

HOMES FOR LAMBETH

**PROPOSED RESIDENTIAL DEVELOPMENT:
WOOTTON STREET, LAMBETH**

UTILITIES AND SERVICING STATEMENT

**REPORT REF. 193860-03A
PROJECT NO. 193860 NOV
2020**

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DOCUMENT CONTROL SHEET

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	DRAFT	CJC	EF/CC	-	NOV 2020
A	FINAL	CJC	EF/CC	DM	DEC 2020

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1.0 EXECUTIVE SUMMARY

1.1. This Utilities and Servicing Statement has been prepared to identify statutory utility constraints and connection strategies associated with the proposed development of 36 residential units and a 380m² community space at the Site, Wootton Street, Lambeth. The findings of this report are summarised below, however for full details reference should be made to the following sections of the report.

Table 1-1: Summary of Findings

Executive Summary		
Electricity	On Site Cables	1 LV cable running along the western edge of Windmill House. Cable spurs terminating at the edge of the existing residential building. 1 LV cable running along Ethelm Street.
	Off Site Cables	LV cables are present in Wootton Street, Greet Street and the access road south of Windmill House. HV cables within junction of Wootton Street and Windmill Walk.
	Constraints	Diversion of LV cables west of proposed development is not anticipated; subject to construction of new parking facilities above existing surface levels. Diversion of LV cables to the south to facilitate vehicular crossing subject to utility trace and confirmation of depth.
	Point of connection	LV connection proposed to existing LV cables within Greet Street.
	Capacity	To be confirmed by network analysis as part of detailed application for a firm quote.
	Budget Connection Cost	£10,000 + VAT
Gas	On Site Mains	No Gas mains are present within the Site.
	Off Site Mains	1x90mm & 1x125mm LP gas mains in Wootton Street and Greet Street respectively.
	Constraints	It is not anticipated that any gas main diversions will be required.
	Point of connection	LP connection proposed to existing LP mains within Greet Street / private access road.
	Capacity	To be assessed by SGN on receipt of an order; any reinforcement costs will be met by SGN.

Budget Connection Cost	£26,000 (including VAT)
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Water	On Site Mains	No water mains are present within the Site.
	Off Site Mains	Private 125mm water mains are shown running along Wootton Street and Greet Street. A spur is located to the south east of the site terminating within the footway.
	Constraints	It is not anticipated that any water main diversions will be required.
	Point of connection	Connection proposed to existing main within Greet Street.
	Capacity	The existing network has sufficient capacity to serve the site.
	Budget Connection Cost	£21,040 + VAT (based on TW published rates and including infrastructure charges).
Sewerage	On Site Sewers	No sewers are present within the Site.
	Off Site Sewers	305mm combined sewers in Wootton Street and Greet Street.
	Constraints	It is not anticipated that any sewer diversions will be required. Sewers are located within public highway and easements are not located within the Site.
	Point of connection	A single combined water sewer connection is proposed to the combined sewer in Greet Street.
	Capacity	TW has confirmed capacity is available for all foul flows. A single surface water connection of 2 l/s will be considered acceptable where no alternative outfalls are available.
Telecoms	On Site Cables	Virgin Media have cables adjacent to Windmill House. It is assumed that the works will not affect these cables. BT cables located within Ethelm Street.
	Off Site Cables	Both Virgin Media and BT have telecoms cables within Wootton Street & Greet Street.
	Constraints	Diversion of BT cables south of proposed development is not anticipated; subject to a utility trace confirming their depth and that construction of new vehicular crossover will not affect them. Existing Virgin cabinets located to the north and east of the site will need to be relocated to a suitable location subject to agreement with BT.

2.0 INTRODUCTION

- 2.1 Ardent Consulting Engineers (ACE) has been instructed by Homes for Lambeth to provide Utilities and Servicing advice in relation to a proposed redevelopment of the former Coral Day Nursery located south of Wootton Street, London as part of a residential led mixed use scheme (hereafter referred to as the Site).
- 2.2 This report supports the outline planning application to London Borough of Lambeth Council (LBLC) for development of the site.
- 2.3 The proposed development comprises the demolition of the existing single storey nursery building and the construction of a new part 5, 8 & 10 storey building to provide a new community centre at the ground floor level and 36 residential units above. The development also includes landscaping, car parking and associated infrastructure works.
- 2.4 Capacity enquiries have been submitted to the relevant statutory utility providers.
- 2.5 New parking spaces are proposed to the south of the Site as part of the development. These new parking bays will serve the community space, this report makes the assumption that this parking bays will be accessed via a reinforced vehicular crossover within the footway adjacent to the site and will not affect services located within the southern footway of Wootton Street. If this changes or is not the case then additional costs associated with the diversion/lowering of Virgin Media and Scotia Gas Networks assets may be applicable.
- 2.6 It should be noted that elements of this report have been produced on the basis of information received from relevant service companies and as such, ACE cannot accept responsibility for the accuracy of the information received.

