

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
16	218	W	Bun the Grid	529013 182632	Flat 41 Englefield, Clarence Gardens, London, Greater London, NW1 3LN	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
17	226	SW	Jon Adam	529085 182468	184-192, Drummond Street, London, Greater London, NW1 3HP	Clothing, Components and Accessories	Consumer Products
18	227	E	Finnair	529573 182594	Oneustonsq 40, Melton Street, London, Greater London, NW1 2FD	Airlines and Airline Services	Transport, Storage and Delivery
19	238	SE	Euston Square	529418 182392	Euston Square Station, Euston Road, London, Greater London, NW1 2BN	Underground Network Stations	Public Transport, Stations and Infrastructure
20B	241	NW	Electricity Sub Station	529092 182851	Greater London, NW1	Electrical Features	Infrastructure and Facilities
21	245	E	Excess Baggage Company	529580 182723	West Concourse, Euston Station, Regent's Park, London, Greater London, NW1 2DU	Container and Storage	Transport, Storage and Delivery
22B	248	NW	Electricity Sub Station	529081 182852	Greater London, NW1	Electrical Features	Infrastructure and Facilities
23	249	S	Halfords	529190 182353	Euston Road, London, Greater London, NW1 3DP	Vehicle Parts and Accessories	Motoring

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

1

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
24	288	N	529220 182952	BP	142, Hampstead Road, Regents Park, London, Inner London, NW1 2PT	No	Closed

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT
LHGR-XSV	LYNCH HILL GRAVEL MEMBER	SAND AND GRAVEL

5.3 Bedrock and Solid Geology

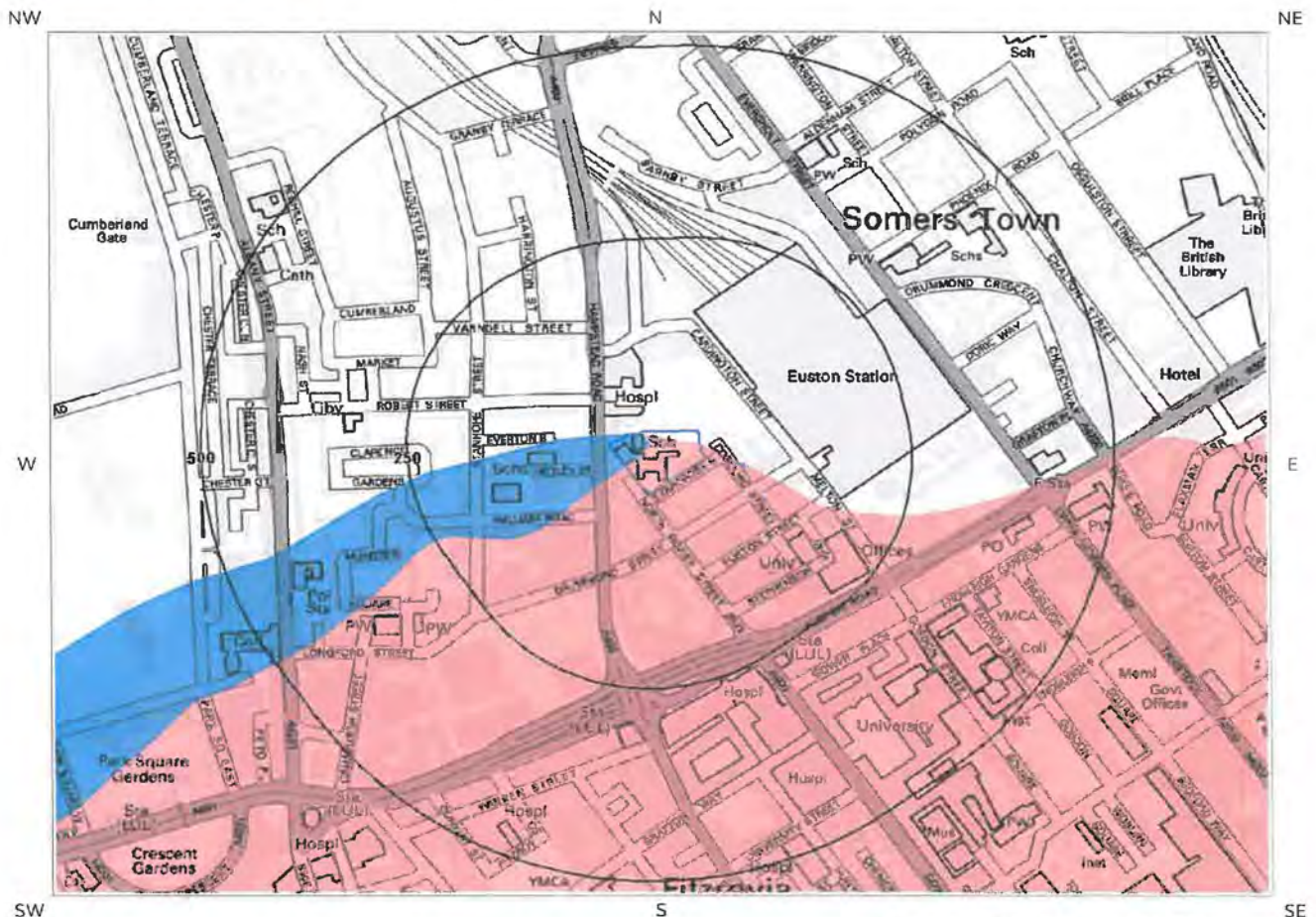
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LC-XCZS	LONDON CLAY FORMATION	CLAY, SILT AND SAND

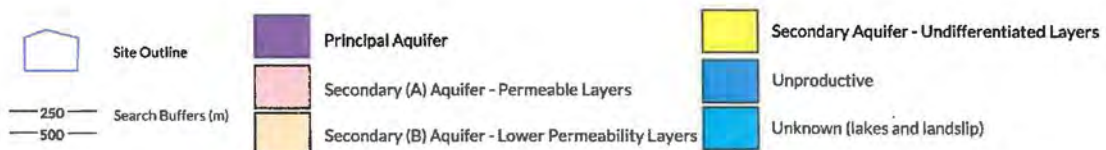
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

