



2. Environmental Permits, Incidents and Registers Map









2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

0

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0



4

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Det	ails
4	257	S	525430 183576	Address: Essis Dry Cleaners, 7 Kilburn High Road, London, NW6 6HT Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
5	310	S	525484 183517	Address: Perfect Dry Cleaners and Launderette, 59 Kilburn High Road, London, NW6 5SB Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
6A	473	NW	525081 184106	Address: Crest Dry Cleaners, 220 Kilburn High Road, NW6 4JL Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
7А	473	NW	525081 184106	Address: Crest Dry Cleaners, 220 Kilburn High Road, NW6 4JL Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

0

0

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:





2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

3

0

0

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Det	ails
1	202	SW	525397 183645	Incident Date: 14-Oct-2001 Incident Identification: 36498 Pollutant: Contaminated Water Pollutant Description: Firefighting Run- Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	281	S	525529 183550	Incident Date: 15-Oct-2003 Incident Identification: 196261 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3	390	E	525887 183800	Incident Date: 28-Aug-2003 Incident Identification: 185712 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

Database searched and no data found.

Report Reference: SCL-4072310

0

Client Reference: 10120-MR





How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site? 0





3. Landfill and Other Waste Sites Map



Landfill Records





3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

1

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1084	NE	526000 184800	Site Address: Canfield Place, London NW6 Waste Licence: - Site Reference: DON009 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

0





3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:





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:

22

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

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1A	108	SE	Kara Autos	525526 183728	Kara Autos, 250a, Belsize Road, Hampstead, London, NW6 4BT	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	113	SE	Electricity Sub Station	525584 183765	Electricity Sub Station, NW6	Electrical Features	Infrastructure and Facilities
3A	118	SE	Kara Autos	525535 183720	Kara Autos, 250, Belsize Road, London, NW6 4BT	Vehicle Repair, Testing and Servicing	Repair and Servicing
4B	134	S	Priory Works	525509 183696	Priory Works, NW6	Unspecified Works Or Factories	Industrial Features
5B	134	S	Works	525508 183695	Works, NW6	Unspecified Works Or Factories	Industrial Features
6	137	S	Electricity Sub Station	525481 183690	Electricity Sub Station, NW6	Electrical Features	Infrastructure and Facilities
7	145	NE	Electricity Sub Station	525569 183970	Electricity Sub Station, NW6	Electrical Features	Infrastructure and Facilities
8	149	S	Warehouse	525522 183683	Warehouse, NW6	Container and Storage	Transport, Storage and Delivery
9C	153	SE	Austrian Bedding Co	525592 183717	Austrian Bedding Co, 205, Belsize Road, London, NW6 4AA	Beds and Bedding	Consumer Products
10C	155	SE	The Cocoa Exchange	525602 183723	The Cocoa Exchange, 201, Belsize Road, London, NW6 4AA	Baking and Confectionery	Foodstuffs
11D	167	S	Castle Management	525483 183660	Castle Management, 258, Belsize Road, London, NW6 4BT	Business Parks and Industrial Estates	Industrial Features
12D	167	S	Belfires Business Centre	525483 183660	Belfires Business Centre, 258, Belsize Road, London, NW6 4BT	Business Parks and Industrial Estates	Industrial Features
13E	176	W	Specsavers Hearcare	525297 183847	Specsavers Hearcare, 116, Kilburn High Road, London, NW6 4HY	Disability and Mobility Equipment	Consumer Products
14	184	E	Hot Chiu	525683 183828	Hot Chiu, 6a, Priory Terrace, London, NW6 4DH	Catering and Non Specific Food Products	Foodstuffs
15E	196	W	Four Points Grab Hire	525278 183860	Four Points Grab Hire, Merlin House 122-126, Kilburn High Road, London, NW6 4HY	Construction and Tool Hire	Hire Services