- 2.7 Copies of the correspondence received from Statutory Undertakers have been provided in the appendices of this report for further reference.

3.0 BASELINE PARAMETERS

Site Location

3.1 The Site is located south of Wootton Street, Waterloo, London and is currently occupied by the former "Coral Day Nursery"; a single storey building with a play area and associated parking. The Site occupies a total area of approximately 0.18ha, and is located south of Waterloo east station, with Ordnance Survey grid co-ordinates of approximately 531432mE, 180006mN.

3.2 Refer to **Figure 3-1** below for the site location.



Figure 3-1: Site Location Plan

- 3.3 The site is bounded by Wootton Street to the north, Windmill House to the west, a private road to the south and Greet Street to the east. There are existing trees located on the northern and southern boundaries.
- 3.4 Windmill Walk is located to the west of the site beyond the Windmill House.

Existing Land Use

- 3.5 The site is currently occupied by the now vacant Coral Day Nursery, a children's play area and an area of car parking associated with the nursery.
- 3.6 The existing site is accessed via foot from Wootton Street to the north and vehicular access is via the gated private road to the south referred to as Ethelm Street.
- 3.7 The topographical survey drawing (**Appendix A**), prepared by Laser Surveys in December 2019, shows that the Site is generally flat, the highest level recorded (excluding the building and surface features) is 2.98m AOD at the north-east corner of the Site. The lowest ground level within the Site is 2.64m AOD and is shown in the south-western extent of the Site. The Coral Day Nursery could not be surveyed due to access restrictions at the time of the survey.
- 3.8 A copy of the Topographical Survey is including in **Appendix A**.

4.0 DEVELOPMENT PROPOSALS

4.1 The proposed development comprises the demolition of the existing single storey building and the construction of a new part 5, 8 & 10 storey building to provide a new community centre at the ground floor level and 36 residential units. The development also includes landscaping, car parking and associated infrastructure works.

4.2 As part of the proposed development, pedestrian access will primarily be from Wootton Street and Greet Street. Vehicular access for onsite parking is proposed off Wootton Street via a new vehicular crossover.

4.3 **Figure 4-1** below shows an extract of the proposed development layout.

