



technical & development services

Utilities Site Appraisal
Land East of Fitzalan Road,
Littlehampton, BN17 6FE
Prepared for Client Boklok UK Ltd

Project Information

Title	Utilities Site Appraisal
Site Location	Land East of Fitzalan Road, Littlehampton, BN17 6FE
Client	Prepared for Boklok UK Ltd
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Issue	Date	Author	Author signature	Approver	Approved signature
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1 Background

1.1 The Site

Boklok UK Ltd. has engaged Technical and Development Services (Southern) Ltd. (TDSS) to determine the availability and sufficiency of existing utilities to serve a proposed residential development of 122 homes on the above site and to identify any utility apparatus on, or adjacent to the site, that may be affected by the development. Budget Costs for provision of the mains and connections required to service the development were also sought.

1.2 Proposed Development

The site is approximately 2.4 hectares of brownfield land and forms part of the previous site of Littlehampton Community School which is located centrally within the coastal town of Littlehampton.

The site lies directly South of The Littlehampton Academy and its associated grounds and shares the entire Northern boundary with the academy. It is further bounded to the East by the low rise linear dwellings of Grove Crescent, to the South by a Public Right of Way footpath/cycleway link between Fitzalan Road & Elmgrove Road and to the West by Fitzalan Road & the access into The Littlehampton Academy.

1.3 Proposed Re-Development

The proposed site plan provided, shows an indicative accommodation mix for the purpose of the utility enquires and indicates a development of attached and terraced homes, together with a block of apartments in the following mix.

- 1 Bed Flats – No. 23
- 2 Bed Flats – No. 9
- 2 Bed Houses – No. 26
- 3 Bed Houses – No. 54

Total No. of Domestic Units: 122 Units

1.4 Planning History

A search of Planning Authority Arun District Planning Portal has indicated an application under reference LU/55/15/OUT for outline planning permission with some matters reserved for 68 No. dwellings, which was approved conditionally on appeal on the 28th September 2016.

1.5 Information Provided

The information provided to TDSS, for the purpose of the initial enquiries to the utility network providers, comprised the following.

- Illustrative Site Plan – Drg No. 6798 Little SK06 – Revision B dated 29/01/20 by ECE Architects.

1.6 Caution

In preparing this report TDSS has taken all reasonable steps to present the client with an accurate evaluation of the data available. However TDSS cannot accept responsibility for the accuracy of information provided by third parties (the utility network providers and/or their agents) and accepts no liability for any direct or consequential loss that may be incurred if information provided by those parties proves to be incorrect or inaccurate.

1.7 Statutory Undertaker Initial Enquiries

Initial enquiries of the statutory undertakers, as to the location and sufficiency of the utility supplies to serve the proposed development, were made by TDSS in July 2020. Budget costs for providing the site mains and house connections were also requested.

Plans of the location of utility apparatus that might constrain the development, or be affected by it, were also sought. The responses and their implications in the redevelopment of this site, to provide up to 122 homes; are set out as follows.

A copy of the Illustrative Site Plan is reproduced at Appendix I

2. Drainage Infrastructure

2.1 Sewerage Provider

The Sewerage Undertaker for the area is Southern Water Services (SWS).

2.2 Existing Apparatus

SWS's Sewer Map indicates.

- An existing 525mm dia. Combined Public Foul and Surface Water Gravity Sewer flowing West to East within the Southern boundary of the site from Fitzalan Road to Elmgrove Road.
- An existing Foul Water Sewer Rising Main routed along the length of Fitzalan Road within its Eastern footway (site side).

2.3 Available Capacity and Point of Connection

2.3.1 Foul Drainage

Under the connections regulations now in force, the Sewerage Company is obliged to provide a point of connection for new developments at "the nearest reasonably practicable point" on its network where the parent sewer is the same diameter, or greater, than that of the connection from the development. Should the Company require the connection to be made elsewhere on its network, for capacity reasons, it will be responsible for any works required to provide that capacity downstream of "the nearest reasonably practicable point" of connection meeting the condition on respective pipe sizes. Any network reinforcement costs required shall be recovered by the Company through the infrastructure charges levied on new connections, and/or its own capital program allocation.

Sewerage Infrastructure Charge (2020-2021) is £790.00 per connected property.

Accordingly, provided the identified point of connection is accessible to the developer over public highway, or other public land, i.e. a Sewer Requisition is not required, the developer can exercise the right to connect, subject to payment of the relevant connection charges, which are fixed annually and published by the Company.

