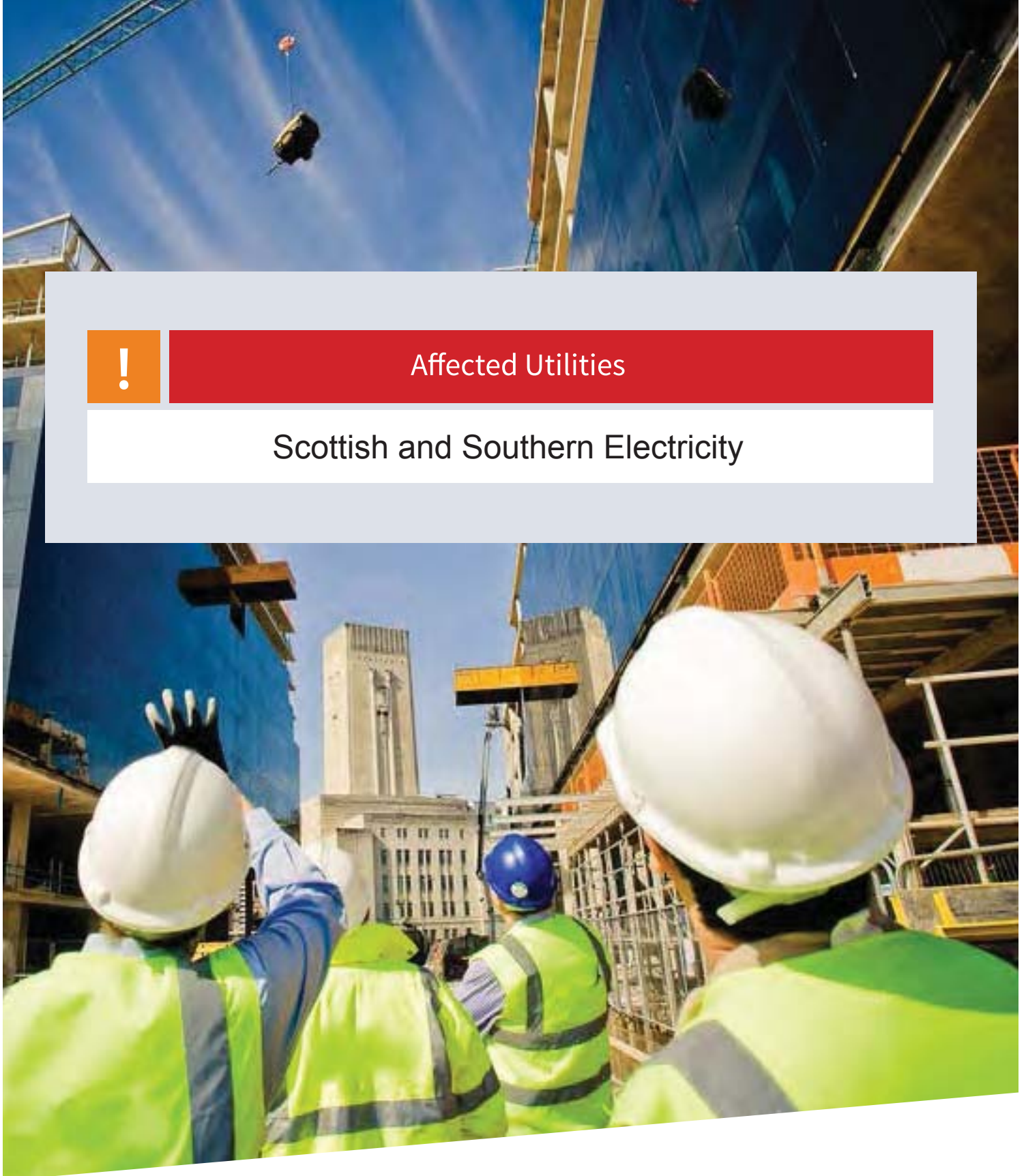
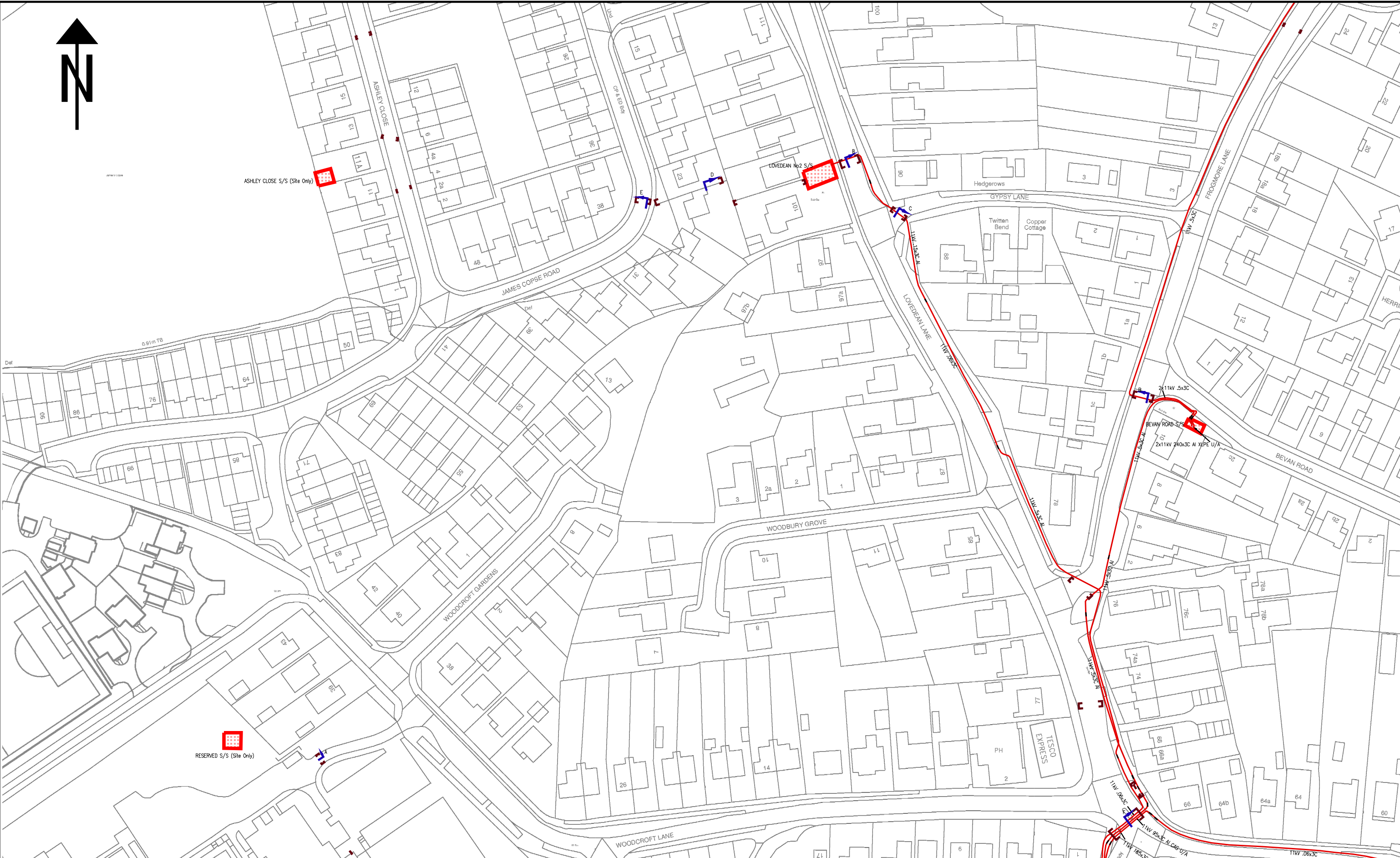