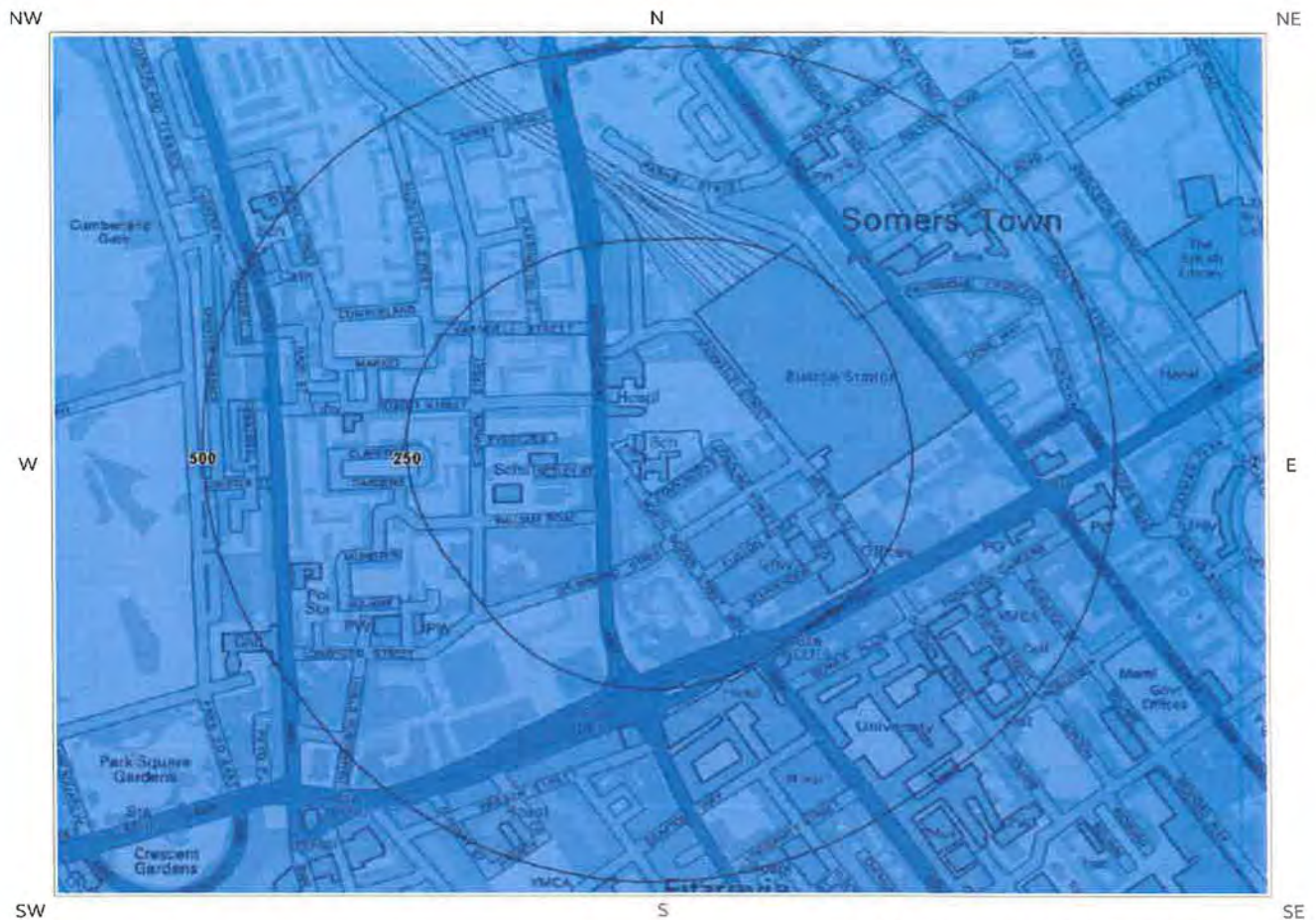
6a. Aquifer Within Superficial Geology



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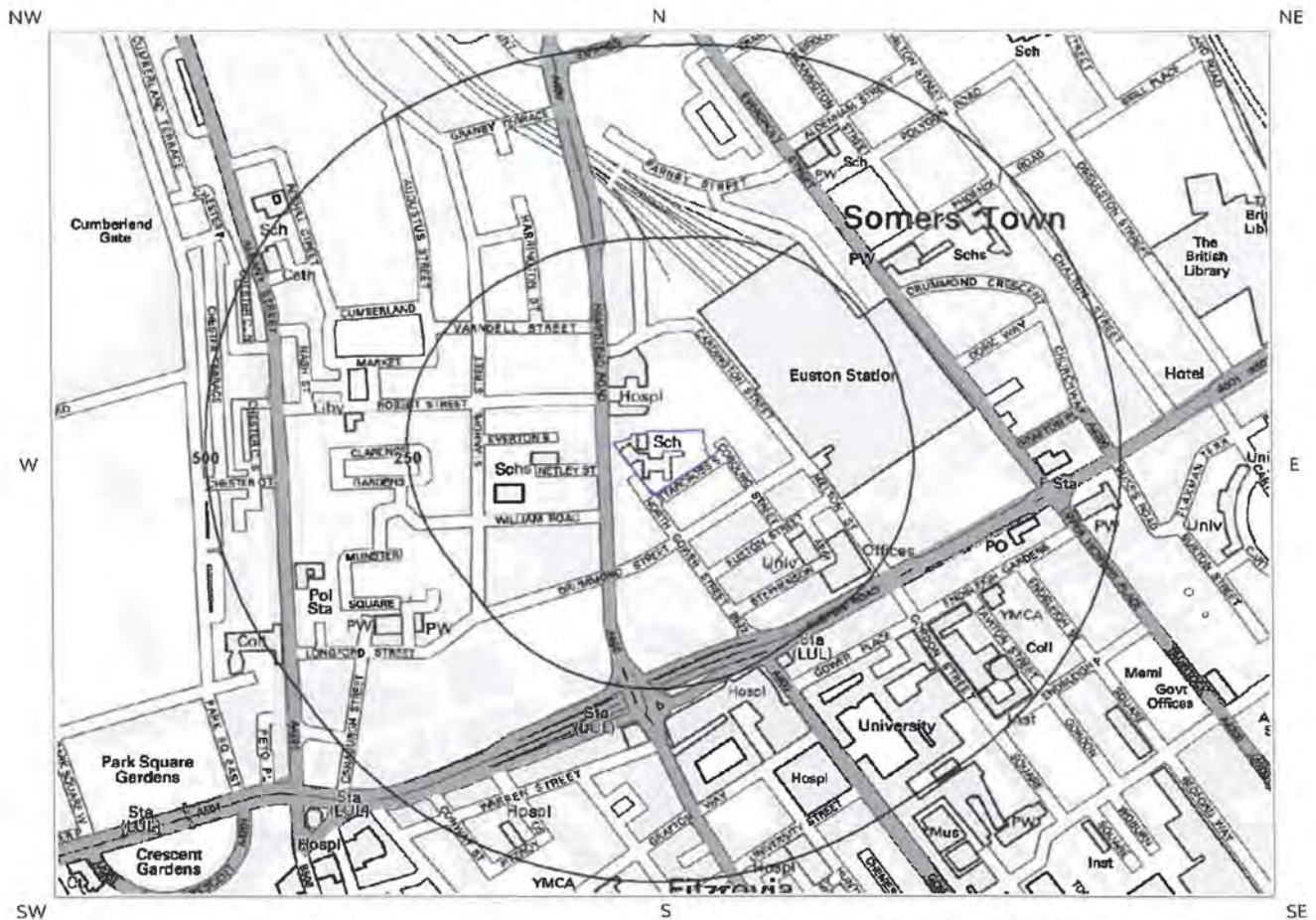


6b. Aquifer Within Bedrock Geology and Abstraction Licences

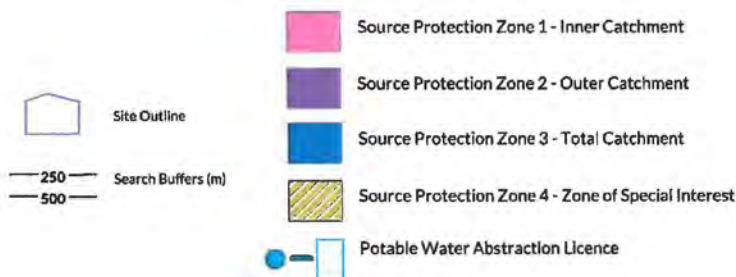


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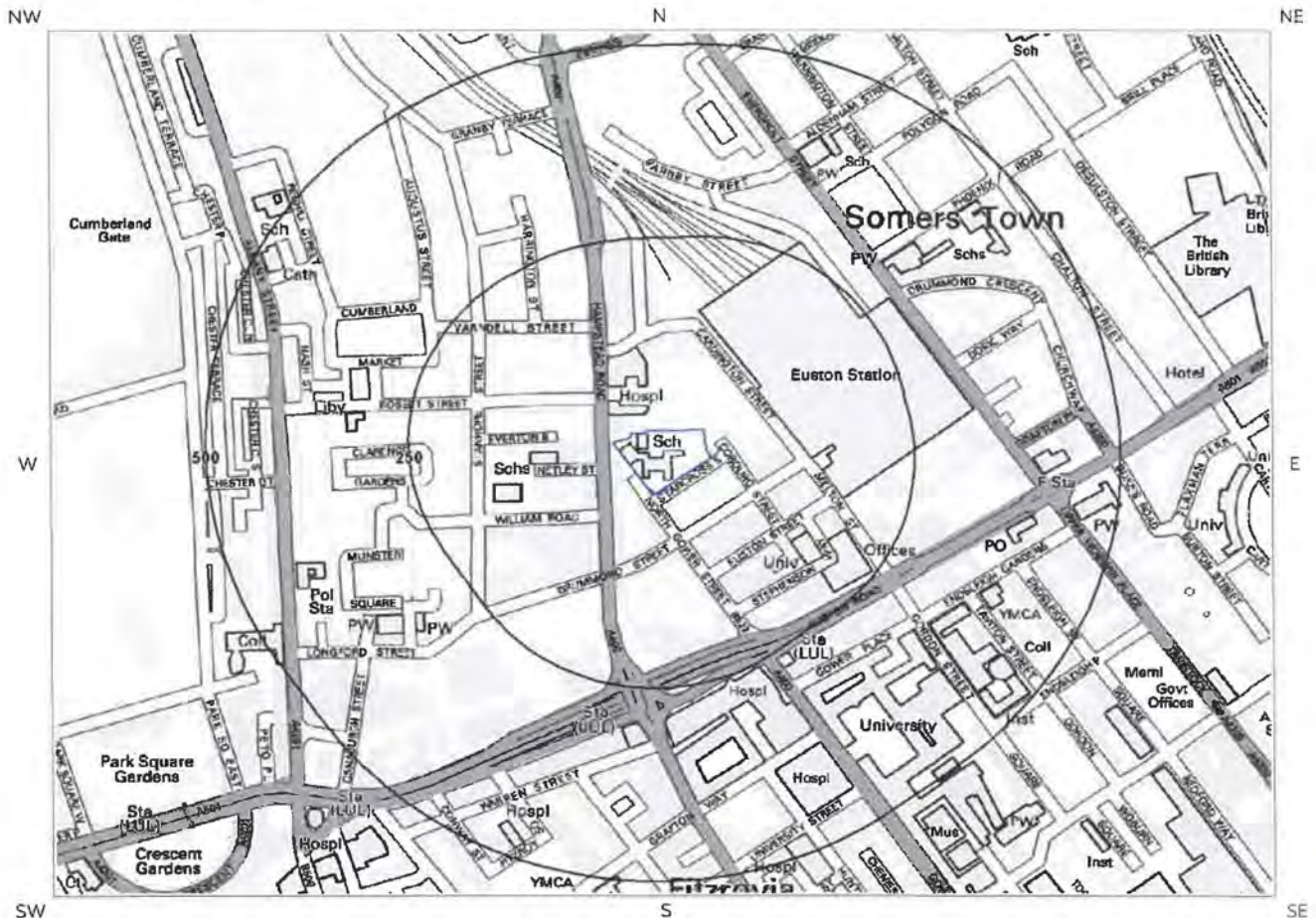
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