4.4 The site layout has been provided by Stockwool Architects and is included in **Appendix B**.

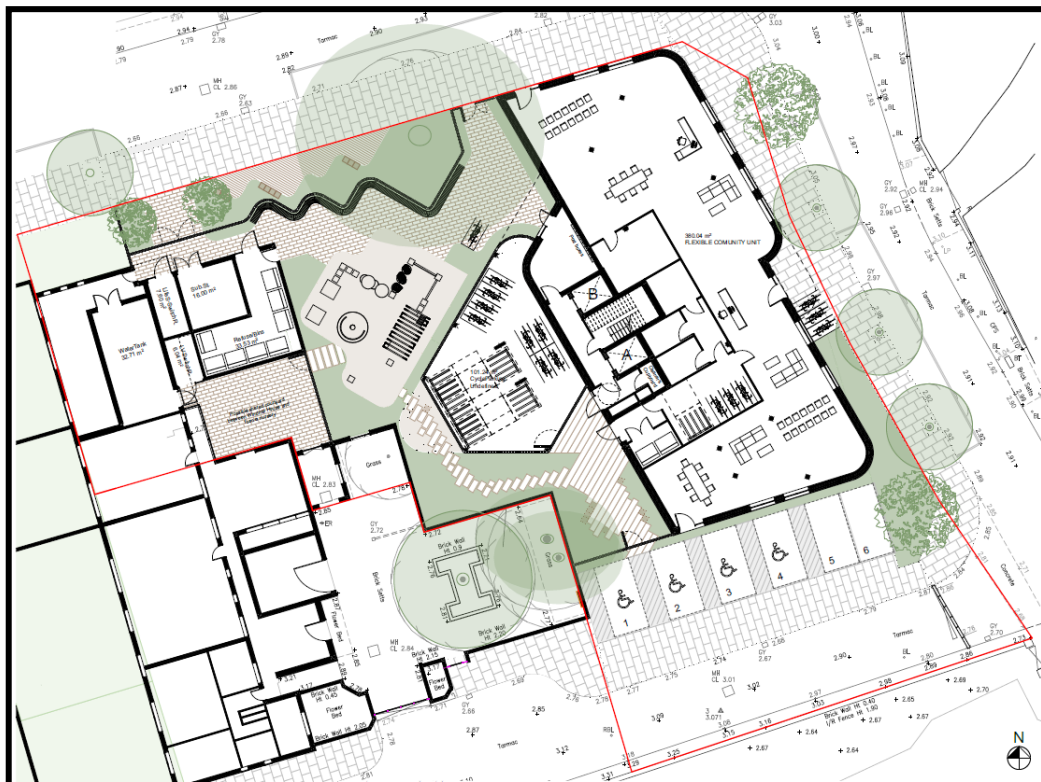


Figure 4-1: Proposed Site Layout

5.0 UTILITY SERVICE PROVISION

Introduction

5.1 All relevant Statutory Undertakers have been consulted in relation to the proposed development. Each Statutory Undertaker, with known plant in the region, has been contacted and requested to provide details of:

- Existing assets in the area;
- The extent of any necessary diversion, abandonment or protection works to facilitate the development;
- The requirement for any off-site reinforcement works to meet the peak load demand generated by the development proposals; and
- The potential point of connection to the existing supply distribution network.

Approximate Utility Demands

5.2 Although the current scheme indicates a development of 36 new residential flats and 380.3m² of community (D1) space; the utility loadings submitted to Utility Providers for assessment of network capacity and new connection estimates were based on a previous masterplan. The previous masterplan comprised of 36 residential units and 380m² of community space. The anticipated utility loadings for gas, electricity, potable water and foul water were derived using BSRIA Guidance Documents and common benchmarks. Since the change represents only a small increase in the commercial space, it will not impact on the findings of the report and Utility companies were not therefore reconsulted.

5.3 The following approximate loadings in **Table 5-1** have been used to inform the overall site demands. It should be noted that these figures are given prior to the relevant utility companies applying their own diversification adjustments:

Land Use	Electricity Peak kVA	Gas		Potable Water l/sec	Foul Water l/sec
		Peak kW	Annual kWh		
36 Residential dwellings	56.2	1080.00	540,000.00	0.76	1.67
380.3m ² Community Space	25.10	43.73	53,242.00	0.08	0.80

Table 5-1: Approximate Utility Demands

Statutory Undertakers Unaffected by the Proposals

5.4 It is understood that the following Statutory Undertakers do not have assets in the immediate vicinity of the proposed development; (see **Appendix B**):

List of not affected LSBUD members		
AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
BP Exploration Operating Company Limited	BPA	Carrington Gas Pipeline
CATS Pipeline c/o Wood Group PSN	Cemex	Centrica Storage Ltd
CLH Pipeline System Ltd	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Ltd	DIO (MOD Abandoned Pipelines)	Drax Group
E.ON UK CHP Limited	EirGrid	Electricity North West Limited
ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited	EP Langage Limited
ESP Utilities Group	ESSAR	Esso Petroleum Company Limited
Fulcrum Pipelines Limited	Gamma	Gateshead Energy Company
Gigaclear Ltd	Hafren Dyfrdwy	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN Enterprises Limited	Intergen (Coryton Energy or Spalding Energy)
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	Northumbrian Water Group	NPower CHP Pipelines
Oikos Storage Limited	Ørsted	Perenco UK Limited (Purbeck Southampton Pipeline)
Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos	Phillips 66
Premier Transmission Ltd (SNIP)	Prysmian Cables & Systems Ltd (c/o Western Link)	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	Severn Trent (Chester area only)	Shell (St Fergus to Mossmorran)
Shell Pipelines	SSE (Peterhead Power Station)	Tata Communications (c/o JSM Construction Ltd)
Total (Colnbrook & Colwick Pipelines)	Total Finaline Pipelines	Transmission Capital
Uniper UK Ltd	Vattenfall	Veolia ES SELCHP Limited
Veolia ES Sheffield Ltd	Wales and West Utilities	Western Power Distribution
Westminster City Council		

