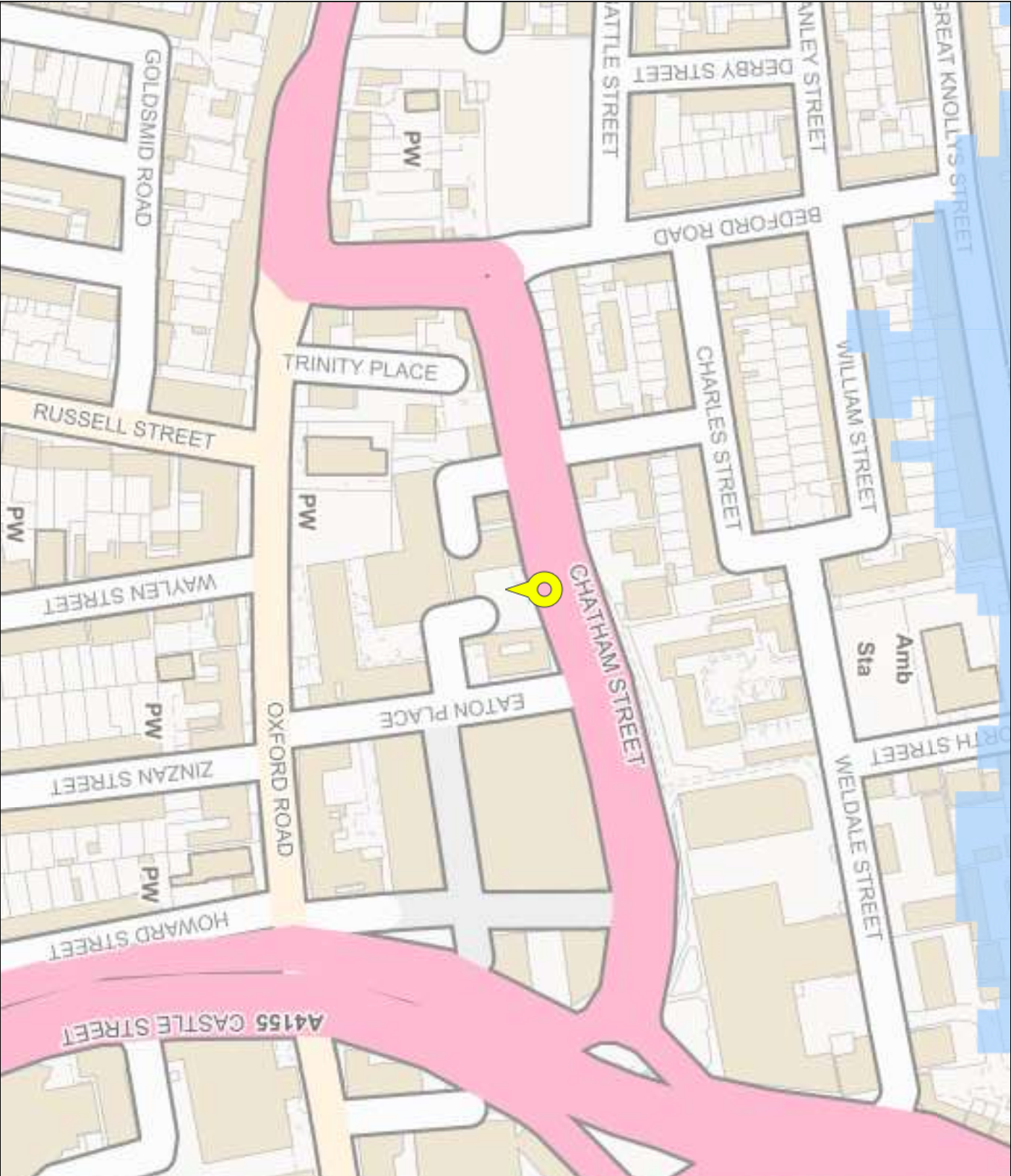
- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

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<https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>



Flood map for planning

Your reference
Chatham St.

Location (easting/northing)
470869/173490

Scale
1:2500

Created
7 Jan 2021 13:19

 Selected point

 Flood zone 3

 Flood zone 3: areas
benefiting from flood
defences

 Flood zone 2

 Flood zone 1

 Flood defence

 Main river

 Flood storage area

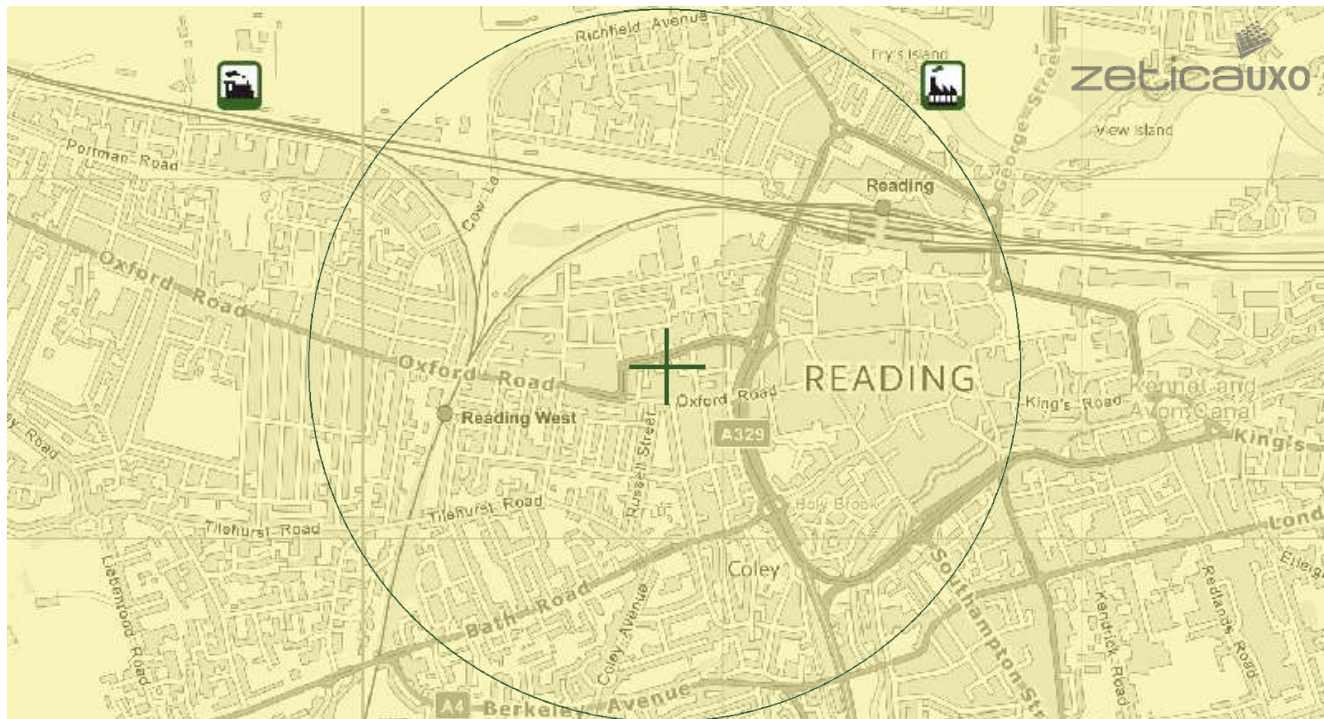


UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: RG1 7JX,
Map Centre: 470851,173483



LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

- | | | |
|------------------|----------------------|--------------------------|
| military | industry | UXO find |
| transport | dock | Luftwaffe targets |
| utilities | Bombing decoy | other |

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

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It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Communications (Affected)



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Date: 06/01/21

Scale: 1:2235

Map Centre: 470869.173453

Data updated: 01/12/20

Telecoms Plan A4

Important information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2020 Ordnance Survey 100019209.

