making the right connections

Land off Llanrwst Road

Utility Study

Level 1

Document Status				
Issue/Revision	Comments	Date	Prepared By	Checked By
1	First Issue	22/07/2022	Joanne Blackburn	Casey Watmore
2				
3				

UCML Utility Study – Level 1

Land off Llanrwst Road,

Conwy

Produced for: Atticus Land and Developments (on behalf of Adra)

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Contents

1.0 Introduction 4
2.0 Scope and Objectives 7
3.0 Assumptions and Exclusions 8
4.0 Cost Summary 9
5.0 Electricity 10
6.0 Gas 13
7.0 Water 16
8.0 Communications 20
9.0 Conclusion 23
10.0 Further UCML Services 25
Appendices 28

1.0 Introduction

UCML has been instructed by Atticus Land and Developments (hereafter referred to as 'the Client') to provide a desktop utility study to identify the outline constraints derived from the statutory utility infrastructure on a proposed residential development of up to 80 no. dwellings. The site is located off Llanrwst Road, Conwy, as indicated within Figure 1.1 below.

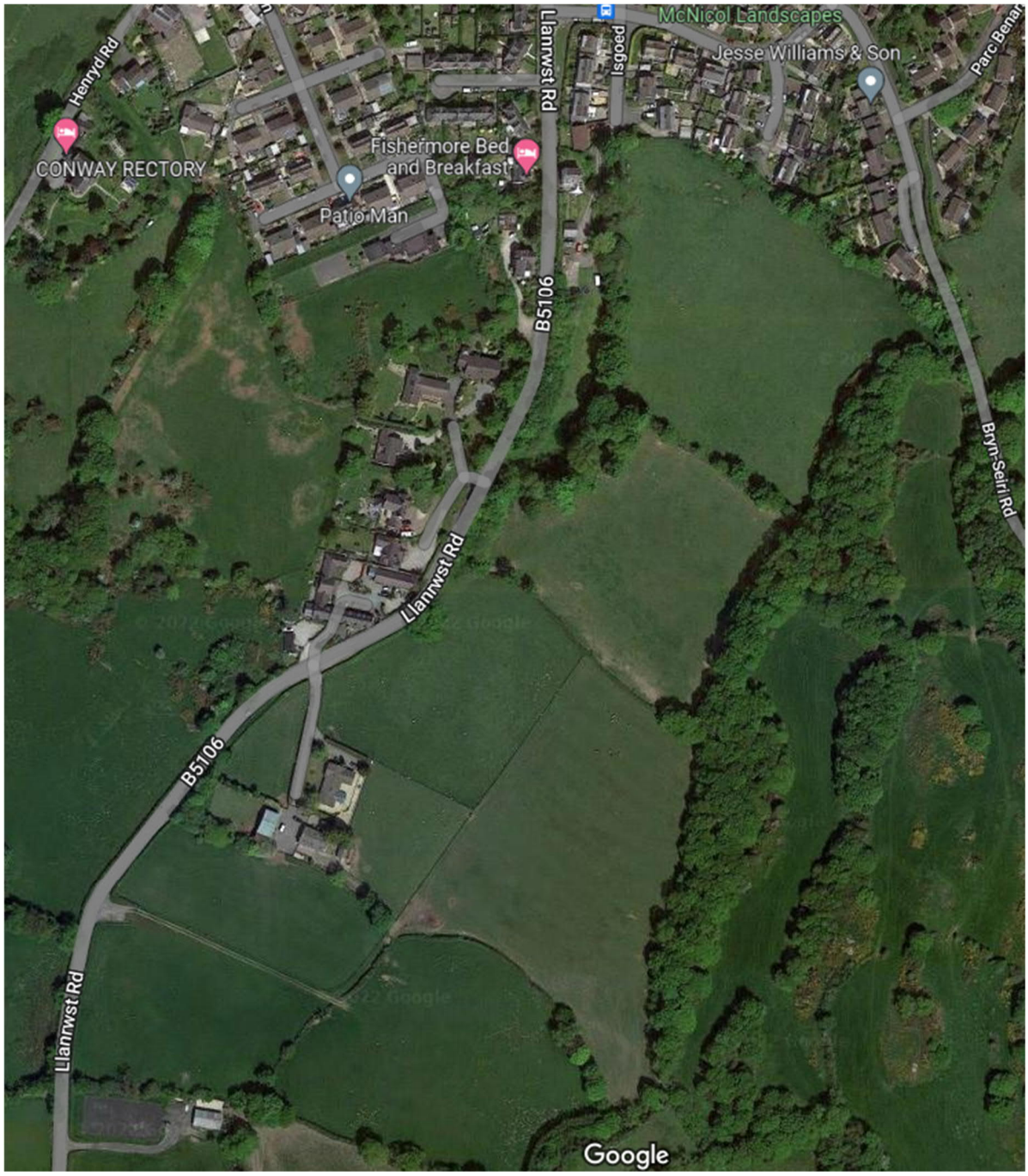


Figure 1.1 – Aerial view of existing site

UCML has been commissioned to provide a desktop utility study defining potential cost and timescale risks that could impact on the overall delivery of the project. The principal aim of this utility study is to identify the key constraints derived from statutory utility infrastructure on the proposed development. The information provided within this desktop study is based on review of the current site layout plan (drawing no. C1098-006, dated 30/05/2022) provided to UCML by the Client, and indicated in Figure 1.2 below.

Figure 1.2 – Site Layout Plan

This desktop study has been produced using the statutory records received from each relevant body. The host statutory network operators which operate in the vicinity of the development site and covered within this study are listed in Table 1.1 below.

Utility	Statutory Operator
Electricity	SP Energy Networks
Gas	Wales & West Utilities
Water	Dŵr Cymru Welsh Water
Telecoms	Openreach

Table 1.1 – Host Statutory Network Operators

UCML is not responsible for the accuracy or quality of the information provided on statutory utility infrastructure records, and has attempted to use reasonable skill and care in investigating the existing site services. Unless stated otherwise, UCML has not made any provision for out-of-area water mains, private networks, unrecorded networks, Liquid Petroleum Gas (LPG) networks, street lighting, CCTV, traffic signals/illuminated signage, data centre networks, electricity generation installations, interconnectors, or drainage/sewerage networks.

Please note, all information on the drawings contained within this utility study and elsewhere is indicative only. The verification of the details and plant location given on the relevant infrastructure records should be undertaken using the following methods;

- The use of plant location equipment to trace all underground plant.
- The use of hand dug trial holes to confirm the precise location of plant.
- The use of suitable paint or markers on the surface to clearly indicate the position of buried apparatus.

All works undertaken are to be in accordance and compliance with the Construction Design and Management 2015 Regulations, published Health & Safety Guidelines, and the agreed working practices of the relevant utility companies. The following assumptions must be made in regards to any existing utility apparatus;

- All mains, services cables, and pipes should be assumed live until proven dead prior to any excavation, demolition or groundworks commencing.
- Any existing building is assumed to have live services until proven otherwise.
- Any site is assumed to have existing utility apparatus located within the boundary until proven otherwise.
- Service connections are not indicated on all utility infrastructure records. Where no service connections are indicated, their presence should be anticipated until proven otherwise.

2.0 Scope and Objectives

Utilities Connections Management Limited (UCML) is an independent Utility Consultancy providing services relating to the provision of utility connections to all types of developments.

This desktop utility study aims to provide a 'snapshot' in time of the current statutory utility networks and review the potential connection, diversion, and disconnection works that may be required to accommodate the development proposals. The objective of the commission is to provide a level of information relating to budgetary costs and risks, without incurring significant costs relating to distribution network studies. It should be noted that as this study is desktop in nature, no site visits or surveys have been undertaken during its completion.

The scope of works undertaken by UCML may be summarised as follows;

- Obtain the statutory Network Operators' infrastructure records.
- Review the existing utility distribution networks within the local area of the site.
- Provision of budget costs for proposed disconnection, diversion, and connection works.
- Identification of possible abnormal costs associated with existing and proposed infrastructure.
- Highlighting of abnormal legal requirements including wayleaves and easements.