In this case, the pipe size required to drain the 122 domestic properties proposed is not likely to exceed 150mm bore, i.e. no greater than the size of the public sewer at the nearest practicable point of connection. Therefore, due to the presence of the 525mm dia. Combined Public Foul & Surface Water Sewer within the Southern boundary of the site, a right to connect is assured.

2.3.2 Surface Water Drainage

The policy of Planning Authorities and the Water & Wastewater Companies, in relation to the management of surface water run-off from new developments, is that a development should utilise sustainable urban drainage systems (SuDS) unless that proves not to be feasible. Given the site and ground conditions and should aim to achieve 'greenfield' run-off rates. Surface water run-off shall be managed as close to its source as practicable, in accordance with the following drainage hierarchy.

- Store rainwater for later use
- Use infiltration techniques, such as porous surfaces in non-clay areas
- Attenuate rainwater in ponds or open water features for gradual release
- Attenuate rainwater by storing in tanks or sealed water features for gradual release
- Discharge rainwater direct to a watercourse
- Discharge rainwater to a surface water sewer/drain
- Discharge rainwater to the combined sewer

With the presence of a 525mm dia. Combined Public Foul & Surface Water Sewer within the southern boundary of the site it is anticipated that the surface water run-off will be via a controlled discharge to this sewer.

2.4 Sewer Connections and Adoption Costs

With effect of 1st April 2020, Ofwat introduced new charging rules that require developers to meet the full costs of any off-site sewer requisitions, i.e. no or a reduced 'income offset' will be payable by Sewerage Companies for sewer requisitions. Where developers elect to employ accredited self-lay providers for off-site sewer constructions, the equivalent 'asset payments' will no longer be made. The additional costs will therefore need to be provided for, see Southern Waters "Statement of Significant Changes for 2020-21 New Connection Charges" on website.

https://www.southernwater.co.uk/media/3305/new-connections-services-charging-arrangements-20_21.pdf

Wastewater income offset offered by Southern Water is offset against the Infrastructure reducing the Infrastructure Charges applicable.

Wastewater Income Offset (2020-2021) is a credit of £225.00 per connected property.

The figure shown above is to be deducted from the Sewerage Infrastructure charge of £790, leaving a net figure to be paid by the developer of £565.00

Southern Water Network Plans are reproduced at Appendix 2.

3. Water Infrastructure

3.1 Water Supply Company

The Potable Water Supplier (DNO) for the area is Southern Water Services (SWS).

3.2 Existing Apparatus

SWS's mains records indicate.

- A 125mm High Performance Polyethylene (HPE) distribution main routed along the Northern footway of Cornwall Road.
- A 3-inch dia. Cast Iron (CI) distribution routed East from Cornwall Road and into the South-West corner of the site to a Water Hydrant.
- A 3-inch dia. Cast Iron (CI) distribution routed west from Elmgrove Road and into the South-East corner of the site to a Water Hydrant.
- A 90mm dia. High Performance Polyethylene (HPE) distribution main routed along Western boundary to supply The Littlehampton Academy.

3.3 Available Capacity and Point of Connection

Under Section 37 of the Water Industry Act 1991, the Water Company is required to "develop and maintain a system of water supply such that it can have supplies available to persons demanding them," i.e., it is obliged to provide a point/s of connection for new development at the nearest practicable point to the site. Any reinforcement works required must now be funded by the Water Company subsidized by way of the Infrastructure Charges Levied on all new connections.

Water Infrastructure Charge (2020-2021) is £0.00 per connected property.

With effect of 1st April 2020, OFWAT has introduced new charging rules that require developers to meet the full costs of mains requisitions (off-site and on-site), i.e., no or a reduced 'income off-set' will be payable by the Water Company (if company laid) and no asset payment will be made where developers elect to employ accredited self-lay providers.

If the water company wishes to continue applying income off-sets, the charging rules require that this must be applied to the infrastructure charges instead. OFWAT has stated that the infrastructure charge income water companies receive must continue to match their average spends on network reinforcement over the 5 years to 31st March 2023.

Water Income Offset (2020-2021) is £335.00 per connected property.

In this case, the size of connection required to supply the 122 domestic properties proposed is not expected to exceed 125mm, i.e. no greater than the size of the existing public water main at the nearest practicable point of connection, which is expected to be the 125mm HPE distribution main within Cornwall Road and the junction of Fitzalan Road opposite the site. Therefore, the right of connection is assured, subject to payment of the relevant charges which are published and fixed annually by each Company.