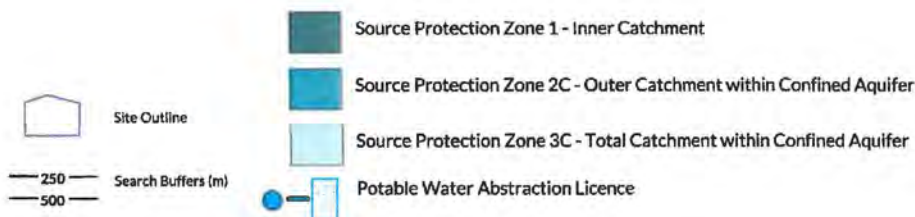
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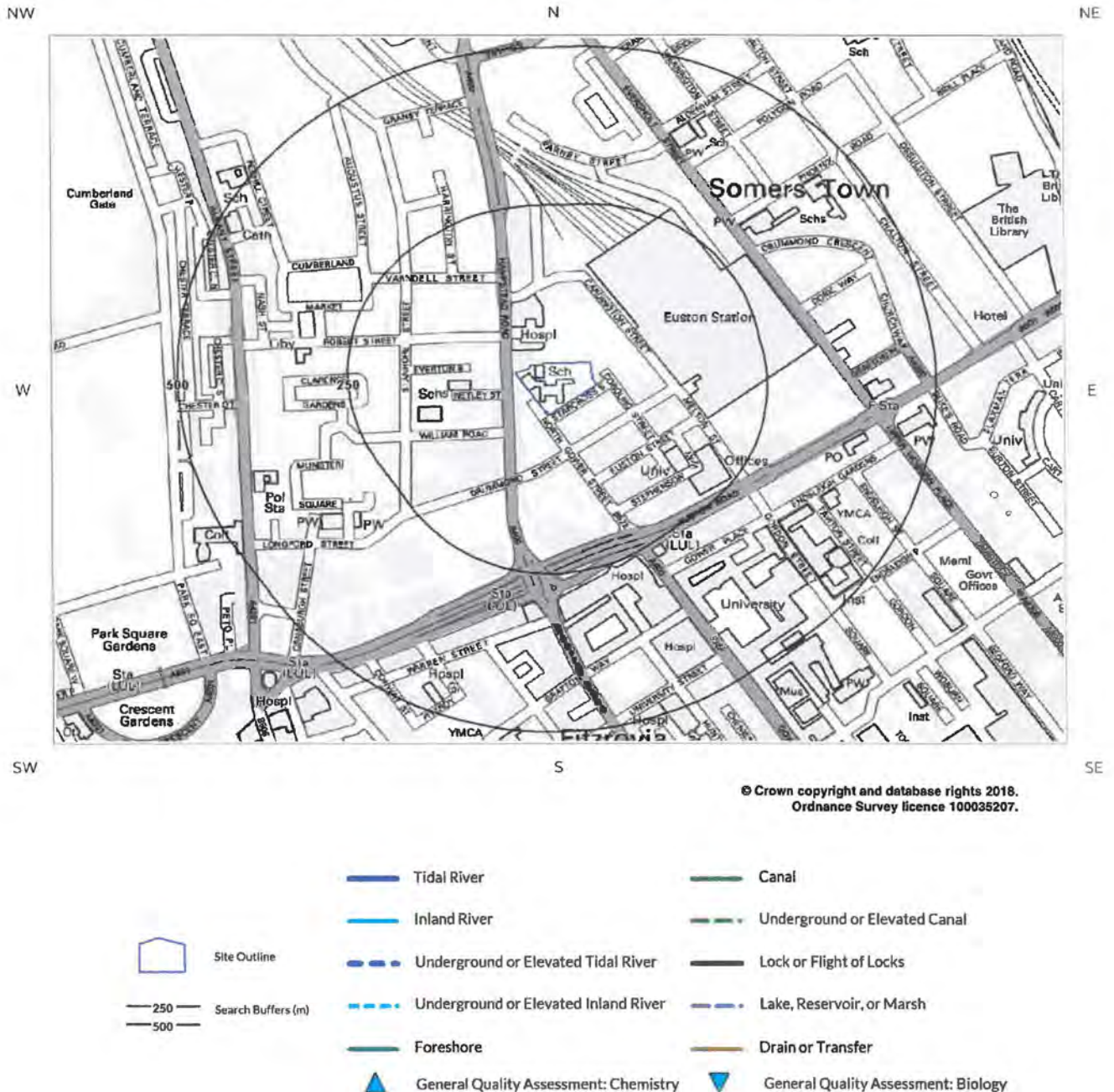
6d. Hydrogeology – Source Protection Zones within confined aquifer



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6e. Hydrology – Watercourse Network and River Quality



