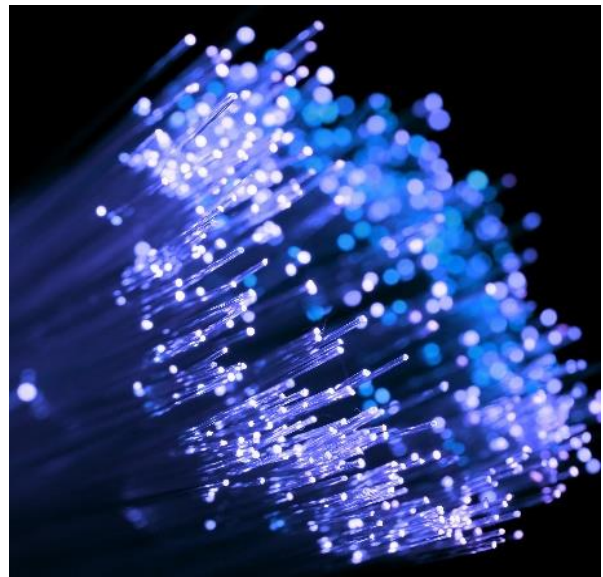




Winston Road, Harpurhey

UCML Utility Study Level 1

Prepared by: Joanne Blackburn BA (Hons) – Senior Technical Engineer
Utilities Connections Management Limited
Email: joanne.blackburn@ucml.co.uk

UCML Utility Study – Level 1

Winston Road,
Harpurhey,
Manchester

Produced for: BTP Architects, on behalf of One Manchester

Issue/Revision	Comments	Date	Prepared By	Checked By
1	First Issue	25/01/2021	Joanne Blackburn	Ryan Elliman
2				
3				

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1.0 Introduction

UCML has been instructed by BTP Architects, on behalf of One Manchester (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 12 no. dwellings. The site is located off Winston Road, Harpurhey, Manchester. This study includes the land within the red line boundary 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. WR-BTP-00-SP-DR-A-3816_105 dated 11/11/2020) provided to UCML by the Client, as indicated in Figure 1.2 overleaf.



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	Electricity North West Ltd
Gas	Cadent Gas
Water	United Utilities
Telecoms	Openreach
	Virgin Media

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 – £9,600.00 (<i>LV disconnection works</i>)	
Testing Works – £3,500.00	
Diversiory Works – £23,000.00 (<i>LV diversionary works if required</i>)	
Connections – £13,500.00	
Total Electricity Costs - £49,600.00	
Gas	
Disconnection Works – <i>None currently anticipated</i>	
Diversiory Works – £44,000.00 (<i>LP diversionary works, if required</i>)	
Connections – £11,000.00	
Total Gas Costs - £55,000.00	
Water	
Disconnection Works – £Nil	
Diversiory Works – <i>None currently anticipated</i>	
Connections – £18,000.00	
Total Water Costs - £18,000.00	
Telecoms – Openreach	
Disconnection Works – <i>None currently anticipated</i>	
Diversiory Works – £37,800.00 (<i>if required, inclusive of survey fee</i>)	
Connections – £7,056.00 (<i>FTTP connections</i>)	
Total Openreach Costs - £35,656.00	
Telecoms – Virgin Media	
Disconnection Works – <i>None currently anticipated</i>	
Diversiory Works – £45,600.00 (<i>relocation of cabinet, inclusive of survey fee</i>)	
Connections – It can be assumed that Virgin Media will provide a connection proposal for the development at no cost to the developer. It is recommended Virgin Media is consulted to confirm.	
Total Virgin Media Costs - £45,600.00	
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 Electricity North West Ltd (ENWL) 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 ENWL infrastructure which has been extracted from its network records. The cables shown in blue are operated at 6,600 Volts (HV), and those shown in orange are operated at 415 Volts (LV). Please refer to the infrastructure record appended to this study for further detail.

