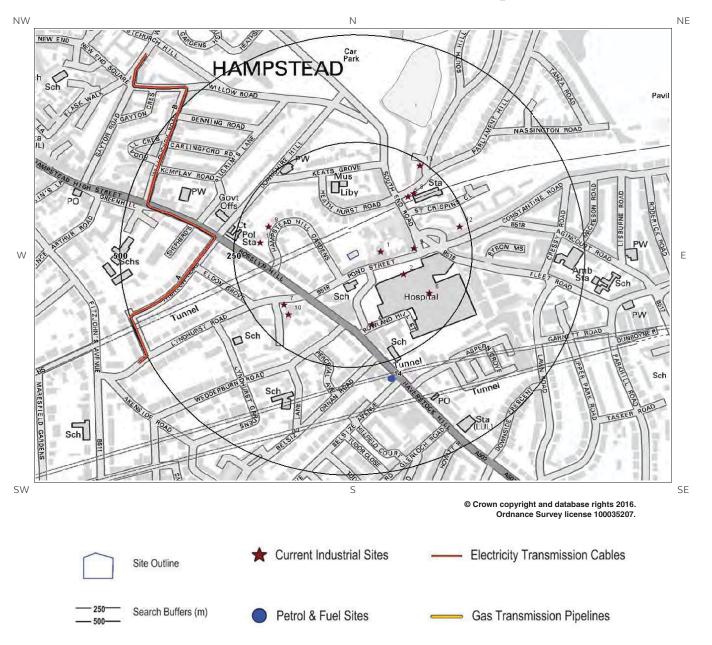


## 4. Current Land Use Map





## 4. Current Land Uses

## 4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

13

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	50	Е	Drill Hall	527190 185507	NW3	Armed Services	Central and Local Government
2	108	SE	Royal Free Hospital	527240 185454	Royal Free Hospital, Pond Street, London, NW3 2QG	Accident and Emergency Hospitals	Health Practitioners and Establishments
3	123	Е	The Flooring Group Ltd	527262 185514	3-5, South End Road, London, NW3 2PT	Construction Completion Services	Construction Services
4	157	S	Electricity Sub Station	527170 185337	NW3	Electrical Features	Infrastructure and Facilities
5	168	NE	Hampstead Heath Rail Station	527250 185634	NW3	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
6	179	SE	Royal Free Hospital	527297 185410	Royal Free Hospital, Pond Street, London, NW3 2QG	Hospitals	Health Practitioners and Establishments
7	179	SW	Electricity Sub Station	526977 185383	NW3	Electrical Features	Infrastructure and Facilities
8	182	NE	Electricity Sub Station	527263 185642	NW3	Electrical Features	Infrastructure and Facilities
9	185	W	The Art Studio	526943 185565	5, Hampstead Hill Gardens, London, NW3 2PH	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
10	186	SW	Air Studios Lyndhurst Hall	526986 185360	Lyndhurst Hall, Lyndhurst Road, London, NW3 5NG	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
11	194	W	Electricity Sub Station	526924 185528	NW3	Electrical Features	Infrastructure and Facilities
12	231	E	Electricity Sub Station	527363 185565	NW3	Electrical Features	Infrastructure and Facilities
13	241	NE	Flat Pack Assembly	527276 185707	Flat 10, South Hill Park, London, NW3 2SB	Furniture	Consumer Products

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## 4.2 Petrol and Fuel Sites

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

1

8

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

ID	Distance (m)	Directio n	NGR	Company	Address	LPG	Status
14	290	S	527213 185211	ВР	Belsize Park Service Station, 215, Haverstock Hill, Haverstock Hill, Belsize Park, London, Greater London, NW3 4QE	No	Open

## 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:

The following Underground Electricity Transmission Cable records are represented as linear features on the Current Land Use map:

ID	Distanc e (m)	Direction		Details		
15A	294	W	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
16A	295	W	Cable Set: - Cable Route: MILL HILL - ST JOHNS WOOD 1 Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -		
17A	295	W	Cable Set: - Cable Route: MILL HILL - ST JOHNS WOOD 2 Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -		
18A	296	W	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
19B	413	W	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		
20B	417	W	Cable Set: - Cable Route: MILL HILL - ST JOHNS WOOD 1 Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -		