LOCATION INTELLIGENCE

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
16	210	S	Kilburn High Road Rail Station	525506 183618	Kilburn High Road Rail Station, NW6	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
17F	214	E	London Airport Express	525704 183778	London Airport Express, Abbey Road Motorist Centre 131-179, Belsize Road, London, NW6 4AQ	Airlines and Airline Services	Transport, Storage and Delivery
18F	214	E	London Prestige Chauffeur Services Within Abbey Road Centre	525704 183778	London Prestige Chauffeur Services Within Abbey Road Centre, Abbey Road Motorist Centre 131-179, Belsize Road, London, NW6 4AQ	Vehicle Hire and Rental	Hire Services
19	224	S	Electricity Sub Station	525549 183613	Electricity Sub Station, NW6	Electrical Features	Infrastructure and Facilities
20	239	W	Halfords	525235 183816	Halfords, 127, Kilburn High Road, London, NW6 6JL	Vehicle Parts and Accessories	Motoring
21G	242	S	londongraphi c.com	525404 183598	londongraphic.com, 1st Floor 2 Kilburn Bridge House, 69 Kilburn High Road, London, NW6 6HY	Published Goods	Industrial Products
22G	244	SW	Electricity Sub Station	525386 183603	Electricity Sub Station, NW6	Electrical Features	Infrastructure and Facilities

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)	Directio n	NGR	Company	Address	LPG	Status
23	476	W	525001 183903	Obsolete	Gibbs Garages, 19-25, Willesden Lane, Willesden Lane, Kilburn, London, Outer London, NW6 7RD	Not Applicable	Obsolete





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	
24	171	SW	Cable Set: ELSTREE - ST JOHNS WOOD CABLE SECTION 1 Cable Route: ELSTREE - ST JOHNS WOOD Cable Make: ABB 400KV XLPE CABLE AL SHEATH	Cable Type: A/C Operating Voltage (kV): 400 Year of installation: 2005 Cable in tunnel: Y

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

1





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-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







6b. Aquifer Within Bedrock Geology and Abstraction Licenses



© Crown copyright and database rights 2017 Ordnance Survey license 100035207.







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



© Crown copyright and database rights 2017 Ordnance Survey license 100035207.







6d. Hydrogeology – Source Protection Zones within confined aquifer









6e. Hydrology – Detailed River Network and River Quality



General Quality Assessment: Chemistry





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? No

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
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
2	473	W	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

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	Deta	ils
Not shown	1320	E	526750 184261	Status: Active 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 (m ³): 10512 Max Daily Volume (m ³): 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:





ID	Distanc e (m)	Direction	NGR	Deta	ails
Not shown	1320	E	526750 184261	Status: Active 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 (m ³): 10512 Max Daily Volume (m ³): 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	1320	E	526750 184261	Status: Active 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 (m ³): 10512 Max Daily Volume (m ³): 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	1373	E	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 (m ³): 10512 Max Daily Volume (m ³): 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:

6.4 Surface Water Abstraction Licences

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

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?

Database searched and no data found.

6.6 Source Protection Zones

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

Database searched and no data found.

No

No

No





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? No

Database searched and no data found.

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?

No





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

No





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







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?

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.

7.5 Areas benefiting from Flood Defences

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

Very Low

No

No





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? No

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

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?

Yes

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

Database searched and no data found.

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

0

0

Database searched and no data found.

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

0

0

Database searched and no data found.

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

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.

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

3

0

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
Not shown	1722	SE	St John's Wood Church Grounds	Natural England
Not shown	1736	NW	Westbere Copse	Natural England
Not shown	1739	NW	Westbere Copse	Natural England

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

Database searched and no data found.

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

Database searched and no data found.

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

0

0

0

Database searched and no data found.

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

Database searched and no data found.

0





Database searched and no data found.

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

0

0

0

Database searched and no data found.

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





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?

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

Moderate

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:

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.

Hazard

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





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:

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.

Hazard

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.

