


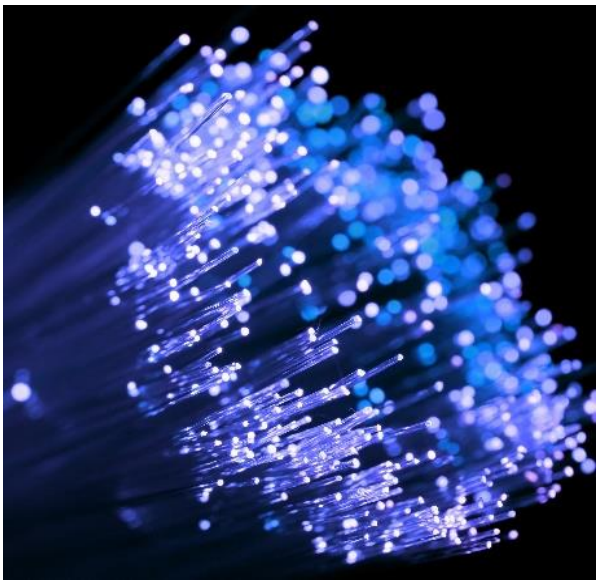

Former Ysgol Thomas Ellis School

UCML Utility Study

Level 2

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UCML Utility Study – Level 2

Former Thomas Ellis School,

Llys Treseifion,

Holyhead

Produced for: Isle of Anglesey County Council

Study Type	Inclusions/Exclusions		
	Electricity Point of Connection (POC)	Gas Capacity Check (GCC)	Water Pre-development Enquiry (PDE)
Level 2	Yes	No	Yes

Issue/Revision	Comments	Date	Prepared By	Checked By
1	First Issue	28/07/21	Casey Watmore	Joanne Blackburn
2				
3				

Contents

1.0 Introduction

UCML has been instructed by Isle of Anglesey County Council (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 40 no. dwellings. The site is located at the former Ysgol Thomas Ellis School site, and this study includes the land within the aerial image as indicated within Figure 1.1 below.

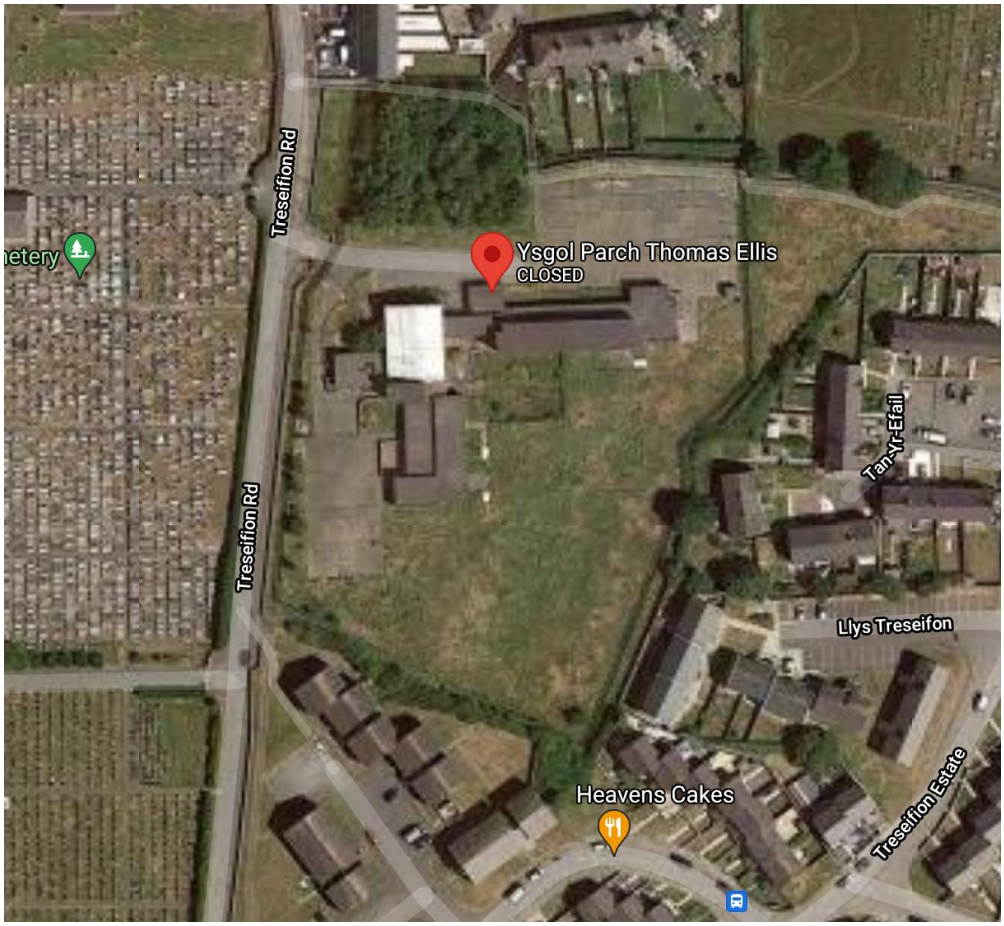


Figure 1.1 – Aerial view of existing site

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 Site Layout sketch provided to UCML by Isle of Anglesey County Council, indicated in Figure 1.2 below.

Figure 1.2 – Site Layout Sketch

The information provided within this desktop study is based on the development consisting of up to 40 no. residential dwellings. All utility load requirements have been estimated by UCML based on all dwellings being electrically heated. Table 1.1 below summarises the estimated loads used for the study. Please note, these estimated loads are intended for use as a guide only for the production of this study, and it is recommended that a Mechanical and Electrical Consultant is employed to calculate the actual load required based on the final layout design and proposed heating method. Please note, the load estimations for the residential development does not include a figure for individual clean water load requirements. As residential clean water connections are standardised, no individual load assessment for residential dwellings is required.

Utility	Total load
Electricity	165 kVA

Table 1.1 – Load summary

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 1.2 below. 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.

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

Table 1.2 – Host Statutory Network Operators

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.
- Application for firm points of connection for electricity, gas and water supplies to the site to determine the location of proposed connection.
- Consider the impact existing utility apparatus will have on proposed development works and provide a technical review and analysis of all statutory authority infrastructure affected by proposed on and off-site works, including the provision of the following;
    - Budget estimates for anticipated disconnection and diversion works.
    - Budget estimates for connection works, derived from firm non-contestable charges including an estimate of 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 of abnormal legal requirements including wayleaves and easements, and explanation of requirements to mitigate risk.

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 Terms and Definitions

ADMD After Diversity Maximum Demand. The development demand taking into account diversity of usage.

CSEP Controlled System Exit Point. Gas mains connection point.

DNO Distribution Network Operator. This is the licensed electricity distributor for the geographic region.

EV Electric Vehicle. Charging points for electric vehicles can significantly increase electricity demand of a development.

FTTP Fibre to the Premise telecommunications connection.

GT Gas Transporter. The GT is the licensed gas network operator for a specific geographical area.

ICP Independent Connection Providers. Undertake new electrical connections, however they do take ownership of the asset.

IDNO Independent Distribution Network Operator. Network owners and operators that are not constrained to a geographic area.

IGT Independent Gas Transporter. A GT that is not governed by its geographic location.

POC Point of Connection. This is a formal document submitted by the DNO identifying the location for a new electrical connection.

5.0 Executive Summary

This study comprises the results of the investigation and appraisal undertaken by UCML of the existing utility infrastructure located in the vicinity of the development site, and provides an overview of the likely demand requirements to support the proposed development works along with a review of any network reconfiguration works that are currently anticipated.

The relevant sections of the study will discuss the development requirements and constraints in further detail, however UCML would highlight the following main site constraints, along with the recommended next steps to be taken;

- SP Energy Networks has confirmed that a Point of Connection can be taken from the Secondary Substation (Ref: 08/2481/012/ - TAN YR EFAIL) located on Tan Y Efail. They have confirmed that network reinforcement works to the LV cable will need to be untaken to provide the capacity, Further information on this can be found within the electricity section.

- The current statutory network operators may still have service connections present within the site boundary, which will have provided supply to the former Ysgol Thomas Ellis School. If still present, disconnection works will be required to clear the development site for demolition. Further information can be found within the relevant sections.

Cost Summary

Table 5.1 below summarises the total anticipated budget costs for the required utility works. Please refer to the relevant section of the study for further detail.

Electricity	**Budget Cost**
Non-Contestable Works	£4,611.23
Contestable Connection Works	£132,000.00
Diversionary Works	None currently anticipated
Disconnection Works	£3,600.00
Total Electricity Costs	**£140,211.23**
Gas	**Budget Cost**
Connection Works	N/A
Diversionary Works	None currently anticipated
Disconnection Works	None currently anticipated
Total Gas Costs	**£Nil**
Water	**Budget Cost**
Connection Works	£64,000.00
Diversionary Works	None currently anticipated
Disconnection Works	None currently anticipated
Total Water Costs	**£64,000.00**
Openreach	**Budget Cost**
Connection Works	£Nil
Diversionary Works	£40,500.00
Disconnection Works	£Nil
Survey Fees	£2,099.00
Total Openreach Costs	**£42,599.00**
Budgetary sums exclude Value Added Tax, on-site civils and principal contractor preliminaries.	

Table 5.1 – Cost Summary Table

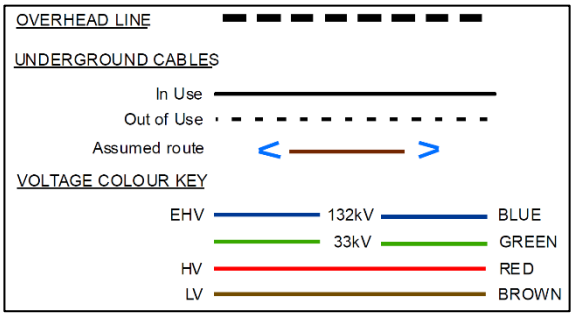
6.0 Electricity

6.1 Existing Electricity Network

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 Extra High Voltage (EHV), High Voltage (HV) and Low Voltage (LV).

The diagram below illustrates the location of existing SP Energy Networks infrastructure which has been extracted from its network records. The cables shown in red 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 6.1 – Existing Electricity Infrastructure Plan



6.2 Connection Works

6.2.1 Non-Contestable Works (165 kVA)

The non-contestable element of the connection works are works required to accommodate the provision of capacity for the development, which can only be undertaken by the relevant Distribution Network Operator (DNO). The non-contestable costs are covered within a Point of Connection (POC) quotation.

Based on the development information as outlined within the introduction, UCML has estimated the electrical load requirement for the proposed residential development of 40 no. dwellings to be 165 kVA, based on the use of electric heating. Based on this estimated load, UCML requested a Point of Connection quotation for the non-contestable works from SP Energy Networks.

SP Energy Networks has provided a POC quotation for a load of up to 165 kVA, confirming the development can be connected to the Low Voltage 415 Volts distribution network. The POC will be located from the LV spur routed from the Secondary Substation (Ref: 08/2481/012/ - TAN YR EFAIL) which is located on Tan Yr Efail to the east of the development site, as indicated in Figure 6.2 below.