6.0 ELECTRICITY

UK Power Networks

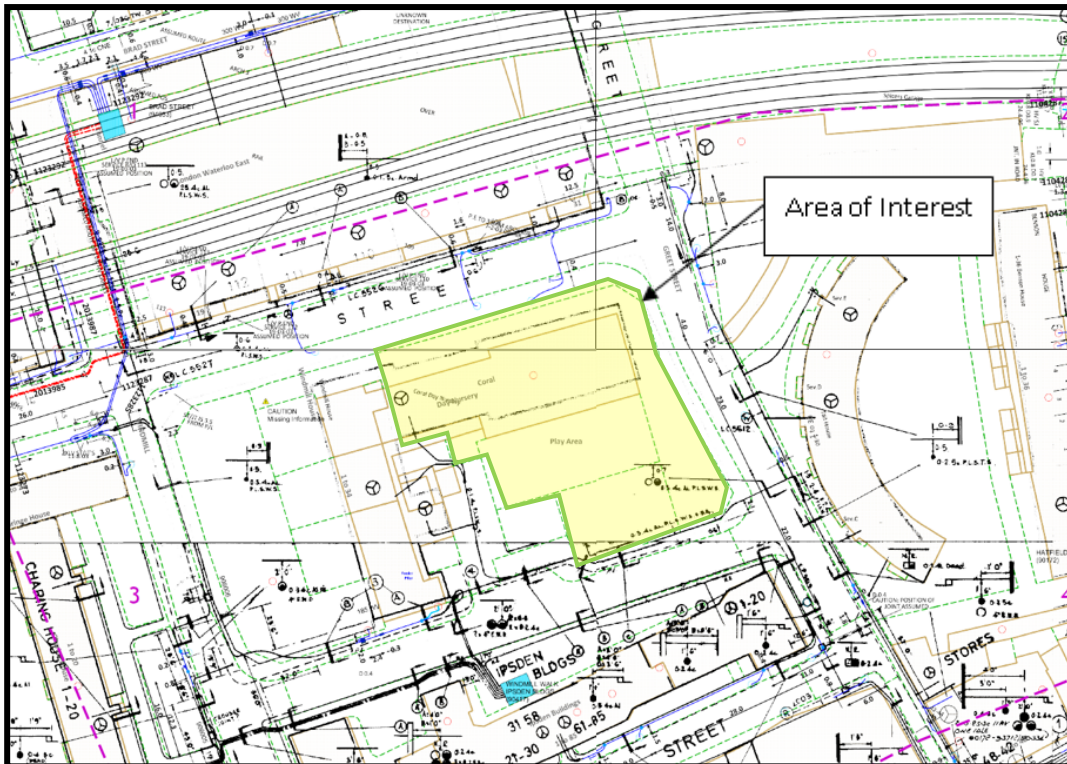


Figure 6-1: UKPN Asset Mapping

6.1 **Figure 6-1** above shows an extract from the UKPN asset record plans, a full version of the mapping is included in **Appendix C**. UKPN plans indicate that there are existing substations to the north and south of the site located off Brad Street and the private road to the south of the site respectively.

6.2 The asset plans show low voltage electrical >400V apparatus running along the footpath on the far side of Wootton Street and Greet Street. A low Voltage cable also runs along southern site boundary within the private road to the south of the site, a connection from this cable enters the Site and provides connection to both the existing Nursery and Windmill House (residential tower block).

- 6.3 It is not anticipated that any UKPN apparatus will require diversion or lowering however a utility trace will be required to confirm the depth of the LV cables in Ethelm Street to ensure that construction of a vehicle crossover will not affect them.
- 6.4 A budget estimate enquiry was sent to UKPN to determine whether they have sufficient spare capacity within their existing network and to obtain a budget cost for connecting the proposed development to the network.
- 6.5 UKPN have provided a budget estimate of £10,000 (ex. VAT) for the connection of 36 new residential units, one commercial connection and one landlord connection with a maximum onsite demand of up to 79.12kVA. The quotation assumes a point of connection to the LV network along Greet Street.
- 6.6 UKPN have made a number of assumptions in order to provide a budget quotation as set out within their letter and have not undertaken any network analysis at this stage to confirm that capacity is available within the existing electricity distribution network. Network analysis will be undertaken as part of a detailed application and it is recommended that this should be undertaken as soon as full details of the development are available.
- 6.7 Correspondence with UKPN is included in **Appendix C**.