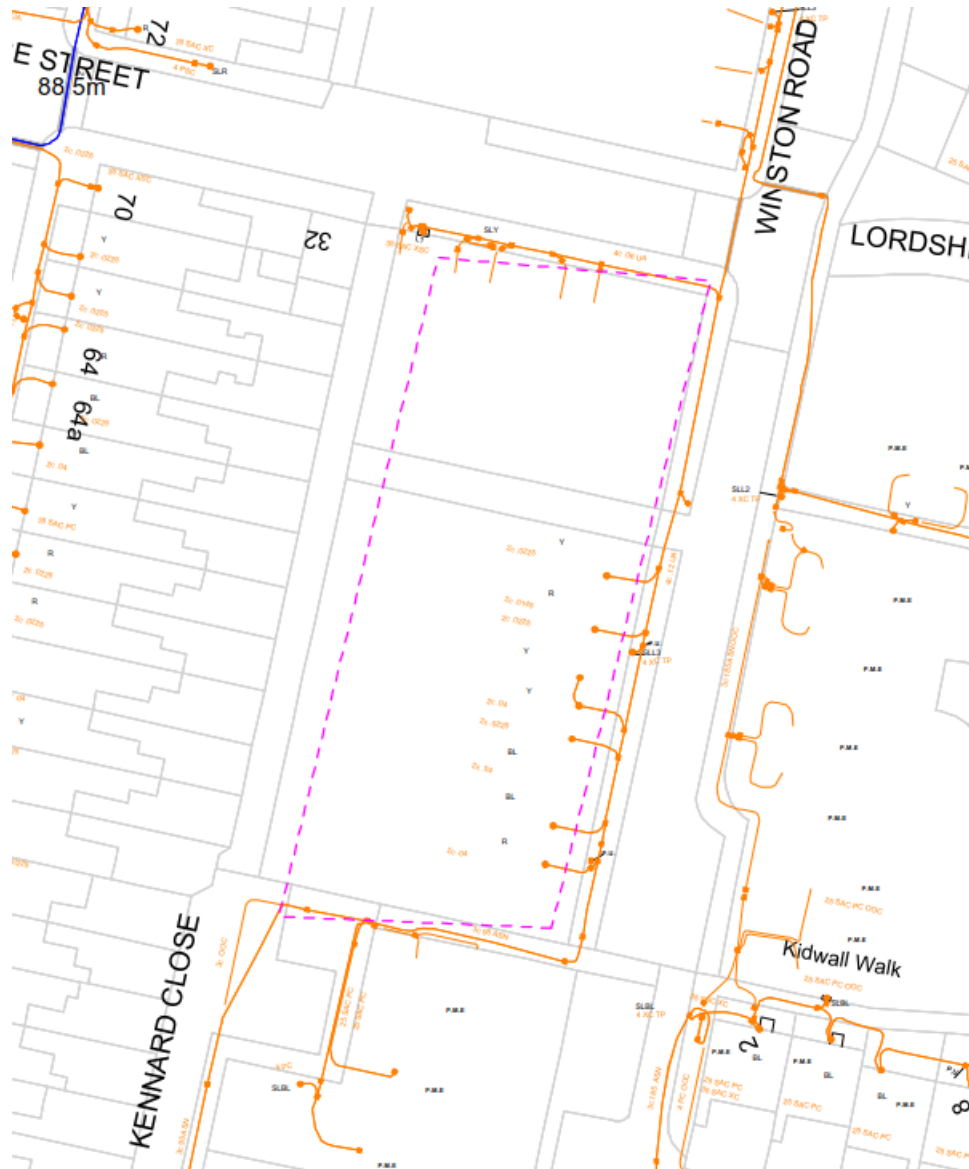


Figure 5.1 – Existing Electricity Infrastructure Plan

Operating Voltage	Colour Code	Line Colour
132kV	Black	—
33kV	Green	—
22kV-25kV	Yellow	—
11kV	Red	—
6kV-6.6kV	Blue	—
1kV-6kV	Violet	—
LV	Orange	—
Unknown Voltage	Brown	—

Disconnections: ENWL infrastructure record indicates a 11 no. LV cables extending within the development site boundary, which appear to be legacy assets remaining following the demolition of units that previously occupied the development site. Desktop review of the ENWL infrastructure site suggests 3 no. of these cables are disconnected from the local

network. It may be prudent to undertake testing works to confirm the status of the cables, for which a **budget cost of £3,500.00** is recommended (based on the on-site contractor undertaking the excavation works to expose the cables). Once proven dead, the cables can be removed from the site by the appointed contractor if required. It should be noted that any utility apparatus exposed on-site should be treated as live until proven otherwise.

The remaining 8 no. cables are indicated as live, and disconnection works will be required to clear the site to enable the proposed development works to go ahead. A **budget cost of £9,600.00** is recommended for the anticipated disconnection works.

Diversions: ENWL infrastructure record indicates LV cables routed within the site side footpaths of Winston Road and Hodge Street. As indicated on the current site layout plan, the proposed development works include the construction of driveways with associated dropped kerbs on to Winston Street. The construction of the dropped kerbs may affect the existing LV cables to the extent diversionary works may be required, depending on the existing depth of the cables.

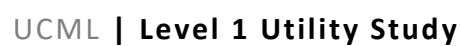
It may be prudent to undertake strategically located trial excavations within the site side footpath of Winston Street to confirm the actual depth of the aforementioned cable as, should it be proven the cable is already located at a minimum of 600mm below the proposed finished ground cover level, the requirement for diversionary works could be negated through consultation with ENWL. If the cables are shallow, and lowering works are required, a **budget cost of £23,000.00** is recommended for these works.

Connections: It is envisaged there may be sufficient capacity in the existing LV network to provide supply to the proposed development. A Point of Connection (POC) application is recommended to confirm the actual availability of capacity within the local network. For the purpose of this study, UCML has assumed a connection can be taken at LV. Allow a **budget cost of £13,500.00** for connections.

6.0 Gas

The local Gas Distribution Network in the vicinity of the development site is owned and operated by Cadent Gas 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 Cadent Gas' 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.