Duct, Trench

Chamber

Cabinet

utilitysite@outlook.com



Dear Sir/Madam

Turner & Townsend Project Management are appointed on behalf of MBNL to conduct Plant (apparatus) Searches in accordance with the relevant NRSWA Act 1991- Diversionary Works legislation. These searches considered plant belonging to EE (T-Mobile and Orange sites) and the HG3 mobile telecommunication networks.

MBNL do have plant in or near to the area of development please see below.



However, further details of the proposed development are needed to ascertain if works will affect either the plant or its coverage. Please keep us up to date with any future developments using the contact details below.

Kind Regards

MBNL SHQE Team

t: 0121 262 3663 |



Health & Safety Team of the Year 2019

Turner & Townsend Europe Limited

Registered office: Low Hall, Calverley Lane, Horsforth, Leeds LS18 4GH, United Kingdom |

Registered in England and Wales | Registration No: 3514794



Zayo Plant Protection Centre

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

Date: 06/01/2021

Your Reference: Chatham Street

Our Reference: 20933627

ZAYO GROUP LTD UK AFFECTED C2 PRELIMINARY PLANT ENQUIRY

We acknowledge with thanks your request dated 06/01/2021 07:10:24 PM for information on the location of our assets.

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

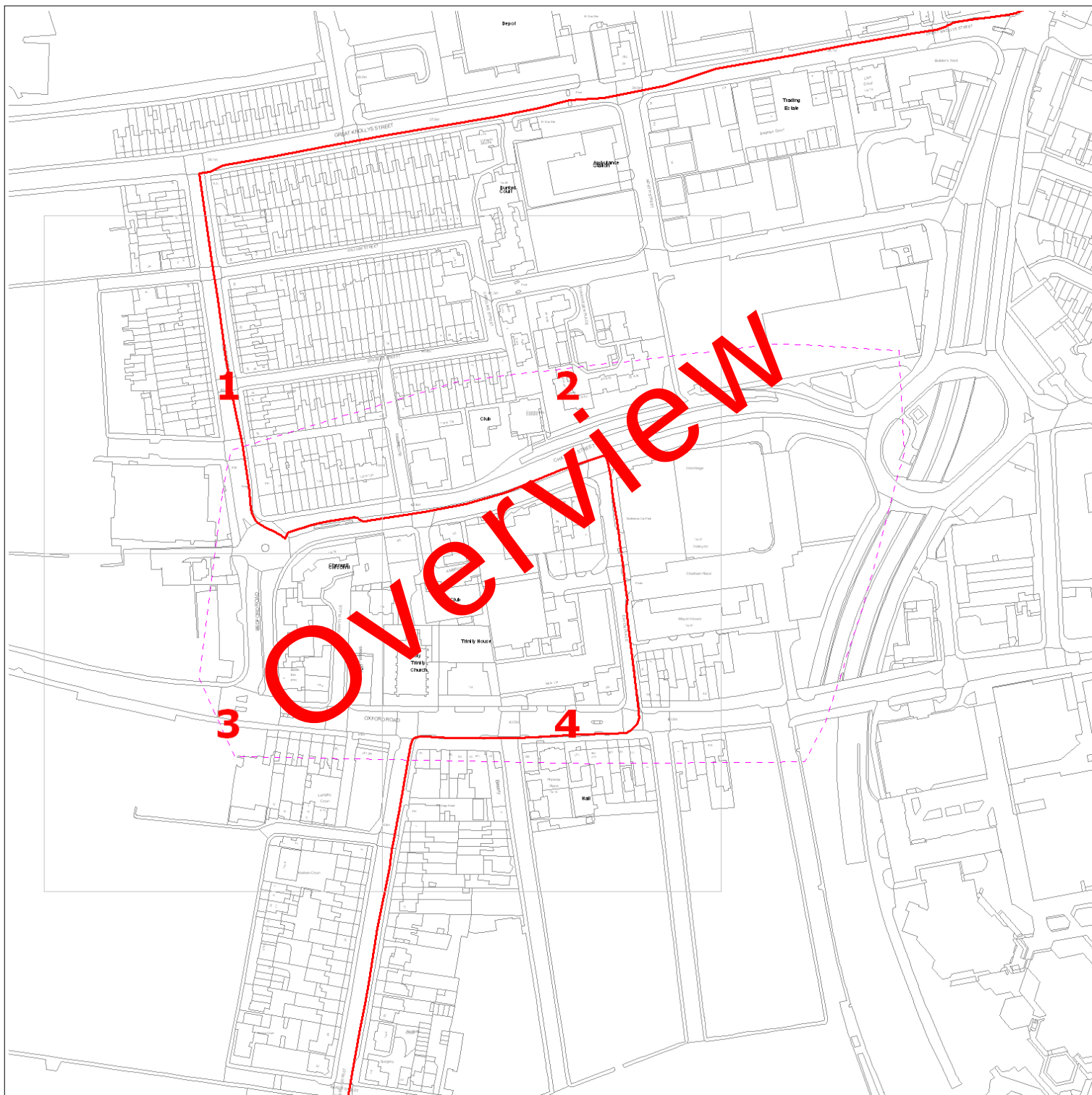
Please note these maps indicate approximate location only and their accuracy cannot be guaranteed. To determine the exact location a trial hole must be dug using extreme caution and hand dig methods only. Please refer to the attached document "Guide to Excavation within the vicinity of Zayo Apparatus".

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.

Yours faithfully,

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



Date Requested: 06/01/2021

Job Reference: 20933627

Your Scheme/Reference: Chatham Street



Dig Sites: Line --- Area - - - - -

Scale on A4 paper: 1:1000

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Protecting Lives, Cables & Pipes

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

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



JSM Group Ltd
Sterling House
Mutton Lane, Potters Bar
Hertfordshire, EN6 3AR
T: 01992 788 019

zayoplantenquiries@jsmgroup.com



Date Requested: 06/01/2021

Job Reference: 20933627

Your Scheme/Reference: Chatham Street



Dig Sites: Line --- Area [dashed pink box]

Scale on A4 paper: 1:1000

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



JSM Group Ltd
Sterling House
Mutton Lane, Potters Bar
Hertfordshire, EN6 3AR
T: 01992 788 019

zayoplantenquiries@jsmgroup.com



Date Requested: 06/01/2021

Job Reference: 20933627

Your Scheme/Reference: Chatham Street



Dig Sites: Line Area

Scale on A4 paper: 1:1000

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Protecting Lives, Cables & Pipes