Utilities Report

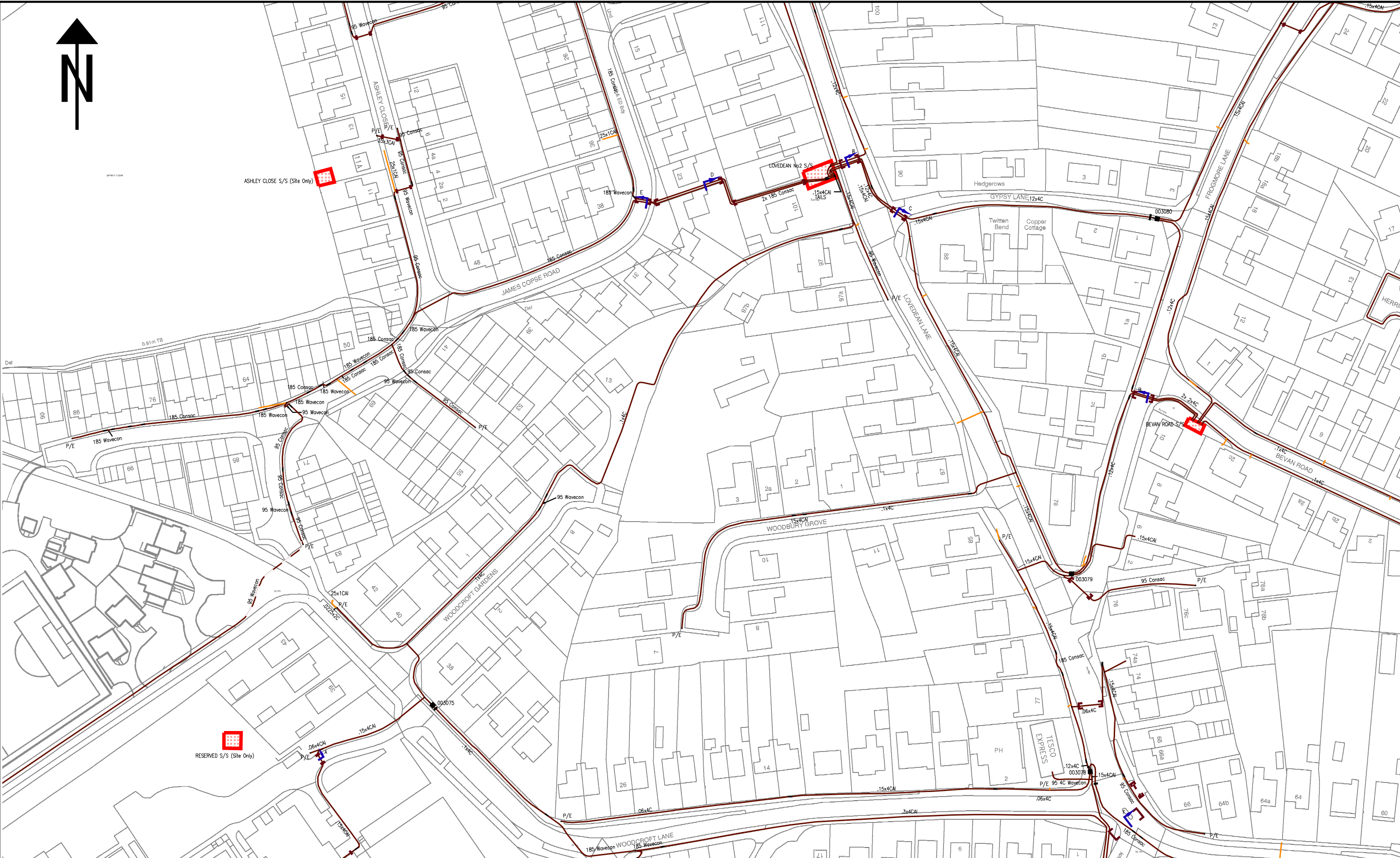


Affected Utilities

Scottish and Southern Electricity



NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID				WARNING There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive - Avoiding Danger from Buried Cables - should be consulted before commencing excavation work. (available from the HSE) WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE G56 SHOULD BE CONSULTED. (AVAILABLE FROM THE HSE)		BASED UPON THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE. CROWN COPYRIGHT RESERVED.			
						This copy has been made by or with the authority of Southern Electric Power Distribution plc. pursuant to section 47 of the Copyright, Designs and Patents Act 1988 ('the Act'). Unless the Act provides a relevant exception to copyright, the copy must not be copied without the prior permission of the copyright owner. Template: SIAS NRSWA COL A3 plot		H.V. MAINS RECORD	
				Southern Electric Power Distribution plc. Registered in England No. 04094290 Registered Office: No. 1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH		PORTSMOUTH 023-9262-4200		CHECKED	
				UNCONTROLLED COPY Subject to Revision Master held at		Grid Ref: SU68731224 Scale: 1:1250 Date: 28/03/2018			
services l.v. h.v. e.h.v.									
FOOTPATH 0.40m 0.45m 0.60m 0.75m									
ROAD CROSSING 0.60m 0.60m 0.75m 0.90m									
l.v./services - up to 1000V.									
h.v. - over 1000V. to 11,000V.									
e.h.v. - 22,000V. to 132,000V.									



NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID <table><thead><tr><th></th><th>services</th><th>l.v.</th><th>h.v.</th><th>e.h.v.</th></tr></thead><tbody><tr><td>FOOTPATH</td><td>0.40m</td><td>0.45m</td><td>0.60m</td><td>0.75m</td></tr><tr><td>ROAD CROSSING</td><td>0.60m</td><td>0.60m</td><td>0.75m</td><td>0.90m</td></tr><tr><td>l.v./services</td><td colspan="4">- up to 1000V.</td></tr><tr><td>h.v.</td><td colspan="4">- over 1000V. to 11,000V.</td></tr><tr><td>e.h.v.</td><td colspan="4">- 22,000V. to 132,000V.</td></tr></tbody></table>					services	l.v.	h.v.	e.h.v.	FOOTPATH	0.40m	0.45m	0.60m	0.75m	ROAD CROSSING	0.60m	0.60m	0.75m	0.90m	l.v./services	- up to 1000V.				h.v.	- over 1000V. to 11,000V.				e.h.v.	- 22,000V. to 132,000V.				WARNING There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive - Avoiding Danger from Buried Cables - should be consulted before commencing excavation work. (available from the HSE) WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE G56 SHOULD BE CONSULTED. (AVAILABLE FROM THE HSE)		BASED UPON THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE. CROWN COPYRIGHT RESERVED. This copy has been made by or with the authority of Southern Electric Power Distribution plc. pursuant to section 47 of the Copyright, Designs and Patents Act 1988 ('the Act'). Unless the Act provides a relevant exception to copyright, the copy must not be copied without the prior permission of the copyright owner. Template: SIAS NRSWA COL A3 plot Southern Electric Power Distribution plc. Registered in England No. 04094290 Registered Office: No. 1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH		Scottish & Southern Electricity Networks L.V. MAINS RECORD PORTSMOUTH 023-9262-4200 UNCONTROLLED COPY Subject to Revision Master held at		Grid Ref: SU68731224 Scale: 1:1250 Date: 28/03/2018	
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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. 08457 708090 for southern England or 0800 300999 for Scotland.