Report Reference: GS-3526404 Client Reference: 8222\_7546

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ID	Distanc e (m)	Direction	Details			
21B	417	W	Cable Set: - Cable Route: MILL HILL - ST JOHNS WOOD 2 Cable Make: -	Cable Type: DECOMMISSIONED Operating Voltage (kV): 275 Year of installation: - Cable in tunnel: -		
22B	420	W	Cable Set: - Cable Route: - Cable Make: -	Cable Type: PILOT Operating Voltage (kV): - Year of installation: - Cable in tunnel: -		

## 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

Database searched and no data found.

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

## 5.3 Bedrock and Solid Geology

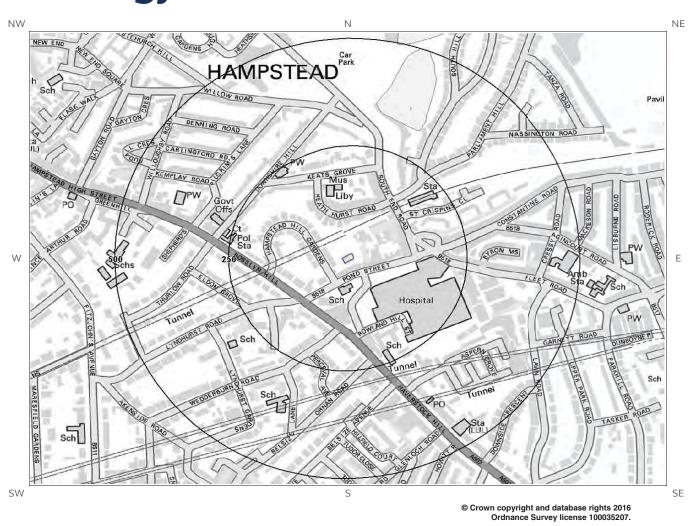
The database has been searched on site, including a 50m buffer.

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

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



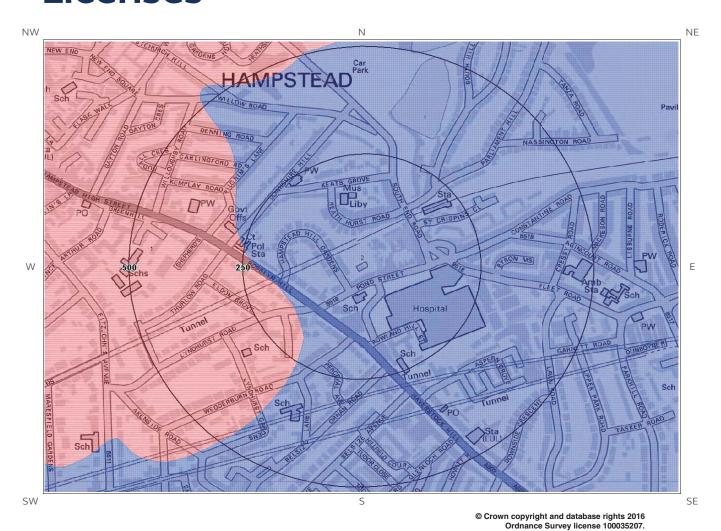
## 6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology







# 6b. Aquifer Within Bedrock Geology and Abstraction Licenses

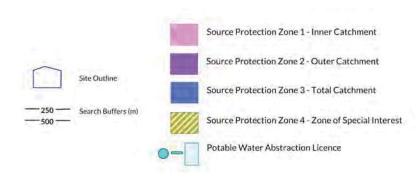






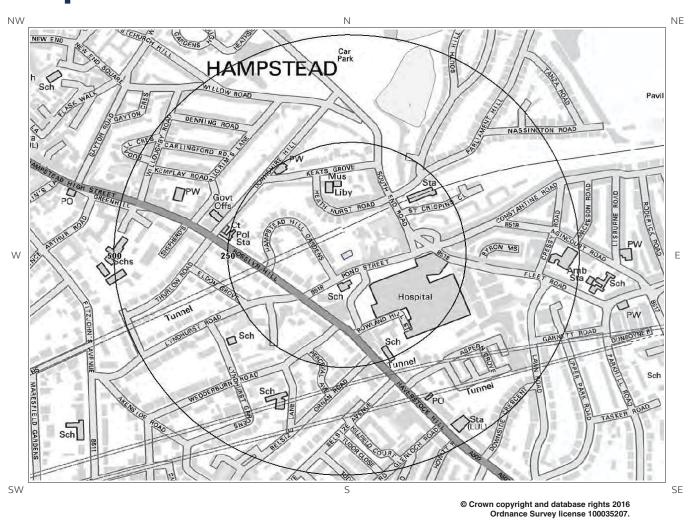
# 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses