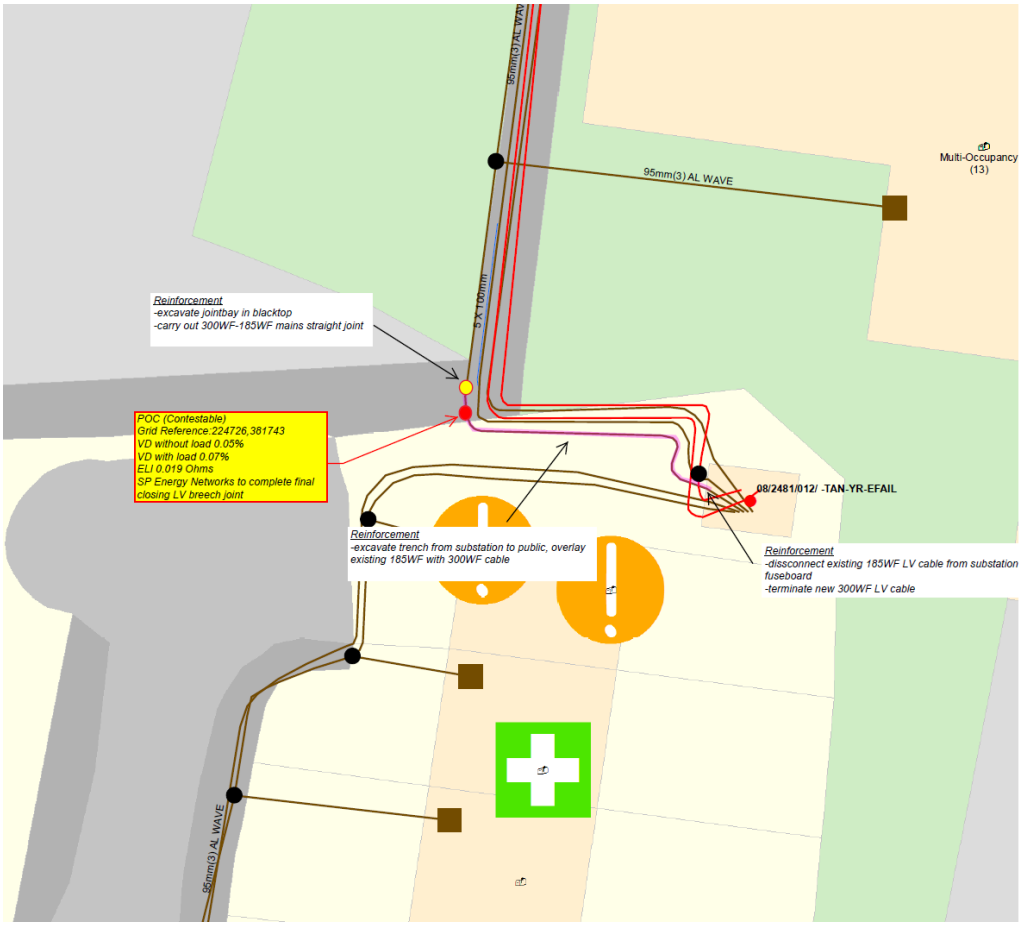


Figure 6.2 – Plan showing electricity LV Point of Connection

SP has advised that in order to provide the capacity, network reinforcement works will need to be completed within the substation (Ref: 08/2481/012/ - TAN YR EFAIL). This works include upgrading an existing Low Voltage cable exiting the substation and completing the associated jointing works. These works will be completed as part of the non-contestable element of the connections and the costs are included within table 6.1 below.

As part of the non-contestable works SP Energy Networks will undertake ICP design approval and inspections. Cable jointing works for the POC will typically be undertaken by a SP Energy Networks Engineer. Please refer to Section 6.2.2 for further detail on the associated contestable connection works required to utilise the provided LV POC.

The total cost and breakdown of the SP Energy Networks non-contestable POC is detailed below;

Description	Cost
Assessment Charges	£500.00
Design Charges	£600.00
Operational Work	£457.00
Reinforcement Work	£2,771.07
Inspection Charges	£283.16
Total Non-Contestable Charges	**£4,611.23**

Table 6.1 – Point of Connection cost breakdown

6.2.2 Contestable Works (165 kVA)

Based on the confirmed non-contestable POC provided by SP Energy Networks, the following contestable connection works will need to be undertaken to provide connections to the proposed dwellings;

- Lay LV cabling from POC location to site boundary
- Excavate, backfill and permanently reinstate public highway/footpath to Local Authority standards.
- Lay LV mains infrastructure on-site to serve all proposed dwellings.
- Install LV service connections to each dwelling, and connect to LV mains infrastructure.
- Install suitable cut out to the DNO standard.

Allow a **budget cost of £132,000.00** for the contestable connection works, based on the confirmed Point of Connection being within 600 metres of the site boundary, as located from the LV spur routed from the Secondary Substation (Ref: 08/2481/012/ - TAN YR EFAIL) which is located on Tan Yr Efail to the east of the development site.

As the above works are contestable, they can be undertaken by the DNO, or alternatively an Independent Connection Provider (ICP) can be appointed to complete the works. The use of an ICP to undertake the contestable connection works provides the opportunity to open the contestable element of the works to competitive tender, which may provide significant cost savings in comparison to the DNO undertaking the works.

6.3 Diversions & Disconnections

SP Energy Networks infrastructure record indicates a Low Voltage underground cable routed within the carriageway of Treseifion Road. Provided no alteration will be made to the line and level of the carriageway during construction and following completion of the development proposals, diversion of this apparatus is not currently anticipated. See Figure 6.3 below for further detail.

Figure 6.3 – LV cable routed within the carriageway of Treseifion Road

SP Energy Networks infrastructure record indicates a Low Voltage cable routed within the site boundary which appears to be providing supply to the former school building currently occupying the site boundary. This apparatus will need to be disconnected to accommodate the demolition works, allow a **budget cost of £1,800.00** for these works.

SP Energy Networks infrastructure record indicates a Low Voltage spur routed within the site side footpath of Treseifion Road, which appears to have been left in situ following previous disconnection works. Based on review of the site layout available, it appears that this apparatus will need to be cut back to the carriageway to accommodate the proposed driveways and associated drop kerbs. Allow a **budget cost of £1,800.00** for these works.

6.4 Conclusion – Cost & Risk Analysis

Costs relating to the reconfiguration of the existing SP Energy Networks distribution system are identified in the following table;

Detail	Cost
Non-Contestable Works	£4,611.23
Contestable Connection Works	£132,000.00
Diversions	None currently anticipated.
Disconnections	£3,600.00
Total	**£140,211.23**

Table 6.2 – Electricity costs

The main risks associated with the procurement of proposals and required works are as follows;

- Some figures have been applied based on previous projects of similar size and UCML's experience, others have been provided for budgetary purposes by SP Energy Networks.

- The Point of Connection is valid for only 3 months from submission. The network capacity can only be reserved upon submission of signed acceptance and a suitable design from either an Independent Connection Provider or Independent Distribution Network Operator.

- Diversionary works where required are not regulated by Ofgem, it is therefore advised that a work commencement date is identified as early as possible as this may have a significant impact on any construction programme.

7.0 Gas

7.1 Existing Gas Network

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.

The following diagram 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.

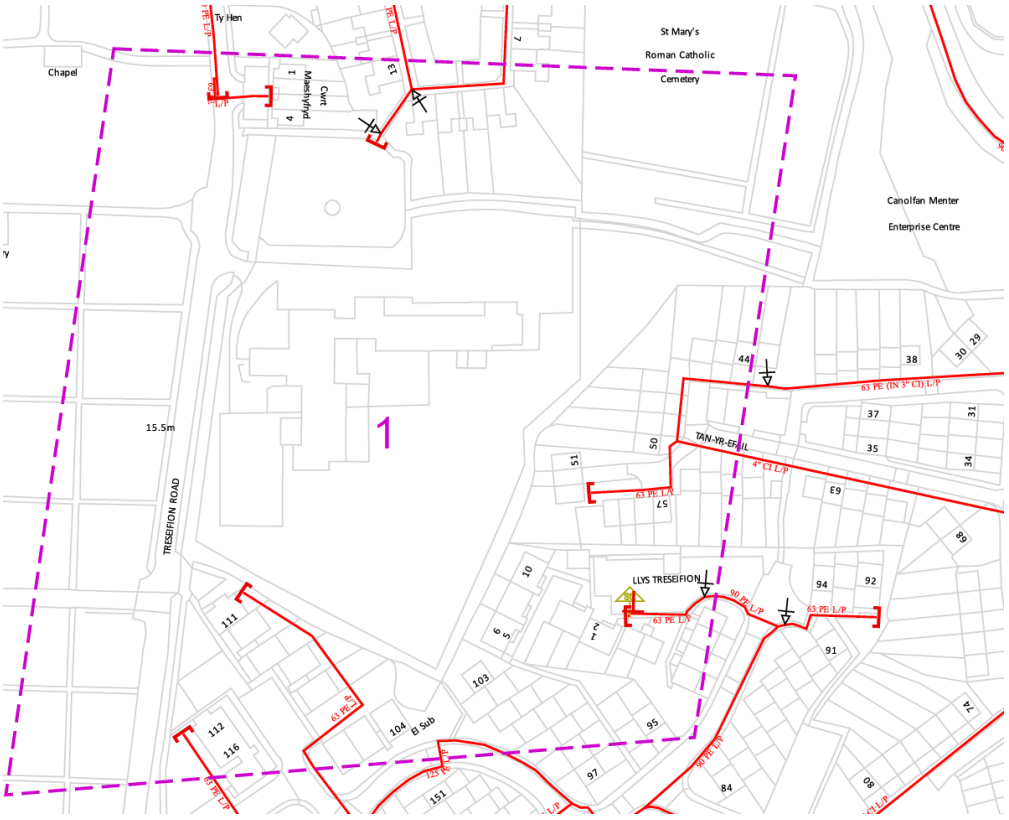
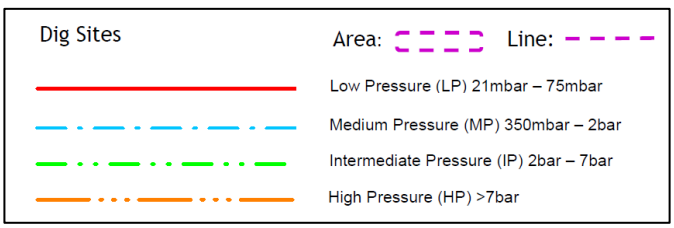


Figure 7.1 – Existing Gas infrastructure plan



7.2 Proposed Gas Service

Based on the clients requirements, UCML has not requested a gas capacity check as the development is proposed to be electrically heated.

7.3 Diversions & Disconnections

Wales and West Utilities infrastructure records do not indicate any apparatus within the vicinity of the development site that will be affected by the development proposals. Therefore, no diversions are anticipated.

Wales and West Utilities infrastructure records do not typically indicate individual service connections however, their presence should be anticipated until proven otherwise. In this instance, based on the current usage of the former school, it can be assumed that no gas connections are present within the site boundary. It is recommended that a site survey is undertaken to confirm this.

7.4 Conclusion – Cost & Risk Analysis

Costs relating to the reconfiguration of the existing Wales & West Utilities network are identified in the following table;

Detail	Cost
Connections	N/A
Diversions	None currently anticipated.
Disconnections	None currently anticipated.
Total	**£Nil**

Table 7.1 – Gas costs

8.0 Water

8.1 Existing Water Network

The local clean water distribution network in the vicinity of the development site is owned and operated by Dwr 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 distribution water mains and associated apparatus. Please refer to the infrastructure record appended to this study for further detail.

The following diagram is an extract from Dwr 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.