3.4 Mains and Connections Costs

All costs and charges relating to water mains requisition, off site connections, off site mains, on site mains and house connections, and all associated costs, both statutory (company laid) and self-laid are now fixed annually and published and can be found in Southern Water "New Connections Services – Charging Arrangements 2020-21" available online.

https://www.southernwater.co.uk/media/3305/new-connections-services-charging-arrangements-20_21.pdf

3.5 Water Mains Diversion

There is an existing 90mm dia. HPPE distribution main that is routed along the Western boundary of the site that currently supplies The Littlehampton Academy, this water main crosses the proposed site access and may require diverting/lowering.

Further investigations to determine exact location of the water main will be required to determine its impact, it is recommended that a detailed underground utility survey ("Catscan") is carried out, supplemented by hand-dug trial holes if required to accurately locate this apparatus in plan and depth to determine if the main will require diverting/lowering to accommodate the proposed site access.

Southern Water Network records are reproduced at appendix 3

4. Gas Infrastructure

4.1 Gas Network Operator

The Distribution Network Operator (DNO) for the area is Southern Gas Networks (SGN).

4.2 Existing Apparatus

SGN'S network records currently indicate.

- A 125mm dia. Low Pressure (LP) Polyethylene (PE) distribution main routed through the Western boundary of the site which supplies The Littlehampton Academy.
- A 12-inch dia. LP Spun Iron (SI) distribution main routed along the Public Right of Way link between Elm Grove Road and Fitzalan Road on the Southern boundary of the site.
- A 6-inch dia. LP Cast Iron (CI) distribution main spur routed along the Northern footway of Elm Grove Road into the South-Eastern corner of the site.

4.3 Available Capacity and Point of Connection

SGN has provided a 'Budget Indication' for the required gas connection based upon connection to its existing Low Pressure network (see 4.4 below) and has confirmed that based upon its current network model, there is sufficient capacity in the network to provide for the demand of the proposed development. However, it has provided its standard caution that, upon receipt of an application for a firm quotation, it will need to review the model to confirm if that situation still applies.

4.4 Budget Estimate

SGN Connections has provided the following Budget Indication for provision of the required gas infrastructure, based upon connection to its existing Low Pressure (LP) network in Fitzalan Road.

Upon receipt of an order acceptance, SGN will need to conduct additional analysis on its network 'Security of Supply Check' to confirm the availability of the required capacity to supply the proposed development.

Budget Indication - £10,500.00 (Meters excluded)

4.5 On Site Diversion

SGN have provided a C3 Budget estimate to replace 80m of 125mm dia. PE LP main along the Western boundary with 85m of 125mm dia. PE LP main to be routed within the footpath along Fitzalan Road and to cut and cap off the 6-inch LP mains spur at the South-Eastern boundary, with 6m of 125mm PE LP main and 36m of 6-inch Cast Iron LP main to be abandoned.

C3 Budget Estimate is as follows: £35,000.00

SGN'S Network Records and Capacity Check Response are reproduced at Appendix 4.

5. Electricity Infrastructure

5.1 Electricity Network Operator

The Distribution Network Operator (DNO) for the area is UK Power Networks (UKPN).

5.2 Existing Apparatus

UKPN's Network Records indicate.

- A 33kV Extra High Voltage (EHV) underground cable routed East from Cornwall Road to the West of the site within the Southern boundary.
- A 33kV EHV & 11kV High Voltage (HV) underground cables routed West to East along the Public Right of Way between Fitzalan Road & Elm Grove Road.
- Dual Laid Low Voltage (LV) underground cables routed West to East along the Public Right of Way between Fitzalan Road & Elm Grove Road.

5.3 Availability and Point of Connection

UKPN has provided a 'Budget Estimate' for the required electricity infrastructure (See 5.4 below), based upon a High Voltage (HV) connection from their existing HV network within the cycle way, to enable the Low Voltage (LV) distribution to 122 domestic connections.

The UKPN budget estimate includes for the provision of 7.2kW communal Electric Vehicle Chargers (EVC) in a 1:5 ratio and 1 landlord supply as per the development scope.

5.4 Budget Estimate

UKPN's Budget Estimate for the required electricity infrastructure for onsite substation & Low Voltage distribution and 122 domestic service connections is:

Budget Estimate - £ 210,000.00

UKPN's Network Plans & Budget Estimate are reproduced at Appendix 5

6. Dual Fuel Infrastructure

Competitive Dual Fuel budget costings have been invited from GTC Ltd, Fulcrum and UK Power Solutions (UKPS).