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





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

Soil Consultants Ltd Telephone: 01494 712494 stuart.w@soilconsultants.co.uk



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



British **Geological Survey** NATURAL ENVIRONMENT RESEARCH COUNCIL





The Coal Authority



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, Hampshire RG27 8NW Tel: 01252 845444







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 who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028]. This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.




Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link: https://www.groundsure.com/terms-and-conditions-sept-2016



Soil Consultants Ltd	Report Reference	e: SCL-4072311
CHILTERN TRADING ESTATE UNIT 2, EARL HOWE ROAD, HIGH WYCOMBE/HOLMER GREEN, HP15 6QT	Your Reference:	10120-MR
	Report Date	11 Jul 2017
	Depart Delivery	Encoil node

Report Delivery Email - pdf Method:

Geo Insight

Address: 27A WEST END LANE, LONDON, NW6 4QJ

Dear Sir/ Madam,

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

If you need further assistance, please do not hesitate to contact our helpline on 01494 712494 quoting the above Soil Consultants Ltd reference number.

Yours faithfully,

Soil Consultants Ltd

Enc. Groundsure Geo Insight



Address:	27A WEST END LANE, LONDON, NW6 4QJ
Date:	11 Jul 2017
Reference:	SCL-4072311
Client:	Soil Consultants Ltd

NW

NE



S

Ν

SW

Aerial Photograph Capture date:07-Jun-2015Grid Reference:525485,183839Site Size:0.03ha

SE

F





Contents Page

Contents Page	3
Overview of Findings	5
1:10,000 Scale Availability	8
Availability of 1:10,000 Scale Geology Mapping	9
1 Geology (1:10,000 scale)	
1.1 Artificial Ground Map (1:10,000 scale)	10
1. Geology 1:10.000 scale	
1.1 Artificial Ground	11
1.2 Superficial Deposits and Landslips Map (1:10,000 scale)	12
1.2 Superficial Deposits and Landslips	13
1.2.1 Superficial Deposits/ Drift Geology	13
1.2.2 Landslip	13
1.3 Bedrock and Faults Map (1:10,000 scale)	14
1.3 Bedrock and Faults	15 1E
1.3.2 Faults	
2 Geology 1:50,000 Scale	
2.1 Artificial Ground Map	16
2. Geology 1:50.000 scale	
2.1 Artificial Ground	17
2.1.1 Artificial/ Made Ground	17
2.1.2 Permeability of Artificial Ground	17
2.2 Superficial Deposits and Landslips Map (1:50,000 scale)	18
2.2 Superficial Deposits and Landslips	
2.2.1 Superficial Deposits/ Drift Geology	19 19
2.2.3 Landslip	
2.2.4 Landslip Permeability	19
2.3 Bedrock and Faults Map (1:50,000 scale)	20
2.3 Bedrock, Solid Geology & Faults	21
2.3.1 Bedrock/Solid Geology	21
2.3.3 Faults	
3 Radon Data	22
3.1 Radon Affected Areas	22
3.2 Radon Protection	22
4 Ground Workings Map	
4 Ground Workings	24
4.1 Historical Surface Ground Working Features derived from Historical Mapping	24
4.2 Historical Underground Working Features derived from Historical Mapping	24
4.3 Current Ground Workings	25
5 Mining, Extraction & Natural Cavities	27
5.1 Historical Mining	27
5.2 Coal Mining	27
5.3 Johnson Poole and Bloomer	27
5.4 Non-Coal Mining	28
5.5 Non-Coal Mining Cavities	28
5.6 Natural Cavities	28
5.7 Brine Extraction	28
5.8 Gypsum Extraction	
5.9 Tin Mining	29
5. IU Clay Milning	
b Natural Ground Subsidence	
6.1 Shrink-Swell Clay Map	
6.2 Landsudes Map	
0.3 Ground Dissolution of Soluble Rocks Map	
0.4 Compressible Deposits Map.	33 م د
0.5 Collapsible Deposits Map	