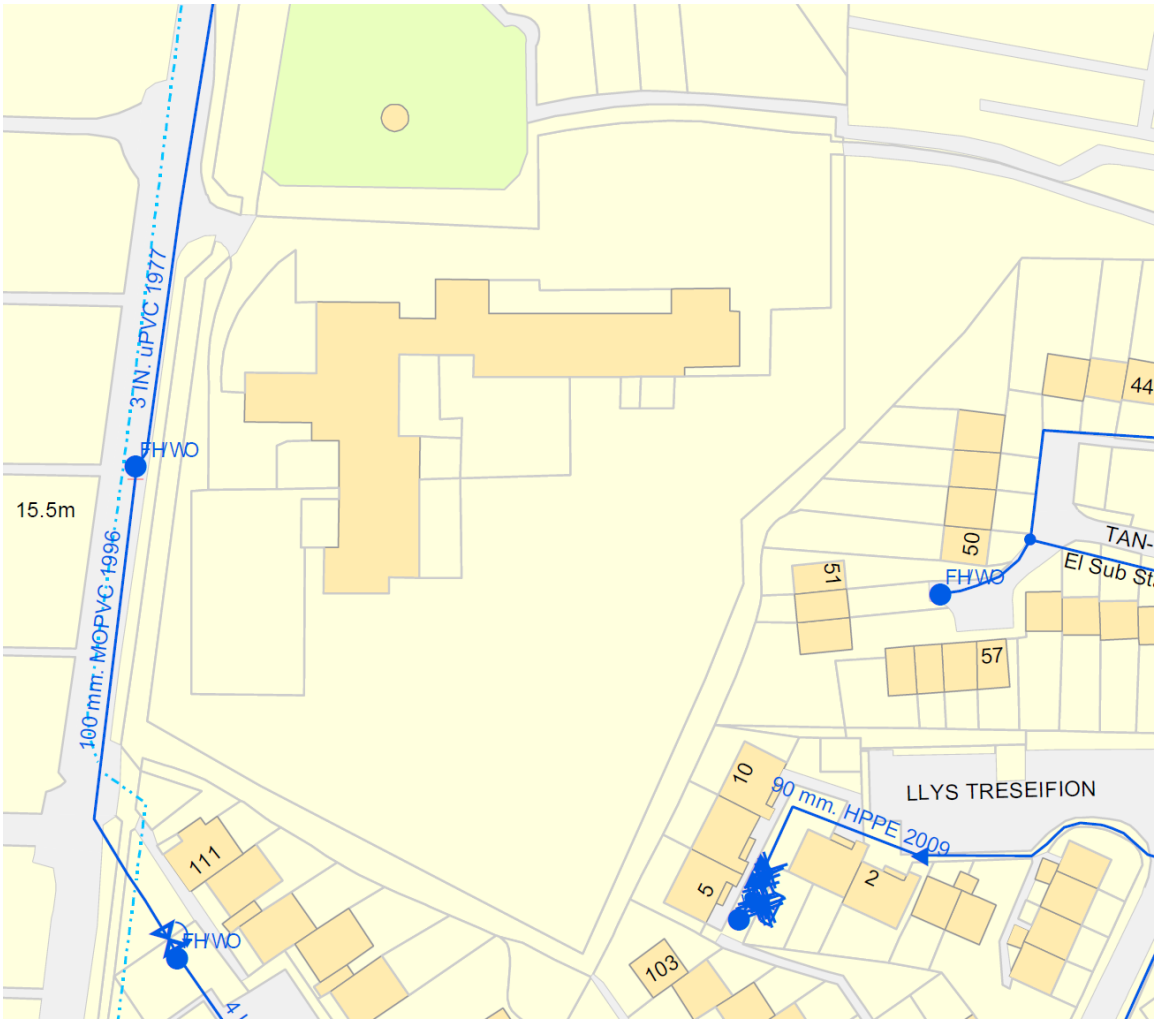
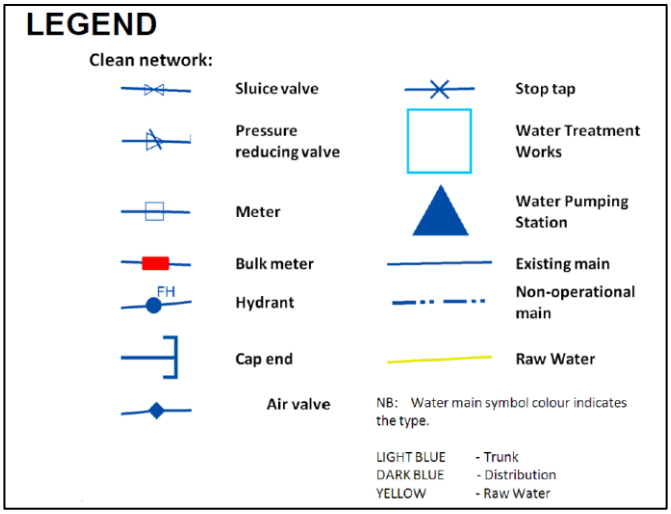


Figure 8.1 – Existing Water infrastructure plan



8.2 Proposed Water Service

UCML has sourced a pre-development response from Dwr Cymru Welsh Water to establish the availability of capacity within the local distribution network, and confirm the likely connection point for the development. Dwr Cymru Welsh Water has advised that a connection point for the development can be provided from the 3" Polyvinyl Chloride distribution main, routed within the carriageway of Treseifion Road. Please see Figure 8.2 below for further detail on the location of the provided point of connection.

Figure 8.2 – Proposed water connection plan

Dwr Cymru Welsh Water has also confirmed that this main has sufficient capacity to supply the development without the requirement for associated off-site reinforcement works. Therefore, allow a **budget cost of £64,000.00** for mains and connections.

It is to be confirmed whether there are records of any chargeable water or sewerage connections on-site within the last 5 years, which will determine whether infrastructure credits will be available for this scheme.

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 a brownfield site, contamination may be identified during the ground investigation which would require the use of barrier pipe.

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 Dwr Cymru Welsh Water once they have prepared a mains design for the site.

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.

8.3 Diversions & Disconnections

Dwr Cymru Welsh Water infrastructure records indicate a 3" Polyvinyl Chloride distribution main, which changes material and diameter to a 100mm Molecular-oriented Polyvinyl Chloride distribution main routed within the carriageway of Treseifion Road. Provided no alteration will be made to the line and level of the carriageway during construction and following completion of the development proposals, diversion of this apparatus is not currently anticipated. See Figure 8.3 below for further detail.

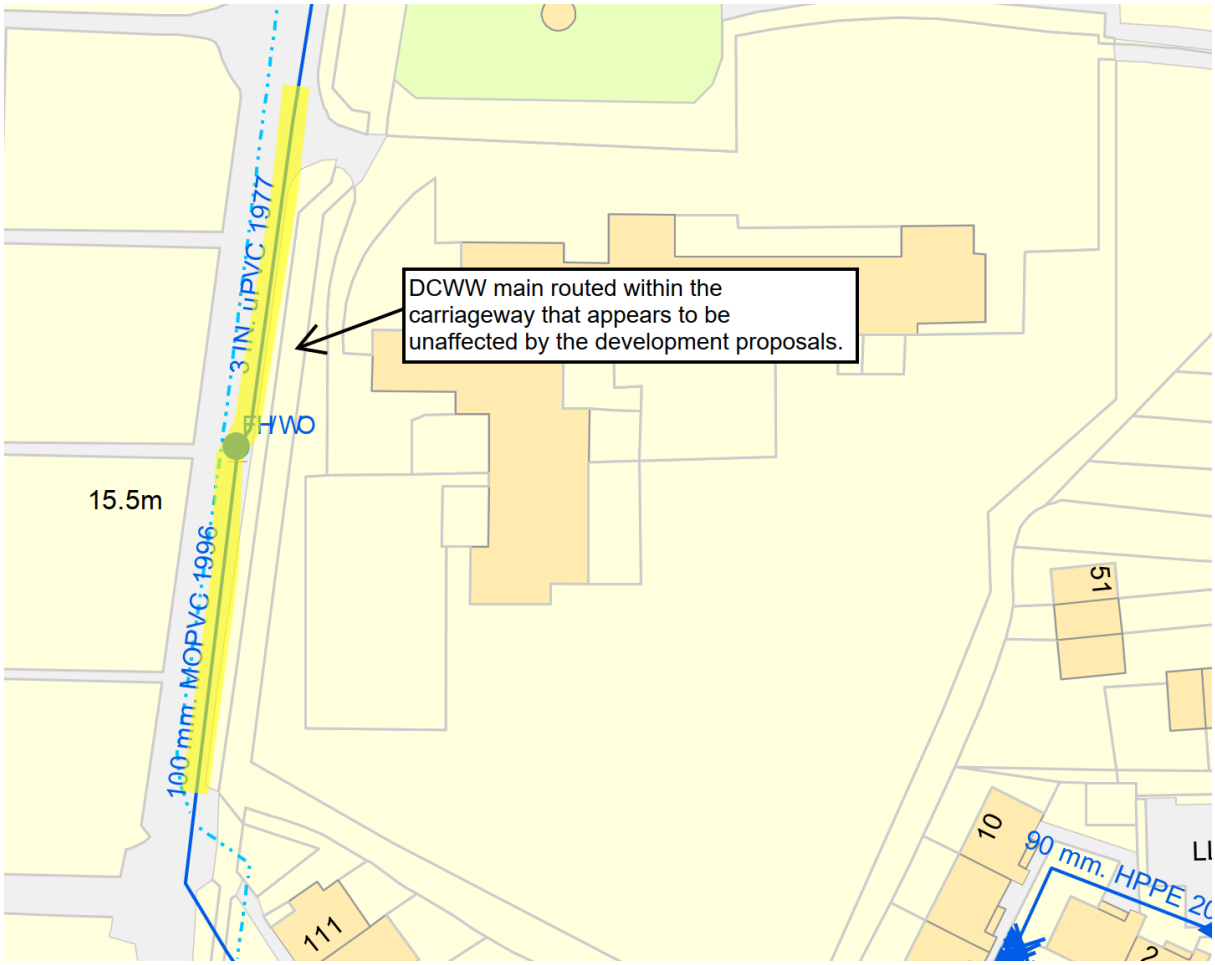


Figure 8.3 – Existing water infrastructure routed within the carriageway of Treseifion Road

Dwr Cymru Welsh Water infrastructure records indicate a non-operational main also routed within the carriageway of Treseifion Road. Again, as this apparatus is routed within the carriageway and the classification is non-operational, it is assumed to be unaffected by the development proposals.

Dwr Cymru Welsh Water infrastructure records do not typically indicate individual service connections however, their presence should be anticipated until proven otherwise. A site survey is recommended to identify if any water services are still supplying the former school currently occupying the site. If a service connection is located, Dwr Cymru Welsh Water will typically disconnect services of 32mm diameter and below for nil cost to the developer. As this is an existing commercial premises, if the service is found to be of greater diameter, it is recommended the water supplier is contacted at the earliest opportunity to confirm if any costs are associated with the disconnection. As the school has been vacant for a period of time, we have assumed that any water disconnection works may have already been completed. The site survey will establish if this is the case.

8.4 Conclusion – Cost & Risk Analysis

Costs relating to the reconfiguration of the existing Dwr Cymru Welsh Water network distribution system are identified in the following table;

Detail	Cost
Mains and Connections	£64,000.00
Diversions	None currently anticipated.
Disconnections	£Nil TBC
Total	**£64,000.00**

Table 8.1 – Water costs

The main risks associated with the procurement of proposals and required works are as follows;

- Some figures have been applied based on previous projects of similar size and UCML's experience, others have been provided for budgetary purposes by Dwr Cymru Welsh Water.