Disconnections: Cadent Gas do not typically indicate individual service pipes on their records; however, their presence should be anticipated until proven otherwise. It is assumed that any service pipes that supplied previous units that occupied the development site were disconnected off-site prior to the completion of demolition works. No further disconnection works are currently anticipated; however, it may be prudent to undertake a site survey to confirm.

Diversions: Cadent Gas infrastructure record indicates 125mm LP mains routed within the site side footpaths of Winston Road and Hodge Street to the development site. This apparatus may be affected by the proposed construction of driveways and associated dropped kerbs onto Winston Road. The construction of the dropped kerbs may affect the existing LP main to the extent diversionary works may be required, depending on the existing depth of the apparatus.

It may be prudent to undertake strategically located trial excavations within the site side footpath of Winston Road to confirm the actual depth of the aforementioned apparatus as, should it be proven the mains are already located at a minimum of 750mm below the proposed finished ground cover level, the requirement for diversionary works could be negated through consultation with Cadent Gas. If the mains are shallow, and lowering works are required, a **budget cost of £44,000.00** is recommended for these works.

Connections: It is envisaged there may be sufficient capacity in the existing LP network to provide supply to the proposed development. A point of connection application is recommended to confirm the actual availability of capacity within the local network. For the purpose of this study, UCML has assumed a connection can be taken at LP. Allow a **budget cost of £11,000.00** for connections.

7.0 Water

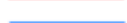
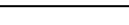
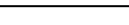
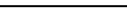
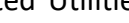
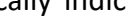
The local clean water distribution network in the vicinity of the development site is owned and operated by United Utilities within the terms of its statutory license issued by Ofwat. The clean water network in the immediate vicinity of the site comprises of distribution water mains and associated apparatus.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

The figure on the following page is an extract from United Utilities' 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

Proposed	Abandoned	Live	
			Distribution Main
			Trunk Main
			Comms Pipe
			Private Pipe
			Concessionary Service
			Raw Water
			LDTM Raw Water
			LDTM Treated Water

Disconnections: United Utilities do not typically indicate individual service pipes on their records; however, their presence should be anticipated until proven otherwise. It can be assumed that any service pipes that supplied previous units that occupied the development site were disconnected off-site prior to the completion of demolition works.

On this occasion, United Utilities does indicate 1 no. service pipe terminating within the site side footpath of Winston Road near to the south east corner of the development site. Assuming this is a legacy asset from the previous use of the site, disconnection of this service

pipe if present will be required to clear the site for the proposed development works. The permanent disconnection of domestic sized service pipes can be typically completed at nil cost to the developer. No further disconnection works are currently anticipated; however, it may be prudent to undertake a site survey to confirm.

Diversions: United Utilities infrastructure record indicates a 100mm ductile iron distribution main routed within the adjacent side footpath of Winston Road to the development site. Assuming no alterations will be made to the line or level of the adjacent side footpath, this apparatus appears to be unaffected by the development proposals.

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.

From April 2018, off-site network reinforcement costs have been funded through the collection of infrastructure charges applicable to each new connection. Infrastructure charges are calculated based on the estimated costs of all off-site reinforcement works required to facilitate connections to new developments within United Utilities' supply area over a rolling 5 year period, based on the total anticipated number of new connections within that supply area. Please note, the infrastructure charge costs can vary year on year and therefore long term developments may be affected by the possible variance in infrastructure charges. Each water company has a differing infrastructure charge based on their individual network and anticipated levels of reinforcement works, and the cost of the infrastructure charges for clean and waste water are likely to differ.

The infrastructure charges applicable to developments within United Utilities' region for the current scheme of charges (2020-2021) are £302.00 per plot for clean water and £279.00 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 £18,000.00** for connections to 12 no. residential dwellings.

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.

It should be noted that United Utilities has an Infrastructure Charges Discount Scheme intended to incentivise sustainable development within their region and encourage developers to construct properties which promote the efficient use of water. In compliance with Part G of the Building Regulations 2010, all new homes built in the UK must be built to a rating of 125 litres of water usage per person, per day (PPPD). United Utilities has introduced a reduced infrastructure charge of £30.00 per property for clean water where it can be demonstrated that properties have been built to a usage rating of 110 litres of water PPPD or less.

In order to qualify for the reduced charge, a completed 'Water Efficiency Calculator' form must be submitted with an application for connections, with one completed calculation required for each property type on a development. This is to demonstrate the fixtures and fittings planned to be installed comply with the water usage criteria (please see <http://sites.wrcplc.co.uk/partgcalculator/> for further information). Along with the efficiency calculator results, United Utilities will require a signed disclaimer notice from the Developer. This disclaimer notice is for Developers to agree to United Utilities conducting an audit of built properties to confirm they comply with the requirements of the discount scheme and regulations, and confirms the Developer accepts liability for the full infrastructure charge if the information provided is found to be inaccurate following an audit. For sewerage, a reduced infrastructure charge of £28.00 per property will be payable for all properties built with no surface water connection to the public sewer. To qualify for the reduced charge for sewerage, a drainage layout plan that confirms the drainage connectivity of the proposed properties must be submitted with an application for water services.

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.