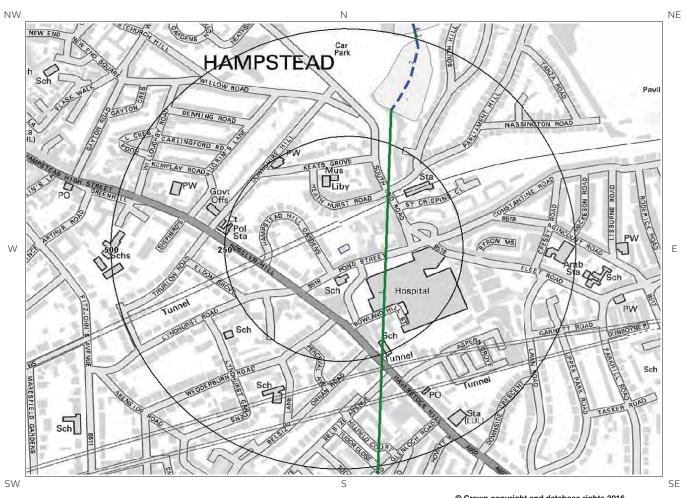
# 6d. Hydrogeology – Source Protection Zones within confined aquifer



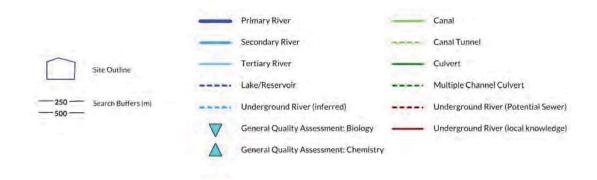




## 6e. Hydrology – Detailed River Network and River Quality



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## 6. Hydrogeology and Hydrology

## 6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property?

Database searched and no data found.

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.

## **6.2 Aquifer within Bedrock Deposits**

Are there 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	Distanc e (m)	Direction	Designation Description	
2	0	On Site	These are rock layers or drift deposits with low permeability that have no significance for water supply or river base flow	
1	165	SW	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	487	S	Unproductive  These are rock layers or drift deposits with low permeability that have ne significance for water supply or river base flow	



## **6.3 Groundwater Abstraction Licences**

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

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

ID	Distanc e (m)	Direction	NGR	Details			
Not shown	1249	S	526800 184280	Status: Historical Licence No: 28/39/39/0219 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: WRA/N/1407 Original Start Date: 12/8/2005 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2008 Version End Date:		
Not shown	1281	S	526750 184261	Status: Historical Licence No: TH/039/0039/087 Details: General Washing/Process Washing Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:		
Not shown	1281	S	526750 184261	Status: Historical Licence No: TH/039/0039/087 Details: Spray Irrigation - Direct Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:		
Not shown	1281	S	526750 184261	Status: Historical Licence No: TH/039/0039/087 Details: Lake & Pond Throughflow Direct Source: Thames Groundwater Point: Swiss Cottage Open Space- Borehole Data Type: Point Name: LONDON BOROUGH OF CAMDEN	Annual Volume (m³): 10512 Max Daily Volume (m³): 28.8 Original Application No: NPS/WR/014567 Original Start Date: 5/12/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 5/12/2013 Version End Date:		
Not shown	1841	SE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:		
Not shown	1841	SE	528800 184700	Status: Historical Annual Volume (m³): 17997 Licence No: 28/39/39/0091 Max Daily Volume (m³): 604. Details: Process Water Original Application No: NPS/WR/ Direct Source: Thames Groundwater Original Start Date: 13/6/196			