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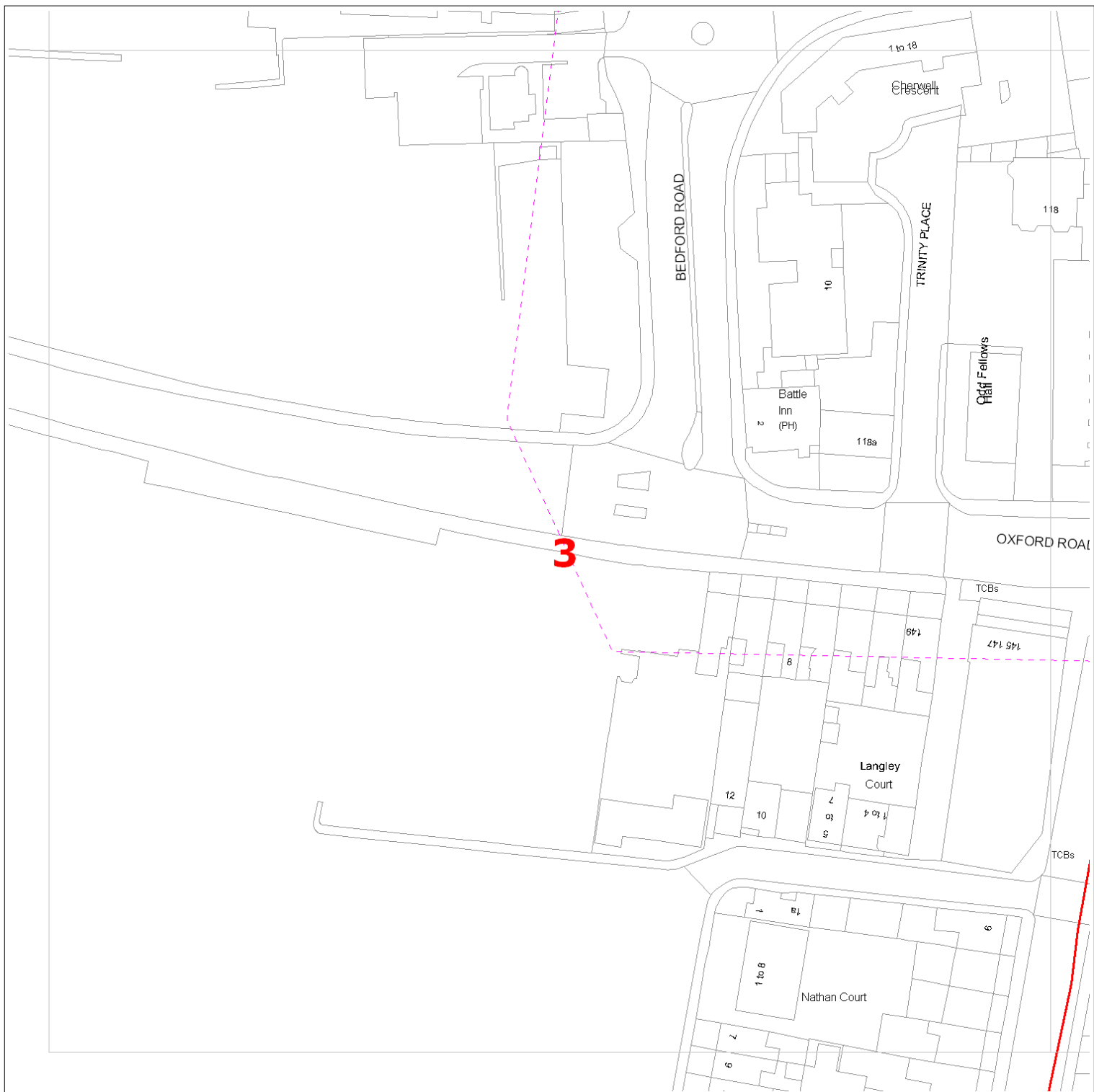


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Date Requested: 06/01/2021

Job Reference: 20933627

Your Scheme/Reference: Chatham Street

 ZAYO DUCT
 or  ZAYO CHAMBER
 Dig Sites: Line --- Area 
 Scale on A4 paper: 1:1000

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zayo
GROUP

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



JSM Group Ltd
Sterling House
Mutton Lane, Potters Bar
Hertfordshire, EN6 3AR
T: 01992 788 019

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Date Requested: 06/01/2021

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Dig Sites: Line --- Area - - - - -

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Hertfordshire, EN6 3AR
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.

Our Ref: 20933627 Your Ref: Chatham Street

Wednesday, 06 January 2021

SSE Enterprise Telecoms - Asset Network Plans

We acknowledge with thanks your request for information on the location of our assets.

We have attached a plan showing the location of SSE Enterprise Telecoms apparatus in the proposed work area for your information. If the map provided is missing any required information e.g. a background map, then please email C2TelecomsRequests@sse.com who will provide a more detailed map.

If you're laying your own services, please use the map provided showing our apparatus and follow your safe dig procedures. There is no need to contact us for permission to dig or arrange any supervision.

If you have determined your works may impact our existing apparatus, then please contact Telecom.Alterations@sse.com for a Budget Estimate. For us to provide you with a Budget Estimate we will require the following information in order to progress your query as quickly and as efficiently as possible:

- A covering letter or details on the email
- Plans / maps showing existing & proposed conditions (min 1:500 scale and PDF format if emailed)
- Scheme cost apportionment information with confirmation of who the works principal is (the person or company funding your project)

SSE Enterprise Telecoms will respond with a Budget Fee letter (if your scheme falls outside of NRSWA) showing the payment required to prepare a Budget Estimate.

Yours sincerely

SSE Telecoms Fibre and Records Team

Address: SSE Telecoms, 4 Penner Road, Havant, Hampshire, PO9 1QH

Telephone: 023 92 494 923

Email: c2telecomsrequests@sse.com

For more information, visit our website:

<https://ssetelecoms.com/about-sse/our-network/plant-enquiries/>



Overview map of worksite

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SSE Telecoms Underground Route

Emergency Number: 0345 305 3337

SSE Enterprise Telecoms is a trading name of **SSE Telecommunications Limited** which is a part of the **SSE Group**.