- The pre-development response is valid for only 6 months from submission. The available network capacity can vary continually, due to proposed developments taking capacity from the water distribution network within the vicinity of this specific scheme.

- The developer cannot reserve any water capacity and pressure until a formal order has been placed with the relevant water Network Operator.

- Please be aware that the position of any required fire hydrants will be determined and implemented upon the advice and requirements of the Local Fire Authority.

9.0 Communications

9.1 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 and overhead cables/lines and associated apparatus. Please refer to the infrastructure record appended to this study for further detail.

The following diagram 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.

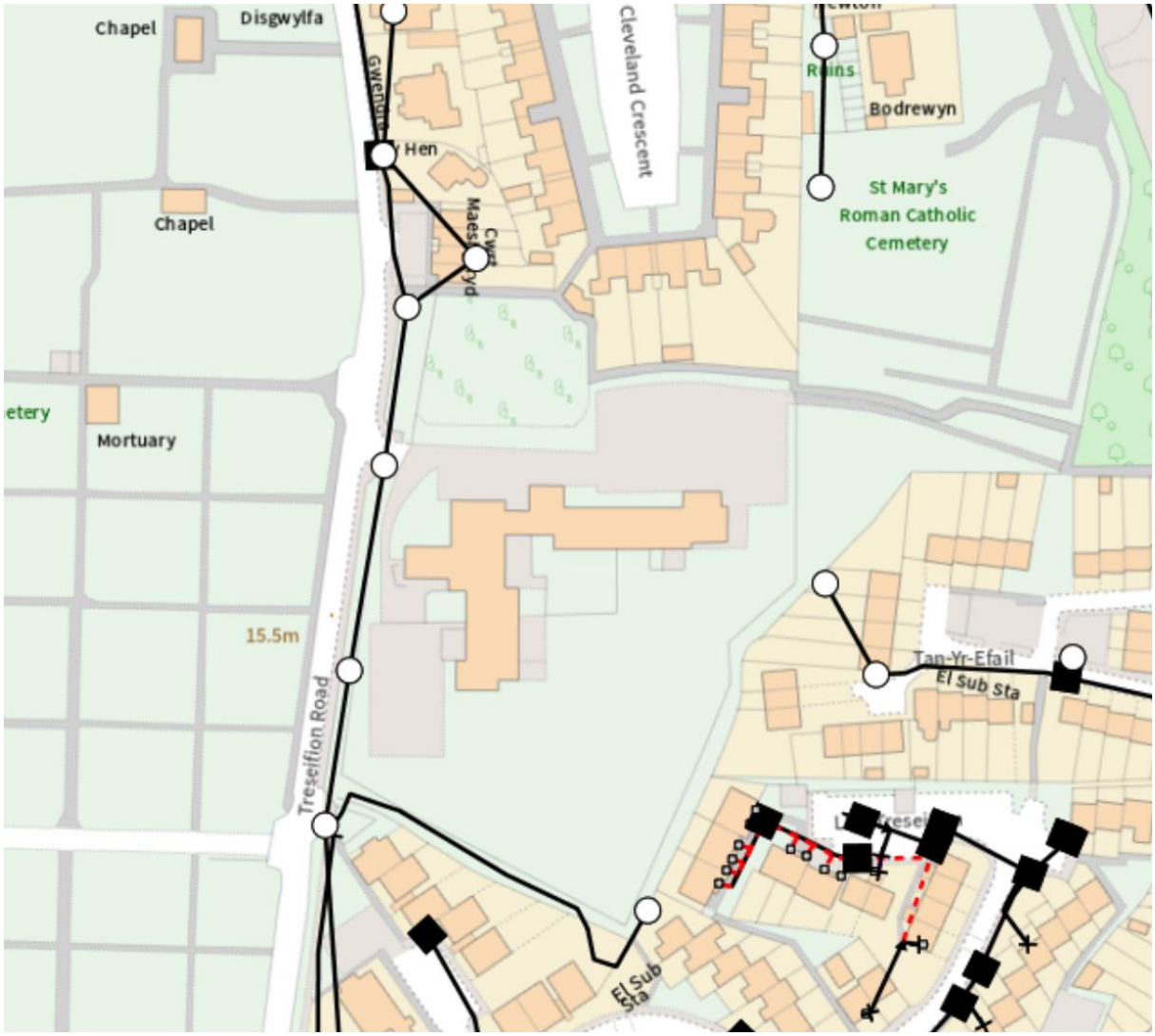
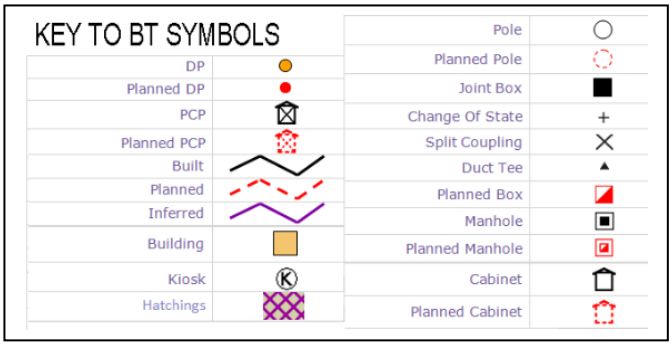


Figure 9.1 – Existing Openreach infrastructure



9.1.1 Openreach Connections

Openreach will provide Fibre to the Premise (FTTP) connection desisgn as standard for new developments. FTTP connections will provide ultrafast broadband speeds to each dwelling and deliver a level of future proofing for broadband as the demand for speed increases. As the development consists of over 20 no. residential dwellings, Openreach will provide FTTP connections free of charge.

Openreach FTTP network is constructed as an Open Access Network, allowing multiple Internet Service Providers (ISPs) to provide services to future residents and customers utilising the same infrastructure. The installation of Open Access Networks mitigate the requirement for multiple service providers installating duplicate infrastructure within the development site.

Typically, the work undertaken by the developer as part of an Openreach FTTP network installation will consist of laying on-site duct and tubing, building all joint boxes, and providing a cable from a designated joint box to each dwelling (with cappings and covers over external entry points). Openreach will carry out all excess construction works outside of the site boundary and in the public highway. Openreach will provide an allowance of up to £3,400.00 per plot (residential) to undertake all off-site works required, however any costs incurred above this allowance will be chargeable to the developer.

For a FTTP installation, the developer will need to sign a contract and Wayleave agreement with Openreach. This is a legal requirement for Openreach to install and access its infrastructure. However, if the installation of an independent fibre network is being considered for the development site, exclusivity may be required and therefore the Openreach wayleave should not be signed until it is confirmed an independent third party fibre provider will not be used.

As part of the contract for the installation of Openreach connections, the developer may receive a rebate of up to £140.00 per house and £50 per flat for carrying out on-site works as detailed within the contract provided with their connection proposal. The rebate is in line with

the Home Builders Federation (HBF) rates and are payable by BT Plc through its Openreach division. If the developer chooses to self-install the internal FTTP apparatus through Developer Self Install (DSI), an additional rebate payment of £20 per house or apartment will be available.

For the installation of FTTP within an individual dwelling, an Optical Network Termination (ONT) will be installed. The ONT is the Openreach demarcation point and replaces the traditional copper master socket. The Openreach ONT will sit in a wall mounted enclosure along with a Battery Backup Unit (BBU) and the associated wiring. The ONT will include an optical port which connects to the external Customer Splice Point (CSP), an Ethernet port which connects to the communications provider's router, and a telephony port to connect to the voice call network.

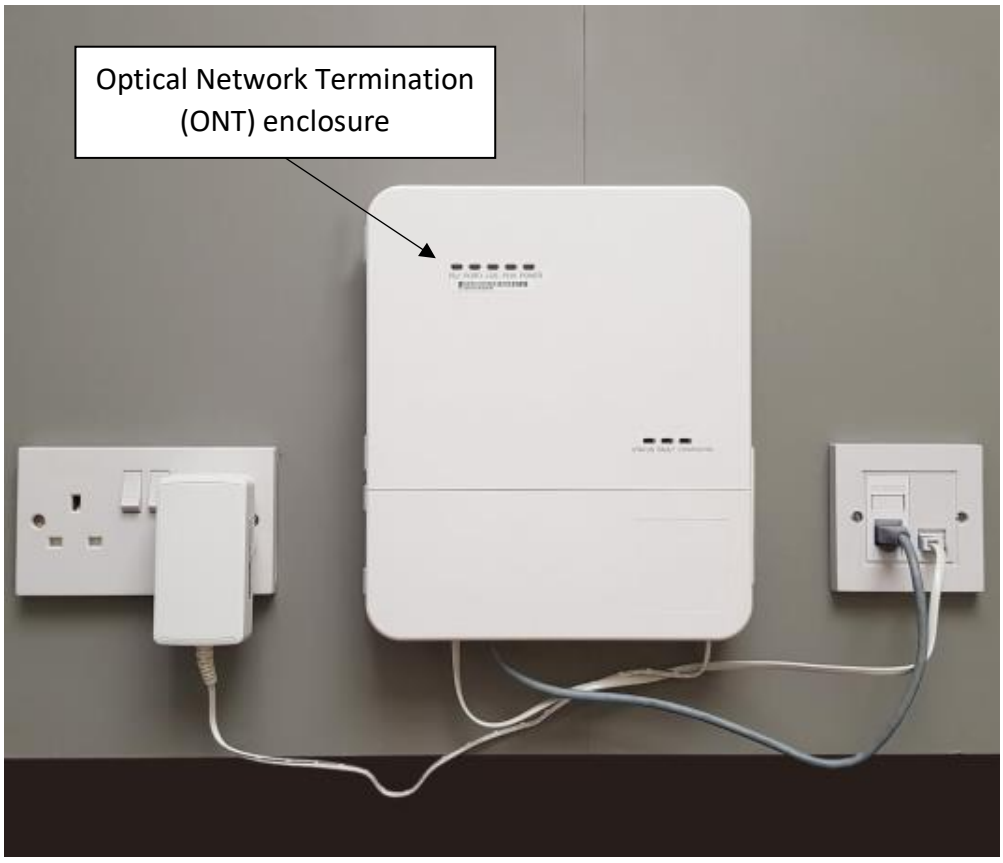


Figure 9.2 – Openreach FTTP Internal Equipment

Should the developer choose for Openreach to install the FTTP equipment, the ONT will be installed at the position of the incoming fibre cable, however, as previously discussed, the

developer can choose to self-install the internal FTTP equipment at their preferred internal location within the dwelling. Where a developer opts to undertake the self-install of the internal equipment, Openreach will supply the ONT, BBU, and the required connectorised fibre cable.

Figure 9.3 below illustrates the simplest installation for the FTTP equipment in a domestic dwelling, where the ONT and associated equipment is located adjacent to the outside wall where the incoming fibre cable is located.