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

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

Watch it! - Working in the vicinity of underground cables

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

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

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

Supplies To Properties, etc.

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

Major Circuits

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

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

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

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

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

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

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

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

Watch it! - Working in the vicinity of overhead lines

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

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

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

Always remember that:

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

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

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

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

GUIDE TO INTERPRETING MAINS RECORDS PLANS

PRODUCED BY MAPPING SERVICES



INTRODUCTION

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

WHEN WORKING IN THE VICINITY OF ELECTRICITY CABLES AND OVERHEAD LINES PLEASE 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 Energy to display the cable information see Appendices.
- Do** Use a cable avoidance tool (CAT) to determine the position of the existing cables in the work area. The positions should be clearly marked and further tests made as work proceeds. **If in doubt, get advice from your supervisor.**
- Do** Hand dig trial holes over the indicated route of the cable, excavate alongside.
- Do** Ask for a cable to be made dead if it is buried in concrete. Please note that this is likely to be a costly process.
- Do** Watch for signs of cables as work progresses, such as marker tapes or cable covers which may be exposed.
- Do** Backfill carefully using stone free soil around cables, replacing marker tapes and covers.
- Do** Ensure that there is maximum clearance above all cable & joints.
- Do** Notify Scottish & Southern Energy immediately should accidental damage to cables occur however large or small. Arrange to keep people well clear of the cable that has been damaged. Do not backfill an area where cable damage has occurred.

DON'T'S

- Don't** Operate a bulldozer, scraper, dragline or excavator unless you are satisfied that there are no buried cables or overhead lines in the working area.
- Don't** Use picks, forks or pointed instruments in soft clay or soil where cables are present, exercise extreme caution where such instruments are used to free lumps of stone or to break up firmly compacted ground.
- Don't** Use exposed cables as a convenient step or handhold.
- Don't** Handle or attempt to alter the position of any cable.

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

IF IN DOUBT ASK SCOTTISH & SOUTHERN ENERGY.

UNDERSTANDING THE CABLE INFORMATION ON THE PLANS.

AVERAGE DEPTH OF CABLES:

Footpaths 0.6 metres

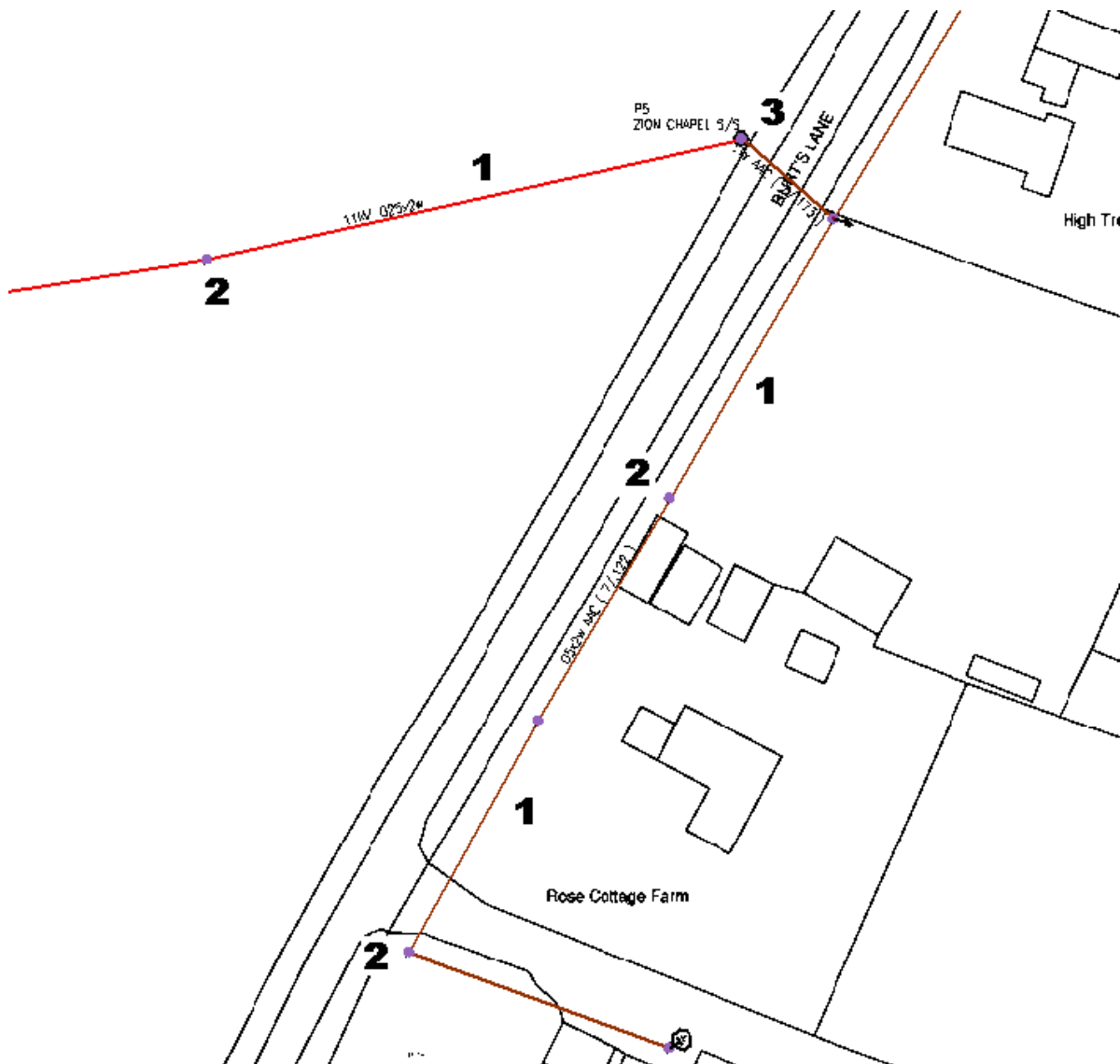
Road Crossings 0.75metres

NB These depths are only approximate, depths may vary. It should also be noted

That surface levels can change subsequent to the cables being laid.