6.1 GTC Ltd

GTC Ltd has provided an Electric and Fibre infrastructure for the development.

The summary of their proposal is as follows:

Onsite Costs

This is the cost to provide mains and services to the development within the site boundary:

On-site works	
You pay GTC	£69,745.26

Offsite Cost

These costs include any off-site costs that are required, including the costs of upstream Network Operators (NWO), completing any works required to supply your site:

Off-site works	
Off-site works (GTC) – Electricity:	£4,614.04
Network Operator Costs – Electricity:	£8,000.00
Total Off-site Costs– You pay GTC	£12,614.04

Total payment to GTC **£82,359.00**

Fibre Rebate Information

GTC's offer is inclusive of a fibre rebate of **£300.00 per plot**. This rebate has been deducted upfront from the on-site total, giving the advantage of no administration burden for you to claim the individual plot rebates as they are connected.

Fibre Rebate Included in This Offer Already Deducted from the On-Site Total	
122 plots with a £300.00 per plot rebate:	£33,600.00

Additional Fibre Network Value

This offer is based upon GTC's innovative fibre installation method which means developers will no longer have the cost or hassle of laying a duct and chamber network. This represents a further construction cost saving estimate of £130.00 per plot.

Estimated Value to Backlog of Construction Costs Saved	
112 Plots with £130.00 per plot saving	£14,560.00

Fibre Integrated Reception System (FIRS) Costs

This is the additional cost to provide a FIRS system to the domestic plots and would offer Fibre to the Premises (FTTP) and television services from a central satellite dish and aerial array.

On-site works	
You pay GTC	£41,378.84

Note: This budget costing is based upon indicative points of connection to the existing DNO electricity networks which are subject to confirmation by the incumbent upstream network operators, as follows.

Electricity

This quotation includes an indicative electric point of connection (PoC) and off-site costs, therefore costs associated with the PoC are subject to change.

However, the PoC and non-contestable charges will be the same regardless of who owns the network. GTC have calculated a total electrical load at 498 KVA.

GTC have assumed a High Voltage point of connection due to the size of the development.

The quote includes the excavation and reinstatement cost within the public highway estimated to be 2m from the site boundary, with all onsite excavations & reinstatements to be completed by the developer.

Fibre

GTC has included for the provision of fibre service to each domestic dwelling, this cost includes any off-site excavation/reinstatement works required to be completed from the appointed Backhaul Provider to the site boundary and the on-site fibre duct network.

This quotation is based on the developer installing any on-site duct network where required, construction of any on-site communication chambers, all on-site excavation/reinstatement works to support the fibre network infrastructure, any on-site civils associated with the housing of active INGN fibre network equipment within the On Site Convergence Point (OSCP) and preparation of the plots to ensure each plot is ready to receive a fibre service.

Should you wish to take up the GTC offer of a FIRS installation an additional payment of **£41,378.84** would be payable.

6.2 Fulcrum

Fulcrum has provided a Dual Fuel costs for both Gas and Electric infrastructure to the development.

Breakdown of Offer

This is the cost to provide mains and services to the development is based on indicative points of connections to both the High Voltage electricity network and the Low-Pressure gas network in Fitzalan Road. This cost includes the provision for a 1000KVA substation and external Gas kiosk.

Fulcrum's Budget quotation for the combined Gas and Electric infrastructure for the development is as follows:

£90,467.76 (Excluding Vat)

6.3 UK Power Solutions

UK Power Solutions (UKPS) has provided a Dual Fuel costs for both Gas and Electric Infrastructure to the development.

Breakdown of Offer

This is the cost to provide mains and services to the development is based on indicative points of connections to both the High Voltage electricity network and the Low-Pressure gas network in Fitzalan Road. This cost includes the provision for a 1000KVA substation and external Gas kiosk.

UKPS Budget quotation for the combined Gas and Electric infrastructure for the development is as follows:

£140,804.00 (Excluding Vat)

GTC, Fulcrum and UKPS Budget Costing's are reproduced at Appendix 6.

7. Telecommunications Infrastructure

7.1 Network Operator

The Local Telecommunications Network Operator is Openreach.

7.2 Existing Apparatus

Openreach's network records indicate.

- A duct and chamber network routed along the Public Right of Way link footway between Fitzalan Road & Elmgrove Road.
- An overhead pole mounted network routed South to North across the Western section of the site from the Public Right of Way to The Littlehampton Academy.
- A duct and chamber network routed North through the Western corner of the site to The Littlehampton Academy.