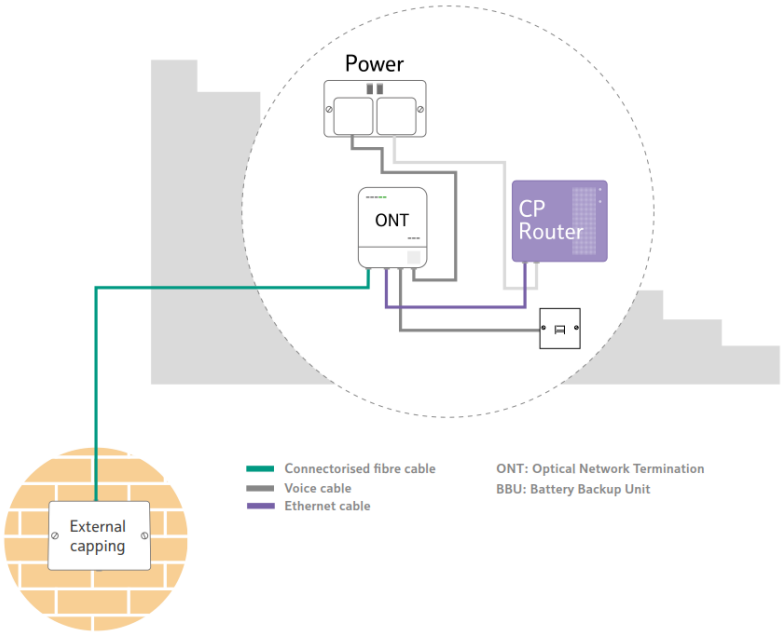


Figure 9.3 – Simple FTTP installation

Figure 9.4 overleaf illustrates a typical example of a developer self-install for the internal equipment, where they have chosen to locate the ONT further inside the dwelling. Further examples of the options for the internal installation are provided within the Openreach Developer Guide for building a fibre network.

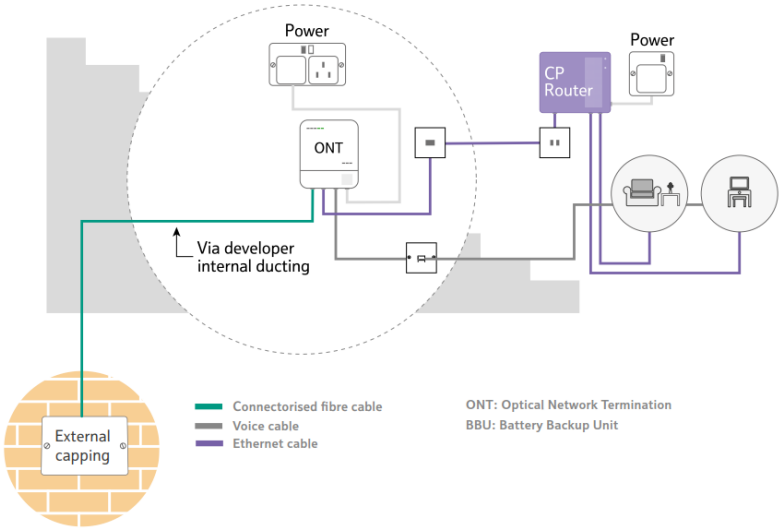


Figure 9.4 – Alternative Option for FTTP installation (DSI)

For a fibre connection to a multi-occupancy building, the incoming fibre will terminate at a joint box/splitter in the communications intake room or riser cupboard. The location of the joint box/splitter will be agreed between the developer and the Openreach Field Based Coordinator assigned to the development. Connectorised fibre cable will need to be run from the ONT located within each plot to the fibre distribution point in the communications room/riser. Please refer to the diagram below, which has been taken from the Openreach developer guide, for further detail.

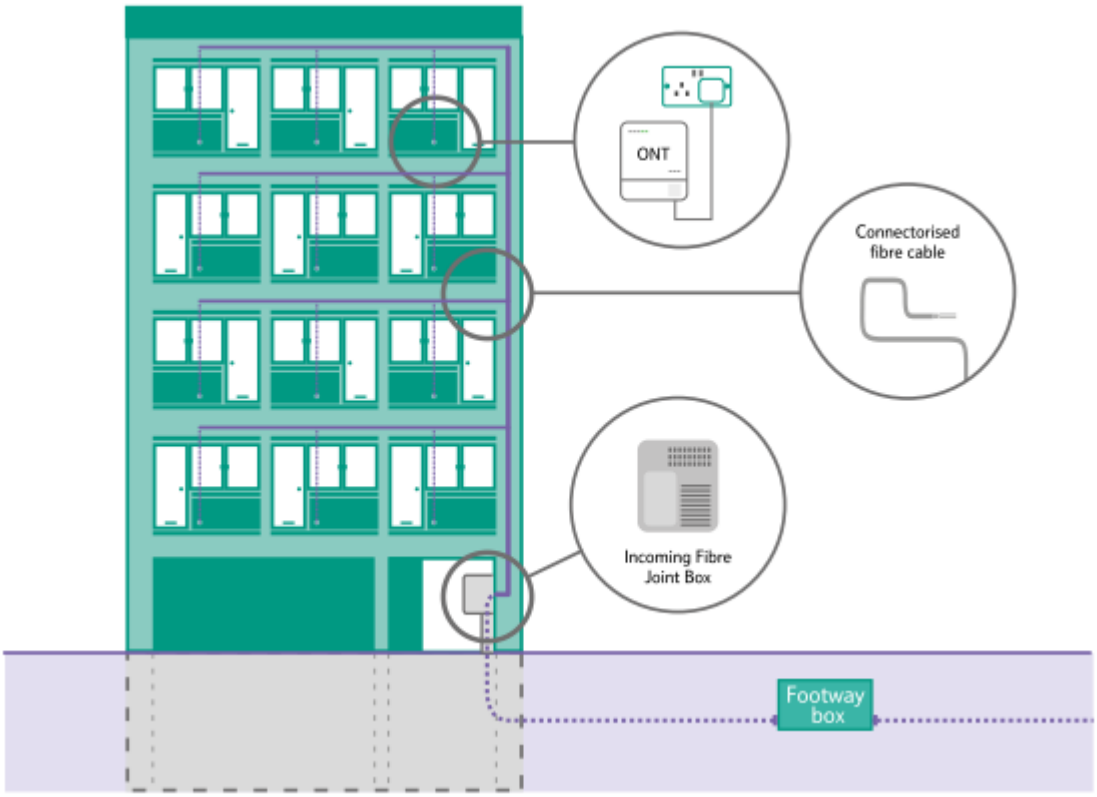


Figure 9.5 – Openreach FTTP Internal Multi Dwelling Unit Arrangement

For multi occupancy dwelling units, a wayleave may be required from the building owner prior to the installation of any cable or apparatus within common areas to ensure Openreach can maintain and access any equipment under their ownership. For any multi occupancy units where a lift is proposed to be installed, copper connections will need to be ordered in addition to FTTP connections to provide the required lift lines.

9.1.2 Diversions & Disconnections

Openreach infrastructure record indicates a number of distribution poles and associated overhead apparatus located on the site side footpath of Treseifion Road. Based on desktop review, this pole and associated appears to be unaffected by the development proposals, assuming its retention is feasible within the open space at the frontage of the site. However, if the client wishes to divert the overhead network for aesthetic appearance at the frontage of the site, it is assumed it will be diverted underground the site side footpath.

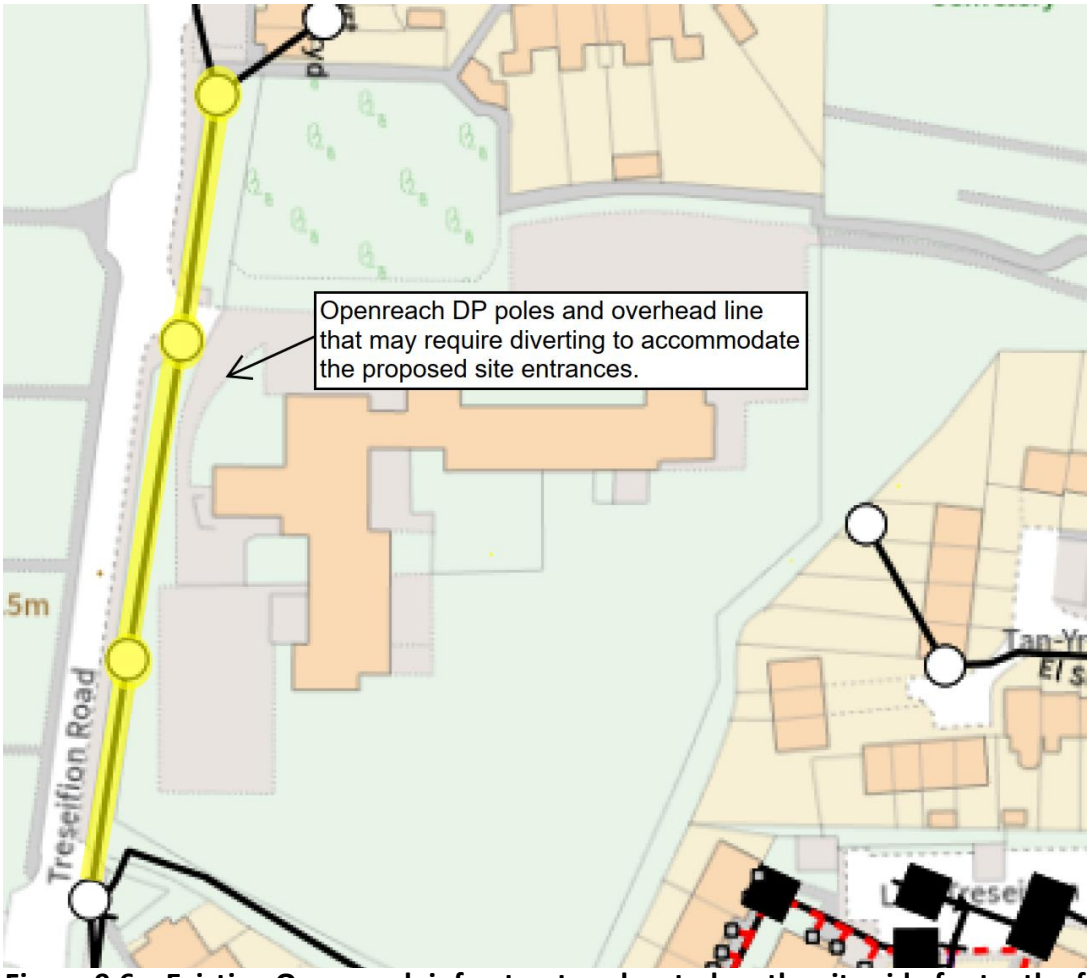


Figure 9.6 – Existing Openreach infrastructure located on the site side footpath of Treseifion Road

It is recommended that Openreach are contacted at the earliest opportunity to attend a site survey in order to provide a detailed estimate for the works. Allow a minimum cost of £1,800.00 for Openreach to undertake a site survey. If the survey determines that the apparatus needs to be relocated, **allow a budget cost of £40,500.00,** in addition to the survey

fee. This cost is based on re-routing the overhead lines underground approximately 100 metres across the full frontage of the site.

Openreach infrastructure record indicates overhead apparatus and 1 no. distribution pole located on the site side footpath to the south of the development site. Based on review of the site layout available, no site entrances or driveways are to be constructed onto this footpath. Therefore, provided no alterations will be made to the line and level of this footpath during construction and following completion of the development proposals, diversion of this apparatus is not currently anticipated.

Openreach infrastructure records do not typically indicate individual service connections however, their presence should be anticipated until proven otherwise. A site survey is recommended to identify if any services are still supplying the former school currently occupying the site. If a service connection is located, Openreach may need to complete a site survey to determine the extent of works required and to confirm no surrounding customer's supply will be affected by the removal of the apparatus. The cost of completing a site survey will be chargeable and the fee payable is £299.00. Given the existing apparatus within the vicinity of the development site, it can be assumed that an overhead service may be present. If so, Openreach will typically cease overhead lines free of charge. As the school has been vacant for a period of time, we have assumed that any Openreach disconnection works may have already been completed. The site survey will establish if this is the case.