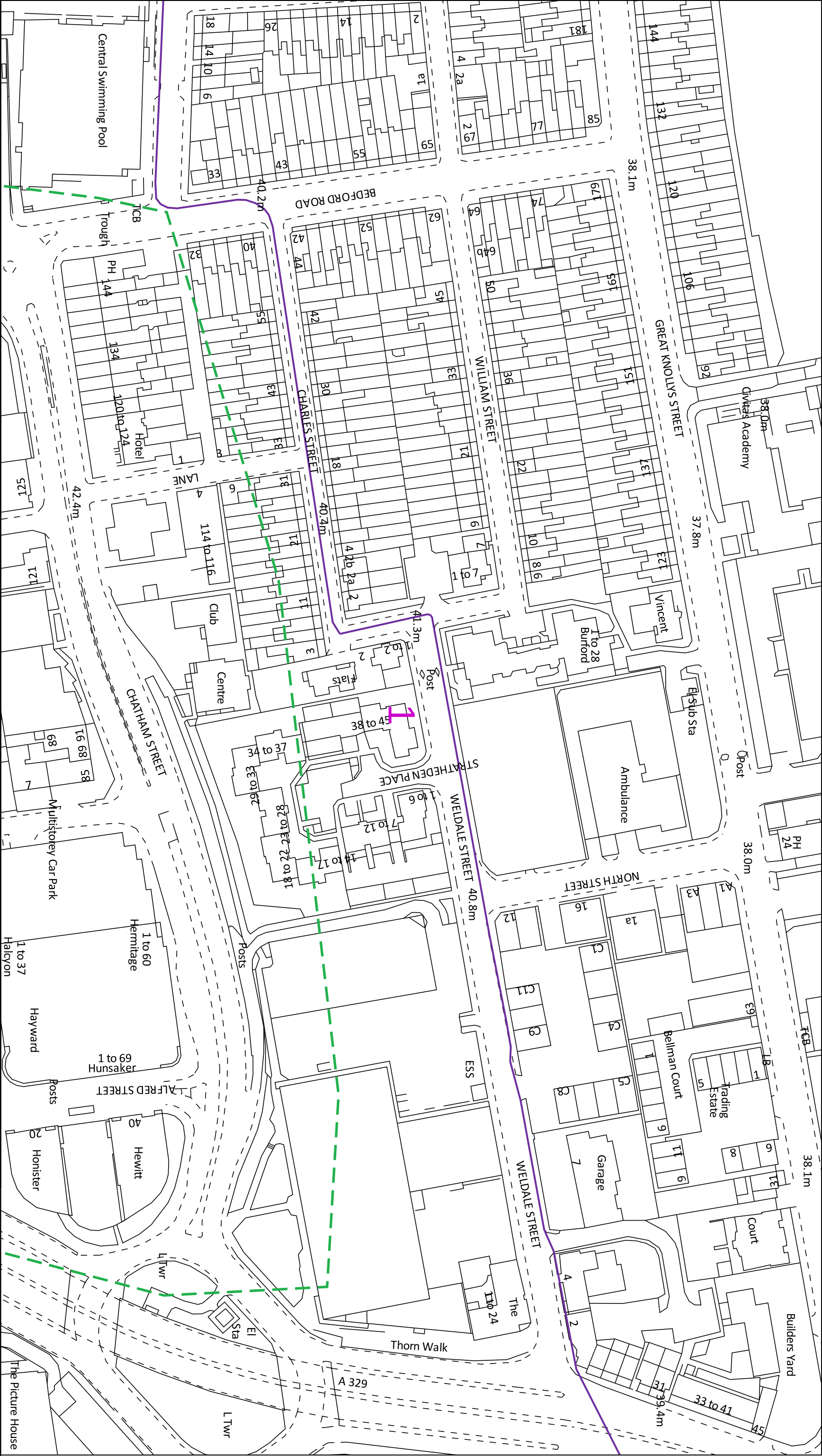


Registered Office:
Inveralmond House
200 Dunkeld Road,
Perth, PH1 3AQ

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Plans generated by DigSAFE Pro™ software provided by LinesearchbeforeDigging



Dig Sites Area: Line: The quality and accuracy of any print will depend on your printer, your computer and its print settings. Measurements scaled from this plan may not match measurements between the same points on the ground.



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SSE Telecoms Underground Route

Emergency Number: 0345 305 3337

Registered Office:
Inverlornond House,
200 Dunkeld Road,
Perth, PH1 3AQ



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SSE Telecoms Underground Route

Emergency Number: 0345 305 3337

Registered Office:
Inverlornond House,
200 Dunkeld Road,
Perth, PH1 3AQ

Communications (None Affected)

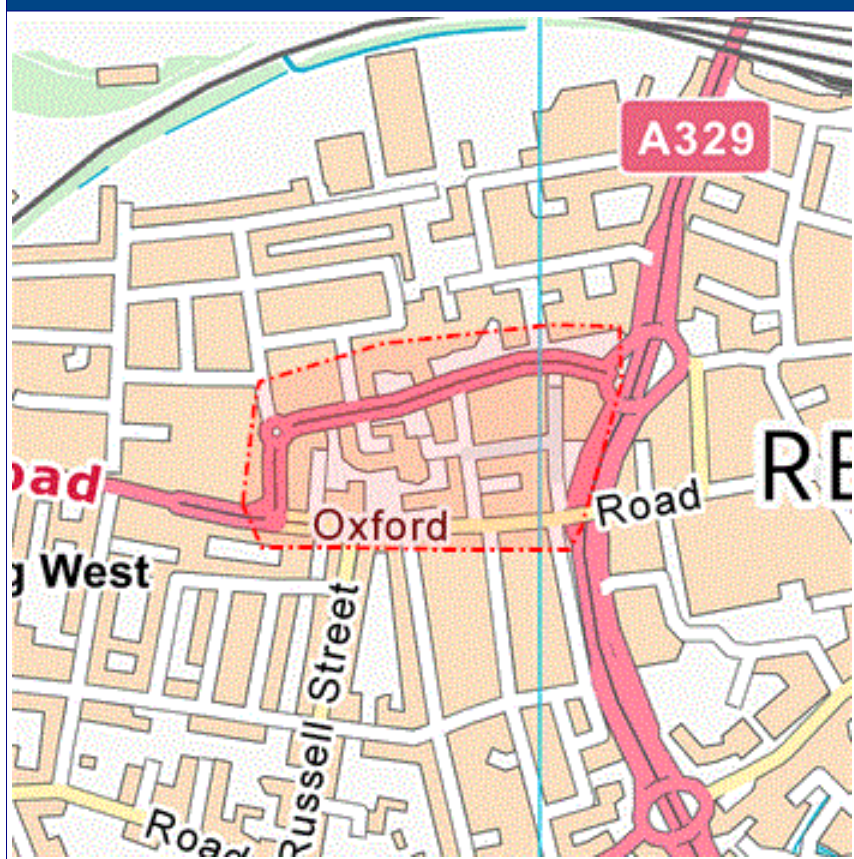
Enquirer

Name		Phone	
Company		Mobile	Not Supplied
Address			
Email			

Enquiry Details

Scheme/Reference	Chatham Street		
Enquiry type	Planned Works	Work category	Utility Works
Start date	07/01/2021	Work type	Multiple excavations site
End date	14/01/2021	Site size	78727 metres square
Searched location	XY= 470869, 173490	Work type buffer*	25 metres
Confirmed location	470885 173482		
Site Contact Name	Not Supplied	Site Phone No	Not Supplied
Description of Works			

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

Site Map


Asset Owners

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

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

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

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

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

Below are three lists of asset owners:

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

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

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

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
ESP Utilities Group	01372227560	01372227560	Await response
Scottish and Southern Electricity Networks	08000483516	08000727282	Await response
SGN	08009121722	0800111999	Await response
SSE Enterprise Telecoms	03453053337	03453053337	Await response
Zayo Group UK Ltd c/o JSM Group Ltd	01992 655 919	0800 169 1646	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
Box Broadband	BP Exploration Operating Company Limited	BPA
Carrington Gas Pipeline	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	Chrysaor Production (UK) Limited	CLH Pipeline System Ltd
CNG Services Ltd	Concept Solutions People Ltd	ConocoPhillips (UK) Teesside Operator Ltd
Diamond Transmission Corporation	DIO (MOD Abandoned Pipelines)	DIO (MOD Live Pipelines)
Drax Group	E.ON UK CHP Limited	EirGrid
Electricity North West Limited	ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited
EP Langage Limited	ESSAR	Esso Petroleum Company Limited
Fulcrum Pipelines Limited	Gamma	Gas Networks Ireland (UK)
Gateshead Energy Company	Gigaclear Ltd	Gtt
Heathrow Airport LTD	Humbly Grove Energy	IGas Energy
INEOS FPS Pipelines	INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited
INOVYN Enterprises Limited	Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd
Mainline Pipelines Limited	Manchester Jetline Limited	Manx Cable Company
Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited	Murphy Utility Assets
National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	Northumbrian Water Group	NPower CHP Pipelines
NYnet Ltd	Oikos Storage Limited	Ørsted
Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos	Phillips 66
Portsmouth Water	Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA
RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)	SABIC UK Petrochemicals
Scottish Power Generation	Seabank Power Ltd	SES Water
Shell	Shell NOP	SSE Generation Ltd
SSE Utility Solutions Limited	Tata Communications (c/o JSM Construction Ltd)	Total (Colnbrook & Colwick Pipelines)

Total Finaline Pipelines	Transmission Capital	UK Power Networks
Uniper UK Ltd	University of Cambridge Granta Backbone Network	Vattenfall
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	Wales and West Utilities
West of Duddon Sands Transmission Ltd	Western Power Distribution	Westminster City Council

The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)			
Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
CenturyLink Communications UK Limited	plantenquiries@instalcom.co.uk	02087314613	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@lastmile-uk.com	01698404646	Not Notified
ENGIE	nrswa.uk@engie.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Mobile Broadband Network Limited	mbnlplantenquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Sota	SOTA.plantenquiries@instalcom.co.uk		Not Notified
Teliasonera	check-network@teliacompany.com	0800526015	Not Notified
Thames Water	http://www.digdat.co.uk	08450709145	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified

Disclaimer

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The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LineasearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LineasearchbeforeUdig, including but not exclusively those set out above. Therefore, LineasearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LineasearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

Dear Sir/Madam,

Thank you for your enquiry for the above reference.