6 Natural Ground Subsidence	36
6.1 Shrink-Swell Clays	36
6.2 Landslides	36
6.3 Ground Dissolution of Soluble Rocks	37
6.4 Compressible Deposits	37
6.5 Collapsible Deposits	37
6.6 Running Sands	37
7 Borehole Records	
8 Estimated Background Soil Chemistry	41
9 Railways and Tunnels Map	
9 Railways and Tunnels	
9.1 Tunnels	43
9.2 Historical Railway and Tunnel Features	43
9.3 Historical Railways	44
9.4 Active Railways	44
9.5 Railway Projects	45





Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geoenvironmental 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 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal 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 1:10,000 Scale

1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	No
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid 1.3.1 For records of Bedrock and Solid Geology beneath the study Geology and Faults site* see the detailed findings section.		
	1.3.2 Are there any records of faults within 500m of the study site boundary at 1:10,000 scale?	No
Section 2: Geolo	gy 1:50,000 Scale	
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	No
Landslips	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	No
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No





Section 2: Geolo	gy 1:50,000 Scale					
2.3 Bedrock, Solid Geology and Faults	2.3.1 For records of Bedrock and Solid Geolo site* see the detailed findings section.	ogy beneath t	he study			
2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?					Yes	
	2.3.3 Are there any records of faults within 5 boundary?	500m of the st	tudy site		No	
Section 3: Rador						
3. Radon	3.1Is the property in a Radon Affected Area a Protection Agency (HPA) and if so what perc above the Action Level?	as defined by [.] centage of hor	the Health nes are	The property Area, as less abov	is not in a Ra than 1% of p e the Action l	don Affected roperties are _evel.
	3.2Radon Protection			No radon j	protective me necessary.	easures are
Section 4: Groun	d Workings	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surfac Scale Mapping	e Ground Working Features from Small	0	0	0	Not Searched	Not Searched
4.2 Historical Under	ground Workings from Small Scale Mapping	0	0	0	0	12
4.3 Current Ground	Workings	0	0	0	0	0
Section 5: Mining	g, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	J	0	0	0	0	7
5.2 Coal Mining		0	0	0	0	0
5.3 Johnson Poole a	nd Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining	*	0	0	0	0	0
5.5 Non-Coal Mining	g Cavities	0	0	0	0	0
5.5 Natural Cavities		0	0	0	0	0





Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-sit	te			
6.1 Shrink-Swell Clay	Modera	ite			
6.2 Landslides	Very Lo	W			
6.3 Ground Dissolution of Soluble Rocks	Negligik	ole			
6.4 Compressible Deposits	Negligik	ole			
6.5 Collapsible Deposits	Very Lo	W			
6.5 Running Sand	Negligit	ole			
Section 7: Borehole Records	On-si	te	0-50m	5	1-250
7 BGS Recorded Boreholes	1		2		12
Section 8: Estimated Background Soil Chemistry	On-si	te	0-50m	5	1-250
8 Records of Background Soil Chemistry	1		1		0
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	1
9.2 Historical Railway and Tunnel Features	0	0	12	Not Searched	1
9.3 Historical Railways	0	0	0	Not Searched	1
9.4 Active Railways	0	0	32	Not Searchec	1
9.5 Railway Projects	0	0	0	1	





1:10,000 Scale Availability



Coverage

Coverage

Coverage

50

250

Search Buffers (m)

Groundsure



Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	No coverage
2	473.0	Some deposits are mapped	Full	Full	No coverage
N3	1150.0	Some deposits are mapped	Full	Full	No coverage
N4	1248.0	Some deposits are mapped	Full	Full	No coverage

Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage





1 Geology (1:10,000 scale). 1.1 Artificial Ground Map (1:10,000 scale)







1. Geology 1:10,000 scale

1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.