7.0 GAS SUPPLY

Scotia Gas Networks (SGN)

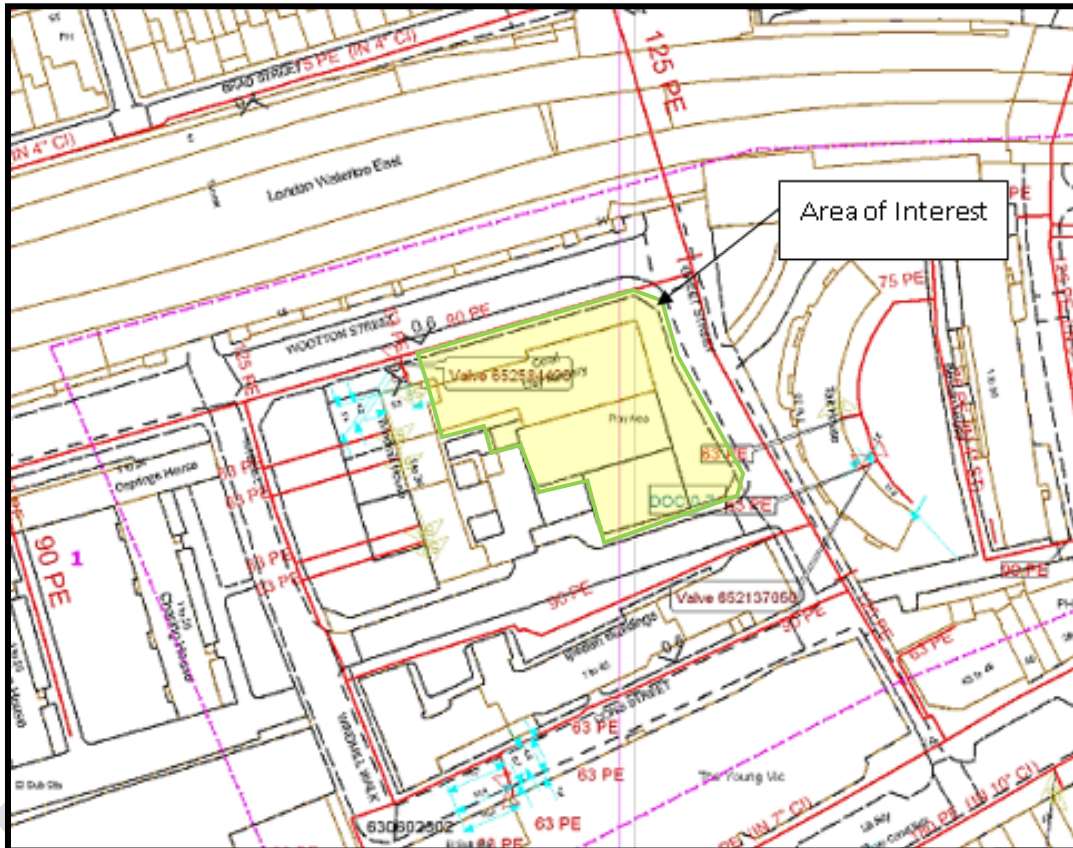


Figure 7-1: Scotia Gas Networks Asset Mapping

- 7.1 **Figure 7-1** above and the mapping included in **Appendix D** show that there are no SGN mains within the site boundary. A 90mm Low Pressure (LP) gas main is located to the north within Wootton Street. It is assumed that the existing day nursery is connected to this main and will require disconnection to allow safe demolition. A 125mm low pressure gas main is present within the carriageway of Greet Street and a 90mm low pressure gas main is shown in the southern side of the private road south of the Site.
- 7.2 It is not anticipated that any SGN LP apparatus will need to be diverted to facilitate the development proposals.