UCML's desktop utility studies provide a detailed overview of the statutory electricity, gas, clean water and telecommunications infrastructure in the vicinity of a proposed site, ideal for:

- Due diligence prior to land purchase to allow negotiation.
- Risk assessment prior to tender.
- Assistance with site layout design to minimise impact on existing utilities, taking into account statutory utility infrastructure legal requirements.
- Detailed planning statements.
- Investment analysis.

3.0 Assumptions and Exclusions

In view of the limitations of the available information, the following assumptions have been made in order to produce this utility study;

- All estimated loads have been based on information provided in the Network Operators Distribution Code and other documented standards.
- The information provided within the desktop study is based on the development site area as identified on the proposed site layout plan shown in Figure 1.2 within the introduction. Any land falling outside of the provided boundary is outside of the scope of this desktop study and, should it be incorporated within the proposed development boundary, this may affect the information and recommendations provided within this desktop study.
- The desktop study has been produced based on the specification provided by the Client/Developer at the time of instruction. Any changes to the size, type, number of specification of the development (for instance the extent of EV charging provision and/or use of Low Carbon heating solutions) may affect the information and recommendations provided within this desktop study.
- In the timescales and budget costs quoted, no allowances have been made in respect to the following unless stated otherwise;
  - Wayleaves, easements, or access rights.
  - Reinforcement charges.
  - Land transfers or lease arrangements for substation requirements if applicable.
  - Abnormal off-site civils.
  - Specialist traffic management (non-standard).
  - On-site civils and builders work.
  - Seasonal Embargoes.

  It should be noted that all budgetary figures quoted are exclusive of any Value Added Tax (VAT) that may be applicable unless stated otherwise.

4.0 Cost Summary

Matrix Key	
	Do not envisage any major issues.
	Could cause delay that can be measured in weeks, and can also be prevented.
	Could cause delay that can be measured in months, and may be prevented.
	Could cause major delay, that may not be mitigated.

Utility	Risk
Electricity	
Disconnection Works – None currently anticipated Diversionary Works – None currently anticipated Connections – £142,500.00 (based on assumed HV POC) Total Electricity Costs - £142,500.00	
Gas	
Disconnection Works – None currently anticipated Diversionary Works – None currently anticipated Connections – None currently anticipated (based on use of electric heating) Total Gas Costs - £Nil	
Water	
Disconnection Works – None currently anticipated Diversionary Works – None currently anticipated Connections – £125,000.00 Total Water Costs - £125,000.00	
Telecoms – Openreach	
Disconnection Works – None currently anticipated Diversionary Works – None currently anticipated Connections – £Nil (FTTP connections) Total Openreach Costs - £Nil	
Budgetary sums exclude Value Added Tax, on-site civils and principal contractor preliminaries.	

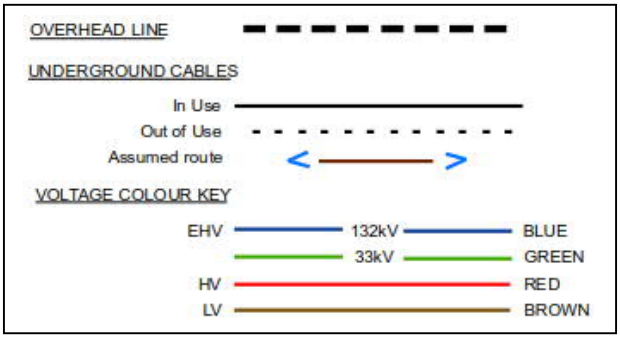
Table 4.1 – Cost Summary and Risk Matrix Table

5.0 Electricity

The electricity distribution network in the vicinity of the development site is under the ownership of SP Energy Networks and is operated within the terms of its Electricity Distribution License issued by Ofgem. The local electricity distribution network in the immediate vicinity of the site comprises of underground cables and associated substations operating at High Voltage (HV) and Low Voltage (LV).

The figure on the following page illustrates the location of existing SP Energy Networks infrastructure which has been extracted from its network records. The cables shown in red are operated at 11,000 Volts (HV), and those shown in brown are operated at 415 Volts (LV). Please refer to the infrastructure record appended to this study for further detail.

Figure 5.1 – Existing Electricity Infrastructure Plan



Disconnections: SP Energy Networks infrastructure record does not indicate any existing service cables within the development red line boundary and, as the development site appears to be greenfield, it can be assumed that none are present. No disconnection works are currently anticipated.

Diversions: SP Energy Networks infrastructure record indicates 11 kV HV and LV apparatus located in the wider vicinity of the development site, to the west and south west of the site. Based on desktop review of the current site plan, the existing network apparatus does not appear to be affected by the development proposals; therefore, no diversionary works are currently anticipated. Review of the final site layout plan and any associated off-site highway alteration drawings will be required to confirm.

Connections: The connection capacity required for the development will be dependant on the heating strategy to be utilised for the development, and the extent of Electric Vehicle (EV) charging units proposed to be installed. Based on current UK Government guidelines, it can be assumed that it is likely that a low-carbon heating strategy will be utilised for the development, and a minimum of 1 no. 7.2 kW EV charging unit will be installed on each plot. Based on this, it is envisaged that there may be sufficient capacity in the existing 11 kV HV network to provide supply to the proposed development. The use of a POC at 11 kV will trigger the requirement for an on-site secondary substation to be installed on-site to supply the LV network that will supply the individual dwellings.

A Point of Connection (POC) application is recommended to confirm the actual availability of capacity within the local electricity network and confirm the position from which a connection can be taken. For the purpose of this study, UCML has assumed that a connection can be taken from the 11 kV HV overhead network in the vicinity of the development site. A budget cost of £142,500.00 is recommended for connections.

6.0 Gas

The local Gas Distribution Network in the vicinity of the development site is owned and operated by Wales & West Utilities under its Gas Transportation License issued by Ofgem. The gas network in the immediate vicinity of the site comprises of gas mains and apparatus operating at Low Pressure (LP).

The figure on the following page is an extract from Wales & West Utilities' statutory records and details the currently indicated position of existing infrastructure, however it may be prudent to undertake a below ground survey to ensure there are no services present which are not recorded on statutory records. Please refer to the infrastructure record appended to this study for further detail.