6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
3	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	708	E	530052 182718	Status: Historical Licence No: TH/039/0039/001 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BIDBOROUGH HOUSE 20 MABLEDON PLACE LONDON Data Type: Point Name: LONDON BOROUGH OF CAMDEN Annual Volume (m³): 327600 Max Daily Volume (m³): 1260 Original Application No: - Original Start Date: 09/04/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 09/04/2009 Version End Date:
Not shown	708	E	530052 182718	Status: Historical Licence No: TH/039/0039/001 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE 20 MABLEDON PLACE LONDON Data Type: Point Name: LONDON BOROUGH OF CAMDEN Annual Volume (m³): 327600 Max Daily Volume (m³): 1260 Original Application No: - Original Start Date: 09/04/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 09/04/2009 Version End Date:
Not shown	708	E	530052 182718	Status: Active Licence No: TH/039/0039/064 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BIDBOROUGH HOUSE, 20 MABLEDON PLACE, LONDON Data Type: Point Name: University College London Annual Volume (m³): 327600 Max Daily Volume (m³): 1440 Original Application No: - Original Start Date: 16/04/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 21/11/2014 Version End Date:
Not shown	819	SW	528830 181900	Status: Active Licence No: TH/039/0039/068 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 10 WEYMOUTH STREET, RIDGEFORD PROPERTIES Data Type: Point Name: Ridgeford Properties Limited Annual Volume (m³): 50000 Max Daily Volume (m³): 400 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date:
Not shown	819	SW	528830 181900	Status: Historical Licence No: TH/039/0039/010 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 10 WEYMOUTH STREET, RIDGEFORD PROPERTIES Data Type: Point Name: Ridgeford Properties Limited Annual Volume (m³): 50000 Max Daily Volume (m³): 400 Original Application No: - Original Start Date: 13/08/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 13/08/2009 Version End Date:
Not shown	922	SE	529858 181865	Status: Active Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 2 Data Type: Point Name: London School of Hygiene and Tropical Medicine Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/04/2011 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	922	SE	529858 181865	<p>Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE 2, KEPPEL STREET Data Type: Point Name: London School of Hygiene and Tropical Medicine</p> <p>Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 08/11/2010 Version End Date:</p>
Not shown	925	SE	529860 181863	<p>Status: Historical Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE 1, KEPPEL STREET Data Type: Point Name: London School of Hygiene and Tropical Medicine</p> <p>Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 08/11/2010 Version End Date:</p>
Not shown	925	SE	529860 181863	<p>Status: Active Licence No: TH/039/0039/031 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: KEPPEL STREET, BLOOMSBURY, LONDON - BOREHOLE 1 Data Type: Point Name: London School of Hygiene and Tropical Medicine</p> <p>Annual Volume (m³): 203407 Max Daily Volume (m³): 558 Original Application No: - Original Start Date: 08/11/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/04/2011 Version End Date:</p>
Not shown	929	SW	528407 182223	<p>Status: Active Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: DORIC VILLA, YORK TERRACE EAST, LONDON Data Type: Point Name: Ritblat</p> <p>Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: - Original Start Date: 26/02/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 26/02/2010 Version End Date:</p>
Not shown	929	SW	528407 182223	<p>Status: Historical Licence No: TH/039/0039/022 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: CONFINED CHALK, DORIC VILLA, YORK TERRACE EAST, LONDON Data Type: Point Name: Ritblat</p> <p>Annual Volume (m³): 118260 Max Daily Volume (m³): 324 Original Application No: - Original Start Date: 26/02/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 26/02/2010 Version End Date:</p>
Not shown	1033	SW	528480 181930	<p>Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 3-5 DEVONSHIRE PLACE-BOREHOLE A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED</p> <p>Annual Volume (m³): 122400 Max Daily Volume (m³): 511 Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date:</p>
Not shown	1039	SW	528480 181920	<p>Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 20 DEVONSHIRE PLACE, LONDON-BOREHOLE A Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1048	SW	528460 181930	<p>Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 3-5 DEVONSHIRE PLACE-BOREHOLE B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED</p> <p>Annual Volume (m³): 122400 Max Daily Volume (m³): 511 Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date:</p>
Not shown	1053	SW	528470 181910	<p>Status: Historical Licence No: 28/39/39/0215 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 20 DEVONSHIRE PLACE, LONDON-BOREHOLE B Data Type: Point Name: TRUSTEES OF THE LONDON CLINIC LIMITED</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 24/02/2005 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 24/02/2005 Version End Date:</p>
Not shown	1199	S	529100 181400	<p>Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE B Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:</p>
Not shown	1199	S	529100 181400	<p>Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: 26/11/1979 Version End Date:</p>
Not shown	1202	NE	530368 183294	<p>Status: Active Licence No: TH/039/0039/055 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: REGENT QUARTER - BOREHOLE A Data Type: Point Name: BNP Paribas Jersey Trust Corp Ltd and Anley Trustees Ltd</p> <p>Annual Volume (m³): 323612 Max Daily Volume (m³): 2160 Original Application No: - Original Start Date: 06/02/2013 Expiry Date: 31/03/2025 Issue No: 2 Version Start Date: 25/06/2014 Version End Date:</p>
Not shown	1264	S	529010 181350	<p>Status: Active Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'A' Data Type: Point Name: Pontsarn Investments Limited</p> <p>Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 102 Version Start Date: 29/11/2012 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1284	S	529010 181330	<p>Status: Active</p> <p>Licence No: 28/39/39/0138</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'B'</p> <p>Data Type: Point</p> <p>Name: Pontsarn Investments Limited</p> <p>Annual Volume (m³): 9126</p> <p>Max Daily Volume (m³): 25</p> <p>Original Application No: -</p> <p>Original Start Date: 11/10/1971</p> <p>Expiry Date: -</p> <p>Issue No: 102</p> <p>Version Start Date: 29/11/2012</p> <p>Version End Date:</p>
Not shown	1315	S	529000 181300	<p>Status: Historical</p> <p>Licence No: 28/39/39/0138</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: BOREHOLE 'A' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1</p> <p>Data Type: Point</p> <p>Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126</p> <p>Max Daily Volume (m³): 25</p> <p>Original Application No: -</p> <p>Original Start Date: 11/10/1971</p> <p>Expiry Date: -</p> <p>Issue No: 100</p> <p>Version Start Date: 26/11/1979</p> <p>Version End Date:</p>
Not shown	1315	S	529000 181300	<p>Status: Historical</p> <p>Licence No: 28/39/39/0138</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE A</p> <p>Data Type: Point</p> <p>Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126</p> <p>Max Daily Volume (m³): 25</p> <p>Original Application No: -</p> <p>Original Start Date: 11/10/1971</p> <p>Expiry Date: -</p> <p>Issue No: 100</p> <p>Version Start Date: 26/11/1979</p> <p>Version End Date:</p>
Not shown	1439	NW	528000 183400	<p>Status: Historical</p> <p>Licence No: 28/39/39/0035</p> <p>Details: Animal Watering & General Use in non Farming situations</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: BOREHOLE AT REGENT'S PARK, LONDON NW1</p> <p>Data Type: Point</p> <p>Name: ZOOLOGICAL SOCIETY OF LONDON</p> <p>Annual Volume (m³): 681.9</p> <p>Max Daily Volume (m³): 59</p> <p>Original Application No: -</p> <p>Original Start Date: 04/04/1966</p> <p>Expiry Date: -</p> <p>Issue No: 100</p> <p>Version Start Date: 04/04/1966</p> <p>Version End Date:</p>
Not shown	1487	NE	529920 184040	<p>Status: Active</p> <p>Licence No: TH/039/0039/027</p> <p>Details: General Use Relating To Secondary Category (High Loss)</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: KINGS CROSS CONCRETE PLANT-BOREHOLE</p> <p>Data Type: Point</p> <p>Name: HANSON QUARRY PRODUCTS EUROPE LTD</p> <p>Annual Volume (m³): 33400</p> <p>Max Daily Volume (m³): 200</p> <p>Original Application No: -</p> <p>Original Start Date: 21/04/2010</p> <p>Expiry Date: 31/03/2019</p> <p>Issue No: 2</p> <p>Version Start Date: 13/08/2012</p> <p>Version End Date:</p>
Not shown	1487	NE	529920 184040	<p>Status: Historical</p> <p>Licence No: 28/39/39/0222</p> <p>Details: General Use Relating To Secondary Category (High Loss)</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: KINGS CROSS CONCRETE PLANT-BOREHOLE</p> <p>Data Type: Point</p> <p>Name: HANSON QUARRY PRODUCTS EUROPE LTD</p> <p>Annual Volume (m³): 55200</p> <p>Max Daily Volume (m³): 200</p> <p>Original Application No: -</p> <p>Original Start Date: 31/08/2006</p> <p>Expiry Date: 31/03/2010</p> <p>Issue No: 1</p> <p>Version Start Date: 31/08/2006</p> <p>Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1487	W	527850 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ABBEY HOUSE, BAKER STREET-BOREHOLE Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 102 Version Start Date: 19/12/2003 Version End Date:
Not shown	1534	W	527800 182100	Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ABBEY HOUSE, BAKER STREET, LONDON NW1 Data Type: Point Name: ABBEY NATIONAL PLC Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/05/2000 Version End Date:
Not shown	1573	SW	527800 182000	Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT DORSET HOUSE, GLOUCESTER PLACE, LONDON. W1 Data Type: Point Name: BELLNORTH LIMITED Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 10/01/1994 Version End Date:
Not shown	1573	SW	527800 182000	Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: DORSET HOUSE, LONDON- 2 BOREHOLES Data Type: Point Name: Dorset House Residential Limited Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 103 Version Start Date: 20/11/2014 Version End Date:
Not shown	1700	SW	528061 181399	Status: Active Licence No: TH/039/0039/080 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 7-15 BAKER STREET, LONDON, W1U - BOREHOLE Data Type: Point Name: London Baker Street SARL Annual Volume (m³): 52560 Max Daily Volume (m³): 202 Original Application No: - Original Start Date: 19/07/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 08/07/2016 Version End Date:
Not shown	1700	SW	528061 181399	Status: Historical Licence No: 28/39/39/0241 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 7-15 BAKER STREET, LONDON, W1U - BOREHOLE Data Type: Point Name: AUB (BAKER STREET) DEVELOPMENT LIMITED Annual Volume (m³): 52560 Max Daily Volume (m³): 201.6 Original Application No: - Original Start Date: 12/12/2008 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 12/12/2008 Version End Date:
Not shown	1811	W	527420 182620	Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT ABBEY LODGE, PARK ROAD, LONDON NW8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 28/11/1991 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1811	W	527420 182620	Status: Active Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: ABBEY LODGE, PARK ROAD, LONDON NW8-TWO BOREHOLES Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/06/2006 Version End Date:
Not shown	1850	S	528793 180800	Status: Active Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 40-54 GROSVENOR HILL LONDON Data Type: Point Name: Grosvenor Properties Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: - Original Start Date: 28/02/2011 Expiry Date: 31/03/2019 Issue No: 3 Version Start Date: 14/10/2014 Version End Date:
Not shown	1850	S	528765 180766	Status: Historical Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 40-54 GROSVENOR HILL LONDON Data Type: Line Name: Grosvenor West End Properties Limited Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: - Original Start Date: 28/02/2011 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 11/11/2011 Version End Date:
Not shown	1891	S	528765 180766	Status: Active Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: 40-54 GROSVENOR HILL LONDON Data Type: Point Name: Grosvenor Properties Annual Volume (m³): 438000 Max Daily Volume (m³): 1200 Original Application No: - Original Start Date: 28/02/2011 Expiry Date: 31/03/2019 Issue No: 3 Version Start Date: 14/10/2014 Version End Date:
Not shown	1891	S	528765 180766	Status: Historical Licence No: TH/039/0039/036 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT 70 GROSVENOR STREET LONDON Data Type: Point Name: Grosvenor West End Properties Limited Annual Volume (m³): 473040 Max Daily Volume (m³): 1296 Original Application No: - Original Start Date: 28/02/2011 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 28/02/2011 Version End Date:
Not shown	1891	SW	528190 181039	Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: OXFORD STREET - BOREHOLE C Data Type: Point Name: Park House (Oxford St.) Ltd Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 17/09/2012 Version End Date:
Not shown	1891	SW	528190 181039	Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE C- OXFORD STREET Data Type: Point Name: Park House (Oxford St.) Ltd Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/09/2011 Version End Date:
Not shown	1895	E	531239 182777	Status: Active Licence No: TH/039/0039/059 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT NEW RIVER HEAD Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 1.26144e+006 Max Daily Volume (m³): 3456 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1898	NW	527640 183690	<p>Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD</p> <p>Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: - Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: 26/09/2002 Version End Date:</p>
Not shown	1898	NW	527640 183690	<p>Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD</p> <p>Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: - Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 01/04/2007 Version End Date:</p>
Not shown	1904	SW	528197 181019	<p>Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: OXFORD STREET - BOREHOLE B Data Type: Point Name: Park House (Oxford St.) Ltd</p> <p>Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 17/09/2012 Version End Date:</p>
Not shown	1904	SW	528197 181019	<p>Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE B- OXFORD STREET Data Type: Point Name: Park House (Oxford St.) Ltd</p> <p>Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/09/2011 Version End Date:</p>
Not shown	1905	NW	527636 183697	<p>Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: THAMES WATER UTILITIES LTD</p> <p>Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date:</p>
Not shown	1935	E	531280 182760	<p>Status: Historical Licence No: 28/39/39/0201 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: NEW RIVER HEAD, FINSBURY - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD</p> <p>Annual Volume (m³): 1.26144e+006 Max Daily Volume (m³): 3456 Original Application No: - Original Start Date: 08/01/2004 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 08/01/2004 Version End Date:</p>
Not shown	1956	SW	528135 180998	<p>Status: Active Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: OXFORD STREET - BOREHOLE A Data Type: Point Name: Park House (Oxford St.) Ltd</p> <p>Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 17/09/2012 Version End Date:</p>
Not shown	1956	SW	528135 180998	<p>Status: Historical Licence No: TH/039/0039/039 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOREHOLE A - OXFORD STREET Data Type: Point Name: Park House (Oxford St.) Ltd</p> <p>Annual Volume (m³): 1.95523e+006 Max Daily Volume (m³): 5357 Original Application No: - Original Start Date: 01/09/2011 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 01/09/2011 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1962	NE	531022 183681	Status: Active Licence No: TH/039/0039/057 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARNARD PARK Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 914544 Max Daily Volume (m³): 3024 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 01/04/2013 Version End Date:
Not shown	1965	NE	531020 183690	Status: Historical Licence No: 28/39/39/0207 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARNARD PARK, ISLINGTON - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 914544 Max Daily Volume (m³): 3024 Original Application No: - Original Start Date: 02/05/2003 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 08/01/2004 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1016	NE	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: GRAND UNION CANAL AT CAMLEY STREET NATURE PARK, LONDON Data Type: Point Name: BRITISH WATERWAYS BOARD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 18/09/1991 Expiry Date: - Issue No: 100 Version Start Date: 18/09/1991 Version End Date:
Not shown	1016	NE	529750 183600	Status: Historical Licence No: 28/39/39/0172 Details: Make-Up or Top Up Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: CAMLEY STREET NATURE PARK, LONDON Data Type: Point Name: BRITISH WATERWAYS BOARD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 18/09/1991 Version End Date:
Not shown	1289	NE	530310 183520	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: MAIDEN LANE BRIDGE, LONDON, NW1 - REGENTS CANAL Data Type: Point Name: Canal and River Trust Annual Volume (m³): 7.01e+006 Max Daily Volume (m³): 19520 Application No: - Original Start Date: 18/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date:
Not shown	1549	NW	528500 184020	Status: Active Licence No: 28/39/39/0164 Details: Non-Evaporative Cooling Direct Source: THAMES SURFACE WATER - NON TIDAL Point: SOUTHAMPTON BRIDGE, LONDON, NW8 - REGENTS CANAL Data Type: Point Annual Volume (m³): 7.01e+006 Max Daily Volume (m³): 19520 Application No: - Original Start Date: 18/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 17/12/2007 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1554	NW	528490 184020	Name: Canal and River Trust
				Status: Historical
				Licence No: 28/39/39/0173
				Details: Non-Evaporative Cooling
				Direct Source: THAMES SURFACE WATER - NON TIDAL
				Point: OVAL ROAD, CAMDEN - GRAND UNION REGENTS CANAL
				Data Type: Point
				Name: BRITISH WATERWAYS BOARD
				Annual Volume (m³): -
				Max Daily Volume (m³): -
				Application No: -
				Original Start Date: 08/12/1994
				Expiry Date: -
				Issue No: 100
				Version Start Date: 08/12/1994
				Version End Date: -