We can confirm that Colt Technology Services do not have apparatus near the above location as presented on your submitted plan, if any development or scheme amendments fall outside the 50 metre perimeter new plans must be submitted for review.

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

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

Kind regards,

Plant Enquiry Team





Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that KPN do not have any apparatus within the immediate proximity of your proposed works

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

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.

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: kpn.plantenquiries@instalcom.co.uk

Web: <http://www.instalcom.co.uk>



Dear Sir or Madam,

Thank you for your plant enquiry below.

We can confirm that Level 3, Global Crossing (Uk) Ltd, Global Crossing PEC, Fibernet UK Ltd and Fibrespan Ltd do not have any apparatus within the indicated works area.

Instalcom responds to plant enquiries for all of the above and therefore you only need send one 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.

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>





Thank you for your enquiry.

Please be advised that Sky Telecommunications Services Ltd will not be affected by your proposal.

Best endeavours have been made to ensure accuracy, however if you require further information, please contact us by email at nrswa@sky.uk.

Regards



NRSWA Department
Sky UK – Technology - Operations

 nrswa@sky.uk  +44 2070323234

Hi, thanks for the advance notice however I can confirm on this occasion we have NO apparatus in the vicinity of the proposed works. (Gtt formerly Hibernia Networks). We are now a member of LSBUD, for all future requests please contact LSBUD directly.

Regards

Owen Maguire

Networks Operations Manager NI
office: +44 (0) 28 70380028 | mobile: +44 754-553-2224

www.gtt.net

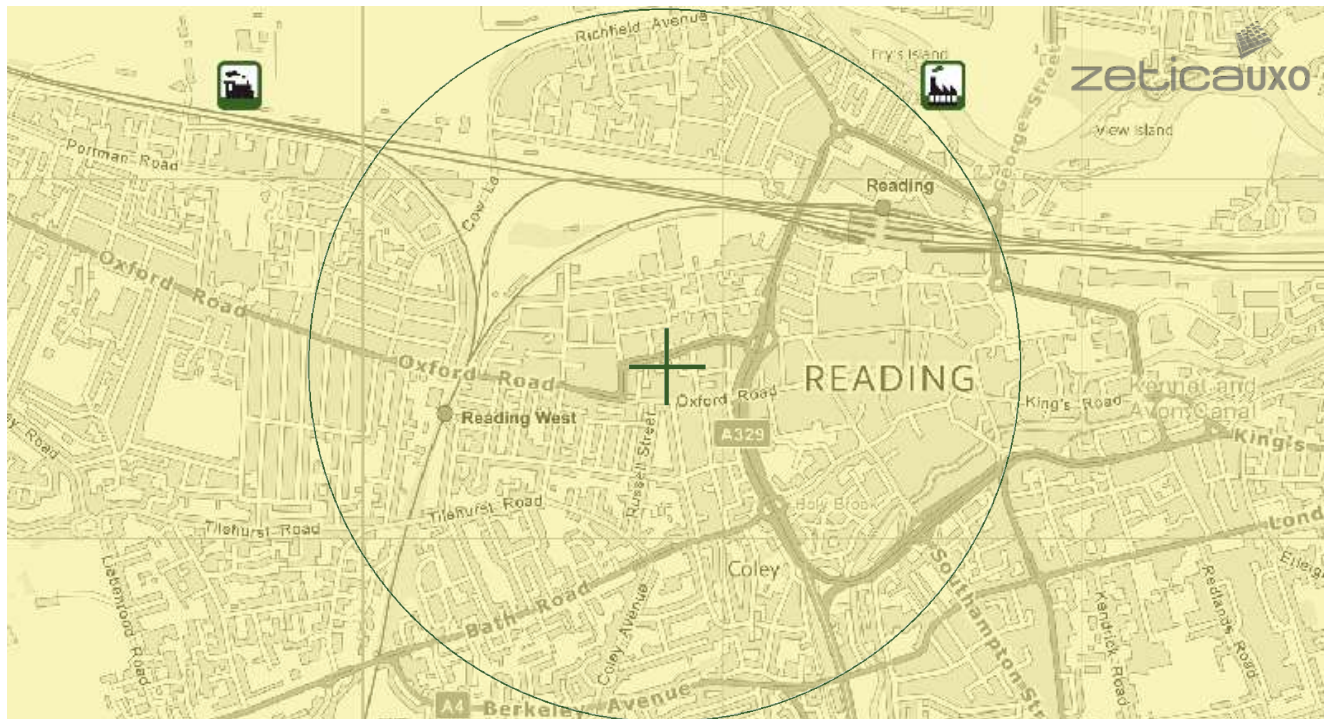


UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: RG1 7JX,
Map Centre: 470851,173483



LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military**
- industry**
- UXO find**
- transport**
- dock**
- Luftwaffe targets**
- utilities**
- Bombing decoy**
- other**

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

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

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

Yours faithfully

Plant Protection Officer (GB) Email osp-team@uk.verizon.com

Dear Sir/Madam,

Please note that KCOM only own apparatus within the Public Highway in East Yorkshire and Lincolnshire.

Apparatus in the Public Highway, which was previously owned by KCOM outside of East Yorkshire and Lincolnshire, is now owned by City Fibre.

All future Plant enquiries or NRSWA C2, C3 or C4 Inquiries, regarding this apparatus outside of East Yorkshire and Lincolnshire, should be directed to City Fibre not KCOM.

Please forward your enquiry to asset.team@cityfibre.com

PLEASE NOTE THIS EMAIL HAS NOT BEEN FORWARDED

Regards

Jarod Gillespie

Apprentice Planning and Design Consultant– Field Engineering

Tel: +44 (0)3316 646302

Mob: +44 (0)7484 032622

Email: jarod.gillespie@kcom.com

Web: www.kcom.com

The logo for KCOM, featuring the letters 'KCOM' in a bold, orange, sans-serif font. The 'K' and 'C' are slightly larger than the 'O' and 'M'.

Thank you for recently contacting Utility Assets plant record department. We will check whether we have any plant present at your site and contact you within 5 - 7 working days ONLY if we own any plant in the vicinity.

If we do not reply, we do not have any apparatus in the area of your works. However, PLEASE TAKE CARE when excavating around electricity cables in the event that not all cables present may be accurately shown. We recommend you use detecting equipment to map the site before excavating and fully comply with HSG47. DO NOT assume that a cable is dead if you don't have a record of its presence. The cable must be treated as live unless PROVEN DEAD by the cable owner. In case of emergency please contact your local electricity distribution company.

This is an automated reply from our dedicated asset records email address. If you receive further correspondence from us it will be from asset.manager@utilityassets.co.uk quoting a site reference number.

Asset Manager - Utility Assets Ltd

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

euNetworks Fiber UK Limited do not have plant in the vicinity of your proposed works and no strategic additions to our existing network are envisaged in the immediate future.

This information is only valid for a period of 3 months so, if your start date is 3 months or more from the date of this email, please re-apply for updated information at our generic email address: plantenquiries@psgservices.co.uk.

Kind regards

ALL PLANT ENQUIRIES AND DIVERSIONARY REQUESTS SHOULD BE ADDRESSED BY EMAIL TO THE OPERATIONS

TEAM AT plantenquiries@psgservices.co.uk , WITH A PLAN AND FULL POSTAL ADDRESS OF YOUR ENQUIRY,

THANK YOU



For and on behalf of euNetwork Fiber UK Limited

Regards

Stuart Green

M 07796 696810 | **T** 01257 433166 | **E** plantenquiries@psgservices.co.uk



Telecommunications Survey, Planning, Engineering & GIS Services

Good Morning,

I can confirm there are no assets in the area.

Kind Regards

Claire Phillips

Distribution Administration Assistant

0844 800 1813



Toll Bar Road, Marston, Grantham, Lincolnshire, NG32 2HT Registered Company Number : 7330883



Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that SOTA do not have any apparatus within the immediate proximity of your proposed works.