- 7.3 SGN have been contacted to confirm a suitable connection location for the development and to identify if any off-site gas reinforcement works will be required.
- 7.4 SGN have provided a budget cost of £26,000.00 (inc VAT) based upon an hourly load of 1,080.00 kW and an annual quantity of 540,000.00 kWh. This assumes that SGN will carry out all the necessary off-site excavation and reinstatement within the public highway.
- 7.5 Upon receipt of an order for the new gas connections, SGN will undertake further analysis to ensure that the existing gas infrastructure can manage the new gas loads. If offsite network reinforcement work is required then this may incur some delay to the installation of the new gas supply, however SGN has confirmed that any reinforcement costs will be met by SGN.
- 7.6 SGN correspondence is included in **Appendix D**.

8.0 POTABLE WATER

Thames Water

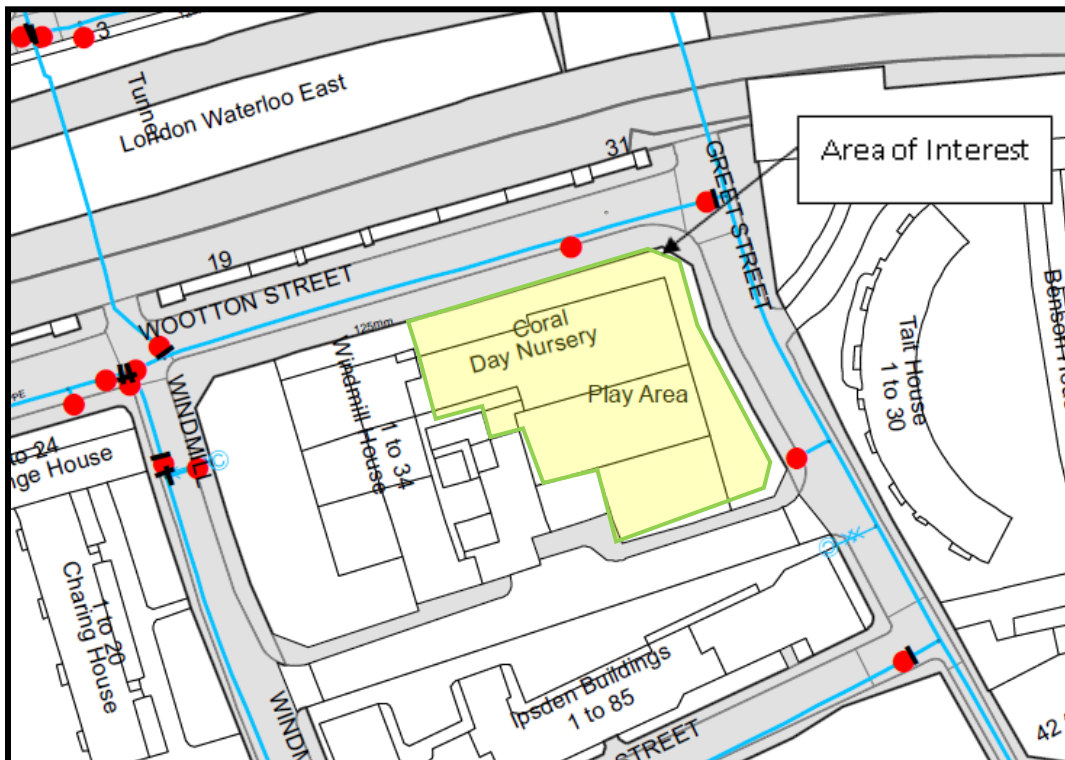


Figure 8-1: Thames Water Potable Water Asset Mapping

- 8.1 Thames Water asset maps show a 125mm water mains running within Wootton Street and Greet Street. A spur is shown extending from the 125mm main under Greet Street to the south eastern site boundary where it terminates within the footway. It is not anticipated that the water mains in Wootton Street or Greet Street will be affected by the proposed development work however any existing connections to the day nursery will need to be disconnected while works are ongoing.
- 8.2 Thames Water has been consulted as part of a developer enquiry to establish whether there is sufficient capacity within the local distribution network to serve the development or whether network reinforcement work is required.

- 8.3 In a response dated 29th January 2020, Thames Water have advised that the existing network has sufficient capacity to serve the site.
- 8.4 Thames Water has not provided a quotation for the new water connections to the proposed development; however the cost of the new connections has been estimated based on Thames Water's 'Charging Arrangements for New Connection Services 2019 / 2020'. The estimate is provided as an outline only and is based on a number of assumptions set out below. It should also be noted that charges set out in Thames Waters document are revised annually.
- 8.5 The table below summarises the estimated cost of new water infrastructure and connections up to the site boundary using the methods set out in the Thames Water Charging Arrangements for new Connections and Services. It is assumed that the Site will be served from the spur on Greet Street; the main will be extended approximately 1m within the footway and 5m into the site. 36 service connections will be provided. Water meters for the 36 flats and community space will be located within communal areas.