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
Not shown	1199	S	529100 181400	Status: Historical
				Licence No: 28/39/39/0138
				Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services
				Direct Source: THAMES GROUNDWATER
				Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE B
				Data Type: Point
				Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED
				Annual Volume (m³): 9126
				Max Daily Volume (m³): 25
				Original Application No: -
				Original Start Date: 11/10/1971
				Expiry Date: -
				Issue No: 100
				Version Start Date: -
				Version End Date: -
Not shown	1199	S	529100 181400	Status: Historical
				Licence No: 28/39/39/0138
				Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services
				Direct Source: THAMES GROUNDWATER
				Point: BOREHOLE 'B' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1
				Data Type: Point
				Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED
				Annual Volume (m³): 9126
				Max Daily Volume (m³): 25
				Original Application No: -
				Original Start Date: 11/10/1971
				Expiry Date: -
				Issue No: 100
				Version Start Date: -
				Version End Date: -
Not shown	1264	S	529010 181350	Status: Active
				Licence No: 28/39/39/0138
				Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services
				Direct Source: THAMES GROUNDWATER
				Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'A'
				Data Type: Point
				Name: Pontsarn Investments Limited
				Annual Volume (m³): 9126
				Max Daily Volume (m³): 25
				Original Application No: -
				Original Start Date: 11/10/1971
				Expiry Date: -
				Issue No: 102
				Version Start Date: -
				Version End Date: -
Not shown	1284	S	529010 181330	Status: Active
				Licence No: 28/39/39/0138
				Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services
				Direct Source: THAMES GROUNDWATER
				Point: WALMER HOUSE, 296 REGENT STREET, LONDON, W1B - BOREHOLE 'B'
				Data Type: Point
				Annual Volume (m³): 9126
				Max Daily Volume (m³): 25
				Original Application No: -
				Original Start Date: 11/10/1971
				Expiry Date: -
				Issue No: 102
				Version Start Date: -
				Version End Date: -

ID	Distance (m)	Direction	NGR	Details
Name: Pontsarn Investments Limited				
Not shown	1315	S	529000 181300	<p>Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT WALMER HOUSE, 296 REGENT STREET, LONDON W1 Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: - Version End Date: -</p>
Not shown	1315	S	529000 181300	<p>Status: Historical Licence No: 28/39/39/0138 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: WALMER HOUSE, 296 REGENT STREET, LONDON W1-BOREHOLE A Data Type: Point Name: CAPITAL AND COUNTIES PROPERTY COMPANY LIMITED</p> <p>Annual Volume (m³): 9126 Max Daily Volume (m³): 25 Original Application No: - Original Start Date: 11/10/1971 Expiry Date: - Issue No: 100 Version Start Date: - Version End Date: -</p>
Not shown	1487	W	527850 182100	<p>Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: ABBEY HOUSE, BAKER STREET-BOREHOLE Data Type: Point Name: BASKERVILLE ESTATES (GP) LIMITED</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 102 Version Start Date: - Version End Date: -</p>
Not shown	1534	W	527800 182100	<p>Status: Historical Licence No: 28/39/39/0070 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ABBEY HOUSE, BAKER STREET, LONDON NW1 Data Type: Point Name: ABBEY NATIONAL PLC</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: - Version End Date: -</p>
Not shown	1573	SW	527800 182000	<p>Status: Historical Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT DORSET HOUSE, GLOUCESTER PLACE, LONDON, W1 Data Type: Point Name: BELLNORTH LIMITED</p> <p>Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 101 Version Start Date: - Version End Date: -</p>
Not shown	1573	SW	527800 182000	<p>Status: Active Licence No: 28/39/39/0021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: DORSET HOUSE, LONDON- 2 BOREHOLES Data Type: Point Name: Dorset House Residential Limited</p> <p>Annual Volume (m³): 56370 Max Daily Volume (m³): 318 Original Application No: - Original Start Date: 13/12/1965 Expiry Date: - Issue No: 103 Version Start Date: - Version End Date: -</p>
Not shown	1811	W	527420 182620	<p>Status: Historical Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household</p> <p>Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 05/09/1966</p>