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

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.

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: sota.plantenquiries@instalcom.co.uk

Web: <http://www.instalcom.co.uk>



To whom it may concern

With regard to your request for details of existing services in the specified area;

We can confirm that, based on the details provided to us, we have no buried plant or equipment in the identified area.

ENGIE Document Control

Urban Energy

UK & Ireland

NRSWA.UK@engie.com

Cofely GDF SUEZ is now ENGIE



engie.co.uk

Kings Yard,
1 Waterden Road,
Queen Elizabeth Olympic Park
London E15 2GP - UK

Please consider the environment before printing this message





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

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

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

By post – to, telent,
 Teliasonera line plant enquiries,
 Mayne House,
 Fenton Way,
 Basildon,
 Essex
 SS15 6TD

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

By phone – to, 01268 269096

Yours faithfully

Telent CCO

Basildon

Dear Sir,

Our records show we have no equipment at this location.

Linda

Linda Francomb Delivery Administrator

Clear Channel United Kingdom Unit 9, Newtons Court, Galleon Boulevard, Crossways Business Park Park, Dartford, Kent DA2 6QL
D 0044 1322 620 707
M N/A





Disclaimer

This record pack has been compiled from information provided by statutory utility providers.
whilst every effort has been made to ensure the accuracy
and completeness of information included within this report,

Discovery Surveys Ltd

take no responsibility for erroneous or missing historic record data which has been supplied
to us from a utility provider. Due to the nature of record
information being indicative rather than accurate it is advisable
for a full site utility survey to be undertaken
prior to any groundwork's or construction.

Discovery Surveys Ltd - The Winning Post Centre ,Marshland Road, Moorends, Doncaster, South Yorkshire, DN8 4PB

Doncaster Head Office 01405 631020 - Edinburgh - 0131 5000030 - Windsor - 01753 206727

info@discoverysurveys.co.uk



Utility Search Report 2021

APPENDIX C – UTILITY COMPANY QUOTATIONS AND CAPACITY CHECKS

28 January 2021

Our Ref: 2120662

Your Ref:

Vincent Lam
Xco2
The Gymnasium
56 Kingsway Place
London, EC1R 0LU

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

Customer Service **0800 912 1700***

Dear Vincent Lam

New connection at 115, Chatham Street, Reading, Berkshire, RG1 7JX

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

Work to be carried out

SGN to install appropriately sized gas infrastructure to a suitable location. SGN to carry out excavation and reinstatement work up to the site boundary. SGN to supply and fit 1 x suitably sized meter housing and base.

Your budget indication is £6,400.00 (incl. VAT)

Please note that this figure is a budget indication only, it is based upon an hourly load of 111 kW and an annual quantity of 405000 kWh along with any other information you've given us, and doesn't represent an offer to carry out the work.

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

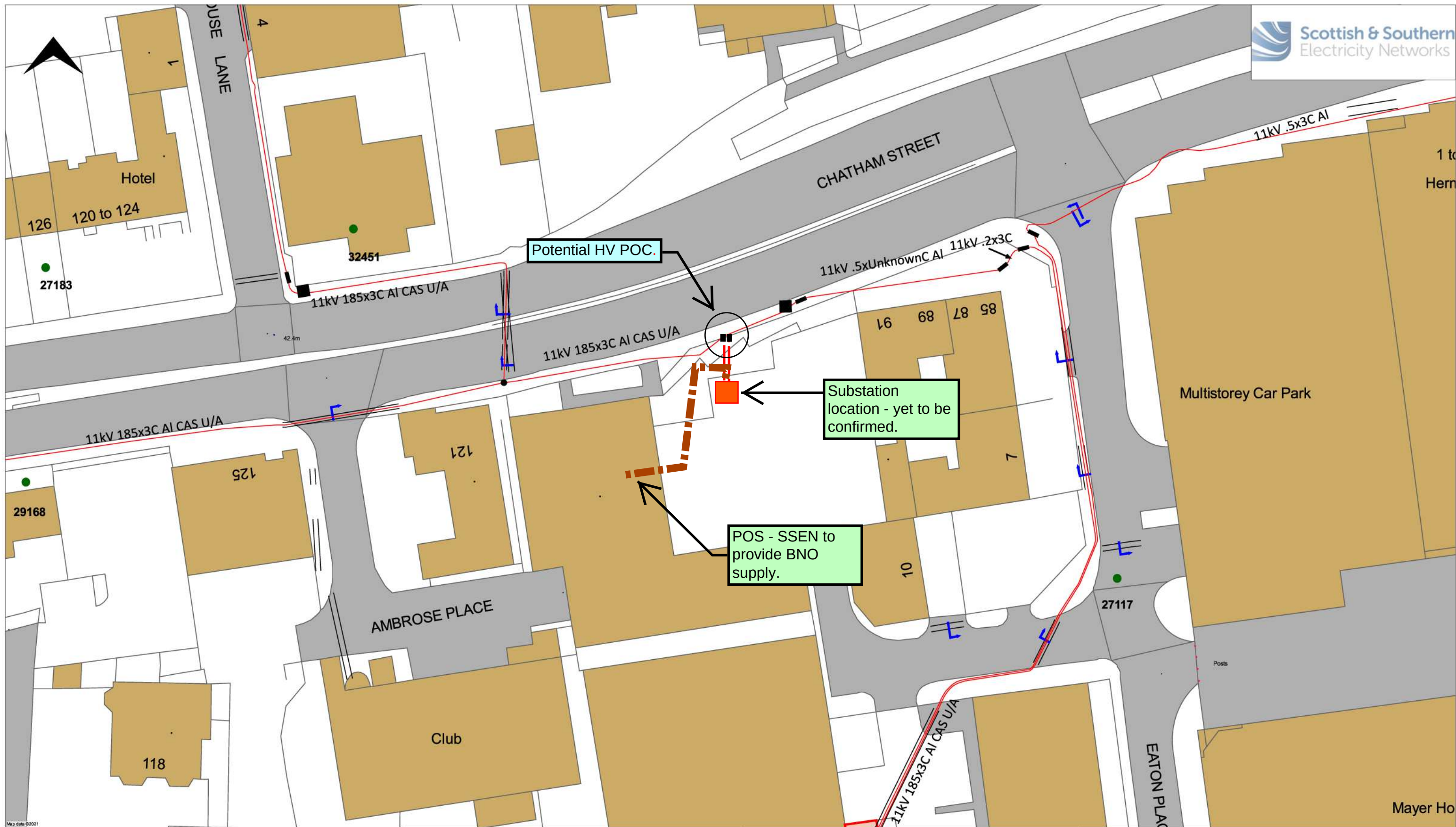
Please note that this budget indication doesn't allow for any diversion of our existing infrastructure if we find it's necessary. You can get further detail on this by calling our customer service line on the number at the top of this page and asking to speak with the Mains Diversions and Isolations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

Zorica Manojlovic
Technical Assistant

* All calls are recorded and may be monitored



WARNING

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive - Avoiding Danger from Buried Cables - should be consulted before commencing excavation work. WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE GS6 SHOULD BE CONSULTED (AVAILABLE FROM THE HSE WEBSITE)

Map Centre: 470869, 173494

Scale: 1:482

Designer Name: Mwadime, Ruth

Grid Ref: SU70867349

Plot Date: 03/02/2021

Job Number:

UNCONTROLLED COPY

Subject to revision

Master held by SSEN Asset Data Team - Asset.Data@sse.com

If you are unsure & need to seek advice before commencing excavations please contact;

General Enquiries

0800 048 3516

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID

	Services	LV	HV	EHV
FOOTPATH/UNMADE	0.45m	0.45m	0.6m	0.8m
ROAD CROSSING	0.6m	0.6m	0.75m	0.9m
AGRICULTURAL	1m	1m	1m	1.1m