1.2 Superficial Deposits and Landslips Map (1:10,000 scale)



Artificial Ground Legend

© Crown copyright and database rights 2017. Ordnance Survey license 100035207.







1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.





1.3 Bedrock and Faults Map (1:10,000 scale)



SW

Bedrock and Faults Legend

© Crown copyright and database rights 2017. Ordnance Survey license 100035207.







1.3 Bedrock and Faults

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
	0.0	On Site	LC-CLAY	London Clay Formation - Clay	Eocene Epoch
4	473.0	W	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

1.3.2 Faults

Are there any records of Faults within 500m of the study site boundary at 1:10,000 scale?

No

Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.





2 Geology 1:50,000 Scale 2.1 Artificial Ground Map









2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 256

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary?

No

Database searched and no data found.

2.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.





2.2 Superficial Deposits and Landslips Map (1:50,000 scale)



Ground Workings Legend

© Crown copyright and database rights 2017. Ordnance Survey license 100035207.



Search Buffers (m)





2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? No

Database searched and no data found.

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? No

Database searched and no data found.

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site boundary?

No

Database searched and no data found.





2.3 Bedrock and Faults Map (1:50,000 scale)



SW

Ground Workings Legend

© Crown copyright and database rights 2017. Ordnance Survey license 100035207.



Search Buffers (m)





2.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 256

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN

2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distanc e	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

2.3.3 Faults

Are there any records of Faults within 500m of the study site boundary?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.





3.1 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.

3.2 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.



Current Ground Workings





4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? No

Database searched and no data found.

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	938.0	E	526440 183785	Air Shafts	1940
Not shown	939.0	E	526434 183717	Air Shafts	1940
Not shown	942.0	E	526471 183522	Tunnel	1973
Not shown	942.0	E	526471 183522	Tunnel	1989
Not shown	942.0	E	526452 183836	Tunnel	1968
Not shown	942.0	E	526471 183522	Tunnel	1957
Not shown	946.0	E	526434 183659	Air Shaft	1940
Not shown	964.0	E	526463 183954	Air Shaft	1968
Not shown	964.0	E	526463 183954	Air Shaft	1957
Not shown	964.0	E	526463 183954	Air Shaft	1940
Not shown	966.0	E	526471 183522	Tunnel	1968
Not shown	966.0	E	526465 183953	Air Shaft	1920

The following Historical Underground Working Features are provided by Groundsure:





No

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary?

Database searched and no data found.





5 Mining, Extraction & Natural Cavities Map







5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary?

Yes

ID	Distance (m)	Direction	NGR	Details	Date
Not shown	938.0	E	526440 183785	Air Shafts	1940
Not shown	939.0	E	526434 183717	Air Shafts	1940
Not shown	946.0	E	526434 183659	Air Shaft	1940
Not shown	964.0	E	526463 183954	Air Shaft	1968
Not shown	964.0	E	526463 183954	Air Shaft	1957
Not shown	964.0	E	526463 183954	Air Shaft	1940
Not shown	966.0	E	526465 183953	Air Shaft	1920

The following Historical Mining information is provided by Groundsure:

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary?

No

The following information provided by JPB is not represented on mapping: Database searched and no data found.





This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary?

Database searched and no data found.

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary?

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary?

No

No

No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.





This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary?

Database searched and no data found.

5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

No

Database searched and no data found.





6 Natural Ground Subsidence 6.1 Shrink-Swell Clay Map









6.2 Landslides Map









6.3 Ground Dissolution of Soluble Rocks Map







6.4 Compressible Deposits Map









6.5 Collapsible Deposits Map









6.6 Running Sand Map








6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? Moderate

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	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.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	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.

^{*} This includes an automatically generated 50m buffer zone around the site





The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	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.

6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	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.

6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	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.

6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID (n	n) Directi	on Hazard Rating	Details
1 0.	0 On Si	e Negligible	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.