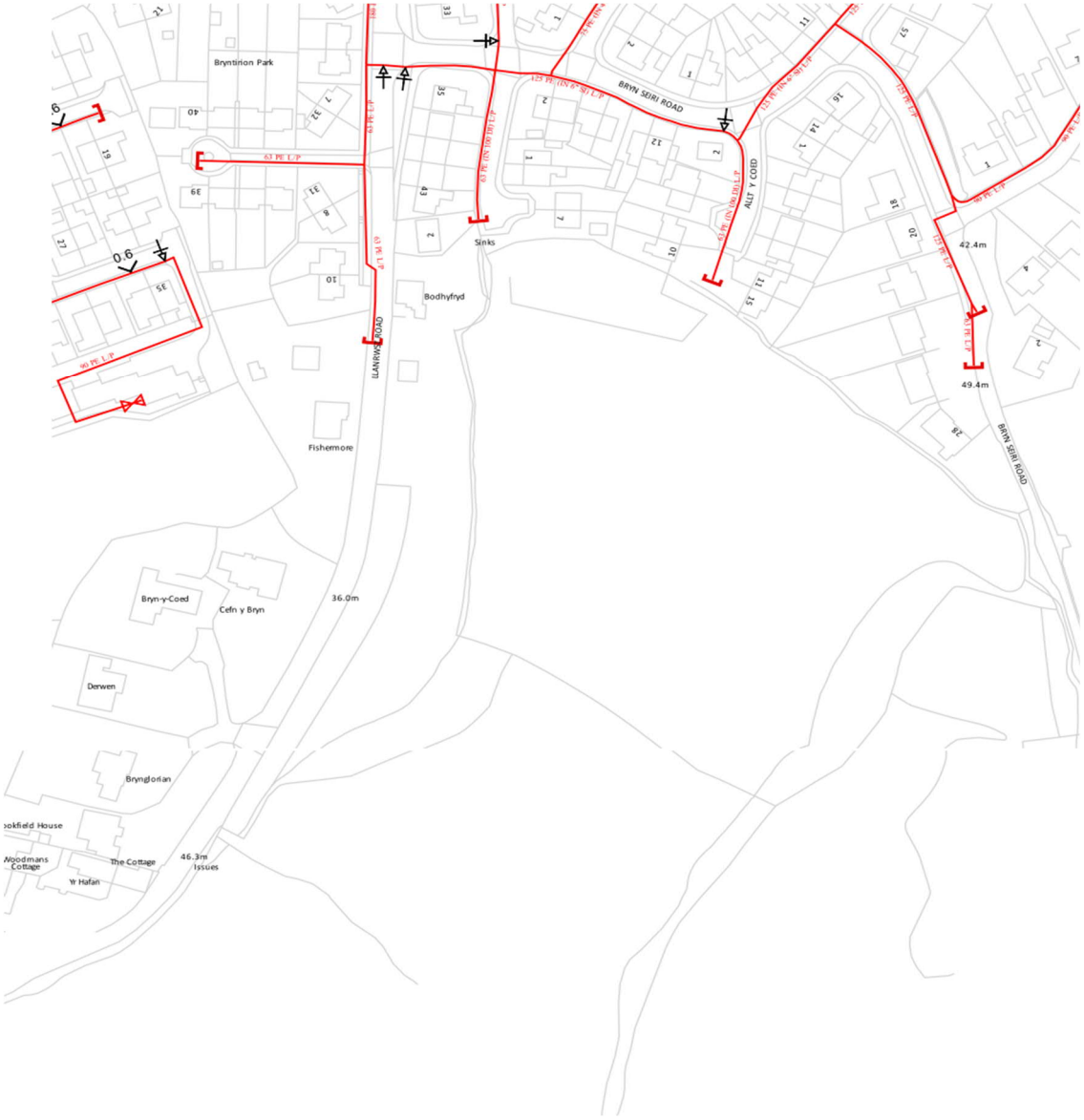


Figure 6.1 – Existing gas infrastructure plan

Disconnections: Wales & West Utilities do not typically indicate individual service pipes and associated apparatus on their infrastructure records; however, their presence should be anticipated until proven otherwise. as the development site appears to be greenfield, it can be assumed that none are present. No disconnection works are currently anticipated.

Diversions: Wales & West Utilities infrastructure record indicates LP apparatus located in the wider vicinity of the development site, to the north of the development site. Based on desktop review of the current site plan, the existing network apparatus does not appear to be affected by the development proposals; therefore, no diversionary works are currently anticipated. Review of the final site layout plan and any associated off-site highway alteration drawings will be required to confirm.

Connections: As discussed within the previous section, it is anticipated that the development will likely utilise a low-carbon electrical heating strategy to be in line with current and future Government guidelines. In this case, there would be no requirement for mains gas connections for the proposed development.

If gas connections are required for the development, it is envisaged that the existing LP mains network may not have sufficient capacity to support the development without network reinforcement works being completed. If a gas connection strategy is to be used, further investigation is recommended to confirm the availability of capacity within the local network.

7.0 Water

The local clean water distribution network in the vicinity of the development site is owned and operated by Dŵr Cymru Welsh Water within the terms of its statutory license issued by Ofwat. The clean water network in the immediate vicinity of the site comprises of trunk water mains, distribution water mains and associated apparatus. Please refer to the infrastructure record appended to this study for further detail.

The figure on the following page is an extract from Dŵr Cymru Welsh Water statutory records and details the current indicated position of existing infrastructure, however it may be prudent to undertake a below ground survey to ensure there are no unknown services which are not recorded.

Please note on rare occasions 'out of area' water supply authorities have water mains crossing other water supply authority areas. This is typically trunk or raw water mains transporting water extracted from reservoirs or water courses between areas. Unless stated otherwise, UCML's utility study covers the statutory water network operator for this region as identified within the introduction only.

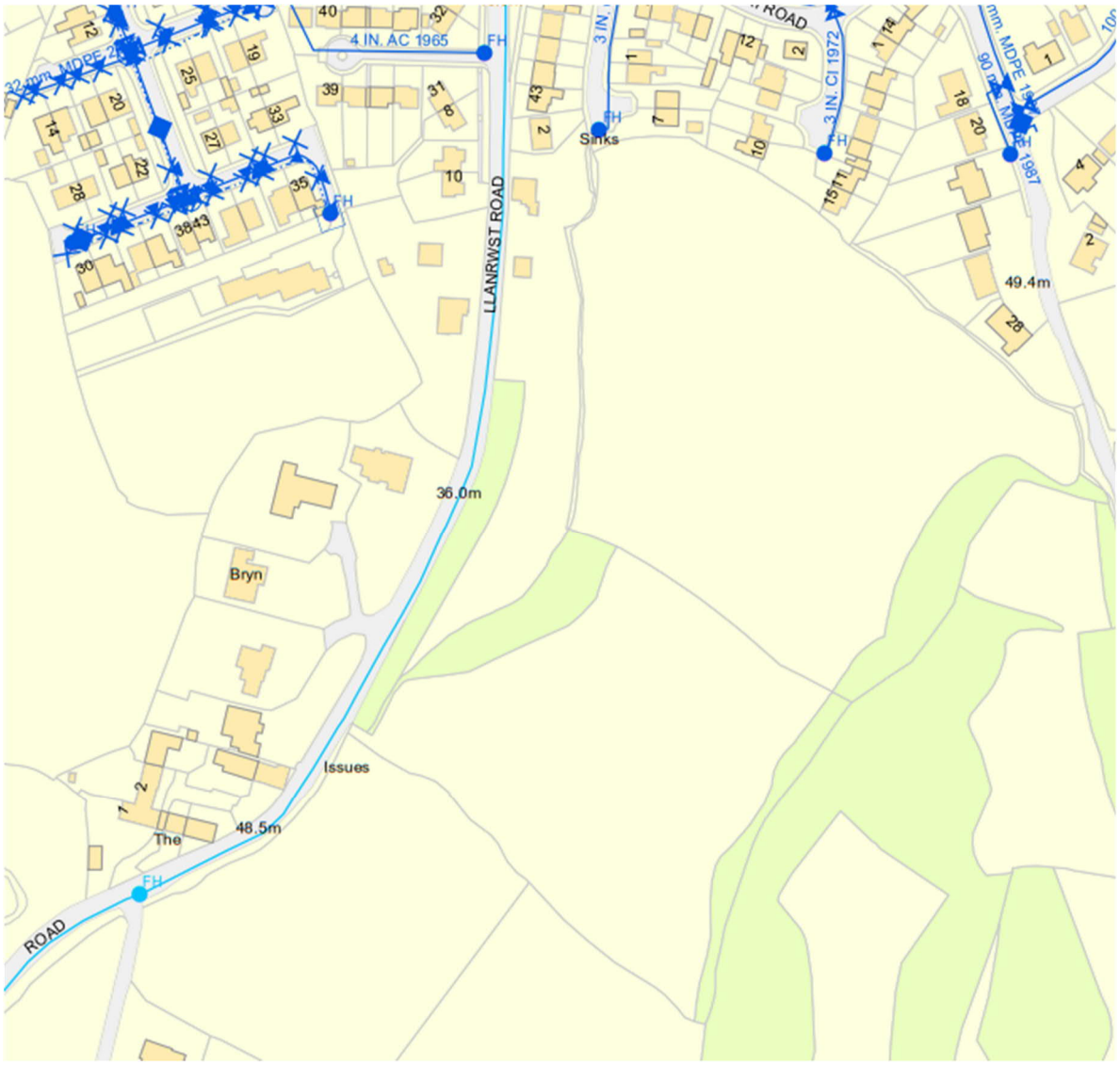
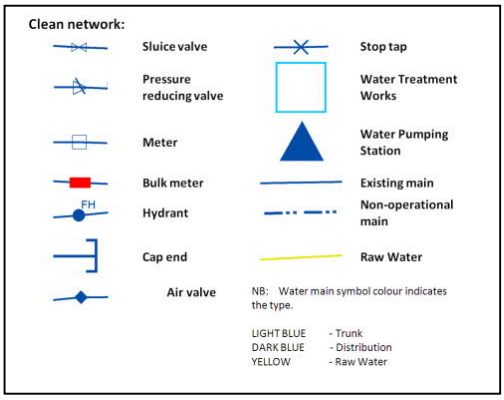


Figure 7.1 – Existing water infrastructure plan



Disconnections: Dŵr Cymru Welsh Water do not typically indicate individual service pipes and associated apparatus on their infrastructure records; however, their presence should be anticipated until proven otherwise. as the development site appears to be greenfield, it can be assumed that none are present. No disconnection works are currently anticipated.