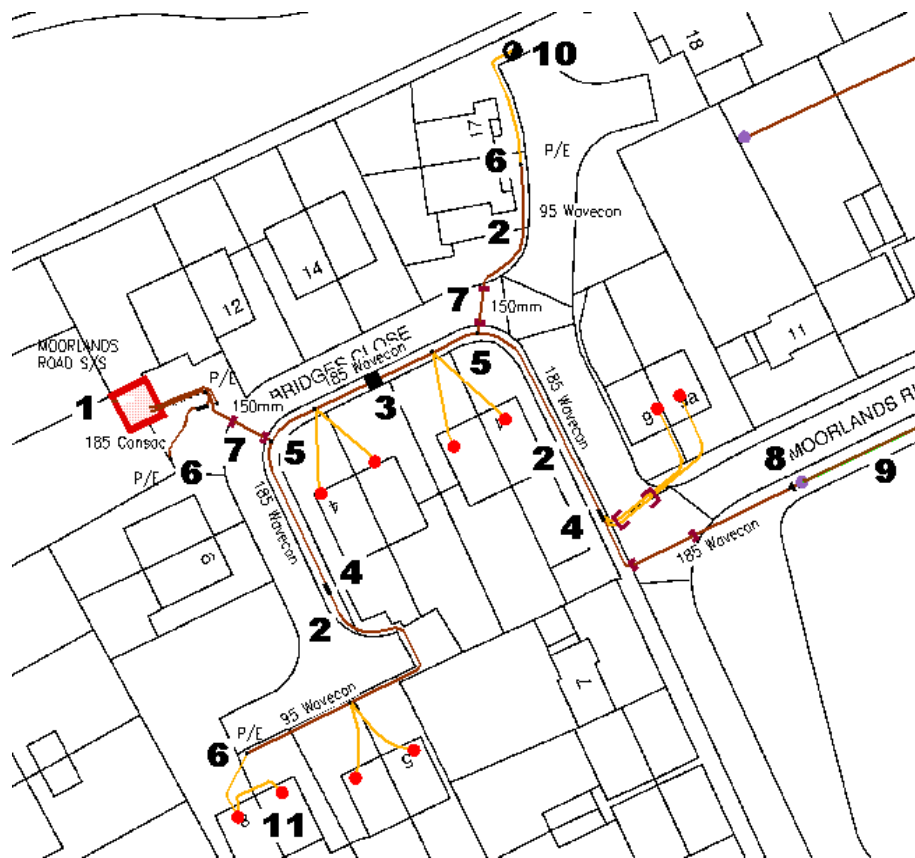
Mains records symbols definitions and examples:

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



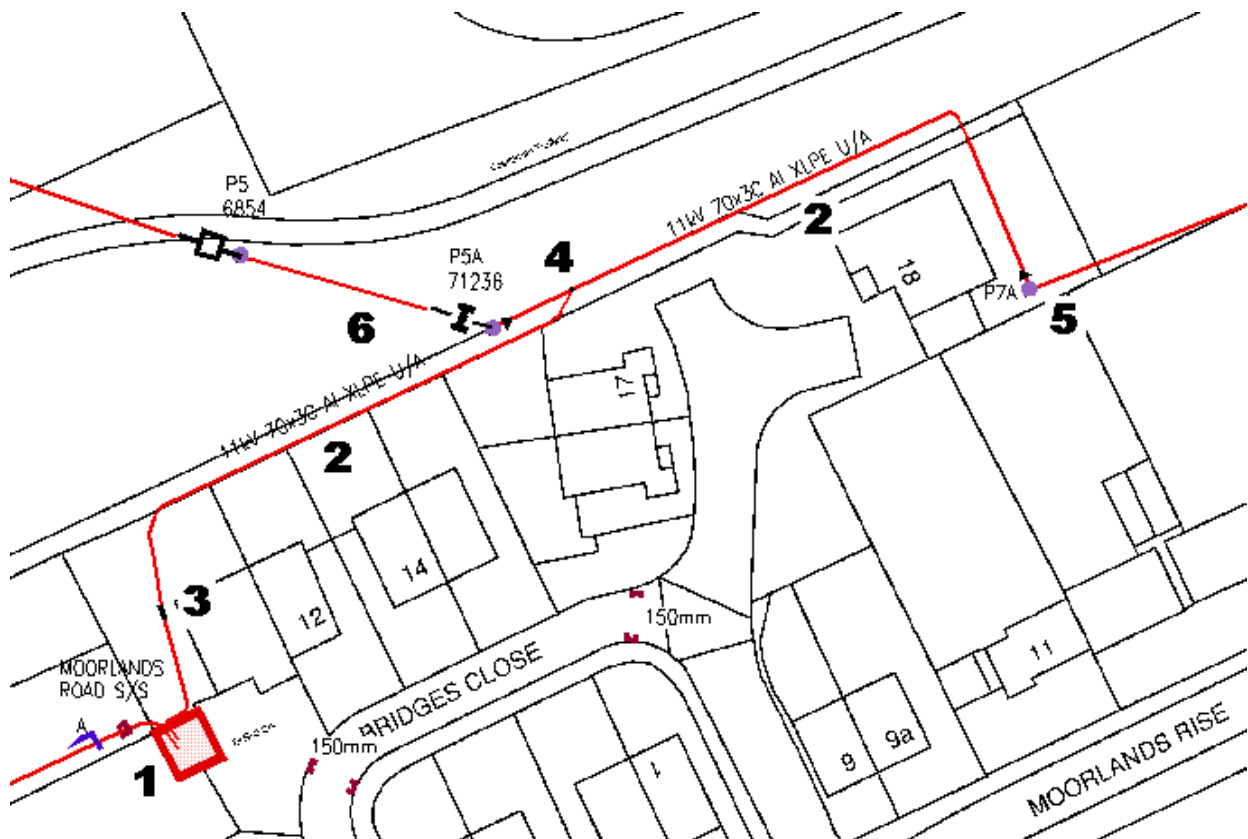
1. Overhead Line – These can be either High Voltage or Low Voltage, colour denotes voltage.
2. Poles.
3. Pole Mounted Transformer.

B) Typical example of Low Voltage cable records:



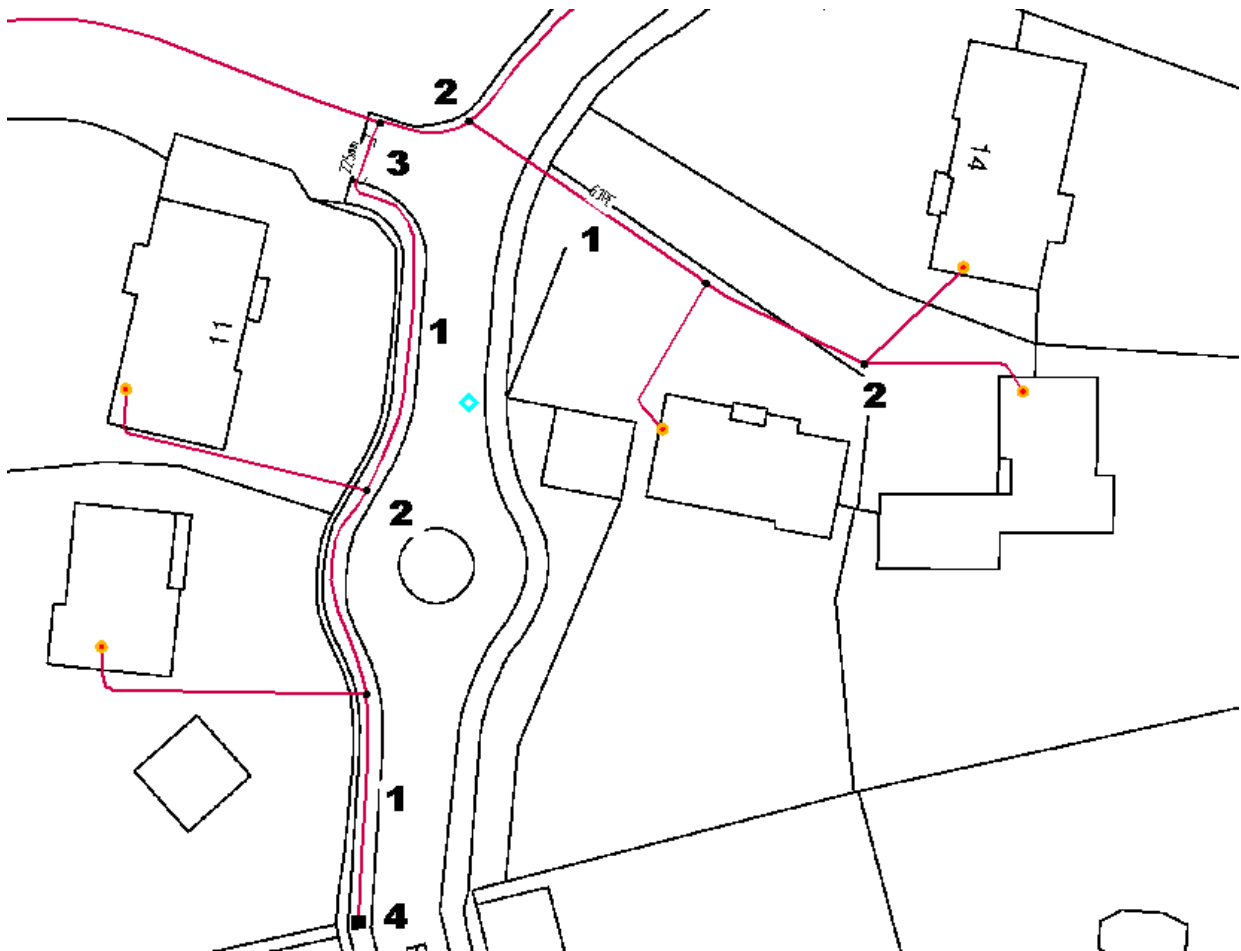
1. Sub Station
2. Low Voltage Underground cable.
3. Link Boxes: This is a box with a manhole cover marked as belonging to Scottish & Southern Energy containing links. Either two or four cables will lead away from a link box.
4. Straight Joint: This is where two separate cables are joined together.
5. Breech Joint: This is where another cable is attached to the main.
6. Pot End: This is the end of the cable. In certain circumstances service cables to properties can be taken from the pot end. These services may not be shown on the plans.
7. Road crossing duct where a cable is routed under a path or road.
8. Cable terminations/Pole Box: Where underground cables are connected to overhead lines
9. Overhead line.
10. Street Lamps.
11. Services to properties: The service cable to an individual property are not always shown on the mains records that Scottish & Southern Energy supply.
In some cases a service can be looped from an adjacent property.
Some services are laid through ducts from the mains to the meter position when laid.

C) Typical example of High Voltage cable record.



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

D) Typical example of Gas pipe record



1. Gas Pipes- Colour denotes pressure.
2. Gas joint
3. Road crossing duct where a pipe is routed under a path or road.
4. Connection Point. Position where network is connected to national gas suppliers network.

Further Notes.

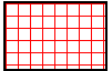
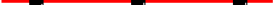
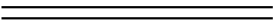
The various sizes of cables and pipes are shown alongside the routes.

IF IN DOUBT ASK SCOTTISH & SOUTHERN ENERGY

GIS ELECTRIC SYMBOLS (SOUTH)

	LV UNDERGROUND SERVICE CABLE		POLE
	LV UNDERGROUND MAINS CABLE		POLE MOUNTED TRANSFORMER
	2KV-3.3KV UNDERGROUND CABLE		SUBSTATION
	6.6KV UNDERGROUND CABLE		LINK BOX
	11KV UNDERGROUND CABLE		PILLAR
	22KV UNDERGROUND CABLE		MAJOR PIPELINE
	33KV UNDERGROUND CABLE		ASSUMED ROUTE
	66KV UNDERGROUND CABLE		CROSS SECTION
	132KV UNDERGROUND CABLE		DUCTING
	LV OVERHEAD LINE		FLYING STAY
	2-3.3KV OVERHEAD LINE		PME EARTH
	6.6KV OVERHEAD LINE		NEUTRAL EARTH
	11KV OVERHEAD LINE		OIL/GAS GAUGE
	22KV OVERHEAD LINE		OIL/GAS TANK
	33KV OVERHEAD LINE		BALANCER
	66KV OVERHEAD LINE		REGULATOR
	132KV OVERHEAD LINE		PIT
	FIBRE OPTIC CABLE		SCHEMATIC CONNECTOR
	PILOT CABLE		SUPPLY LOCATION-PROPERTY
	CIRCUIT BREAKER		SUPPLY LOCATION-OTHER
	SWITCH DISCONNECTOR		SUPPLY LOCATION-STREET FURNITURE
	POLE BOX		
	STRAIGHT JOINT		
	TEE JOINT		
	TRIFURCATING JOINT		
	POT END JOINT		
	CAPPED END JOINT		
	SEALING END JOINT		
	SERVICE CONNECTOR JOINT		
	O/H CONNECTOR JOINT		
	WALL BOX JOINT		

GIS ELECTRIC SYMBOLS (NORTH)

	FIBRE OPTIC CABLE		LINK BOX
	PILOT CABLE		PILLAR
	6.6/11kV UNDERGROUND CABLE		SUBSTATION
	33kV UNDERGROUND CABLE		WATER PIPELINE
	132kV UNDERGROUND CABLE		OIL PIPELINE
	LOW VOLTAGE UNDERGROUND CABLE		GAS PIPELINE
	6.6/11kV OVERHEAD LINE		SWITCH DISCONNECTOR
	33kV OVERHEAD LINE		CIRCUIT BREAKER
	132/275kV OVERHEAD LINE		SUPPLY POINT
	LOW VOLTAGE OVERHEAD LINE		
	POLES		
	TOWER		
	POLE TERMINATION		
	JOINTS		
	DUCTING		

GIS Gas Symbols

	Medium Pressure Pipe
	Low Pressure Pipe
	Gas Ducting
	
	Gas Supply Point
	Gas Joint
	End Closure
	Pressure Reduction Station
	Gas Utility Connection Point
	Valve

GIS Environmental Guide

Countryside Agency



Areas of Outstanding Natural Beauty (AONB)



National Park

Environment Agency



Borehole



Water Extraction Point



Sensitive Waterway



Source Protection Zone



Vulnerability Zone

Forestry Commission



Access



Ownership

English Heritage/Historic Scotland



Monuments

SEPA



Flood Area



Flood Location

English Nature/Scottish Natural Heritage



Site of Special Scientific Interest (SSSI)



National Nature Reserve (NNR)



RAMSAR



Special Area of Conservation (SAC)



Special Protection Area (SPA)

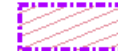


Ancient Woodland

Areas of Concern



Contaminated



Cadmium



Methane



Heavy Metal-Unclassified



Asbestos



Ordnance



Mercury



Restricted Access

Utilities Report



Affected Utilities

SGN - (Southern Gas Networks)

Our Ref: 12486225 Your Ref: LM 63704/BRK

Friday, 23 March 2018

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



Dear Christina Elliott

Thank you for your enquiry dated Friday, 23 March 2018

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

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

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

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

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

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

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

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

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



SGN
Your gas. Our network.