Item	Surface Type	Length or Quantity	Rate	Charge
Barrier Connection 63mm	Road	1 qty	£2,700.00	£2,700.00
Barrier Pipe 63mm	Road	5	£380.00	£1,900.00
Barrier Pipe 63mm	Footpath	2	£300.00	£600.00
Subtotal				£ 5,200.00
Internal Meters 20mm		36	£90	£ 3,240.00
Infrastructure charges (water)		36	£140.00	£ 5,040.00
Infrastructure charges (wastewater)		36	£210.00	£ 7,560.00
Total				£ 21,040.00

Table 8-1: Water Service Connection Costs

- 8.6 The above rates assume that barrier pipe will be required. It should also be noted that alternative connection strategies for the site could be pursued with different costs. The total cost of the off-site connection works is estimated at £21,040, which includes infrastructure charges but excludes onsite water services.
- 8.7 Please find correspondence with Thames Water in **Appendix E** of this report.

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9.0 FOUL AND SURFACE WATER DRAINAGE

Thames Water

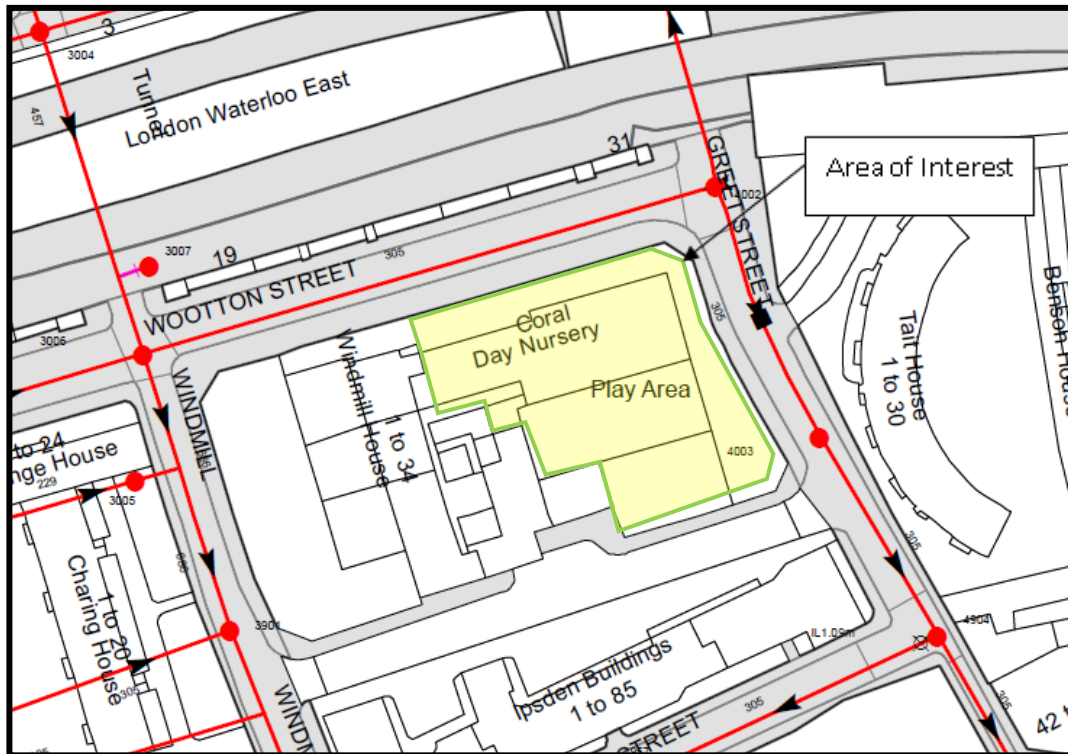


Figure 9-1: Thames Water Asset Mapping (Wastewater)

- 9.1 Figure 9-1 above and the correspondence in **Appendix F** shows that there are no Thames Water sewers within the site boundary. There are combined sewers in the highways to the north (305mm combined), east and west (305mm combined) of the site. The apparatus in Greet Street is proposed as the point of connection for the proposed development.
- 9.2 There are no surface water sewers within the vicinity of the site.
- 9.3 The Thames Water (TW) sewer record plans do not show the location of private sewers and drains. It is possible that there are existing drains left over from the former care home within the site.