7.3 Proposed Connections

Openreach's policy is that any requirement for reinforcement works up to a value of **£3,400.00** per connected property will be funded by Openreach. Given the location of the existing networks in Fitzalan Road it is not anticipated that there will be any difficulty supplying connections to the site, or that there will be any costs to the developer.

Openreach will also make payment to the developer of **£140.00** for each house connected and **£50.00** for each flat, in return for the developer undertaking the trenching and laying of the required ducts and chambers (supplied by Openreach) within the development.

Openreach will only prepare a site layout and proposal for a fully consented and detailed site layout, following submission by the developer of a firm application for connections. Openreach will offer to provide fast Fibre to the Premises (FTTP) for the 122 residential connections at £Nil cost to the developer.

7.4 Diversions

It is anticipated that due to the location of the existing Openreach duct and chamber networks on site, there will be diversions required to accommodate the development. Openreach have provided a detailed estimate figure of **£2,500.00** that would be required to be paid, to enable them to attend site and carry out a full detailed survey to provide a full estimate for the works.

Openreach's Network Plans are reproduced at Appendix 7.

8. Communications & Media Pipeline Search

A search of all known Communications Media & Pipelines Network Operators has revealed 'NEGATIVE' i.e. 'not affected' responses from all, i.e. none of the operators have apparatus in the area of the site or its proposed access, and therefore no apparatus that is likely to be affected by the development.

The Communications Media & Pipelines Search Status Report is reproduced at Appendix 8.

9. 'Linesearch before U dig'

A 'Linesearch' of the national database of utility asset owners registered with 'Linesearch before U-dig' has revealed 'POSITIVE' responses (i.e. the operators have apparatus in the 'search' area), from the following.

- Southern Gas Networks (SGN)
- UK Power Networks (UKPN)

SGN's apparatus is identified and addressed at Para 4.2.

UKPN's apparatus is identified and addressed at Para 5.2

The Linesearch response is reproduced at Appendix 9.

10. Highway Infrastructure

Enquiries of the local Highway Authority West Sussex County Council on the extent of publicly adopted highways in the area, resulted in receipt of an email dated 16/07/2020 and drawing showing the extent of the publicly maintainable highway in pink.

The Adoptable Highways plan is reproduced at Appendix 10.

11. Combined Services Overlay

TDSS have overlaid the existing utility record plans for the local area, over the proposed site plan to provide a Utility constraints plan for the site.

The Existing Services Overlay is reproduced at Appendix 10.

12. Summary of Utility Budget Costs

Sewerage – Southern Water Services

All costs relating to sewer connections are fixed annually and can be found in Southern Water's "New Connections Services – Charging arrangements 2020-21", available online.

https://www.southernwater.co.uk/media/3305/new-connections-services-charging-arrangements-20_21.pdf

Wastewater Income Offset (2020-2021) is a Credit of £225.00 per connected property.

Sewerage Infrastructure Charge (2020-2021) is £790.00 per connected property.

Leaving a net figure to be paid by the developer of £565.00 per connected property.

Water – Southern Water Services

All charges relating to, onsite and off-site mains, connections and all associated charges are fixed annually and can be found in Southern Water's "New Connections Services – Charging Arrangements 2020-21" available online.

https://www.southernwater.co.uk/media/3305/new-connections-services-charging-arrangements-20_21.pdf

Water Income Offset (2020-2021) is a Credit of £335.00 per connected property.

Water Infrastructure Charge (2020-2021) is £0.00 per connected property.

Leaving a net figure to be Credited to the developer of £335.00 per connected property.

Gas – SGN Connections

SGN have provided a budget quotation for the required bulk supply connection for the flats, in line with the heating strategy for the development.

Budget Estimate – £10,500.00

SGN have provided a budget quotation for the required diversions to remove the existing apparatus affective the proposed development:

Budget Estimate - £35,000.00

Electricity – UKPN

UKPN has provided a budget estimate for the electricity connections based on a HV point of connection to their existing main in the Cycle Way and includes provision of a new-on-site sub-station as follows.

Budget Estimate - £210,000.00 (Exc. Vat)

Dual Infrastructure

GTC Ltd, Electric and Fibre only

GTC Electric and Fibre Estimate for the Mains and Service Connections to 122 dwellings:

Budget Estimate - £82,359.00 (Exc. Vat)

Fulcrum

Fulcrums Dual Fuel Budget Estimate for the required Gas and Electric connections for the 122 dwellings is as follows:

Budget Estimate – £90,467.76 (Excluding Vat)

UK Power Solutions

UK Power Solutions Dual Fuel Budget Estimate for the required Gas and Electric connections for the 122 dwellings is as follows:

Budget Estimate – £140,804.00 (Excluding Vat)

Telecommunications – Openreach

Openreach will offer Fibre to the Premises (Fast Fibre Broadband) for the proposed development at Nil cost to the developer.