ID	Distanc e (m)	Direction	NGR	Deta	ails
Not shown	1841	SE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LIMITED	Annual Volume (m³): 17997 Max Daily Volume (m³): 604.6 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/5/2012 Version End Date:
Not shown	1841	SE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Laundry Use Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:
Not shown	1841	SE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Process Water Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: 5/4/2012 Version End Date:
Not shown	1862	S	527636 183697	Status: Historical 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: NPS/WR/009229 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: 1/4/2013 Version End Date:
Not shown	1870	S	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: WRA/R/1026 Original Start Date: 1/4/2007 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: 1/4/2007 Version End Date:
Not shown	1870	S	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: WRA/2/2(24) Original Start Date: 26/9/2002 Expiry Date: 31/3/2007 Issue No: 1 Version Start Date: 26/9/2002 Version End Date:

## **6.4 Surface Water Abstraction Licences**

Are there any Surface Water Abstraction Licences within 2000m of the study site?

No

Database searched and no data found.



## **6.5 Potable Water Abstraction Licences**

Are there any Potable Water Abstraction Licences within 2000m of the study site?

Yes

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	Distanc e (m)	Direction	NGR	Details			
Not shown	1841	SE	528800 184700	Status: Historical Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Two Bores At Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LTD	Annual Volume (m³): 94506 Max Daily Volume (m³): 1813.8 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:		
Not shown	1841	SE	528800 184700	Status: Active Licence No: 28/39/39/0091 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Thames Groundwater Point: Kentish Town Sports Centre, Prince Of Wales St Data Type: Point Name: GREENWICH LEISURE LIMITED	Annual Volume (m³): 17997 Max Daily Volume (m³): 604.6 Original Application No: NPS/WR/010565 Original Start Date: 13/6/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:		
Not shown	1862	S	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: NPS/WR/009229 Original Start Date: 1/4/2013 Expiry Date: 31/3/2025 Issue No: 1 Version Start Date: Version End Date:		
Not shown	1870	S	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: WRA/R/1026 Original Start Date: 1/4/2007 Expiry Date: 31/3/2013 Issue No: 1 Version Start Date: Version End Date:		
Not shown	1870	S	527640 183690	Direct Source: Thames Groundwater			



## **6.6 Source Protection Zones**

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

## 6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

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

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

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
186	W	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

Is there any Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site?

## 6.9.1 Biological Quality:

Database searched and no data found.



6.9.2 Chemical Quality:

Database searched and no data found.

## **6.10 Detailed River Network**

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID Distanc e (m)		Direction	ction Details		
1	80	Е	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined	
2	326	N	River Name: Hampstead Ponds (No 1 Pond) Welsh River Name: - Alternative Name: -	River Type: Lake/Reservoir Main River Status: Currently Undefined	
3	498	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined	

## **6.11 Surface Water Features**

Are there any surface water features within 250m of the study site?

Yes

The following surface water records are not represented on mapping:

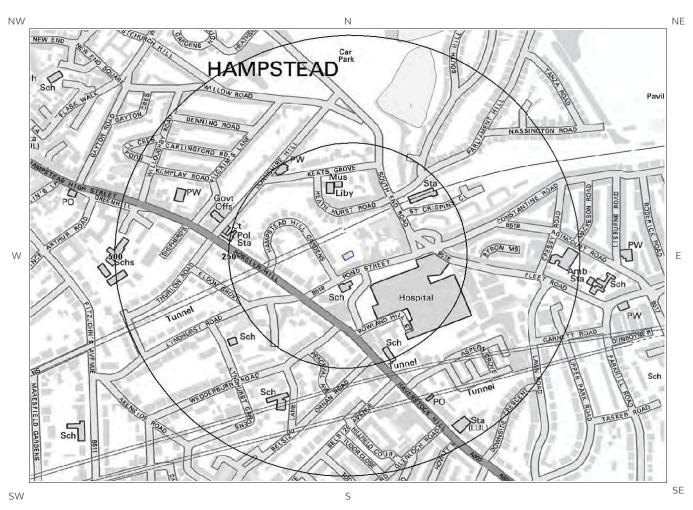
Distance (m)	Direction
235	NE

Report Reference: GS-3526404 Client Reference: 8222\_7546

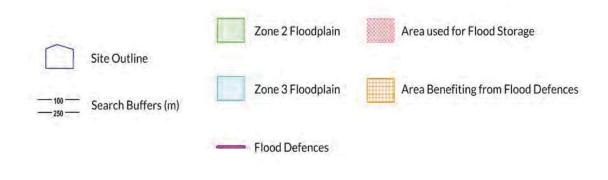
48



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

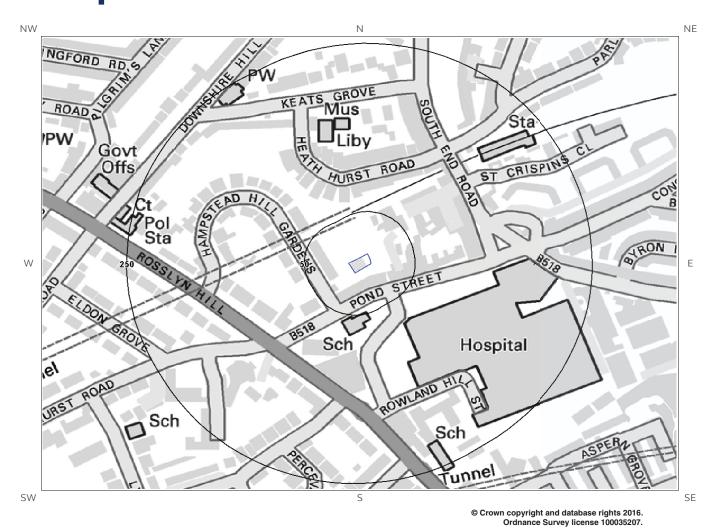


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# 7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map







## 7 Flooding

## 7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 2 floodplain?

No

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

Is the site within 250m of an Environment Agency/Natural Resources Wales Zone 3 floodplain?

No

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

What is the 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

Are there any Flood Defences within 250m of the study site?

Database searched and no data found.

No

## 7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

No

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## 7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

## 7.7 Groundwater Flooding Susceptibility Areas

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

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 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

**Not Prone** 

The area is not considered to be prone to groundwater flooding based on rock type.

## 7.8 Groundwater Flooding Confidence Areas

What is the British Geological Survey confidence rating in this result?