Legend

- Segments (Electric)
 - Cable Segment: HV Route - 11.00 kV, Existing
 - Joint Installation: HV Location - Straight, Existing
 - Joint Installation: HV Location - Tee, Existing
 - Fiber Optic: Existing Route - Fiber Optic
- Distribution Structures (Electric)
 - Pillar/Link Box: New Extent - Existing
 - Pillar/Link Box: Existing Location - Link Box
 - Duct: Route
 - Cross Section: Route
 - Substation Site (Electric)
 - Substation: Existing Extent
- Annotations (Electric)
 - Abc Def Cable Annotation: HV Annotation 1:500 - Medium
 - Abc Def Cable Annotation: HV Annotation 1:500 - Legacy
- Common (Electric)
 - Asset Activity - Green Label Location
 - Asset Def Asset Activity - Green Label Annotation
 - Project Region Area
 - Code Point Gazetteer Location
 - Street: Street End
- Street: Street Start
- OS MasterMap Area: AR10021-Building
- OS MasterMap Area: AR10053-General surface - Multi surface - Normal
- OS MasterMap Area: AR10056-General surface - Normal
- OS MasterMap Area: AR10123-Path
- OS MasterMap Area: AR10172-Road or track
- OS MasterMap Area: AR10189-Roadside - Normal
- OS MasterMap Area: AR10217-Unclassified - Normal
- OS MasterMap Line: LN10018-Building - Outline
- OS MasterMap Line: LN10046-General feature
- OS MasterMap Line: LN10113-Closing geometry
- OS MasterMap Line: LN10114-Closing geometry
- OS MasterMap Line: LN10168-Road or track - Public
- OS MasterMap Point: PT10179-Roadside - Structure
- OS MasterMap Point: PT10197-Terrain and height - Spot height
- Abc Def OS MasterMap Text: TX10026-Buildings or structure
- Abc Def OS MasterMap Text: TX10169-Road or track - Road name/class
- Abc Def OS MasterMap Text: TX10178-Roadside
- Abc Def OS MasterMap Text: TX10198-Terrain and height



XCO2
MISS DANIELA PETRE
KINGSWAY PLACE 56 KINGSWAY PLACE
SANS WALK
LONDON
EC1R 0LU

Connections and Engineering
Scottish and Southern Electricity Networks
Walton Park
Walton Road
Cosham
PO6 1UJ

 01753 695 712

 Ruth.mwadime@sse.com

 www.ssen.co.uk

Our reference: ESZ251

Your reference:

Date: 04/02/2021

PROPOSED ELECTRICITY CONNECTION TO:

115 CHATHAM ROAD, READING, BERKSHIRE, RG1 7JX

Dear Daniela,

Thank you for your recent enquiry. We have carried out a preliminary assessment of the works required to make connection to the distribution network in the area and we are pleased to provide you with our findings along with an estimate of the costs for the option identified. Please note that we have not carried out any detailed design work or network impact analysis. This budget estimate is provided as a result of a preliminary assessment only and possibly without any site specific considerations being taken into account. A budget estimate is not a formal offer for connection and cannot be accepted by you. The initial proposals will be subject to obtaining all necessary legal consents to carry out the work, including any consent required from third parties.

The estimate we provide at this stage may vary considerably from any further budget estimate or the price in any formal connection offer.

Budget estimate in the region of:

 **80,000 – 85,000**

This budget estimate has been calculated exclusive of VAT and does not constitute an offer of terms.

The budget estimate has been calculated based on a high level assessment, the information you have provided and the assumptions listed within this letter. It is my best estimate of the costs you would incur for this proposal and is intended for budgetary purposes only. This estimate cannot be guaranteed. This estimate includes for any reinforcements assumed to be required on the wider network that may be triggered by this connection.



This estimate does not include any assessment for temporary diversion or traffic management requirements. Any necessary reinforcements, temporary diversions or traffic management requirements would be confirmed in a formal connection offer, and part or all of the cost of these reinforcements would be included in the connection charge.

Any documents, drawings or figures provided as part of this budget estimate are indicative only.

There are Independent Connection Providers (ICPs) and Independent Distribution Network Operators (IDNOs) who may be able to provide you with an alternative quotation to carry out some of this work. Please refer to www.lloydsregister.co.uk for further details.

Description of proposed works and assumptions

The customer has requested x54 new supplies for flats and x1 LLDs supply. Tenent load is 150kVA, landlord load is 220kVA, with site total 370kVA. SSEN to provide BNO supply as per the current policy.

SSEN to install a 500kVa substation unit on site. To be looped in and out of the existing 11kV network. This will be via x2 150 XLPE cables.

SSEN to install x4 approx. 35m of 185mm LV wavecon cables to terminate into the customer's LV panel (either within the building or in a separate enclosure adjacent to the substation).

On site excavations and reinstatements by the customer. Off site excavations and reinstatements by SSEN.

x2 HV straight joints.

Padlocks.

HV shutdown.

This estimate is based on the customer carrying out all on site excavation and reinstatement works and providing all internal containments for cables. I have included in this estimate a cost for the diversion of our existing cables and equipment that may be affected by your proposed development.

The initial proposal includes the installation of a new Distribution Substation on a 4.5m x 4.5m plot. The land for this will be provided by the customer at no cost to us. All associated legal costs shall be borne by the customer.

We have not carried out detailed design work or network studies to confirm that the network can accommodate the requested capacity of demand import. There is therefore no guarantee that this level of capacity will be available without completing further studies. As we have only carried out preliminary off-site investigations, physical, technical and wayleave assessments may mean that the proposals are not practical.

Transmission Constraints



Any planned transmission works and dates may be subject to change.

Any network assessment carried out as part of a formal connection offer, will take into account these works and you may be required to pay an apportioned part of network investment. Further information can be found on our Network Capacity maps:

<https://www.ssen.co.uk/ContractedDemand/>

Please also be aware that any formal connection offer will be made under our current Connection Charging Methodology Statement. If you do progress with a connection then there may also be charges applied for the use of the distribution network, as set out in our Use of System Charging Statements. Copies of our charging statements can be found on our website at:

<https://www.ssen.co.uk/Library/ChargingStatements>

If you would like to discuss any aspect of this budget estimate please feel free to contact me at the details provided at the top of this letter. Otherwise if you'd like to progress towards a formal connection offer, please contact connections@sse.com quoting your reference number which can be found at the top of this letter. You can find further information regarding our process for new connections by visiting:

www.ssen.co.uk/Connections/UsefulDocuments.

We look forward to hearing how you wish to progress with your project. Alternatively, you can find answers to any questions you may have on our web site www.ssen.co.uk.

Yours sincerely,

Ruth Mwadime

Connections Designer



Your reference: DS6080695

Your site address: 115 Chatham Street, Reading RG1 7JX

Customer: XCO2

Clean water capacity report

Status: Capacity concerns

Date: 29 January 2021

Validity: Valid until 28 January 2022 or for the duration of your Local Authority planning permission when this report is used to support your application.