ID	Distance (m)	Direction	NGR	Details
				Direct Source: THAMES GROUNDWATER Point: TWO BOREHOLES AT ABBEY LODGE, PARK ROAD, LONDON NW8 Data Type: Point Name: WOOD MANAGEMENT TRUSTEES LTD Expiry Date:- Issue No: 100 Version Start Date: Version End Date:
Not shown	1811	W	527420 182620	Status: Active Licence No: 28/39/39/0115 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: ABBEY LODGE, PARK ROAD, LONDON NW8-TWO BOREHOLES Data Type: Point Name: ABBEY LODGE RTM COMPANY LIMITED Annual Volume (m³): 28640 Max Daily Volume (m³): 100 Original Application No:- Original Start Date: 05/09/1966 Expiry Date:- Issue No: 101 Version Start Date: Version End Date:
Not shown	1895	E	531239 182777	Status: Active Licence No: TH/039/0039/059 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT NEW RIVER HEAD Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 1.26144e+006 Max Daily Volume (m³): 3456 Original Application No:- Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: Version End Date:
Not shown	1898	NW	527640 183690	Status: Historical Licence No: 28/39/39/0231 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No:- Original Start Date: 01/04/2007 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: Version End Date:
Not shown	1898	NW	527640 183690	Status: Historical Licence No: 28/39/39/0202 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARROW HILL PUMPING STATION - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No:- Original Start Date: 26/09/2002 Expiry Date: 31/03/2007 Issue No: 1 Version Start Date: Version End Date:
Not shown	1905	NW	527636 183697	Status: Active Licence No: TH/039/0039/058 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARROW HILL Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 631000 Max Daily Volume (m³): 2000 Original Application No:- Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: Version End Date:
Not shown	1935	E	531280 182760	Status: Historical Licence No: 28/39/39/0201 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: NEW RIVER HEAD, FINSBURY - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 1.26144e+006 Max Daily Volume (m³): 3456 Original Application No:- Original Start Date: 08/01/2004 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: Version End Date:
Not shown	1962	NE	531022 183681	Status: Active Licence No: TH/039/0039/057 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT BARNARD PARK Data Type: Point Name: THAMES WATER UTILITIES LTD Annual Volume (m³): 914544 Max Daily Volume (m³): 3024 Original Application No:- Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: Version End Date:
Not shown	1965	NE	531020 183690	Status: Historical Licence No: 28/39/39/0207 Annual Volume (m³): 914544 Max Daily Volume (m³): 3024

ID	Distance (m)	Direction	NGR	Details
				<div> <div> Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BARNARD PARK, ISLINGTON - BOREHOLE Data Type: Point Name: THAMES WATER UTILITIES LTD </div> <div> Original Application No: - Original Start Date: 02/05/2003 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: Version End Date: </div> </div>

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site Identified

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1437	N	529150 184100	River Name: Grand Union Canal (paddington Arm) Reach: Canal Feeder - Camden Road End/Start of Stretch: End of Stretch NGR	F	F	F	F	E

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

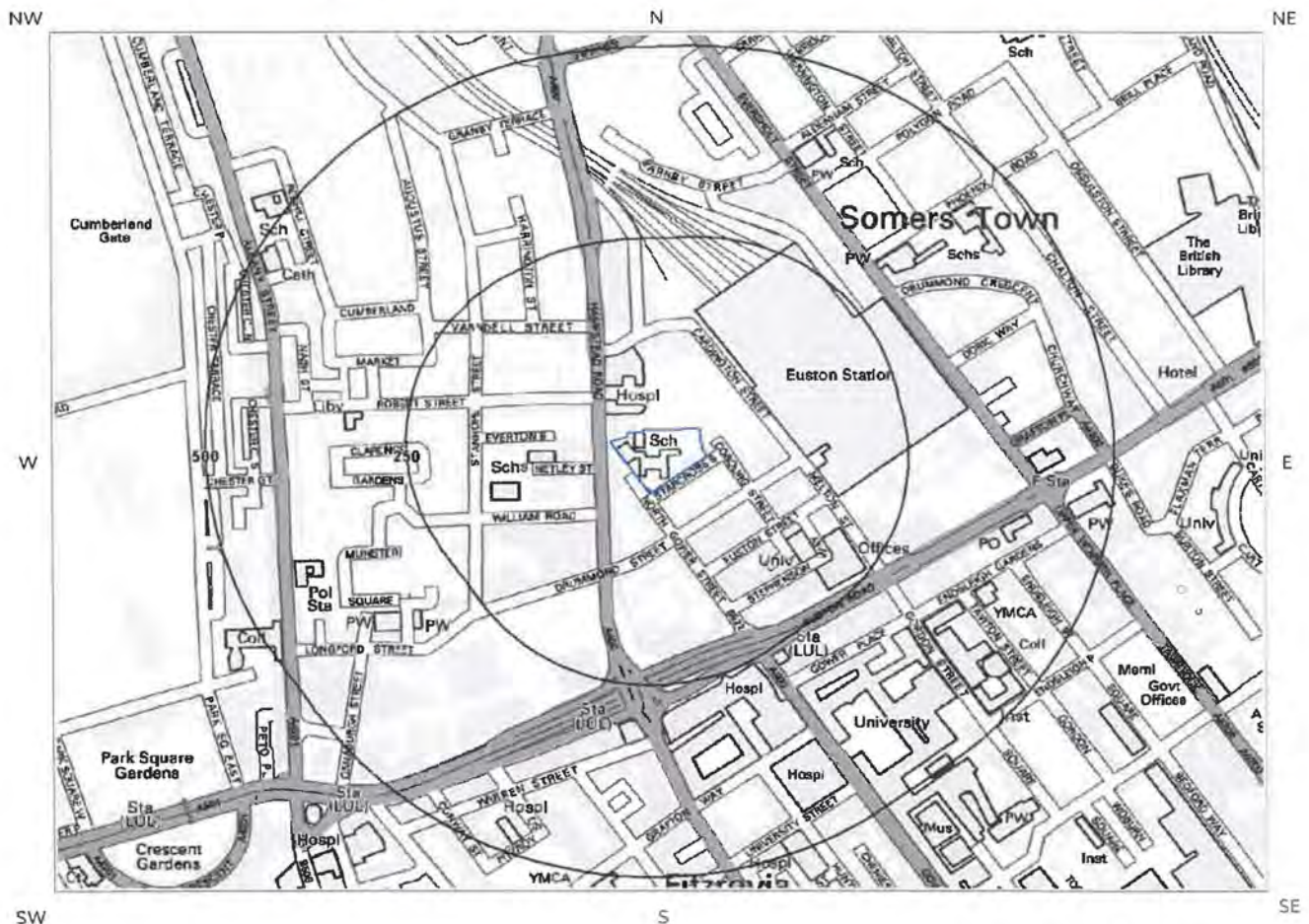
Database searched and no data found.

6.11 Surface Water Features

Surface water features within 250m of the study site None identified

Database searched and no data found.

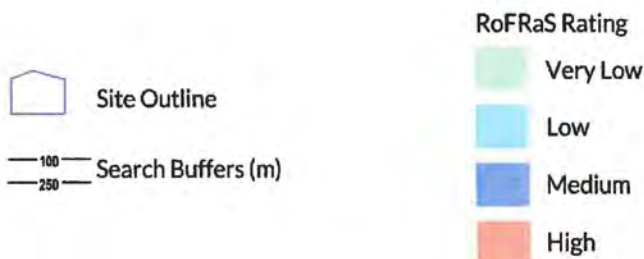
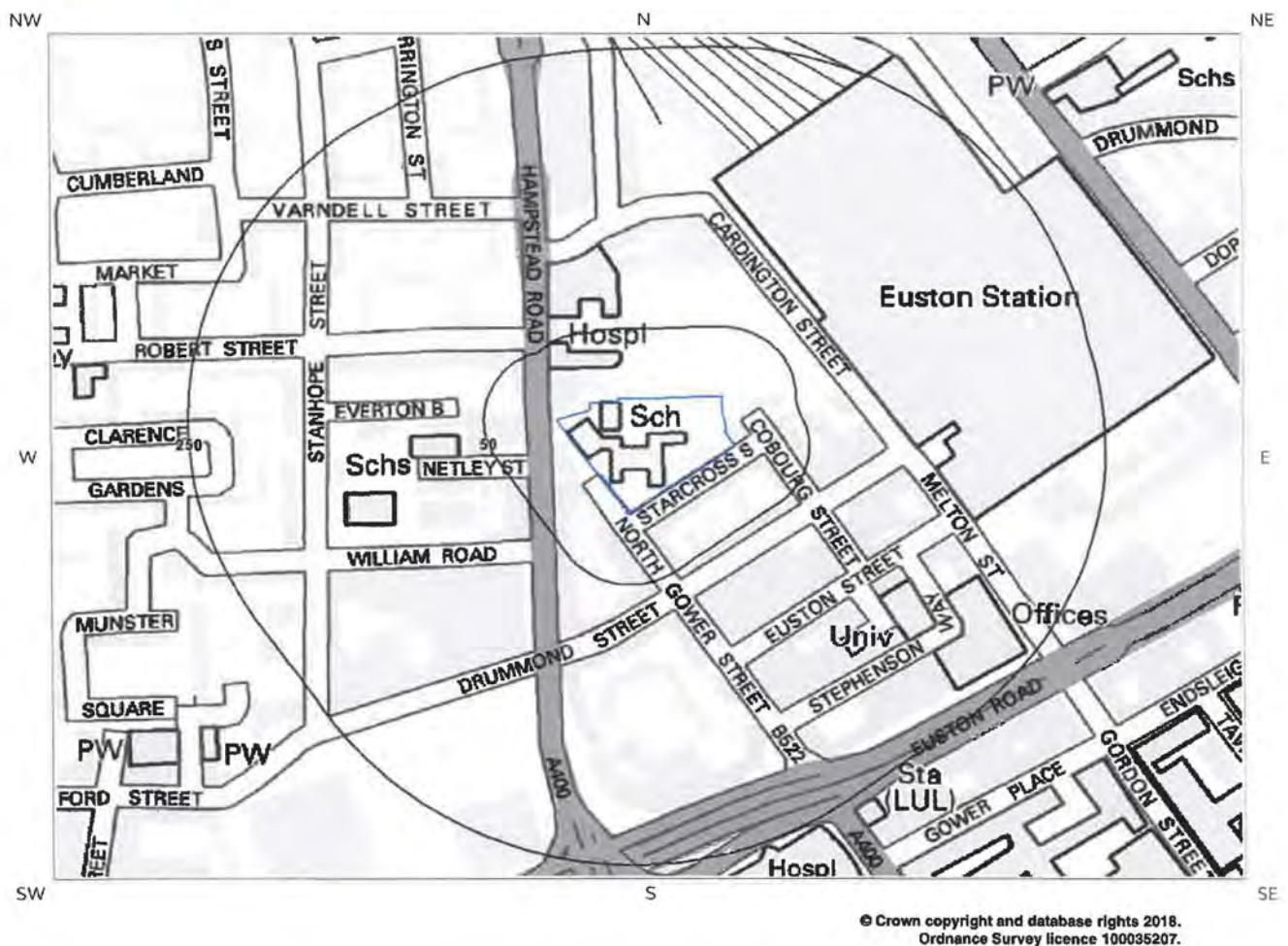
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m