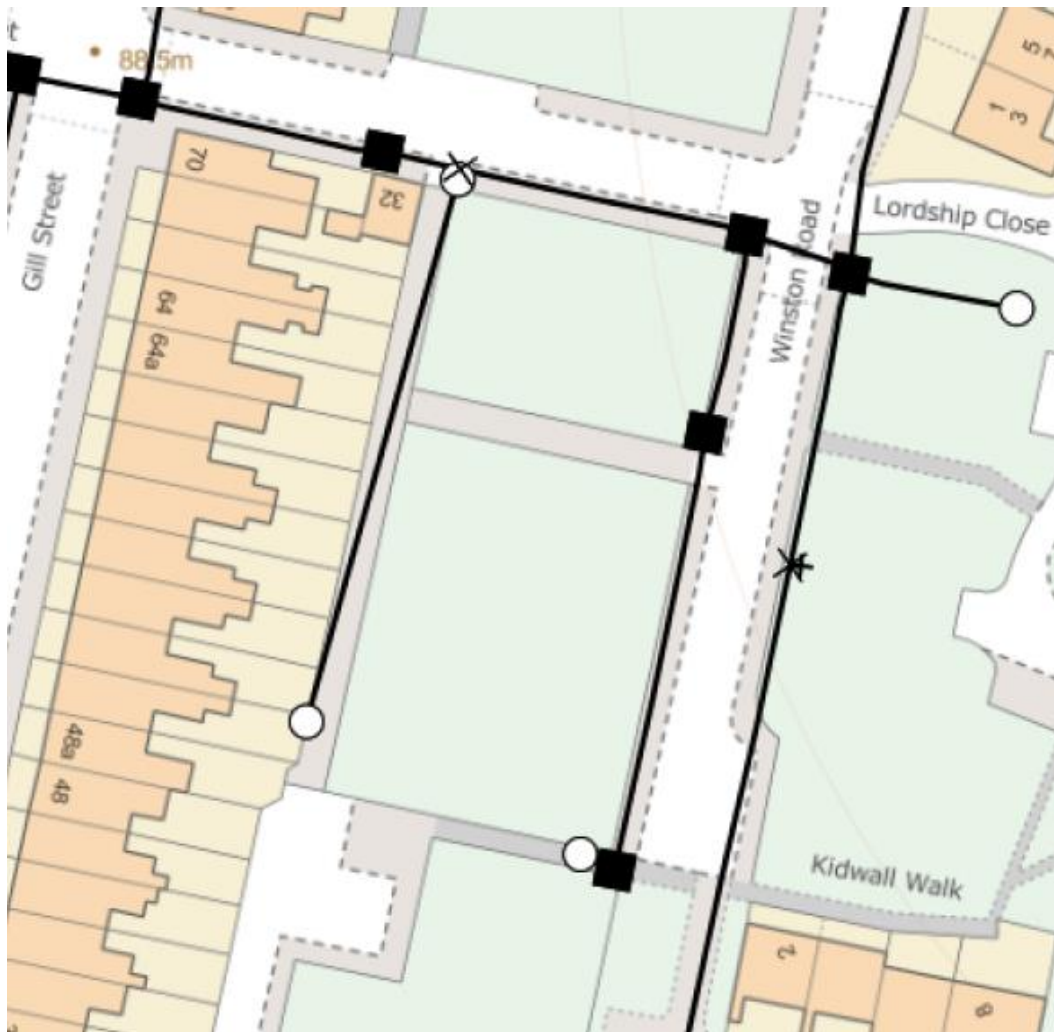


Figure 8.1 – Existing Openreach infrastructure

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

Disconnections: Openreach do not typically indicate individual service connections on their records; however, their presence should be anticipated until proven otherwise. It is assumed that any service connections that supplied previous units that occupied the development site were disconnected off-site prior to the completion of demolition works. No further disconnection works are currently anticipated; however, it may be prudent to undertake a site survey to confirm.

Diversions: Openreach infrastructure record indicates underground duct and associated apparatus routed within the site side footpaths of Winston Road and Hodge Street to the development site. This apparatus may be affected by the proposed construction of driveways and associated dropped kerbs to serve the development. The construction of the dropped kerbs may affect the existing apparatus to the extent diversionary works may be required, depending on the existing depth of the apparatus.

It may be prudent to undertake strategically located trial excavations within the site side footpath of Winston Road to confirm the actual depth of the aforementioned apparatus as, should it be proven it is already located at a minimum of 600mm below the proposed finished ground cover level, the requirement for diversionary works could be negated through consultation with Openreach. If the apparatus is shallow, and lowering works are required, a **budget cost of £27,000.00** is recommended for these works. It should be noted that this cost is based on the lowering of the existing duct only, as desktop review of the proposed site layout plan and Openreach infrastructure record indicates the proposed driveway locations do not conflict with the existing joint boxes located along the footpaths.