A survey of the site would be required to identify any existing private connections.

- 9.4 A pre-development capacity enquiry was received from Thames Water on 4th February 2020 stating there is capacity in the nearby combined system to serve the site.
- 9.5 Thames Water have accepted in principle a proposed connection point to discharge into the combined network upstream of manhole 4003 on Greet Street.
- 9.6 Correspondence with Thames Water is included in **Appendix G**.

10.0 TELECOMS

BT Openreach

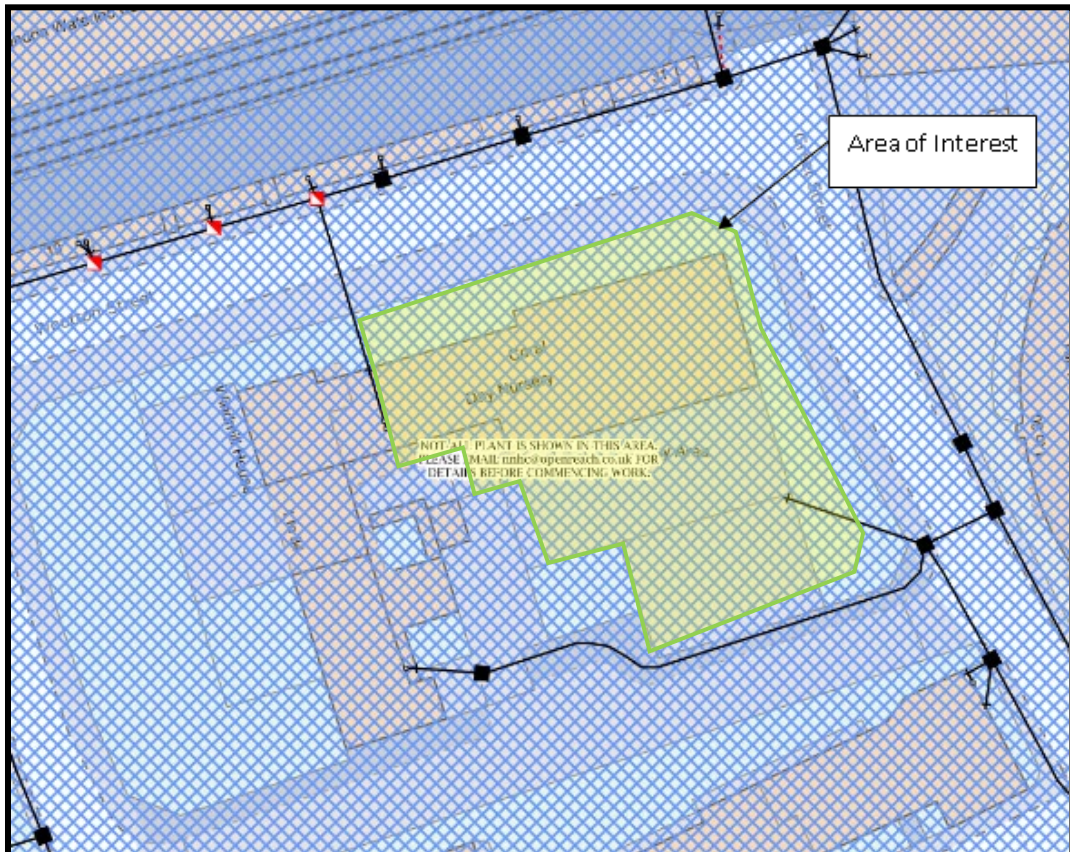


Figure 10-1: BT Openreach Asset Mapping

- 10.1 An extract from BT Openreach asset mapping, in **Figure 10-1** above, indicates that there is underground plant to the north and east of the site. A utility trace will be required to confirm the depth of the BT cables in Ethelme Street to ensure that construction of a vehicle crossover will not affect them.
- 10.2 BT Openreach is obliged to supply the proposed development. Once a planning consent has been granted, detailed costs and a specification of works will be provided by BT Openreach Newsites.
- 10.3 Correspondence with BT Openreach is included in **Appendix H**.