Diversions: Dŵr Cymru Welsh Water infrastructure record indicates a 12" cast iron trunk main routed within the carriageway of Llanrwst Road. The current site layout plan indicates a site entrance will be constructed to serve the development off Llanrwst Road; however, provided no alteration will be made to the line or level of the existing carriageway as part of the site entrance construction works, the apparatus may not be affected by the development to the extent that diversionary works will be required. Review of the final site layout plan and any proposed off-site highway alteration drawings will be required to confirm, along with formal consultation with Dŵr Cymru Welsh Water.

Connections: It is envisaged there may be sufficient capacity in the existing infrastructure to supply the proposed development. However, a pre-development enquiry is recommended to confirm the availability of pressure within the existing network.

The provision of new water mains could be carried out under Section 41 of the Water Act 1991 whereby the developer may elect to pay a commuted sum amount based on projected occupancy of the units. This cost would be provided by Dŵr Cymru Welsh Water once they have prepared a mains design for the site.

The infrastructure charges applicable to developments within Dŵr Cymru Welsh Water's region for the current scheme of charges (2022-2023) are £428.00 per plot for clean water and £428.00 per plot for sewerage, both of which are applied to the clean water connection costs. Based on these infrastructure charges, allow a budget cost of £125,000.00 for mains and connections.

A Phase 2 ground investigation and risk assessment will be required to precisely identify contaminated and uncontaminated ground within the site. The level of contamination on-site will determine the material used for the water mains and service pipes on-site. If the level of contamination is low, standard polyethylene pipe could be used. However, if the level of contamination on-site is determined to be high, the site will require the use of barrier pipe laid in a sterile trench. Should the use of barrier pipe be required, this will increase the cost of connections significantly. As this is generally a greenfield site, it has been anticipated that the levels of contamination may be low and so standard polyethylene pipe could be used.

The Domestic Fire Safety (Wales) Measure, which was passed by the Welsh Assembly Government in February 2011, requires the installation of domestic fire sprinkler systems within all new build residential dwellings constructed from January 2016. The responsibility for the design of the sprinkler system will rest with the developer, installer or domestic fire sprinkler system designer, and the system should be in accordance with BS 9251:2014 (Fire Sprinkler Systems for Domestic and Residential Occupancies – Code of Practice) or BS 8458:2015 (Fixed Fire Protection Systems – Residential and Domestic Watermist System – Code of Practice for Design and Installation).

Dŵr Cymru Welsh Water will be required to assess the proposed fire sprinkler system design as part of their obligation to comply with the Water Regulations in order to ensure they meet the national requirements for design, composition and maintenance for water fixtures and fittings. For all single dwellings requiring a combined domestic and water/fire sprinkler system, a 32mm metered connection will be provided. Any water used by domestic fire sprinklers for firefighting purposes will not incur charges, and a rebate will be made for any water used for firefighting.

A number of options are available for the fire sprinkler systems installed within residential apartment blocks and multi-occupancy premises. Dŵr Cymru Welsh Water will not provide design guidance for sprinkler systems, the responsibility for the design of a suitable system for a development rests with the developer, installer or domestic fire sprinkler system designer.

8.0 Communications

8.1 Openreach

Openreach own and operate telecommunications apparatus in the vicinity of the development site within the terms of its statutory license issued by Ofcom. The Openreach network in the immediate vicinity of the site comprises of underground cables, overhead lines, and associated apparatus. Please refer to the infrastructure record appended to this study for further detail.

The figure on the following page is an extract from Openreach records and details the current indicated position of existing infrastructure, however it may be prudent to undertake a below ground survey to ensure there are no unknown services which are not recorded.

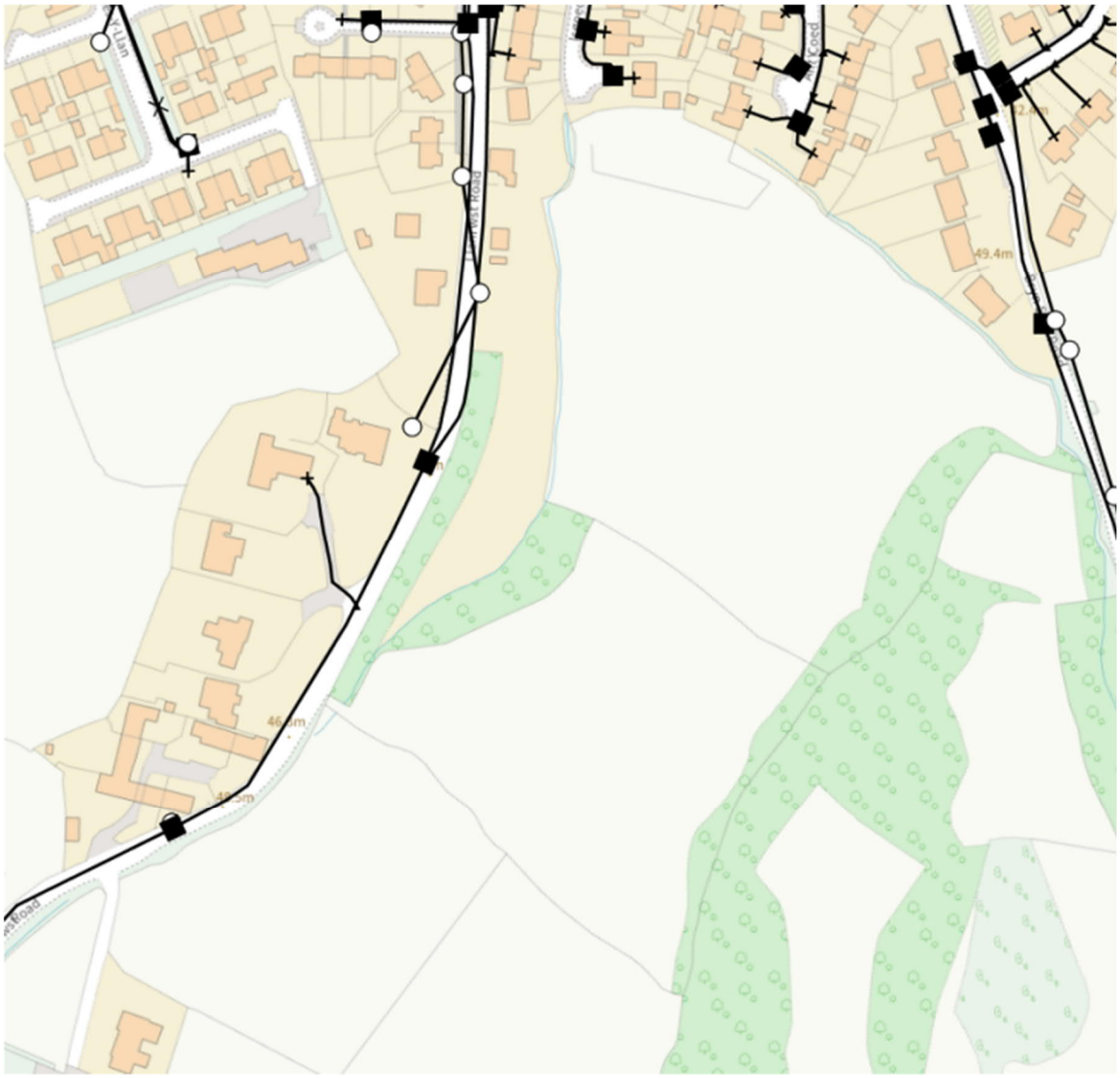
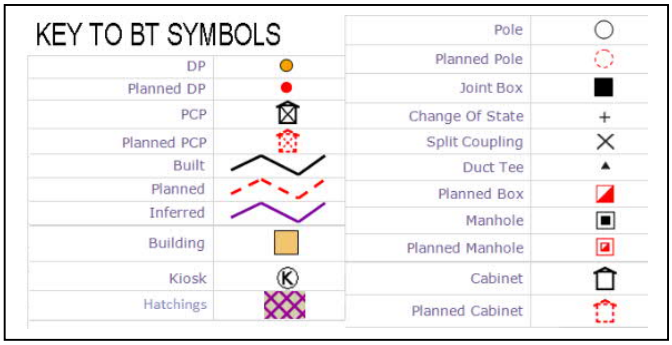