Contact Us

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

Low Pressure Mains

Medium Pressure Mains

Intermediate Pressure Mains

High Pressure Mains

Some Examples Of Plant Items

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Digsite:

Line:

Area:

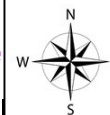
Las

GTs

SSSIs

Diameter Change

Material Change



This information is given as a guide only and its accuracy cannot be guaranteed.

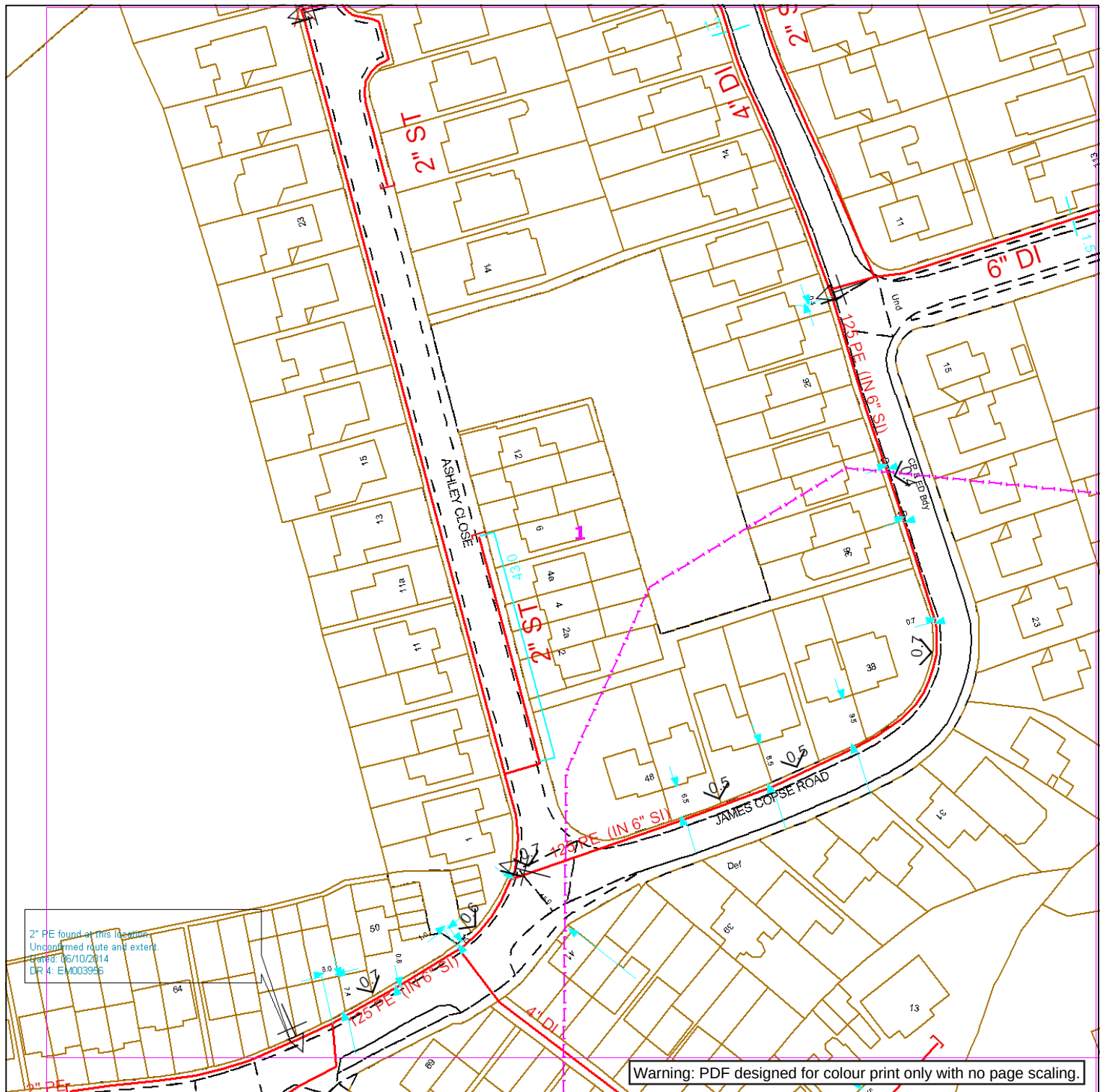


This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc. are not shown but their presence should be anticipated. You should be aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your proposed works are close to one of these pipes, you should contact the SGN Safety Admin Team on 0800 912 1722 for advice. No liability of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

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

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Plans generated by DigSAFE Pro (tm) software provided by LinesearchbeforeUdig



Contact Us

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

Low Pressure Mains

Medium Pressure Mains

Intermediate Pressure Mains

High Pressure Mains

Some Examples Of Plant Items

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Valve

Syphon

Depth of Cover

Digsite:

Line:

Area:

Las

GTs

SSSIs

Diameter Change

Material Change



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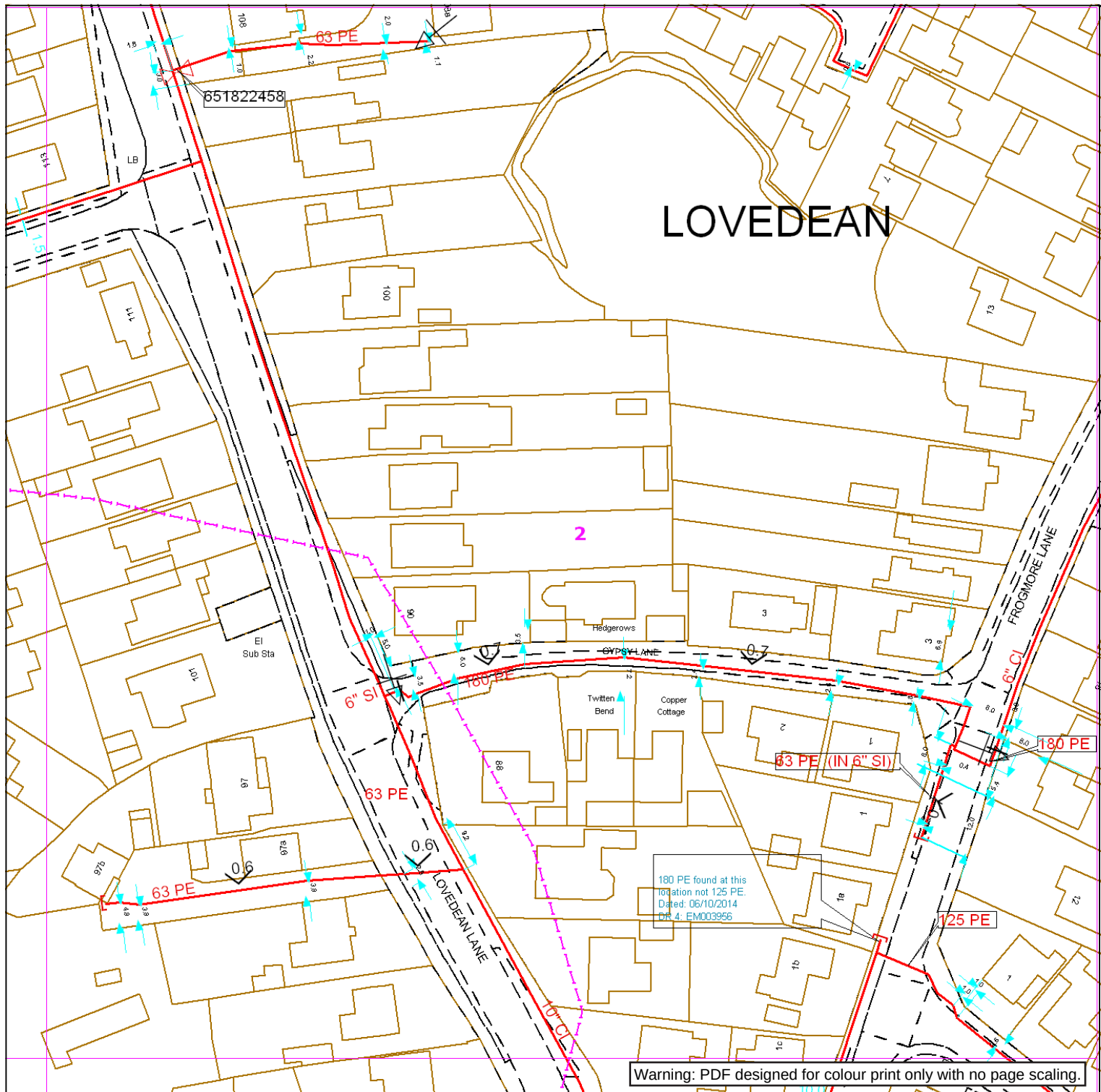
Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 111 999

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Plans generated by DigSAFE Pro (tm) software provided by LinesearchbeforeUdig

Date Requested: 23/03/2018
Job Reference: 12486225
Site Location: 468741 112255
Requested by:
Ms Christina Elliott
Your Scheme/Reference:
LM 63704/BRK

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



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Email:
plantlocation@sgn.co.uk

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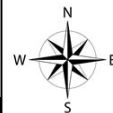
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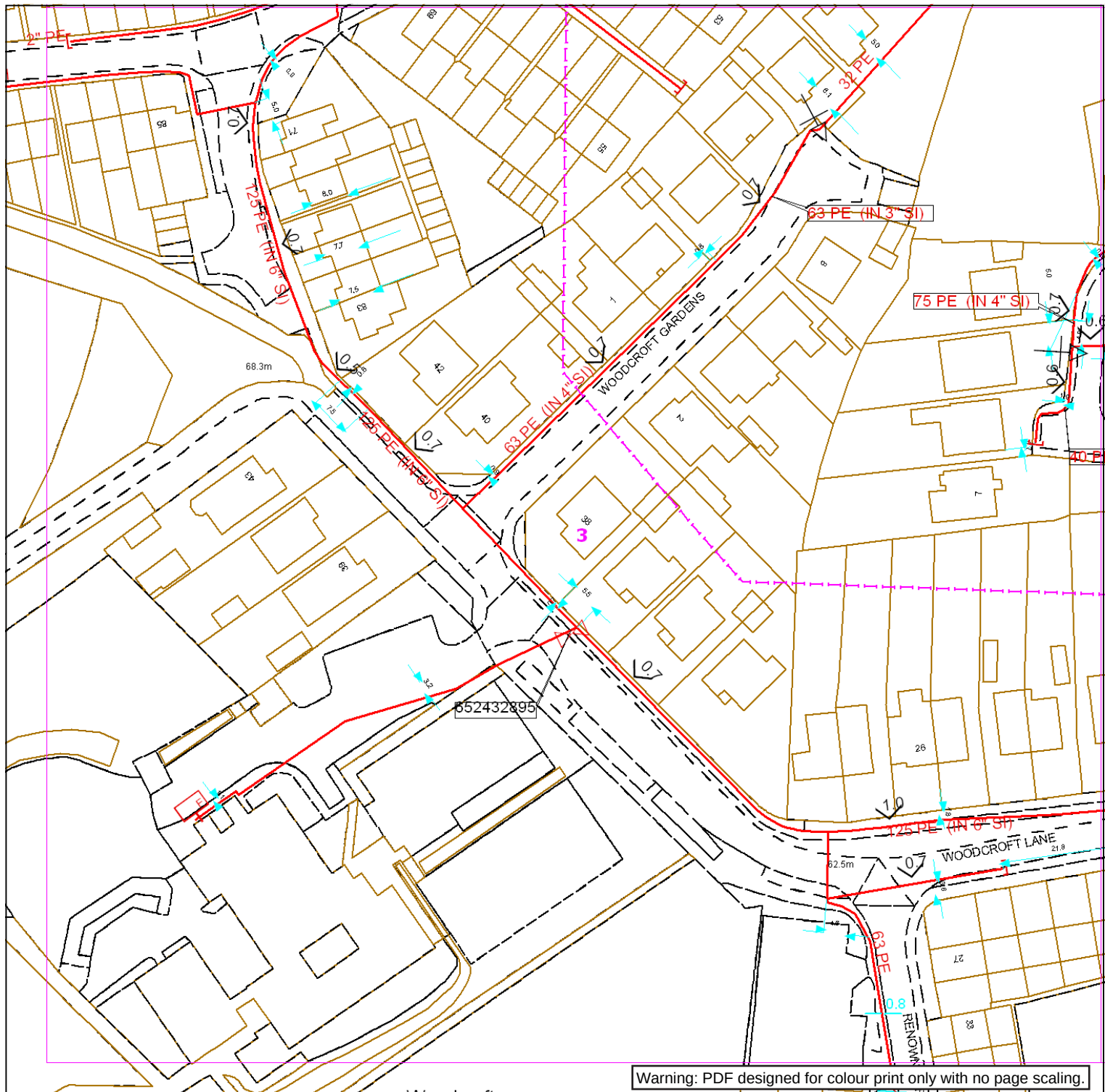
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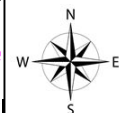
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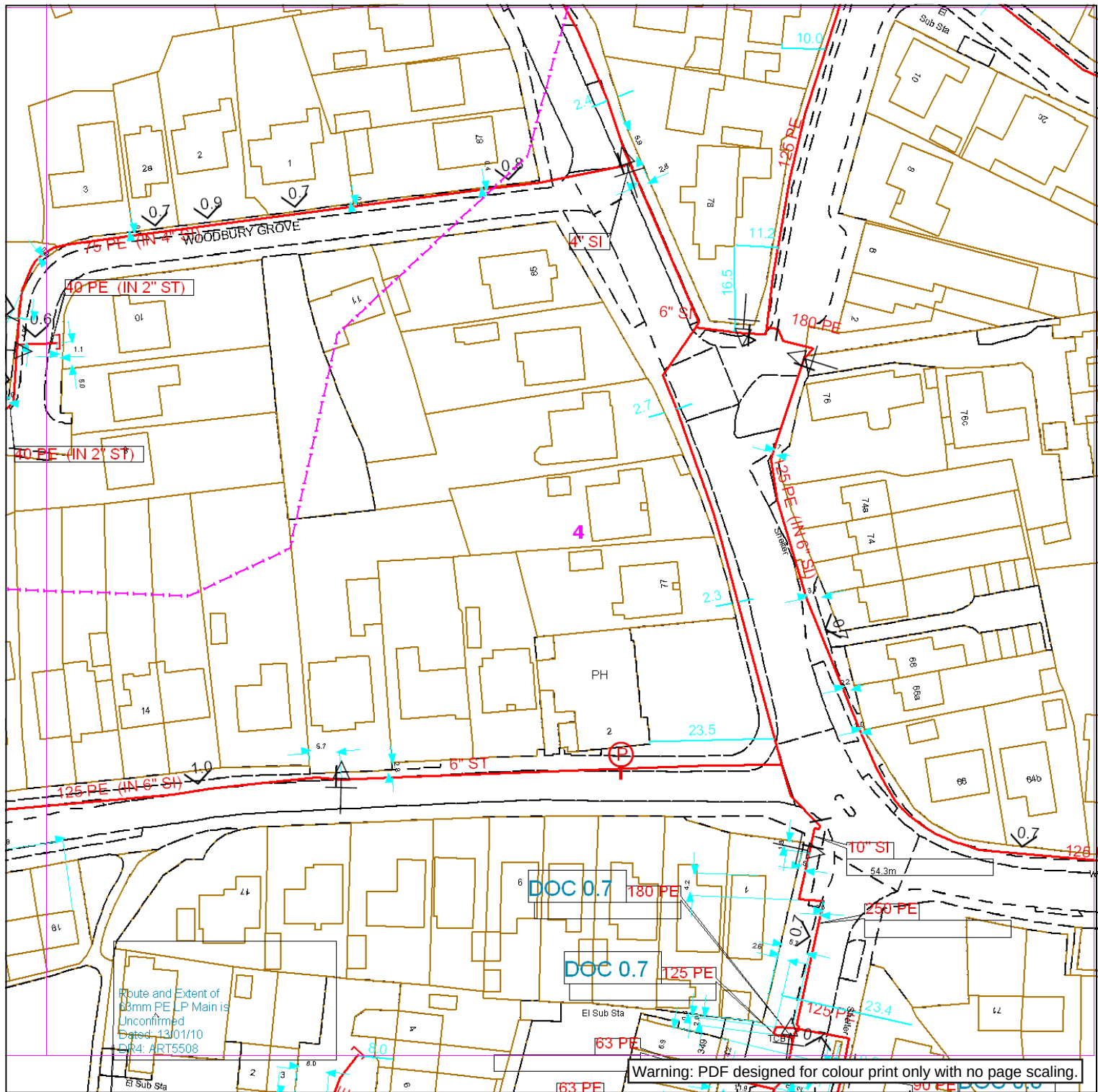
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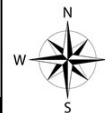
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Map Symbols