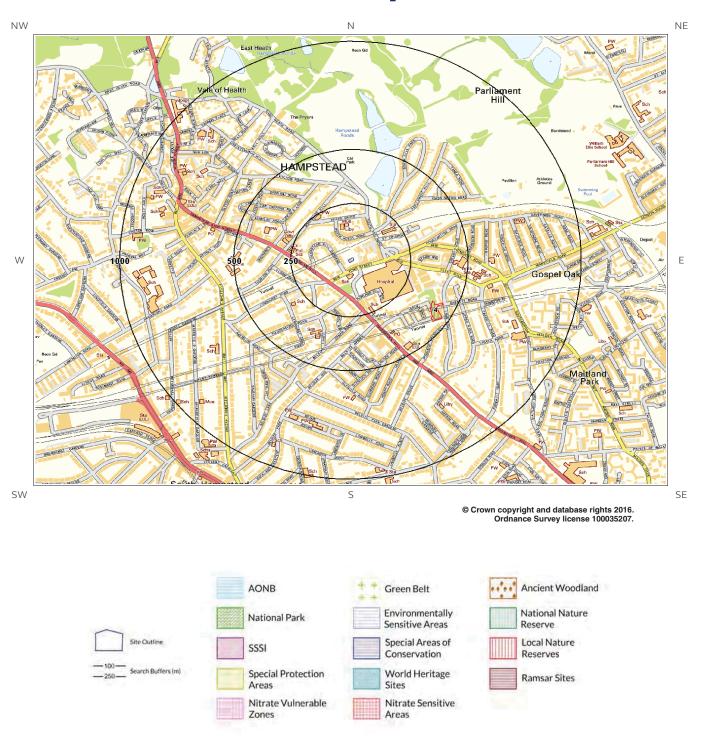
Not Applicable

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





## 8. Designated Environmentally Sensitive Sites

Pres	sence of	Designated Er	nvironmentally Sensitive Sites within 2000m of the study site?	Yes
8.1 site		ds of Sites o	of Special Scientific Interest (SSSI) within 2000m of the	<del></del> study
				3
			pecial Scientific Interest (SSSI) records provided by Natural Engl esented as polygons on the Designated Environmentally Sensitive Si	
ID	Distance (m)	Direction	SSSI Name Dat	a Source
Not	1267	N	Hampstead Heath Woods Natur	al England
Not	1536	N	Hampstead Heath Woods Natur	al England
Not	1943	N	Hampstead Heath Woods Natur	al England
0.2		is of Ivation	nal Nature Reserves (NNR) within 2000m of the study signal Nature	0
8.3	Record	ds of Specia	al Areas of Conservation (SAC) within 2000m of the stud	dy site:
			Database searched and no data found.	
8.4	Record	ds of Specia	al Protection Areas (SPA) within 2000m of the study site	e: 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:

2

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1275	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1341	NW	UNKNOWN	Ancient and Semi-Natural Woodland

## 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
4	394	SE	Belsize Wood	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:

	Database searched and no data found.	
8.11 Records of Nat	tional Parks (NP) within 2000m of the study site:	
	Database searched and no data found.	
8.12 Records of Nit	trate Sensitive Areas within 2000m of the study site:	
	Database searched and no data found.	
8.13 Records of Nit	trate Vulnerable Zones within 2000m of the study site:	
	Database searched and no data found.	
8.14 Records of Gre	een Belt land within 2000m of the study site:	
	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

What is the 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

What is the 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

What is the 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.

<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



## 9.1.4 Compressible Ground

What is the 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

What is the maximum Collapsible Rocks\* 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

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

## 9.1.6 Running Sand

What is the maximum Running Sand\*\* 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 running sand identified. 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.

## 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 property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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<sup>\*</sup> This indicates an automatically generated 50m buffer and site.



## 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

Are there any coal mining areas within 75m of the study site?

No

Database searched and no data found.

## 10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary?

No

Database searched and no data found.

## **10.3 Brine Affected Areas**

Are there any brine affected areas within 75m of the study site? Guidance: No Guidance Required.

No



## **Contact Details**

## Groundsure Helpline

Telephone: 08444 159 000 info@groundsure.com



### **British Geological Survey Enquiries**

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### Web:www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:

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### **Environment Agency**

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NATURAL ENVIRONMENT RESEARCH COUNCIL













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Chelmer Site Investigation Laboratories Ltd

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Groundsure

GS-3526405

Reference:

Your Reference: 8222\_7546

Report Date

15 Dec 2016

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## **Groundsure Geo Insight**

Address: 13A, POND STREET, LONDON, NW3 2PN

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the Groundsure Geo Insight as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director Groundsure Limited

Groundsure Geoinsight



## **Groundsure Geo Insight**

Address: 13A, POND STREET, LONDON, NW3 2PN

Date: 15 Dec 2016

Reference: GS-3526405

Client: Chelmer Site Investigation Laboratories Ltd

NW NE



SW SE

Aerial Photograph Capture date: 07-Jun-2015 Grid Reference: 527125,185497

Site Size: 0.03ha



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## **Overview of Findings**

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1:Geology						
1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?			No		
	1.1.2 Are there any records relating to per ground within the study site* boundary?	No				
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift beneath the study site?	No				
Landstips	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?			No		
	1.2.3 Are there any records of landslip wit site boundary?	No				
	1.2.4 Are there any records relating to per within the study site boundary?	rmeability of	landslips	No		
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Ge study site* see the detailed findings section		h the			
	1.3.2 Are there any records relating to per within the study site boundary?	Yes				
	1.3.3 Are there any records of faults within site boundary?	n 500m of th	e study	No		
1.4 Radon data	1.4.1 Is the property in a Radon Affected A Health Protection Agency (HPA) and if so homes are above the Action Level?		,	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level		
1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extension existing ones as described in publication BR211 by the Research Establishment?				No radon protective measures are necessary		
Section 2: <b>Ground</b> V	Vorkings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping		0	0	2	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping		0	4	0	15	19
2.3 Current Ground Workings		0	0	0	0	0

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