Contribution to Developer for on-site trenching and duct-laying: Service on Demand (SoD) Payments.

40 Flats @ £50.00 per property	£2,000.00
82 Houses @ £140.00 per property	£11,480.00
Total Rebate (Payable to the Developer)	£13,480.00

13. Executive Summary

The enquiries of the utility network providers and their responses have to date revealed some utilities supply impediment to the development of this site, relating to

Foul Drainage

The Sewer Map indicated a 525mm dia. Public Combined Foul and Surface Water Sewer (Manhole Ref: 2501) available on site and therefore under connections regulations now in force (See Para 2.3), there is a right of connection. A connection for foul drainage purposes is therefore assured.

Surface Water Drainage

The Sewer Map indicates that there is a Combined Public Foul & Surface Water Sewer available on site and therefore it is anticipated that the Surface Water runoff will drain into this sewer, via a controlled method.

Water

A 125mm HPE Distribution main is available with Cornwall Road at the junction of Fitzalan Road opposite the site. Under the connection's regulations now in force, the water company is obliged to provide a point of connection for the new development, provided the site connection does not exceed the size of the parent main to which it is to connect, which it is the case here, a connection is therefore assured.

Gas

The SGN records indicate a 125mm PE Low Pressure (LP) gas main routed within the site boundary, which is to be diverted, will be of sufficient size to serve the development and provide the required connection for the flats, including the heating strategy for the development.

Electric

UKPN has provided a 'Budget Estimate', for the required electricity connections, based upon a high voltage connection from its existing HV network Fitzalan Road, to a new on-site distribution substation, with low voltage distribution to 122 domestic connections.

UKPN has confirmed that, at the time of producing this estimate (July 2020) the existing HV network has sufficient capacity to supply the proposed development and further reinforcement is not required.

Telecommunications

Openreach has networks available in Fitzalan Road and have confirmed that it can provide Fast Fibre (FTTP) connections to the development without the need for a developer's contribution.

13.2 Onsite Diversions

The respective utility network operator plans indicate the following apparatus as located either within the area of the proposed site access or located further into site:

- Southern Water 90mm PE distribution main
- SGN 125mm PE Low Pressure Gas Main
- SGN 6-inch Cast Iron Main
- Openreach Duct and Chamber Networks.

Southern Water Services 90mm PE Distribution Water Main

Due to the existing Southern Water records showing the 90mm dia. PE main within the site boundary, it is recommended that further investigations are carried out on site to determine exact location in plan and depth to determine whether or not the existing main will affect the proposed site access.

Southern Gas Networks 125mm PE & 6-Inch Cast Iron Distribution Main

Due to the existing SGN apparatus on site, SGN have provided a C3 Budget Estimate to divert the existing 125mm PE LP main into the footpath on Fitzalan Road and cut and cap off the existing 6-inch Cast Iron Main. Their Budget estimate for these works is **£35,000.00**.

Openreach Duct and Chamber Network

Due to the existing Openreach duct and chamber networks on site, Openreach have provided an estimate fee of **£2,500.00** to attend site to carry out a full detailed survey to determine the C4 figures to carry out the works required to divert the apparatus to allow the construction of the development

It is therefore recommended that the access and the whole site be subject to a detailed underground utility survey (CAT Scan) to fix the utility's locations in plan and depth, to determine the need or otherwise for their lowering or diversion.

Appendices

1. **Site Plan**
Illustrative Layout Plan
2. **Drainage Infrastructure**
Southern Water network records and pre-development enquiry.
3. **Water Infrastructure**
Southern Water network records and pre-development enquiry
4. **Gas Infrastructure**
SGN's Network Records, Budget Estimate and C3 Diversion Proposal
5. **Electricity Infrastructure**
UKPN'S Network Plans and Budget Estimate
6. **Dual Fuel Infrastructure**
GTC's, Fulcrum and UK Power Solutions Budget Estimates
7. **Telecommunications**
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8. **Communications Media & Pipelines Search**
Communication Media & Pipelines Search – Status Report
9. **'Linesearch before U Dig'**
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Adoptable Highway Plan
11. **Existing Services Overlay.**
Existing Utilities Plan