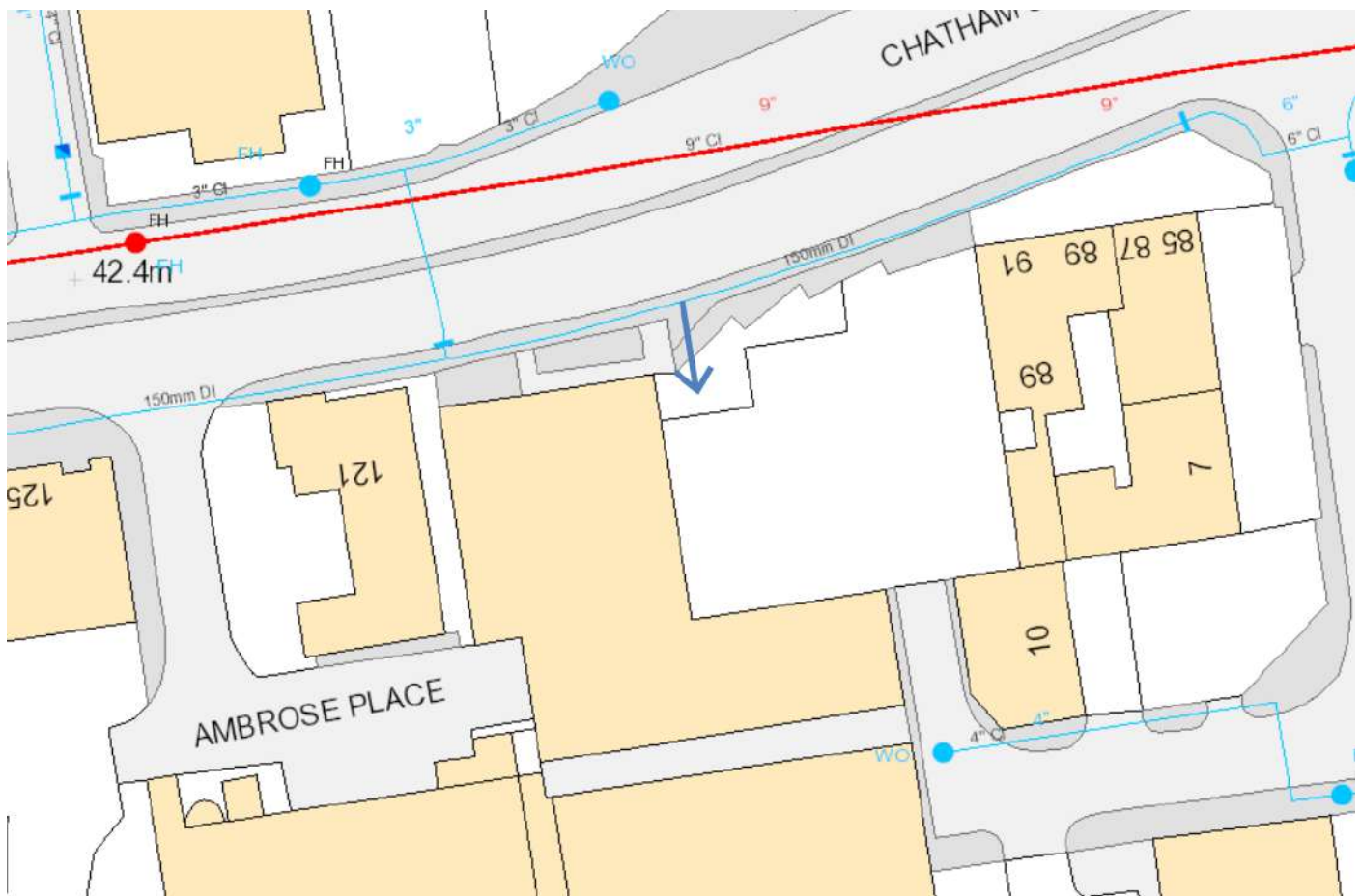
We confirm that there will be sufficient capacity in our clean water network to serve the first 50 residential flats of your development:

However, we're unable to confirm capacity for your whole development of 54 residential flats without further investigation. How to make a request for us to progress with network modelling activity is listed in the accompanying email.

Please be aware that this report is based upon the details and drawings provided. If there are any subsequent changes to these, then the contents of this report will become invalid and a new assessment will be needed.

Please note that the below POC is based on desktop study and it might change after capacity check study or site-specific survey.

Nearest point of connection





Contaminated land

If your site is on contaminated land, any new water pipes laid should be barrier pipe which is more expensive. If you think this is not the case you will need to provide a soil report when applying for new mains and services.

Building near our assets

Please [read our guide](#) 'working near our assets' to ensure your workings will be in line with the necessary processes you need to follow if you're considering working above or near our pipes or other structures. Should you require further information please contact [us](#).

Diversions

From our records we don't anticipate that any clean water assets need to be diverted to accommodate your proposals.

Building water

It's important that you apply for a building water supply before you start using water on site even if you believe your supply is already metered. We need to ensure your account is properly set up and you have the correct meter for your supply or fines maybe imposed. Apply [here](#).

Fire hydrant and sprinkler demand

Please note that we cannot confirm whether a fire hydrant or sprinkler demand can be accommodated on a new connection. You'll need to contact an independent consultant or specialist company for hydrant testing for fire-fighting purposes. Valve operations must be carried out by our Network Service Technician which can be booked on 0800 316 9800.

Asset location search

If you need help in identifying the location of existing water mains and sewers, you can get this information from any property search provider. We have a Property Searches team who will carry out an asset location search, which provides information on the location of known Thames Water clean and/or wastewater assets, including details of pipe sizes, direction of flow and depth (for which a fee is payable). You can find out more [online](#) or by calling us on 0845 070 9148.

Quotation process

Please use links below to find out more information about water main and services connections, including application process.

Click [here](#) for our home improvements website, or click [here](#) to apply for clean water services.

Vincent Lam

From: DEVELOPER.SERVICES@THAMESWATER.CO.U
<DEVELOPER.SERVICES@THAMESWATER.CO.UK>
Sent: 22 January 2021 10:50
To: Vincent Lam
Cc: Raquel Fernández Francés
Subject: RE:DS6080694: 115 Chatham Street, Reading - Pre-planning Wastewater Application

Hi Vincent

We have completed the assessment of the foul water flows based on the information submitted in your application with the purpose of assessing sewerage capacity within the existing Thames Water sewer network. We have assumed that the foul sewer in Eaton Place is the most suitable point of connection but this information was missing from the application. We have based our assessment on a gravity connection to MH9401.

Foul Water

If your proposals progress in line with the details above, we're pleased to confirm that there will be sufficient sewerage capacity in the adjacent foul sewer network to serve your development.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

You'll need to keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient capacity.

Surface Water

You did not provide any information in relation to surface water. Please seek advice from the LLFA.

Regards
Dan

Dan Rees BSc

MIWater

Developer Services – Adoptions Engineer

Mobile: 07747642033

developer.services@thameswater.co.uk

Clearwater Court, Vastern Road, Reading, RG1 8DB

Find us online at developers.thameswater.co.uk

Get advice on making your sewer connection correctly at connectright.org.uk

Original Text

From: Vincent Lam <vincentl@xco2.com>
To: DEVELOPER.SERVICES@THAMESWATER.CO.U <DEVELOPER.SERVICES@THAMESWATER.CO.UK>
CC: Raquel Fernández Francés <raquelff@xco2.com>
Sent: 19.01.21 16:53:07
Subject: 115 Chatham Street, Reading - Pre-planning Water & Wastewater Application

Hello,

Please see attached pre-planning application and supporting documents for 115 Chatham Street, Reading. A proposed development consisting of a high rise building for 54 residential units.

Please let me know if you require any additional information for the capacity check.

Best regards,

Vincent Lam

Engineer | MEng | AMIMechE



www.xco2.com | +44 (0) 20 7700 1000

The Gymnasium | 56 Kingsway Place | Sans Walk | London | EC1R 0LU

XCO2 Energy Ltd [Disclaimer](#)

For the health and wellbeing of our staff and collaborators, the majority of the XCO2 team will be working remotely effective 17th March 2020. Our office number above will continue to work and we will be sure to put you in touch with the relevant person.

Visit us online www.thameswater.co.uk , follow us on twitter www.twitter.com/thameswater or find us on www.facebook.com/thameswater. We're happy to help you 24/7.

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