9.1.3 Conclusion – Cost & Risk Analysis

Costs relating to the reconfiguration of the existing Openreach distribution network are identified in the following table;

Detail	Cost
Connections	£Nil
Diversions	£40,500.00 if required.
Disconnections	£Nil
Survey Fees	£2,099.00
Total	**£42,599.00**

Table 9.1 – Openreach Costs

The main risks associated with the procurement of proposals and the required works are as follows;

- Provisional sums have been applied based on previous projects of similar size and UCML's experience.

- Openreach infrastructure records currently do not differentiate between copper and fibre optic cables, and as such the type of infrastructure within the ground cannot be determined through desktop review of their statutory infrastructure records. Please note, the presence of fibre optic cables could multiply anticipated diversion costs significantly.

10.0 Other

In addition to the statutory network operators operating within the vicinity of the development site, UCML has contacted a number of Independent Distribution Networks Operators (IDNOs), Independent Gas Transporters (IGTs), telecommunications providers, pipeline operators, and other third parties who own and operate apparatus nationwide to determine whether any apparatus is located within the vicinity of the development site.

The companies contacted, and their associated response, are summarised within Table 10.2 overleaf. Please refer to the key provided below for further detail on the definitions used.

Table Key	Definition
Affected	Utility apparatus is indicated as being located within the vicinity of the development site.
Not Affected	Utility apparatus is not indicated as being located within the vicinity of the development site.
No Response	No response has been received from the utility provider to date.
Desk Research	Any response determined from desktop research is indicated in this column. This indicates utility infrastructure records have been obtained in house using mapping software provided by the relevant utility provider.

Table 10.1 – Plant Enquiry Response Key

Utility	Company	Desk Research	Affected (date issued)	Not Affected (date issued)	No Response
IDNO	Engie				28/07/21
IDNO	Utility Assets				28/07/21
IDNO	Eclipse Power Networks Ltd			04/06/21	
IDNO	G2 Energy				28/07/21
IGT	BBL Company				28/07/21
IGT	GTC*			05/05/21	
IGT	Indigo Pipelines				28/07/21
IGT	Interconnector UK LTD				28/07/21
Comms	Arqiva				28/07/21
Comms	Cityfibre			27/07/21	
Comms	Colt (Catelecom)			21/06/21	
Comms	Instalcom**			04/06/21	
Comms	Interoute (Plancast)				28/07/21
Comms	McNicholas (TATA)				
Comms	Mobile Broadband Network LTD			04/06/21	
Comms	Sky UK LTD			04/06/21	
Comms	SOTA			04/06/21	
Comms	Spectrum Communications				28/07/21
Comms	Telent			04/06/21	
Comms	Verizon			07/06/21	
Comms	Virgin Media			22/07/21	
Comms	Vodafone			22/07/21	
Transport	Network Rail			04/06/21	
Transport	NTRS				28/07/21
Transport	Traffic Master			10/06/21	
Other	Mastdata.com (Mobile Phone Masts)			27/07/21	

Table 10.2 – Plant Enquiry Responses

*Note GTC includes: GTC Pipelines Ltd, Independent Pipelines Ltd, Quadrant Pipelines Ltd, Electricity Network Company Ltd, Independent Power Networks Ltd, Independent Water Networks Ltd, Independent Fibre Networks Ltd, and Independent Community Heating Ltd.
** Instalcom includes: CenturyLink Communications UK Ltd (formerly Level 3), Global Crossing (UK) Ltd, Global Crossing Pec and Fibernet UK Ltd and Fibrespan Ltd

Optional Searches

Some utility providers are rarely confirmed to be in the vicinity of infrastructure record searches and are therefore only included within the search upon request, as the charge per enquiry is disproportionate to the number of affected responses received. Please advise UCML if you would like to include these additional searches at an additional cost. These optional searches are as follows;

Optional Searches		
IDNO	Harlaxton	Approximate cost £35 (plus VAT)
IDNO	UK Power Distribution	Cost ranges from £9 - £95 (plus VAT) subject to site size
Comms	Vtesse	Approximate cost £55 (plus VAT)

Table 10.3 – Optional Searches

LinesearchbeforeUDig

A number of asset owners are registered with LinesearchbeforeUDig (LSBUD), an online service used to review the location of utility assets in relation to a development site location. UCML has undertaken an LSBUD search for this development site, and the response is shown in Figure 10.1 below.

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
Wales and West Utilities	02920278912	0800111999	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	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Teesside Operator Ltd	Diamond Transmission Corporation	DIO (MOD Abandoned Pipelines)
DIO (MOD Live Pipelines)	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
Exolum Pipeline System	Fulcrum Pipelines Limited	Gamma
Gas Networks Ireland (UK)	Gateshead Energy Company	Gigaclear Ltd
Gtt	Harbour Energy	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	Last Mile
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	Neos Networks	Northumbrian Water Group
NPower CHP Pipelines	NTT Global Data Centers EMEA UK Ltd	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 and Southern Electricity Networks
Scottish Power Generation	Seabank Power Ltd	SES Water
SGN	Shell	Shell NOP
SSE Generation Ltd	SSE Transmission	SSE Utility Solutions Limited
Tata Communications (c/o JSM Construction Ltd)	Total Colnbrook Pipelines	Total Finaline Pipelines

Figure 10.1 – LSBUD search result

10.1.1 East Surrey Pipelines

East Surrey Pipelines (ESP) infrastructure record confirms that they own and operate network within the vicinity of the development site. The apparatus is indicated as being routed within the cul-de-sac to the east if the development site. Given the location of this apparatus in relation to the development site, it does not appear to be affected by the development proposals. See Figure 10.2 below for further detail.

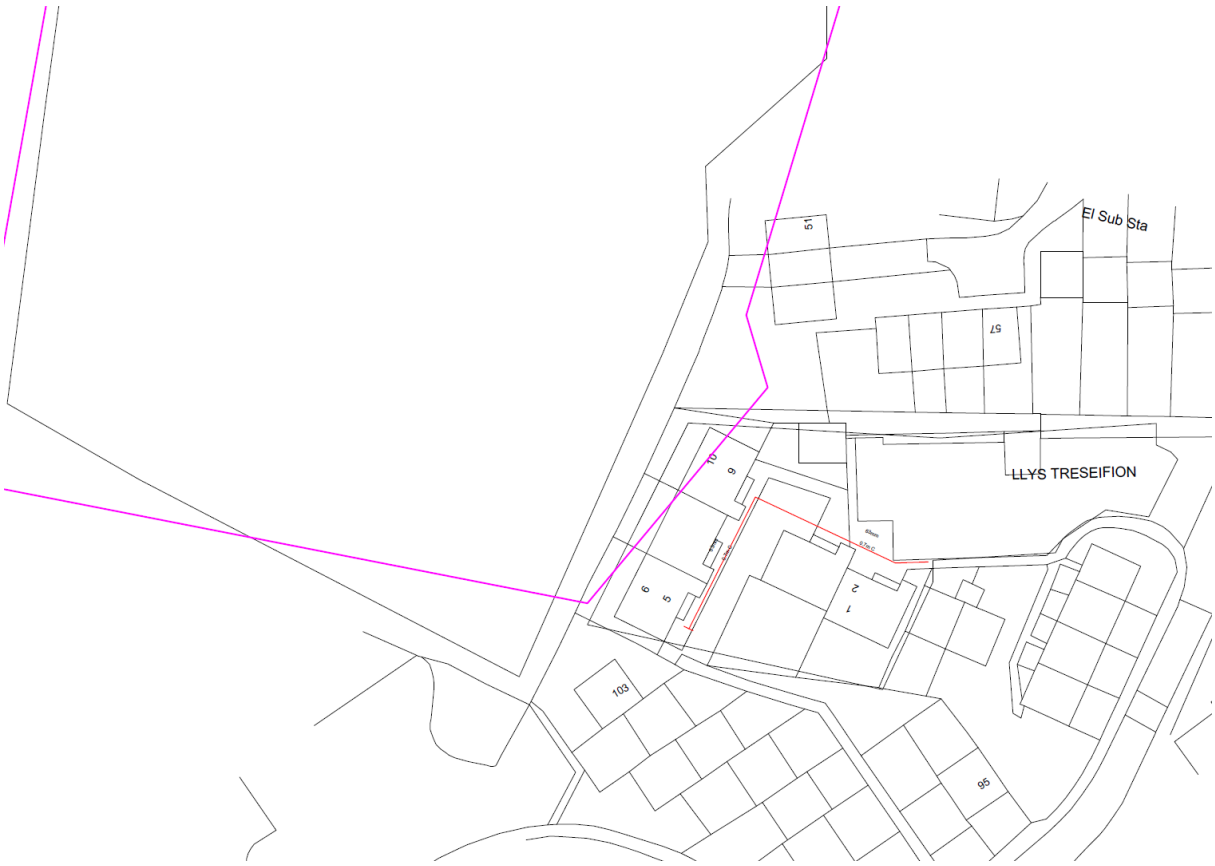


Figure 10.2 – ESP Infrastructure Record

11.0

11.0 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 40 no. residential dwellings. As discussed within the study, UCML has undertaken capacity checks with the relevant statutory network operators who have provided confirmation that the existing electricity, water and telecoms services within the vicinity of the development site currently have sufficient capacity to serve the development.

Figure 11.1 below indicates the locations of the points of connection provided by the statutory utility operators in relation to this development.

Figure 11.1 – Location Plan indicating position of points of connection

The above figure includes indicative routes from the points of connection to the development site, which have been included for information and guidance only, and are subject to change. The final routes of utility apparatus to the development site will be provided by the relevant appointed utility provider and are subject to design approval from the adopting network owner, highway authority or landowner and the completion of relevant legal searches. Based on desktop review, it is assumed that there will be no abnormal legal requirements are currently anticipated to utilise the proposed electricity and water connection points. It is recommended that legal searches are undertake at the earliest opportunity to confirm this.

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.

12.0 Risk Matrix

Based upon the anticipated utility works required for this development discussed within this study, UCML has drawn up an indicative risk matrix for the development. For the risk matrix, each item is allocated a 'traffic light' score based on the anticipated risk to the development and associated timescales based on the key shown below.

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	
Non-Contestable Works – LV POC Contestable Works – LV mains and service connections. Diversionary Works – None currently anticipated. Disconnection Works – LV service disconnections.	
Gas	
Connection Works – N/A Diversionary Works – None currently anticipated. Disconnection Works – None currently anticipated.	
Water	
Connection Works – Mains and service connections. Diversionary Works – None currently anticipated. Disconnection Works – Large diameter disconnection, if required.	
Telecoms – Openreach	
Connection Works – FTTP connections to the premises. Diversionary Works – DP poles and overhead line diversion, if required. Disconnection Works – Overhead line disconnection, if required.	
Other	
East Surrey Pipelines – None currently anticipated.	

Table 12.1 – UCML Risk Matrix

13.0 Street Works UK

Existing and new utilities are assumed to be located in accordance with the Street Works UK (formerly the National Joint Utility Group) guidelines. However, in reality existing utilities are often not laid to these guidelines. Where new road entrances are being formed it is recommended that trial hole investigations are carried out to verify the precise position and depth of infrastructure. In some cases, if the utility infrastructures are sufficiently deep, this may enable the extent and cost of diversions to be reduced.