The above mentioned diversionary costs are based on the underground infrastructure being copper, as opposed to fibre optic cables. Openreach infrastructure records do not currently differentiate between copper and fibre optic cables, and as such the type of infrastructure within the ground cannot be determined by reviewing their statutory infrastructure records. Please note, the presence of fibre optic cables could significantly increase anticipated diversion costs. UCML recommend that Openreach is formally contacted in the early stages of the scheme in order for Openreach to provide a survey to determine the extent of any potential diversionary works and the associated costs. The provision of the survey will incur a survey fee to be paid by the Client, and UCML recommends a **minimum of £1,800.00** is allowed for the applicable upfront survey fee in addition to the budget cost provided above.

Openreach infrastructure record indicates an existing pole located at the entrance of the alleyway routed along the western boundary of the development site, from which an overhead line is routed to a second pole located along the alley.

Review of a 'street view' image of the development site suggests the second pole indicated as located within the alley near the south west corner of the development site is actually located within the development site boundary. If it is located as shown on the Google 'street view' image viewed of the site, diversionary works will be required to relocate the pole as, based on the current site layout plan, it will be located within the boundary of the southernmost Plot. A **budget cost of £9,000.00** is recommended for these works. UCML recommend that Openreach is formally contacted in the early stages of the scheme in order for Openreach to provide a survey to determine the extent of any potential diversionary works and the associated costs. The provision of the survey will incur a survey fee to be paid by the Client, and the survey fee figure provided overleaf includes review of both the underground and overhead diversionary works that may be required to accommodate the proposed development works.

Openreach infrastructure record indicates another pole located on the footpath of Winston Road, near the south east corner of the development site. Based on desktop review, it is assumed this apparatus can be retained in situ as it does not appear to conflict with the proposed on-site works. It may be prudent to undertake a site survey to confirm.

Connections: A reasonable assumption can be made that a connection can be taken from the existing infrastructure located in the immediate vicinity of the development site. As the development consists of under 20 dwellings, the Client will be required to contribute to the cost of Fibre to the Premise (FTTP) connections. For a site of this size, the Client contribution will be **£7,056.00** (£588.00 per dwelling) based on Openreach's current published rate card.

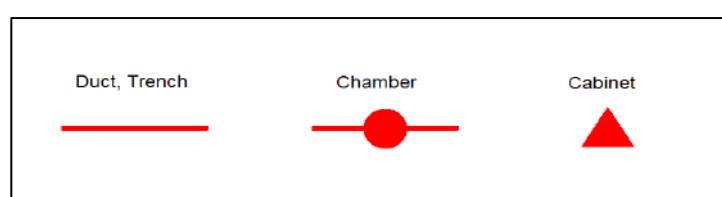
8.2 Virgin Media

Virgin Media has confirmed that they own and operate telecommunications apparatus in the vicinity of the development site. The Virgin Media network in the immediate vicinity of the site comprises of underground cables and associated apparatus.

The following diagram is an extract from Virgin Media 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 refer to the infrastructure record appended to this study for further detail.



Figure 8.2 – Existing Virgin Media Infrastructure



Disconnections: Virgin Media do not typically indicate individual service connections on their records; however, their presence should be anticipated until proven otherwise. It is assumed that if the previous units that occupied the development site had Virgin Media service connections, these were disconnected off-site prior to the completion of demolition works. No disconnection works are currently anticipated.

Diversions: Virgin Media infrastructure record indicates a cabinet located on the site side footpath of Hodge Street to the development site. The location of the cabinet appears to conflict with the proposed driveway located near the north west corner of the development site. If the proposed driveway is retained in its current position, the relocation of the cabinet may be required. A **budget cost of £45,000.00** is recommended for these works. UCML recommend that Virgin Media is formally contacted in the early stages of the scheme in order to provide a survey to determine the extent of any potential diversionary works and the associated costs. The provision of the survey will incur an upfront survey fee of £600.00 to be paid by the Client in addition to the budget cost provided above. It may be prudent to review the location of the driveway if possible to determine if the requirement to relocate the cabinet can be negated.

Connections: A reasonable assumption can be made that a connection can be taken from the existing infrastructure located in the immediate vicinity of the development site if required. It is recommended that Virgin Media are consulted at the earliest appropriate opportunity to determine if Client contribution will be required for connections to the 12 no. residential dwellings.

9.0

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 12 no. residential dwellings. There are existing electricity, gas, water and telecoms services immediately adjoining the development site, which should 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.

Produced;

Joanne Blackburn BA (Hons) – Senior Technical Engineer
Utilities Connections Management Ltd.

Checked by;

Ryan Elliman BEng (Hons) – Technical Engineer
Utilities Connections Management Ltd.

This document has been prepared solely as a Desktop Utility Study for BTP Architects, on behalf of One Manchester. Utilities Connections Management Ltd accepts no responsibility or liability for any use that is made of this document other than by BTP Architects or One Manchester for the purposes for which it was originally commissioned and prepared.

No individual is personally liable in connection with the preparation of this Desktop Utility Study. By receiving this study and acting on it, the client or any other person accepts that no individual is personally liable whether in contract, tort, for breach of statutory duty or otherwise.