None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site

None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

Identified

Clearwater Flooding or Superficial Deposits Flooding

Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

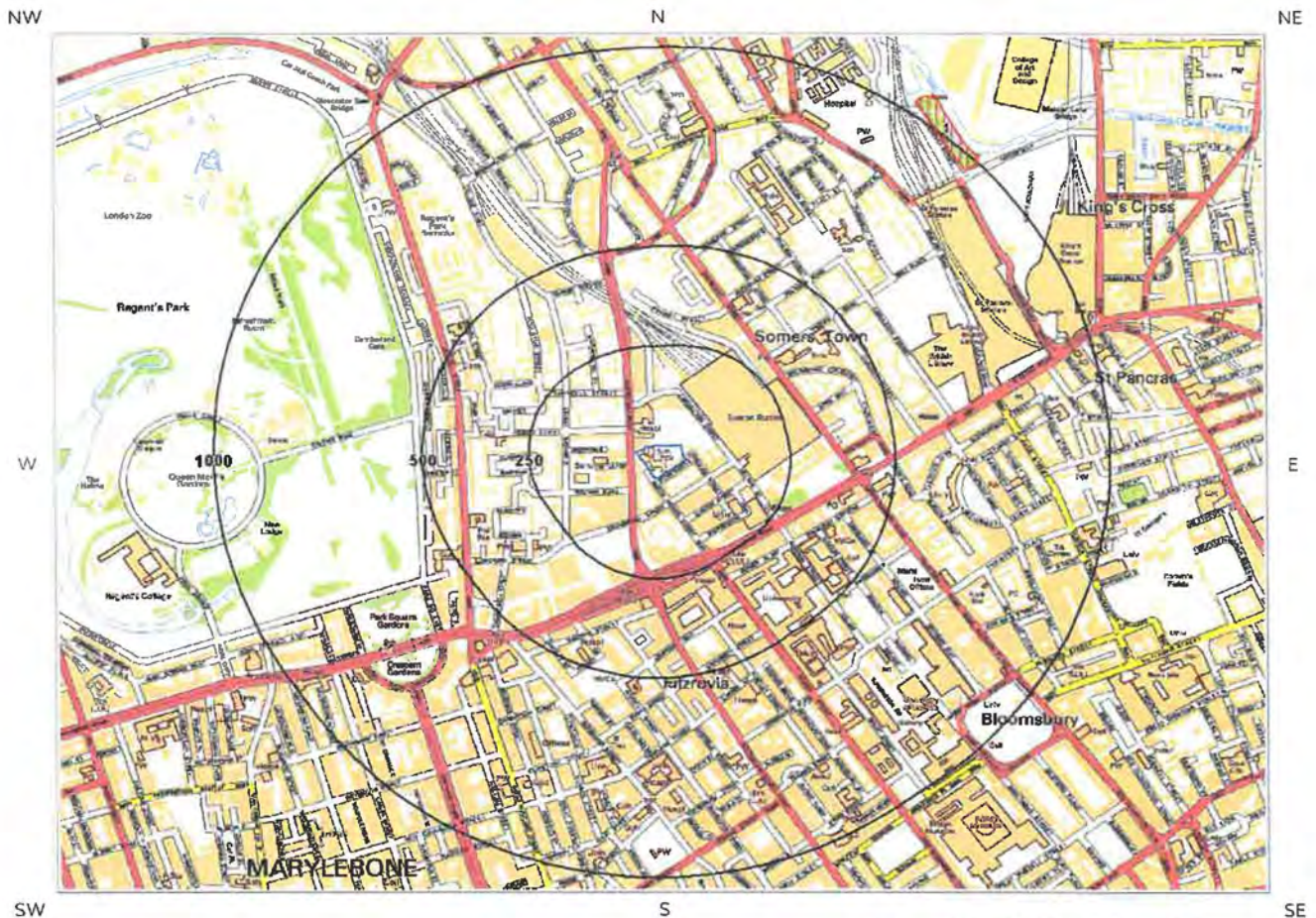
British Geological Survey confidence rating in this result

Moderate

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

0

Database searched and no data found.

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
1	966	NE	Camley Street Nature Park	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell* hazard rating identified on the study site Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly high plasticity. Do not plant or remove trees or shrubs near to buildings without expert advice about their effect and management. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a probable increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a probable increase in insurance risk during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site
Guidance: No Guidance Required.

None identified

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency
National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk

Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority
Authority: London Borough of Camden
Phone: 020 7974 4444
Web: <http://www.camden.gov.uk/>
Address: Camden Town Hall, Judd Street, London, WC1H 9JE

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
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**Public Health
England**



**The Coal
Authority**



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

APPENDIX 3

CHEMICAL TEST RESULTS



Final Report

Report No.: 18-33288-1 18-33288-1

Initial Date of Issue: 02/Nov/2018 02/Nov/2018

Client Ground Engineering Limited Ground Engineering Limited

Client Address: Newark Road
Peterborough
Cambridgeshire
PE1 5UA Newark Road
Peterborough
Cambridgeshire
PE1 5UA

Contact(s): Ashley Murdoch Ashley Murdoch

Project C14593 C14593 Maria Fidelis Lower School, London, NW1

Quotation No.: **Date Received:** 29/Oct/2018 25

Order No.: C14593 C14593 **Date Instructed:** 29/Oct/2018 25

No. of Samples: 9 9

Turnaround (Wkdays): 5 5 **Results Due:** 02/Nov/2018 0

Date Approved: 02/Nov/2018 02/Nov/2018

Approved By:

Details: Martin Dyer, Laboratory Manager

Bulk Identification Certificate

Client: Ground
Engineering
Limited

Site Address:
Date Sampled: 22-Oct-2018
Date Received: 29-Oct-2018

Your Ref.:

Project: C14593
Job Number: 18-33268
No Samples:
Date Reported: 02-Nov-2018

Sample No.	Sample ID	Sample Ref.	Description	SOP	Accred.	Laboratory	Material	Result
713973	B1		BH1	2185	U	COVENTRY	Cement	Chrysotile

The in-house procedure SOP2185 is in accordance with the requirements of Appendix 2 of the Analyst Guide (HSG 248).

The results relate only to items tested as supplied by the client.

Comments and interpretations are beyond the scope of UKAS accreditation.