Figure 8.1 – Existing Openreach infrastructure



Disconnections: Openreach do not typically indicate individual service connections on their infrastructure records; however, their presence should be anticipated until proven otherwise. as the development site appears to be greenfield, it can be assumed that none are present. No disconnection works are currently anticipated.

Diversions: Openreach infrastructure record indicates underground apparatus routed within the adjacent side carriageway of Llanrwst Road. The current site layout plan indicates a site entrance will be constructed to serve the development off Llanrwst Road; however, provided no alteration will be made to the line or level of the existing carriageway as part of the site entrance construction works, the apparatus may not be affected by the development to the extent that diversionary works will be required. Review of the final site layout plan and any proposed off-site highway alteration drawings will be required to confirm.

Connections: A reasonable assumption can be made that a connection can be taken from the existing infrastructure located in the vicinity of the development site. As the development consists of over 20 dwellings, it is likely that Openreach will provide a Fibre to the Premise (FTTP) connection option at no cost to the developer.

9.0 Conclusion

Based on the information currently available for review, the existing utility infrastructure within the vicinity of the development site appears to be capable of supporting the additional demand required to provide connections for the proposed development of 80 no. residential dwellings/units. There are existing electricity, clean water, and telecoms services in the vicinity of the development site, which may have sufficient capacity to serve the development.

It is recommended that formal applications are made to the relevant statutory network operators to confirm the actual availability of capacity within the existing networks, and to provide firm points of connection. Formal connection offers will only be valid for a limited period of time, and no capacity can be reserved until acceptance and payment of a formal quotation has been made.

The connection costs provided in the main body of the report are based on individual utility connection proposals being accepted. It may be possible to undertake the connections works as part of a multi utility offering which can combine the installation of electricity, gas, water and telecoms under a single works contract. For some sites, the appointment of a multi utility provider may be more cost-effective option for the connections.

This desktop utility study covers statutory infrastructures surrounding the site. All information has been taken from the records of the statutory authorities and although this information is the most accurate available it may be prudent to undertake trial excavations in strategic locations to definitively determine the depth and location of infrastructure. Utility Providers Networks are constantly under review and subject to applications from other parties and the capacities and loads currently available may be subject to change.

The costs provided are advised as a predicted worst-case scenario of the foreseeable works. However, as these are only budget figures the actual costs entailed will not be determined until detailed proposals are received from the owners of the infrastructure.

Prepared by;
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Utilities Connections Management Ltd.

Checked by;
Casey Watmore – Technical Coordinator
Utilities Connections Management Ltd.

10.0 Further UCML Services

Utility Study – Level 2

UCML's Level 2 Utility Study provides a detailed overview of the electricity, gas clean water, and communications statutory infrastructure in the vicinity of development site, ideal for;

- Due diligence prior to land purchase to aid negotiation.
- Risk assessment prior to tender.
- Assistance with site layout design to minimize impact on existing utilities, taking into account statutory utility infrastructure and legal requirements.

The services provided within UCML's Level 2 Utility Study includes;

- Application for existing statutory infrastructure records.
- Technical review of all statutory authority infrastructure affected by proposed on-site and off-site works.
- Application for firm point of connection for electricity, gas and water supplies to the site to determine location of proposed connection and firm cost for required electricity network reinforcement works.
- Provision of budget figures for disconnection, diversion and connection works derived from firm non-contestable charges including required reinforcement works where applicable.
- Cost risk and analysis.
- Timescales for provision and execution of quotations for the required works, highlighting risks to project programme.
- Highlight abnormal legal requirements including wayleaves and easements and explanation of requirements to mitigate risk.

Technical Procurement

UCML's technical procurement service deals with the obtaining of capacity checks as well as disconnection, diversion, connection, service alteration and temporary supply quotations. These include electricity, gas, clean water and telecom supplies for all forms of residential, commercial and industrial developments. Use of our technical procurement services can result in;

- Considerable cost savings.
- Reduced overheads.
- Reduced timescales.
- Reduced delays.
- Reduced time expenditure.
- Removal of provisional sums from tender submissions.

The services provided by UCML's Technical Procurement service includes;

- Review of proposed meter positions to ensure technical and regulatory viability.
- Application for:
  - Existing statutory infrastructure records.
  - Disconnection quotations including meter removals where required.
  - Statutory infrastructure diversion quotations.
  - Temporary building supplies.
  - New connections quotations.
  - Legal searches including easement, wayleaves and Land Registry title searches.
- Technical review of all quotations received including technical and commercial comparison across all competing quotes.
- Submission of successful quotations for acceptance.
- Single point of contact for project administration, and an assigned Technical Engineer to each scheme.

Project Management

UCML's Project Management service deals with the project management of disconnections, diversions, connections, service alterations, capacity checks and temporary supply installations for all forms of residential, commercial and industrial developments. Our Project Management team can work in conjunction with our Technical Procurement service or as a stand-alone offering to manage the delivery of all electricity, gas, clean water and telecom works. Use of our Project Management service can result in:

- Improved program planning accuracy.
- Reduced time expenditure.
- Reduced abortive visit charges.
- Reduced delivery timescales and as a result less delays.

The services provided by UCML's Project Management service includes;

- Management of statutory connections from quotation acceptance to completion.
- Assigned Project Manager to the scheme to provide a single point of contact for site staff, and attend site meetings and design team meetings as required.
- Provision of a site pack including existing and proposed drawings and relevant technical information relating to dimensions and layout of metering enclosures.
- Management of legal agreements required including wayleaves, easements and adoption agreements.
- Programming of all mains, connections and metering works through proactive communication with site staff.