Completeness – Due care and effort is made to locate all Utility companies in a search area, however, due to the existence of redundant utilities, emergence of new companies and the combining of, takeover or sale of existing companies, UCML cannot guarantee to provide details on all utilities in a given area.

There may be a time delay between the physical installation, repair or upgrading of utilities networks and the subsequent recording of the works on utility infrastructure records. Therefore, it should be noted there may be utilities present that are not shown on the records.

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 – Electricity North West Ltd Infrastructure Plan

Appendix 2 – Cadent Gas Infrastructure Plan

Appendix 3 – United Utilities Infrastructure Plan

Appendix 4 – Openreach Infrastructure Plan

Appendix 5 – Virgin Media Infrastructure Plan



Requested by: Joanne Blackburn
 Company: UCML
 Date Requested: 04/12/2020
 Job Reference: 20724022
 Your Scheme/Reference: Winston Road

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

Dig Sites:
 Area Line



Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

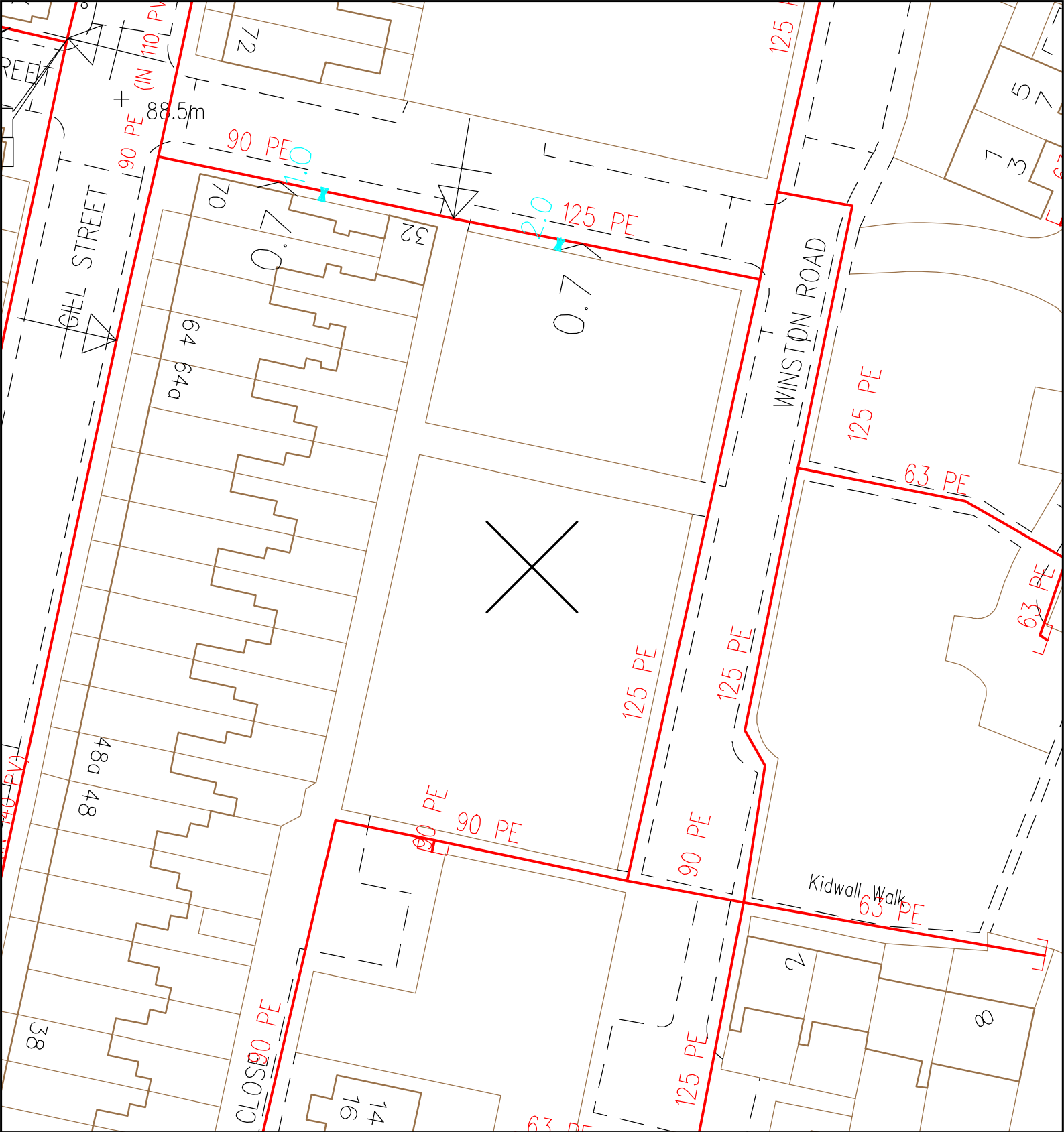
Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

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Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site