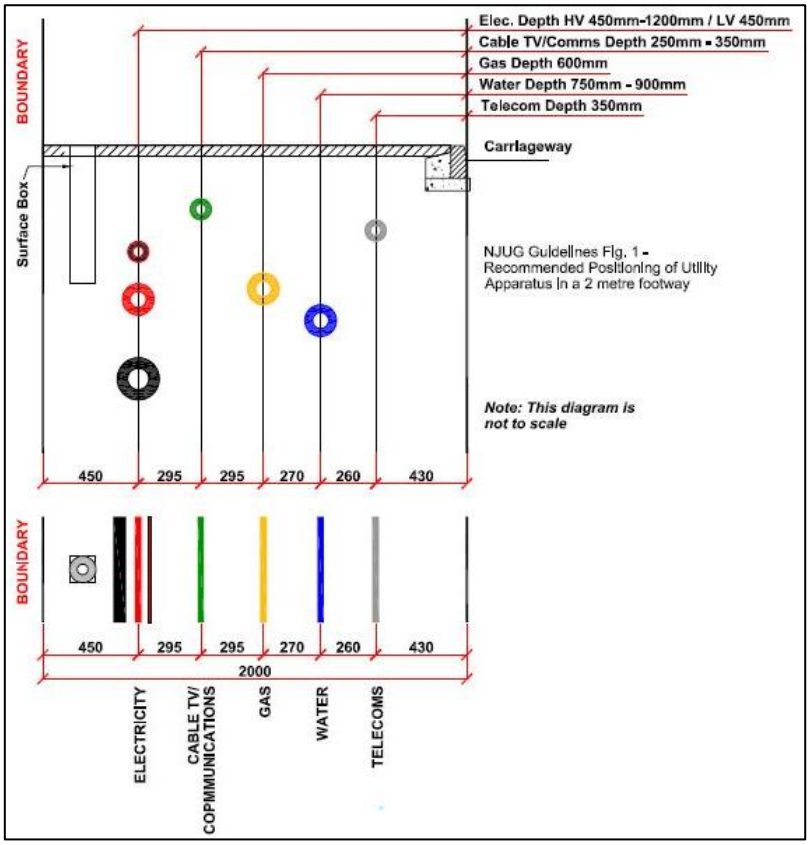
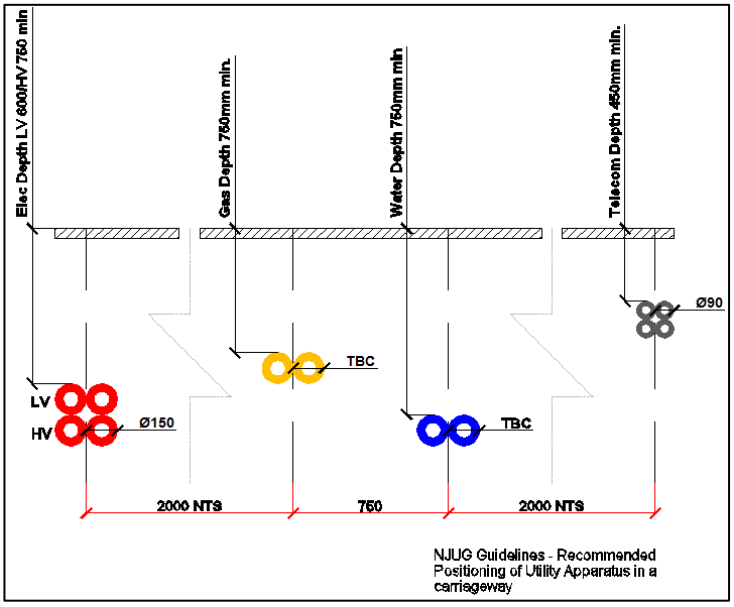


Figure 13.1- Recommended positioning of utility apparatus in a footpath

The position and depths of underground and overhead apparatus as indicated on infrastructure records included within the utility study are approximate and may deviate from the marked route. The plan information shown is given without warranty and is derived from statutory network information provided by others. The accuracy thereof must not be relied upon in the event of any development or works without further below ground investigations taking place.



Utility	Recommended Minimum Depths	
	Footway/Verge	Carriageway
Electricity EHV (High Voltage)	450 - 1200mm	750 - 1200mm
Electricity LV (Low Voltage)	450mm	600mm
Gas	600mm footway 750mm verge	750mm
Water	750mm	750mm min.
Telecoms	250 - 350mm	450 - 650mm

Source - Table 1, NJUG Guidelines on the Positioning of Underground Apparatus for New Development Sites

Figure 13.2 – Recommended positioning of utility apparatus in carriageway

When on-site, the contractor must use safe digging practices, in accordance with HSG 47, to verify and establish the actual position of mains, pipes, services, and any other apparatus on-site before any mechanical plant is used. The responsibility for locating the apparatus precisely before commencing any works rests entirely upon the person undertaking or directly responsible for those works.

The Contractor is to refer to the following documents before works commence within the vicinity of existing services;

- Health and Safety Guidance HSG 47 Avoiding Dangers from Underground Services.
- Health and Safety Guidance GS6 Avoiding Danger from Overhead Electric Lines.
- Street Works UK (formerly NJUG) Guidelines.
- General Safety Measures to Avoid Injury and Damage to Gas Apparatus.
- CDM Regulations 2015 (Regulation 25 – Energy Distribution Installations).

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.

Produced;
Casey Watmore – Technical Coordinator
Utilities Connections Management Ltd.

Checked by;
Joanne Blackburn BA (Hons) – Technical Manager
Utilities Connections Management Ltd.

14.0 Further UCML Services

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 – Dwr Cymru Welsh Water Infrastructure Plan

Appendix 4 – Openreach Infrastructure Plan

Appendix 5 – Points of Connection Location Plan

N
W E
S

Canolfan Menter

Enterprise Centre

Mortuary

TRESEIFION ROAD

08/2481/012/ -TAN-YR-EFAIL

El Sub Sta

TAN-YR-EFAIL

LLYS TRESEIFION

08/2481/015/ -TRESEIFION EST.ST.2

95mm(3) AL AS 11kV

95mm(3) AL AS 11kV

El Sub Sta

El Sub Sta

Parkfield Houses

2 x 35 ABC LV

6 (10m x 230mm)

4 8 10 9 6 5 2 1 111 112 to 116 103 104 117 to 122 151 147 44 38 29 30 28 50 51 57 37 35 31 34 23 63 68 94 92 91 95 97 84 82 83 74 80 18 13 12 91 7 96 85 90 2 1

G

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

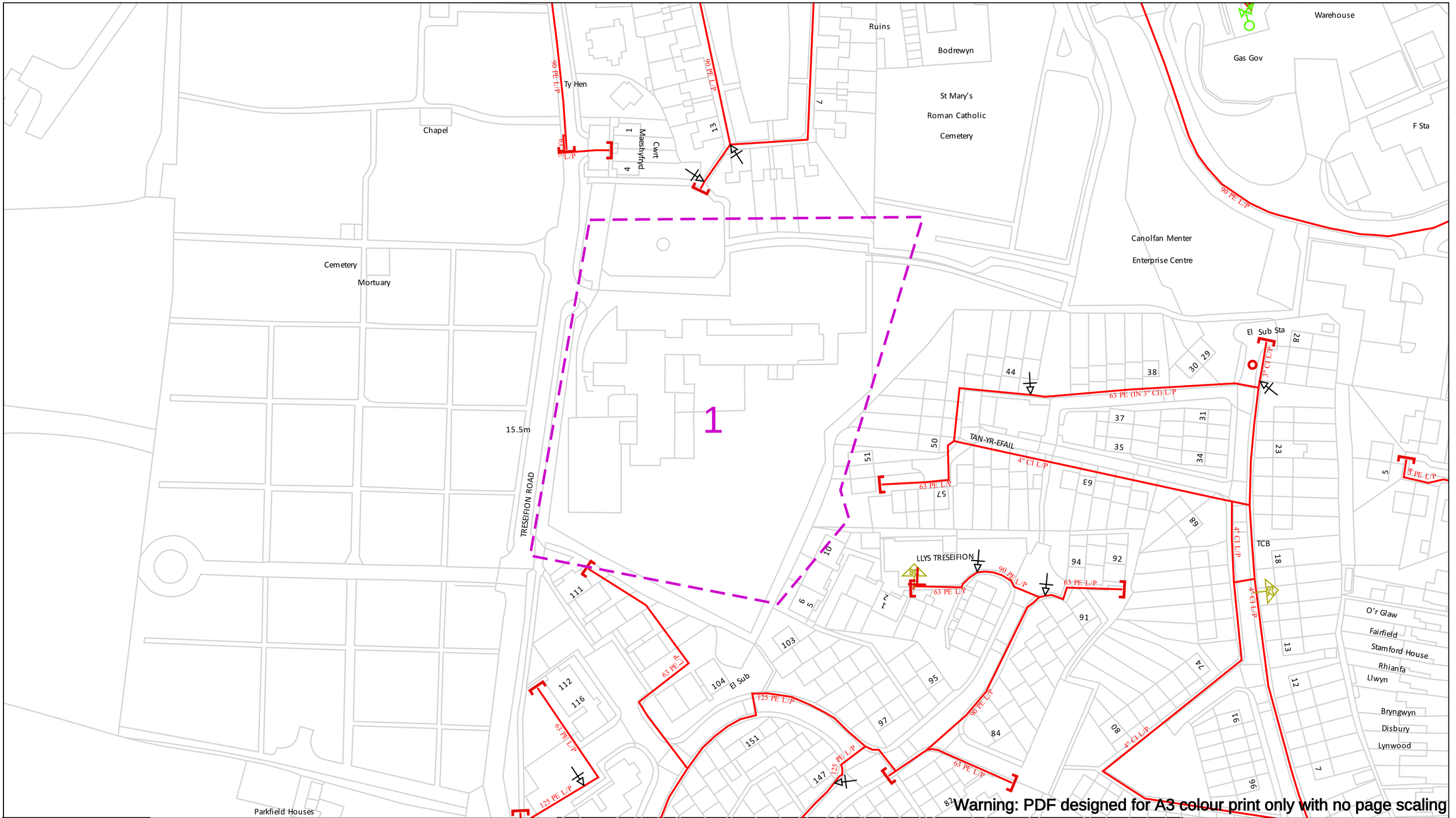
Your attention is drawn to the Health and Safety Executive Booklet HSG47, available from HSE.