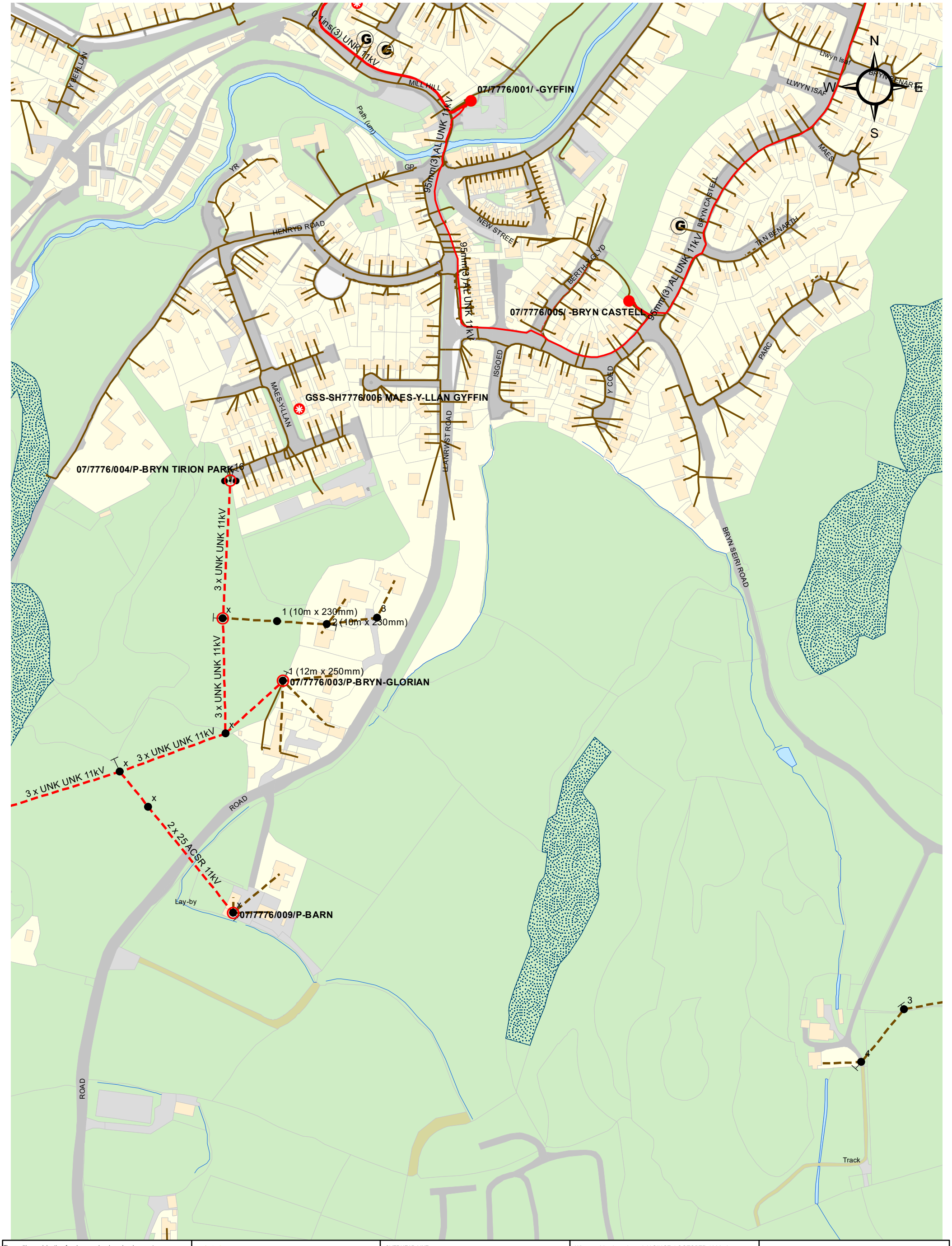
Appendices

Appendix 1 – SP Energy Networks Infrastructure Plan

Appendix 2 – Wales & West Utilities Infrastructure Plan

Appendix 3 – Dŵr Cymru Welsh Water Infrastructure Plan

Appendix 4 – Openreach Infrastructure Plan



The position and depths of underground and overhead apparatus as indicated on this plan are approximate and are intended for guidance only. The depths may have changed if the land surface levels have altered. You are also informed that the plan may not show, or may inaccurately show, individual property services and services to street lighting installations. The onus of locating the apparatus precisely before commencing any excavations or other works in the immediate vicinity therefore rests entirely upon the person undertaking or responsible for those works. Before any such works are undertaken the precise location of the apparatus and cables should therefore be ascertained by suitable means. In the event of an emergency or for further assistance please contact 0800-092-9290 (ScottishPower area) or 0800-001-5400 (SP Manweb area).

SP ENERGY NETWORKS
On behalf of SP Manweb plc

SP Manweb plc
Registered Office: c/o PowerSystems
3 Prenton Way, Prenton, CH43 3ET
Registered in England and Wales No 2366937

OVERHEAD LINE

UNDERGROUND CABLES

In Use

Out of Use

Assumed route

VOLTAGE COLOUR KEY

EHV	132kV	BLUE
	33kV	GREEN
HV		RED
LV		BROWN

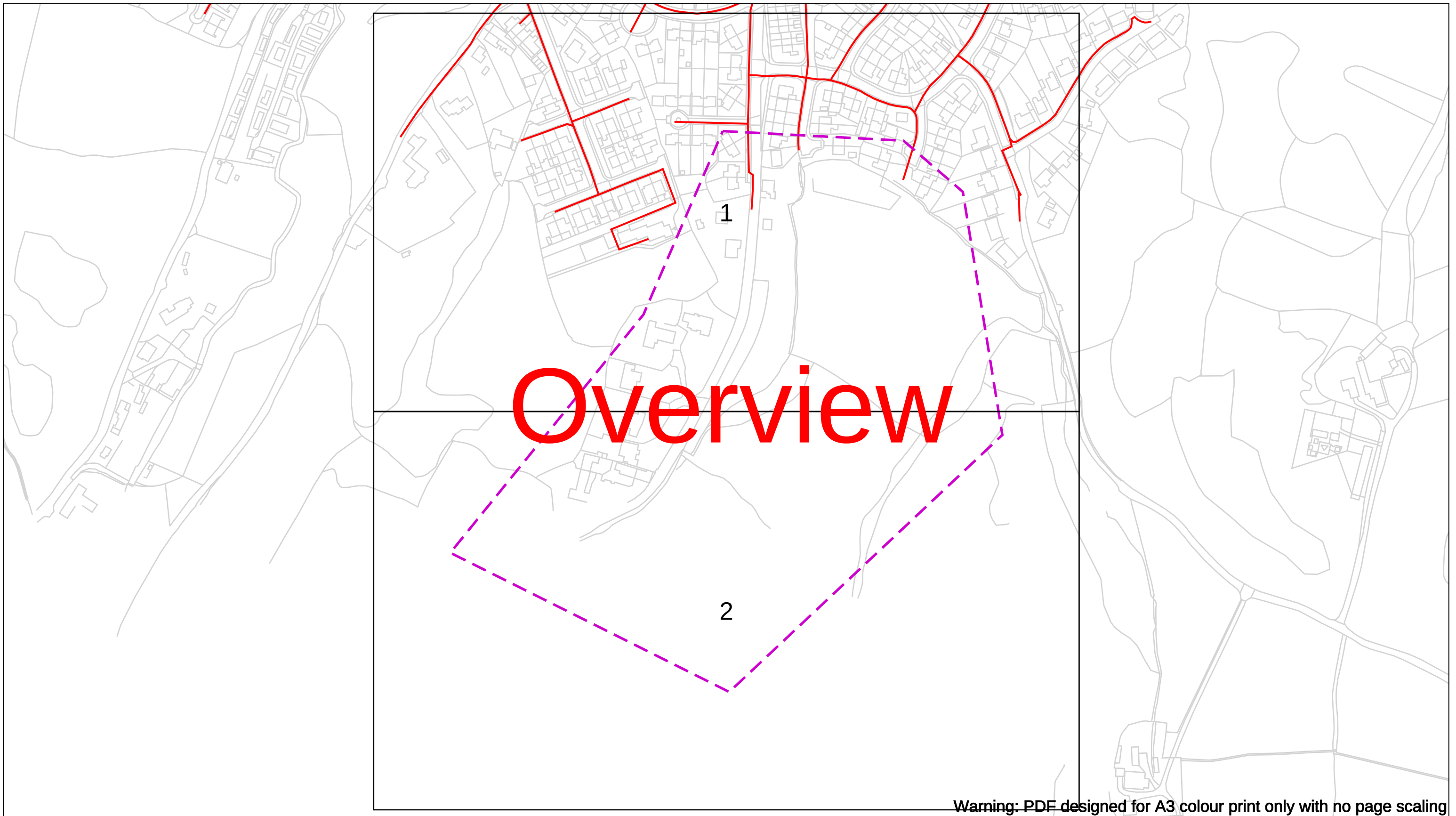
Where cables have been laid SINCE 1 OCTOBER 1988, the following depths in mm apply (to the tops of cables or ducts) UNLESS OTHERWISE SHOWN, but see comments.
(TO TOP OF CABLE, ADD 75mm FOR BOTTOM OF TRENCH)

	EHV	HV	LV
IN FOOTPATHS :	775	600	450
ACROSS ROADS :	775	700	600
ALONG ROADS :	775	700	600
AGRICULTURAL :	910	910	910

Your attention is drawn to the Health and Safety Executive Booklet HSG47, available from HSE.