Samples associated with asbestos in building surveys are retained for six months (HSG 264 refers)

Results - Soil

Client: Ground Engineering Limited	Chemtest Job No.:	18-33288	18-33288	18-33288	18-33288	18-33288	18-33288	18-33288
Quotation No.:	Chemtest Sample ID.:	713954	713956	713957	713958	713959	713960	713961
	Client Sample ID.:	B1	D1	D2	D2	D2	D1	D4
	Sample Location:	BH1	TP4	TP5	TP6	TP3	WS1	WS2
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.40	0.50	0.65	0.70	0.30	1.10
	Bottom Depth (m):	0.30						
	Date Sampled:	22-Oct-2018	22-Oct-2018	22-Oct-2018	22-Oct-2018	23-Oct-2018	23-Oct-2018	23-Oct-2018
	Asbestos Lab:	COVENTRY						
Determinand	Accred.	SOP	Units	LOD				
pH	U	2010		N/A	9.8	8.5	8.0	8.7
Moisture	N	2030	%	0.020	8.1	20	16	19
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.47	0.65	2.1	1.0
Sulphate (2:1 Water Soluble) as SO ₄	U	2120	g/l	0.010	0.22	0.023	0.72	0.30
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	38	4.1	9.9	2.6
Arsenic	U	2450	mg/kg	1.0	17	15	28	23
Cadmium	U	2450	mg/kg	0.10	0.31	0.31	0.19	0.11
Chromium	U	2450	mg/kg	1.0	20	33	35	28
Copper	U	2450	mg/kg	0.50	37	36	41	40
Mercury	U	2450	mg/kg	0.10	1.2	0.20	1.2	0.83
Nickel	U	2450	mg/kg	0.50	21	60	48	40
Lead	U	2450	mg/kg	0.50	310	44	220	280
Selenium	U	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20
Zinc	U	2450	mg/kg	0.50	80	290	150	59
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	5.7	0.74	2.4	1.6
Acenaphthene	U	2700	mg/kg	0.10	2.1	0.36	0.33	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	6.3	0.29	0.25	< 0.10
Anthracene	U	2700	mg/kg	0.10	14	1.7	1.1	< 0.10
Benzo[a]anthracene	U	2700	mg/kg	0.10	28	1.6	1.8	< 0.10
Benzo[a]pyrene	U	2700	mg/kg	0.10	25	0.98	1.4	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	30	1.6	2.1	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	14	0.76	0.58	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	12	1.3	1.1	< 0.10
Chrysene	U	2700	mg/kg	0.10	29	2.4	2.3	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	5.0	0.32	< 0.10	< 0.10
Fluoranthene	U	2700	mg/kg	0.10	63	5.3	4.8	0.64
Fluorene	U	2700	mg/kg	0.10	3.8	0.40	0.41	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	16	0.47	0.76	< 0.10
Naphthalene	U	2700	mg/kg	0.10	1.5	0.55	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	47	5.5	4.1	0.90
Pyrene	U	2700	mg/kg	0.10	57	5.1	4.5	0.69
Total Of 16 PAH's	U	2700	mg/kg	2.0	350	29	26	2.2
Total Phenols	U	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30

Results - Soil

Client: Ground Engineering Limited	Chemtest Job No.:	18-33288	18-33288	18-33288	18-33288	18-33288	18-33288	18-33288
Quotation No.:	Chemtest Sample ID.:	713954	713956	713957	713958	713959	713960	713961
	Client Sample ID.:	B1	D1	D2	D2	D2	D1	D4
	Sample Location:	BH1	TP4	TP5	TP6	TP3	WS1	WS2
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.40	0.50	0.65	0.70	0.30	1.10
	Bottom Depth (m):	0.30						
	Date Sampled:	22-Oct-2018	22-Oct-2018	22-Oct-2018	22-Oct-2018	23-Oct-2018	23-Oct-2018	23-Oct-2018
	Asbestos Lab:	COVENTRY						
Determinand	Accred.	SOP	Units	LOD				
ACM Type	U	2192		N/A	Cement			
Asbestos Identification	U	2192	%	0.001	Chrysotile			
Asbestos by Gravimetry	U	2192	%	0.001	0.27			
Total Asbestos	N	2192	%	0.001	0.27			

Results - Single Stage WAC

Project: C14593 Maria Fidelis Lower School, London, NW1

Chemtest Job No: 18-33288 Chemtest Sample ID: 713955 Sample Ref: Sample ID: B2 Sample Location: BH1 Top Depth(m): 0.30 Bottom Depth(m): 0.80 Sampling Date: 22-Oct-2018				Landfill Waste Acceptance Criteria Limits			
					Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units				
Total Organic Carbon	2625	U	%	2.1	3	5	6
Loss On Ignition	2610	U	%	5.7	--	--	10
Total BTEX	2760	U	mg/kg	[C] < 0.010	6	--	--
Total PCBs (7 Congeners)	2815	U	mg/kg	< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg	[C] 380	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg	150	100	--	--
pH	2010	U		8.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.10	--	To evaluate	To evaluate
Eluate Analysis				10:1 Eluate mg/l	10:1 Eluate mg/kg	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	
Arsenic	1450	U	0.0027	< 0.050	0.5	2	25
Barium	1450	U	0.030	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.010	0.04	1	5
Chromium	1450	U	0.0081	0.081	0.5	10	70
Copper	1450	U	0.0032	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.0035	< 0.050	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.050	0.4	10	40
Lead	1450	U	0.0023	0.023	0.5	10	50
Antimony	1450	U	0.0039	0.039	0.06	0.7	5
Selenium	1450	U	< 0.0010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.013	< 0.50	4	50	200
Chloride	1220	U	1.4	14	800	15000	25000
Fluoride	1220	U	0.21	2.1	10	150	500
Sulphate	1220	U	400	4000	1000	20000	50000
Total Dissolved Solids	1020	N	510	5100	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	6.5	65	500	800	1000

Solid Information

Dry mass of test portion/kg	0.090
Moisture (%)	15

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63, Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
713955		B2	BH1	22-Oct-2018	C	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2185	Asbestos	Asbestos	Polarised light microscopy
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.

Test Methods

SOP	Title	Parameters included	Method summary
2815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and Trimethylphenols Note: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	Compliance Test for Leaching of Granular Waste Material and Sludge

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com

APPENDIX 4

CLASSIFICATION OF AGGRESSIVE CHEMICAL ENVIRONMENT FOR BURIED CONCRETE

TABLE C2 – AGGRESSIVE CHEMICAL ENVIRONMENT FOR CONCRETE

(ACEC) CLASSIFICATION FOR BROWNFIELD LOCATIONS^a

Table C2 Aggressive Chemical Environment for Concrete (ACEC) classification for brownfield locations ^a								
Sulfate and magnesium						Groundwater		ACEC Class for location
Design Sulfate Class for location	2:1 water/soil extract ^b		Groundwater		Total potential sulfate ^c	Static water	Mobile water	
1	2	3	4	5	6	7	8	9
	(SO ₄ mg/l)	(Mg mg/l)	(SO ₄ mg/l)	(Mg mg/l)	(SO ₄ %)	(pH) ^d	(pH) ^d	
DS-1	< 500		< 400		< 0.24	≥ 2.5	> 6.5 ^d 5.5–6.5 4.5–5.5 2.5–4.5	AC-1s AC-1 AC-2z AC-3z AC-4z
DS-2	500–1500		400–1400		0.24–0.6	> 5.5 2.5–5.5	> 6.5 5.5–6.5 4.5–5.5 2.5–5.5	AC-1s AC-2 AC-2s AC-3z AC-4z AC-5z
DS-3	1600–3000		1500–3000		0.7–1.2	> 5.5 2.5–5.5	> 6.5 5.5–6.5 2.5–5.5	AC-2s AC-3 AC-3s AC-4 AC-5
DS-4	3100–6000	≤1200	3100–6000	≤1000	1.3–2.4	> 5.5 2.5–5.5	> 6.5 2.5–6.5	AC-3s AC-4 AC-4s AC-5
DS-4m	3100–6000	> 1200 ^e	3100–6000	> 1000 ^e	1.3–2.4	> 5.5 2.5–5.5	> 6.5 2.5–6.5	AC-3s AC-4m AC-4ms AC-5m
DS-5	> 6000	≤1200	> 6000	≤1000	> 2.4	> 5.5 2.5–5.5	≥ 2.5	AC-4s AC-5
DS-5m	> 6000	> 1200 ^e	> 6000	> 1000 ^e	> 2.4	> 5.5 2.5–5.5	≥ 2.5	AC-4ms AC-5m

Notes

- ^a Brownfield locations are those sites, or parts of sites, that might contain chemical residues produced by or associated with industrial production (Section C5.1.3).
- ^b The limits of Design Sulfate Classes based on 2:1 water/soil extracts have been lowered from previous Digests (Box C7).
- ^c Applies only to locations where concrete will be exposed to sulfate ions (SO₄), which may result from the oxidation of sulfides such as pyrite, following ground disturbance (Appendix A1 and Box C8).
- ^d An additional account is taken of hydrochloric and nitric acids by adjustment to sulfate content (Section C5.1.3).
- ^e The limit on water-soluble magnesium does not apply to brackish groundwater (chloride content between 12 000 mg/l and 17 000 mg/l). This allows 'm' to be omitted from the relevant ACEC classification. Seawater (chloride content about 18 000 mg/l) and stronger brines are not covered by this table.

Explanation of suffix symbols to ACEC Class

- Suffix 's' indicates that the water has been classified as static.
- Concrete placed in ACEC Classes that include the suffix 'z' have primarily to resist acid conditions and may be made with any of the cements in Table D2 on page 42.
- Suffix 'm' relates to the higher levels of magnesium in Design Sulfate Classes 4 and 5.

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