DATE 05/05/2021

SCALE 1 : 1,010

MAP REFERENCE 224,544 381,660

0 3.5 7 14 21 28 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: 22/07/2021
Job Reference: 22763240
Site Location: 224527 381728
Requested by:
Miss Casey Watmore
Your Scheme/Reference: Ysgol Thomas Ellis

Scale: 1:1250 (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

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

Dŵr Cymru
Welsh Water

PPA0005394

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

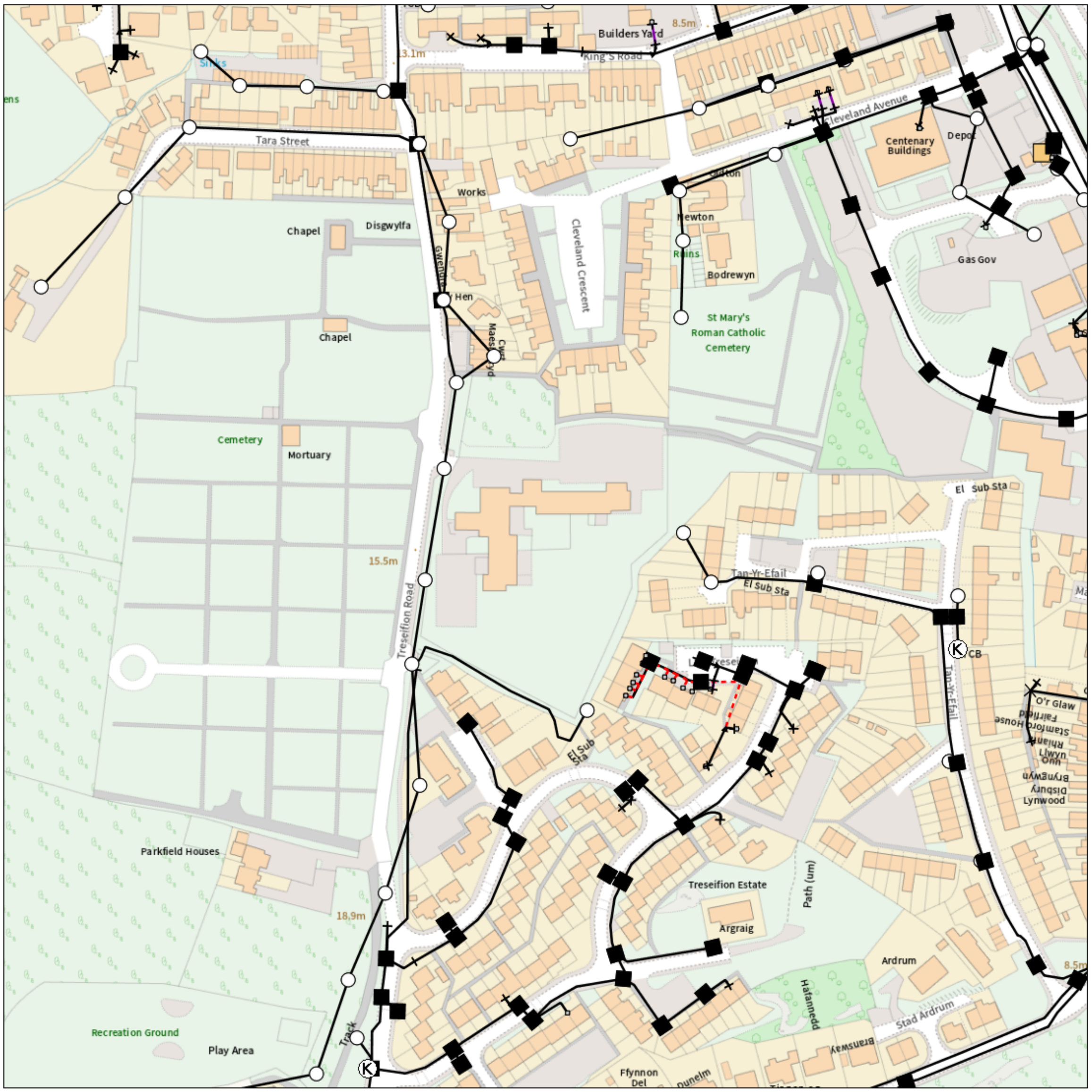
Notes:

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:	224522,381706
Map scale:	1:1250
Printed by:	Gillian Williams
Printed on:	17 Dec 2020

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		

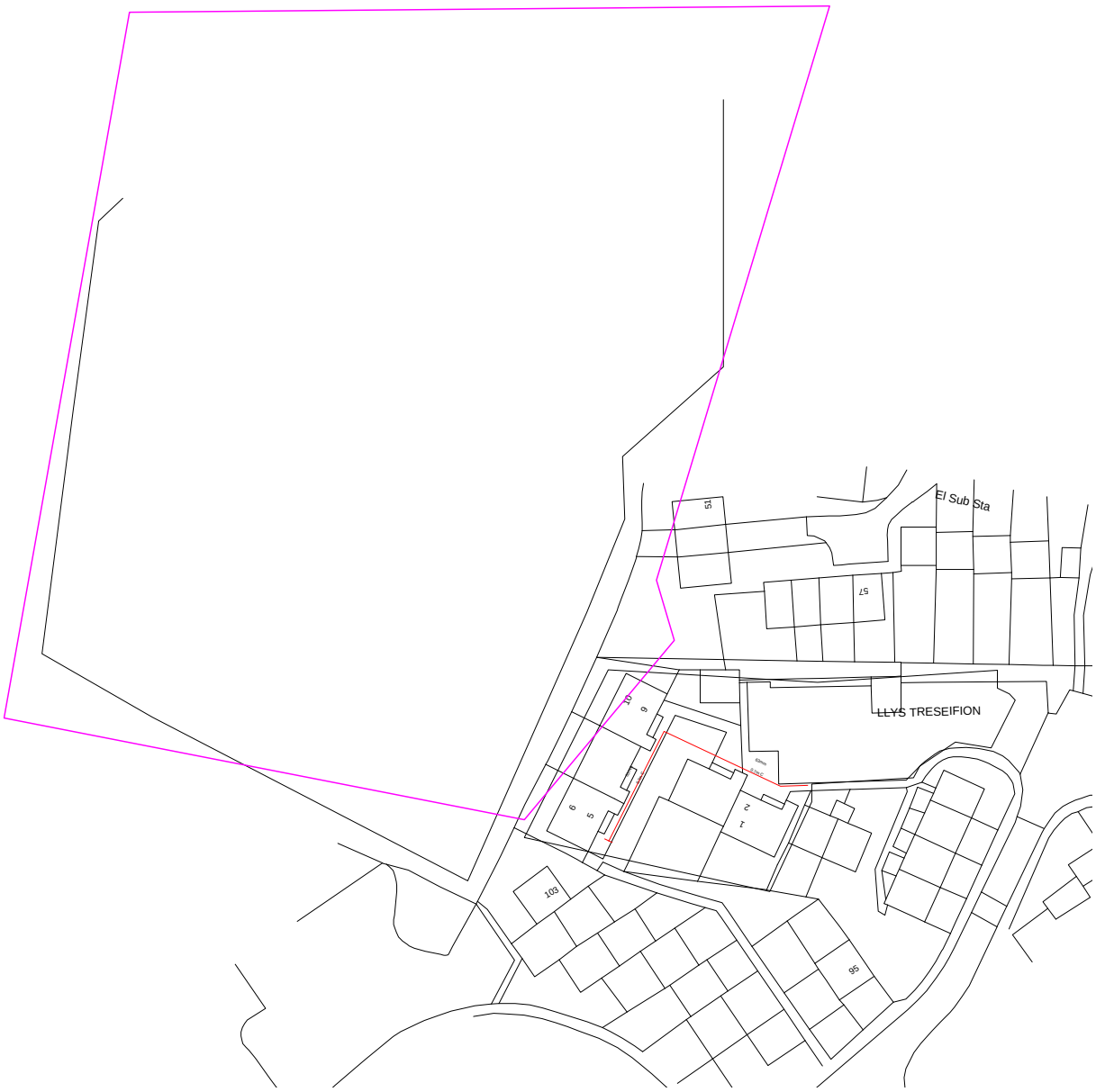
Change Of State	+	Hatchings	
Split Coupling	×	Built	
Duct Tee	▲	Planned	
Building		Inferred	
Kiosk	K	Duct	

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 : VMC01438Y
Map Reference : (centre) SG2452281710
Easting/Northing : (centre) 224522,381710
Issued : 05/05/2021 13:43:46

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



Date Requested: 22/07/2021

Requested by: Casey Watmore

Company: UCML

Job Reference: 22763240

Your Scheme/Reference: Ysgol Thomas Elli

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.

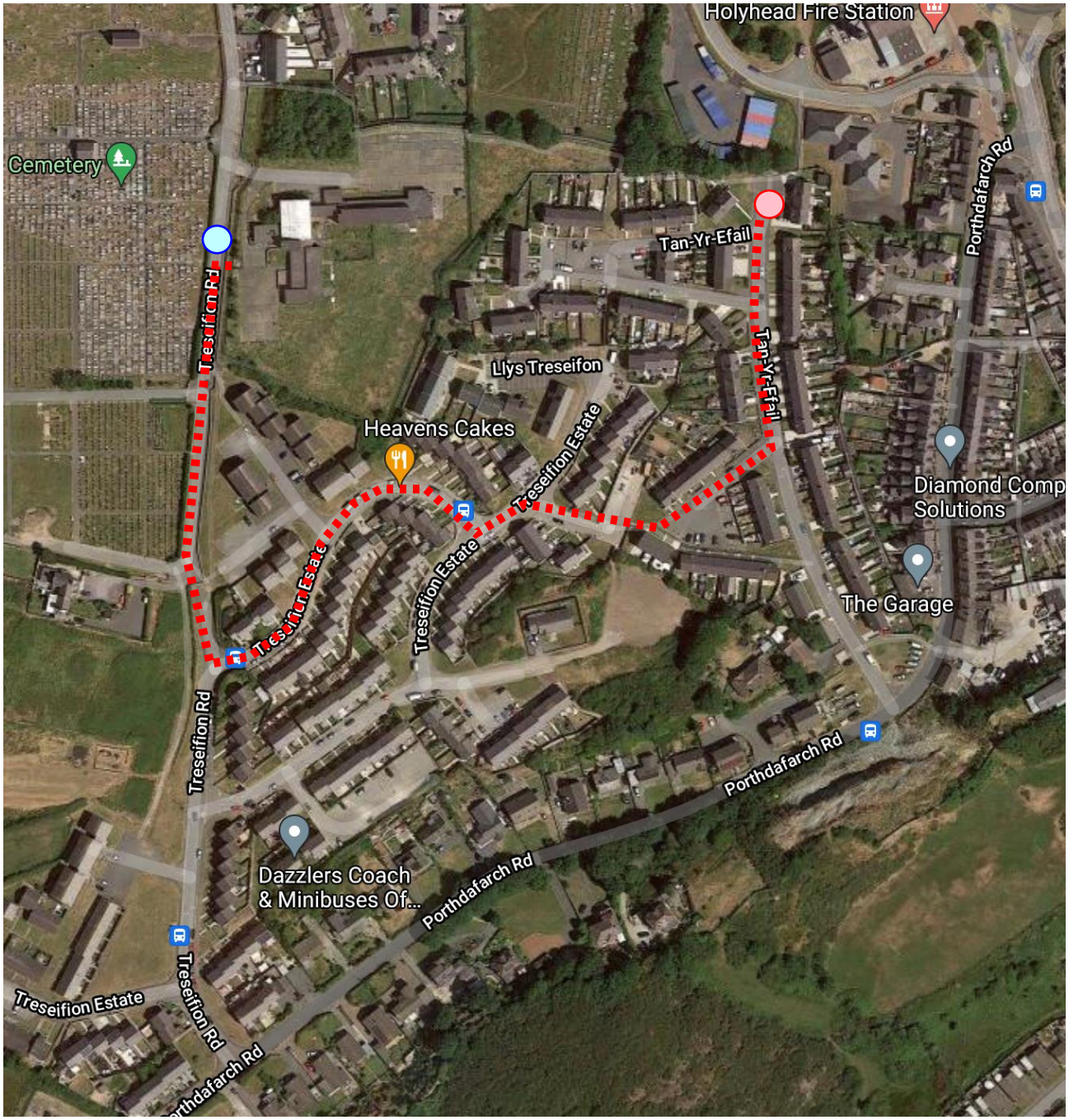
ESP UTILITIES GROUP

ESP Utilities Group Ltd
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA
Phone: 01372 587500
Email: PlantResponses@espug.com

Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)


Holyhead Fire Station
Cemetery
Tan-Yr-Efail
Porthdafarch Rd
Treseifion Rd
Llys Treseifon
Heavens Cakes
Treseifion Estate
Diamond Comp Solutions
The Garage
Treseifion Rd
Porthdafarch Rd
Dazzlers Coach & Minibuses Of...
Treseifion Estate
Treseifion Rd