SCALE: 1 : 500	LP MAINS MP MAINS IP MAINS LHP MAINS	MAPS Viewer Version 5.8.0.1			
USER ID: Joanne.Blackburn					
DATE: 04/12/2020					
EXTRACT DATE: 07/09/2020					
MAP REF: SD8602					
CENTRE: 386770, 402119					
Some examples of Plant Items:		This plan is reproduced from or based on the OS map by Cadent Gas Ltd, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.			
Valve	Depth of Cover		Syphon	Diameter Change	Material Change

This plan shows those pipes owned by Cadent Gas Ltd in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Ltd or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm)

A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

Clean Water Symbolology

Proposed	Abandoned	Live	
			Distribution Main
			Trunk Main
			Comms Pipe
			Private Pipe
			Concessionary Service
			Raw Water
			LDTM Raw Water
			LDTM Treated Water
			Air Valve
			AC Valve, open
			AC Valve, closed
			CC Valve, open
			CC Valve, closed
			Non Return Valve
			Pressure Management Valve
			OMS Valve
			Stop Tap
			Flow Meter
			Domestic Meter
			Commercial Meter
			Pump
			Hydrant
			Fire Hydrant
			Anode
			Chlorination Point
			De-chlorination Point
			Strainer Point
			Access Point
			Hatch Box
			IP Point
			Sampling Station
			Logger Box
			Bore Hole
			Inlet Point
			Bulk Supply Point
			End Cap
			Site Termination
			Change of Characteristic
			Condition Report
			<u>Property Types</u>
			Water Tower
			Valve House
			Booster Pumping Station
			Intake Pumping Station
			Water Treatment Works
			Supply Reservoir
			Service Reservoir
			Impounding Reservoir
			Pipe Bridge

Symbology for proposed assets is the same as above, but shown in **green**
 Symbology for abandoned assets is the same as above, but shown in **black**