DATE	07/07/2022
SCALE	1 : 2,500
MAP REFERENCE	277,763 376,551

0 5 10 20 30 40
Metres



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

Contact Us
Mapping Enquiries: 02920 278 912
General Enquiries: 0800 912 2999

Date Requested: 15/06/2022
Job Reference: 25950237
Site Location: 277770 376580
Requested by:
Mr steffan lloyd
Your Scheme/Reference: Land off Llanwrst Road , Conwy

Scale: 1:2562 (When plotted at A3)

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed
- The plan only shows those pipes owned by Wales & West Utilities (WWU) as its role as a licensed Gas Transporter
- Service pipes, valves, syphons, stub connections etc. may not be shown but their presence should be anticipated
- You must use safe digging practices in accordance with HS(G)47 to establish the actual position of mains, services and other apparatus before any mechanical excavation is used
- It is your responsibility to ensure this information is provided to all persons working near our plant
- If in doubt call the WWU dig team on 02920 278912

In case of an emergency call 0800 111 999

Dig Sites

Area: Line:

- Low Pressure (LP) 21mbar – 75mbar
- Medium Pressure (MP) 350mbar – 2bar
- Intermediate Pressure (IP) 2bar – 7bar
- High Pressure (HP) >7bar

- Line/Fire Valve
- Governor Station
- Change of Diameter
- End Cap
- Depth of cover

WALES&WEST UTILITIES

Smell gas?
Call the Gas Emergency Service on 0800 111 999.

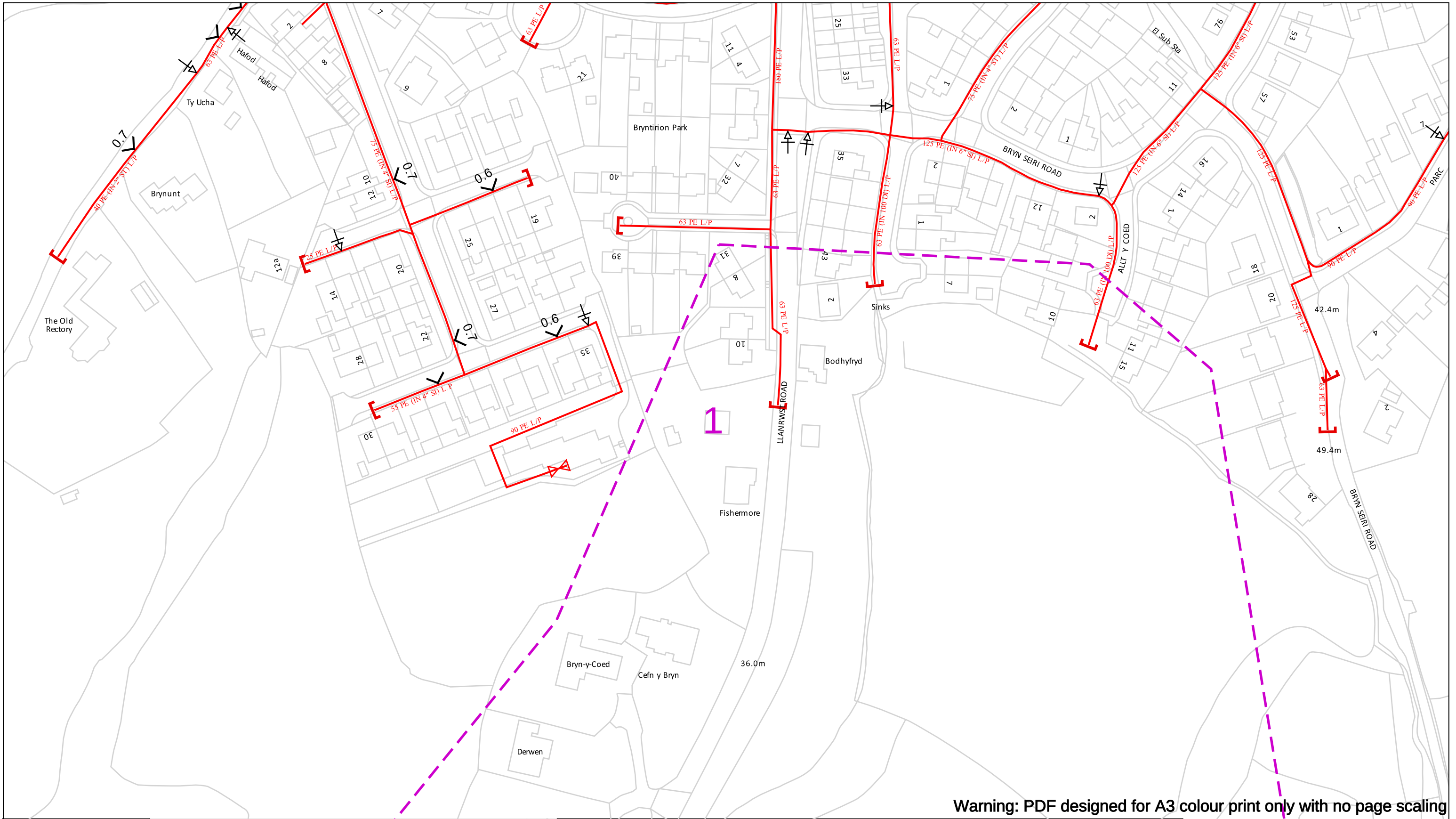
Dial before you dig

Dial
Call 029 2027 8912 before you start work.

Investigate
Before you dig, make sure you know what's below.

Go ahead
Done your research? Now you can dig safely.

We need 10 days' notice



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Job Reference: 25950237
Site Location: 277770 376580
Requested by:
Mr steffan lloyd
Your Scheme/Reference: Land off Llanwrst Road , Conwy

Scale: 1:1250 (When plotted at A3)

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- The plan only shows those pipes owned by Wales & West Utilities (WWU) as its role as a licensed Gas Transporter
- Service pipes, valves, syphons, stub connections etc. may not be shown but their presence should be anticipated
- You must use safe digging practices in accordance with HS(G)47 to establish the actual position of mains, services and other apparatus before any mechanical excavation is used
- It is your responsibility to ensure this information is provided to all persons working near our plant
- If in doubt call the WWU dig team on 02920 278912

In case of an emergency call 0800 111 999

100m

Dig Sites

Area: Line:

Low Pressure (LP) 21mbar – 75mbar
Medium Pressure (MP) 350mbar – 2bar
Intermediate Pressure (IP) 2bar – 7bar
High Pressure (HP) >7bar