VALVE OPEN	VALVE CLOSED	GOVERNOR	END CLOSURE	SYPHON	REDUCER	TEE
TEST POINT	CATHODIC PROTECTION	GENERAL REFERENCE	FLOW MEASURE	DIP POINT	MONO ETHYLENE GLYCOL	OILING POINT
FLOW STOP	PRESSURE MEASUREMENT	STAND PIPE	OFFICIAL MINISTRY RECORD	PURGE POINT	GAS CONDITIONER	DRAIN POINT
					LP MAINS	
SKETCH BUBBLE	DEPTH OF COVER	METER	MATERIAL CHANGE		MP MAINS	
					IP MAINS	
					LHP MAINS	
					HISTORY DATA	
					SSSI	
PIG TRAP	CROSSOVER CONNECTION	CHANGE OF DIAMETER	PIPE JOINT		CONTACT ZONE	
						LTS



SGN

Your gas. Our network.

Dig safely

Measures to avoid injury
and damage to gas pipes



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

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

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

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

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

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

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

In a gas emergency

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

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

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

Additional reference material

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





Making an enquiry for gas mains or services maps

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

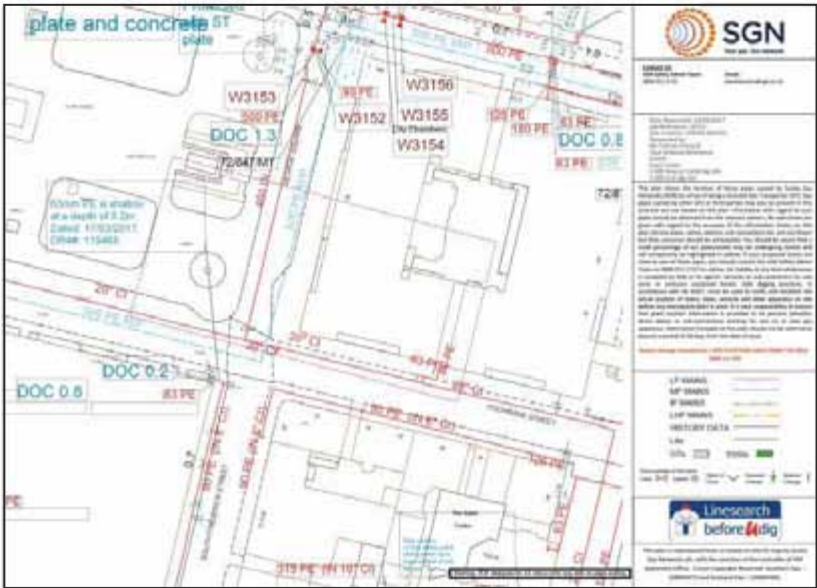
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

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

What you're likely to be sent

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

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



Example of a gas map

Note: Service pipes are not shown on our maps

When working near our gas mains and services

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Safe system of work

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

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

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Financial

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

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

HSE

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

Minimum safe working distances

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

Surface boxes and manholes

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

Deep excavations

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



Crossing our mains or services

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

Exposed plant

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

Hot work

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

Backfilling

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

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

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

Access

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





Mechanical excavation

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

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

Major accident hazard pipelines

High pressure pipeline

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



Pipeline markers

High pressure

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

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



Wind turbines

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