Water for the North West

WATER MAIN RECORDS

Address or Site Reference

1 ROPLEY WALK,
MANCHESTER,
M9 4EL

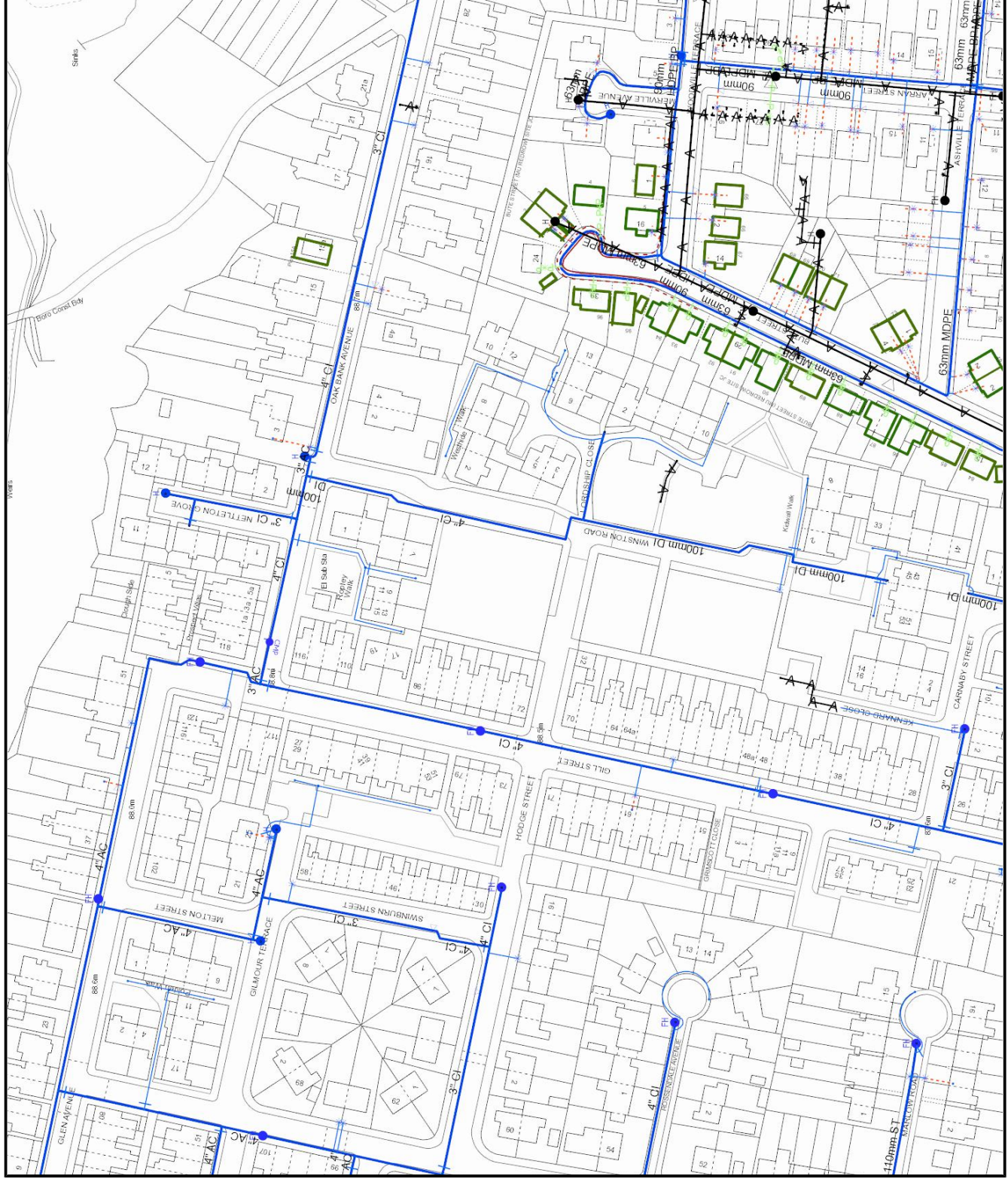
Scale: 1:1250

Date: 16/12/2020

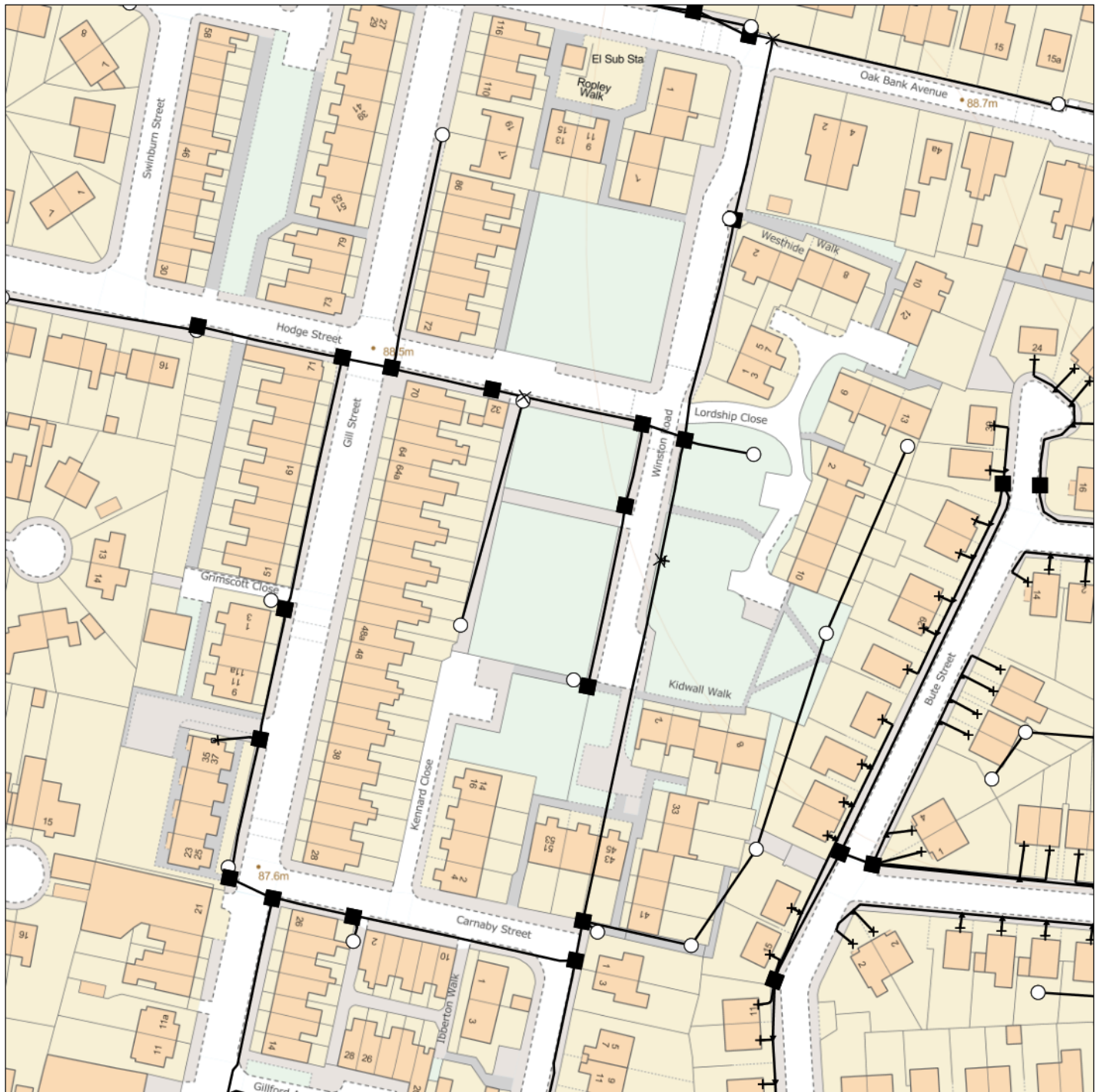
Printed by: Property Searches

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

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Maps by email Plant Information Reply



IMPORTANT WARNING

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



openreach

CLICK BEFORE YOU DIG

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

email cbyd@openreach.co.uk

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

Accidents happen

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

KEY TO BT SYMBOLS

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

BT Ref : OSJ05128H

Map Reference : (centre) SD8677002119

Easting/Northing : (centre) 386770,402119

Issued : 04/12/2020 17:12:27

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

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