Line/Fire Valve
Governor Station
Change of Diameter
End Cap
Depth of cover

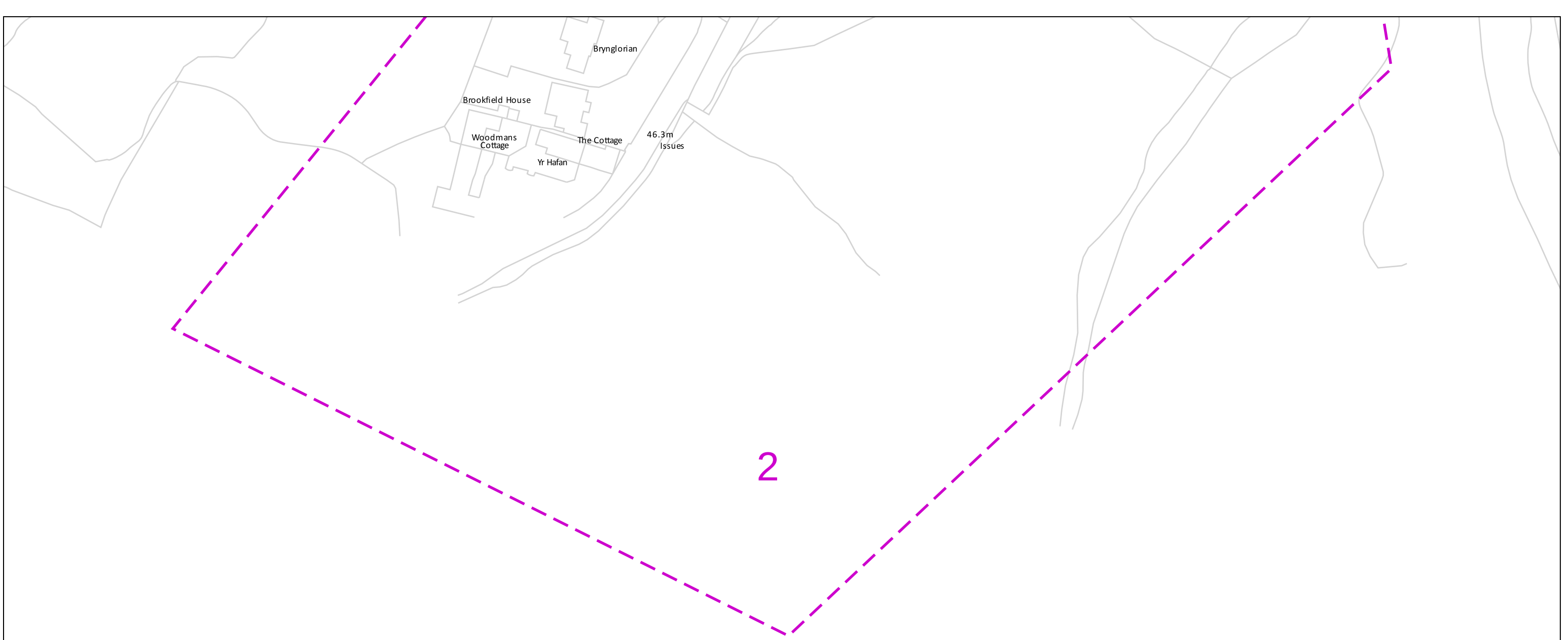
WALES&WEST UTILITIES

Smell gas? Call the Gas Emergency Service on 0800 111 999.

Dial before you dig

Dial Call 029 2027 8912 before you start work.
Investigate Before you dig, make sure you know what's below.
Go ahead Done your research? Now you can dig safely.

We need 10 days' notice



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

Contact Us
Mapping Enquiries: 02920 278 912
General Enquiries: 0800 912 2999

Date Requested: 15/06/2022
Job Reference: 25950237
Site Location: 277770 376580
Requested by:
Mr steffan lloyd
Your Scheme/Reference: Land off Llanwrst Road , Conwy

Scale: 1:1250 (When plotted at A3)

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed
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Dŵr Cymru
Welsh Water

Land off Llanrwst Road Conwy LL32 8UF

N
W E
S

LEGEND

Clean network:

- Sluice valve
- Pressure reducing valve
- Meter
- Bulk meter
- Hydrant
- Cap end
- Air valve
- Stop tap
- Water Treatment Works
- Water Pumping Station
- Existing main
- Non-operational main
- Raw Water

NB: Water main symbol colour indicates the type.

LIGHT BLUE - Trunk
DARK BLUE - Distribution
YELLOW - Raw Water

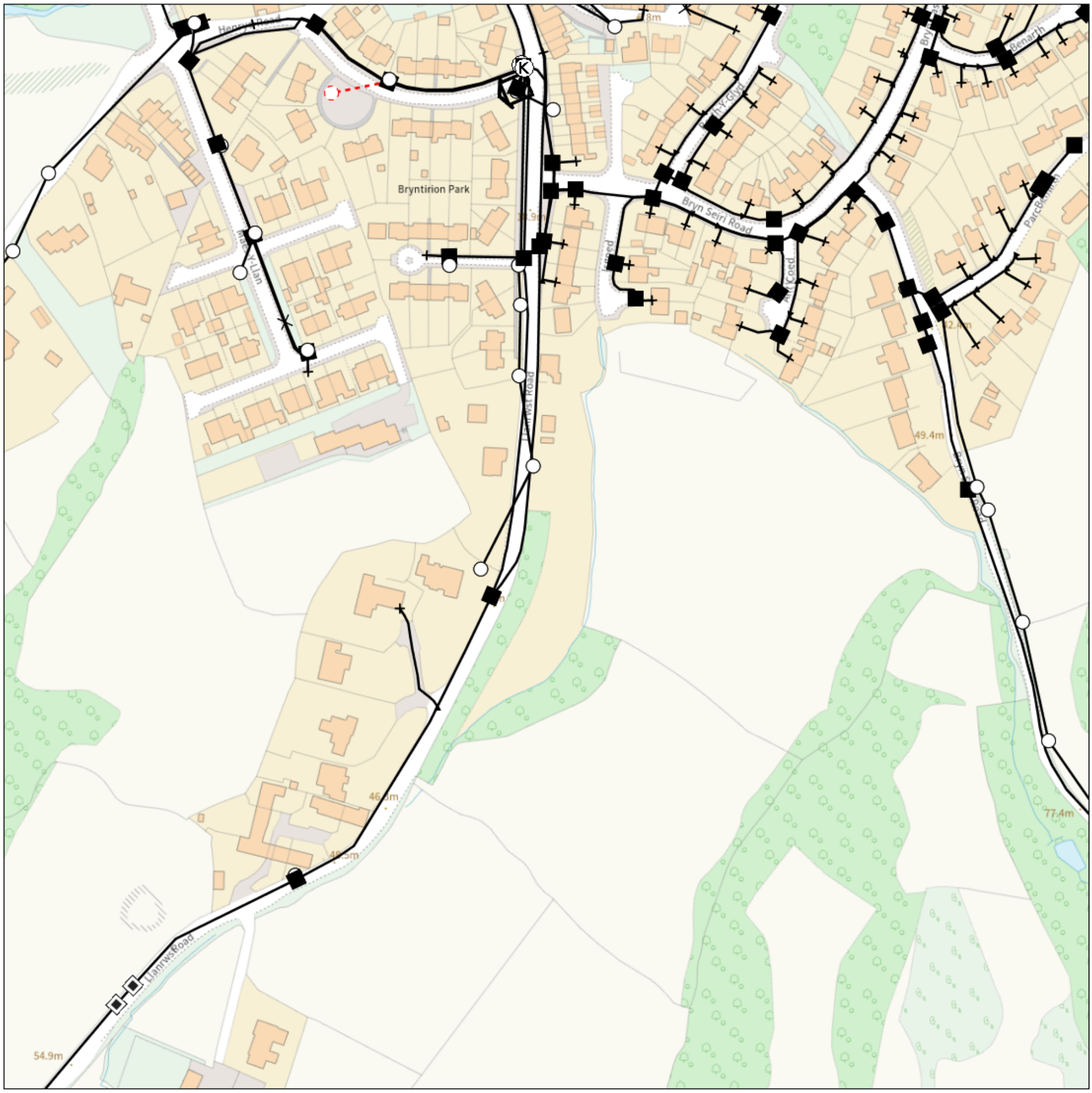
Notes:

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF) . It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

Map Ref:	277748,376632
Map scale:	1:2000
Printed by:	Zara Howells
Printed on:	08 Jul 2022

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
PCP		
Pole		
Box		
Manhole		
Cabinet		

Change Of State	+	Hatchings	
Split Coupling	×	Built	
Duct Tee	▲	Planned	
Building		Inferred	
Kiosk	K	Duct	

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 : PPO11037D
Map Reference : (centre) SG7774876631
Easting/Northing : (centre) 277748,376631
Issued : 15/06/2022 11:03:59

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