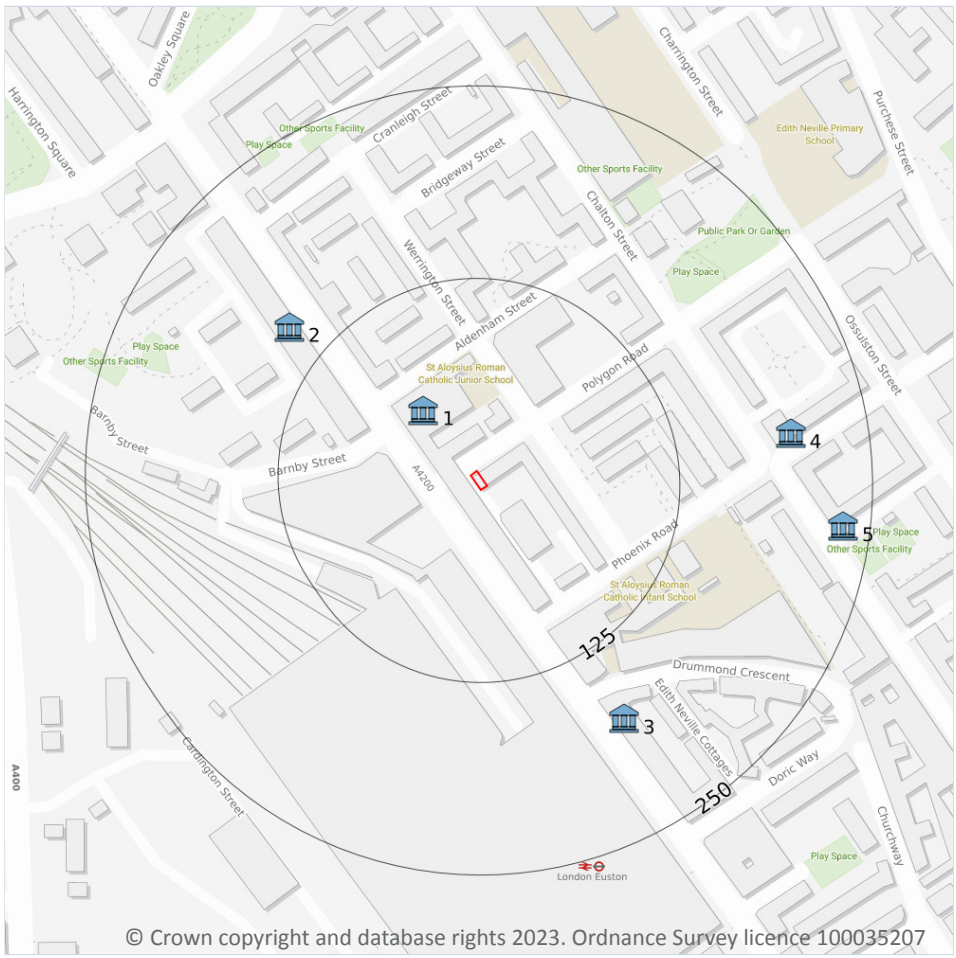
11 Visual and cultural designations



Site Outline

Search buffers in metres (m)

Listed buildings

Conservation areas

Conservation areas - no data

National Parks

Areas of Outstanding Natural Beauty

Registered parks and gardens

Scheduled Monuments

World Heritage Sites

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	5

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 97 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	52m NW	Church Of St Mary The Virgin	II	1342049	10/06/1954
2	152m NW	Eversholt House And Attached Railings	II	1342048	14/05/1974
3	175m SE	64, Eversholt Street	II	1342047	14/05/1974
4	200m E	Walker House Southern Block Including The Cock Tavern Public House	II	1139058	13/12/1996
5	232m E	Chamberlain House Chamberlain House Including Shops	II	1139057	13/12/1996

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 100 >**

ID	Location	Classification	Description
1	**On site**	**Urban**	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m	0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability

Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m	2

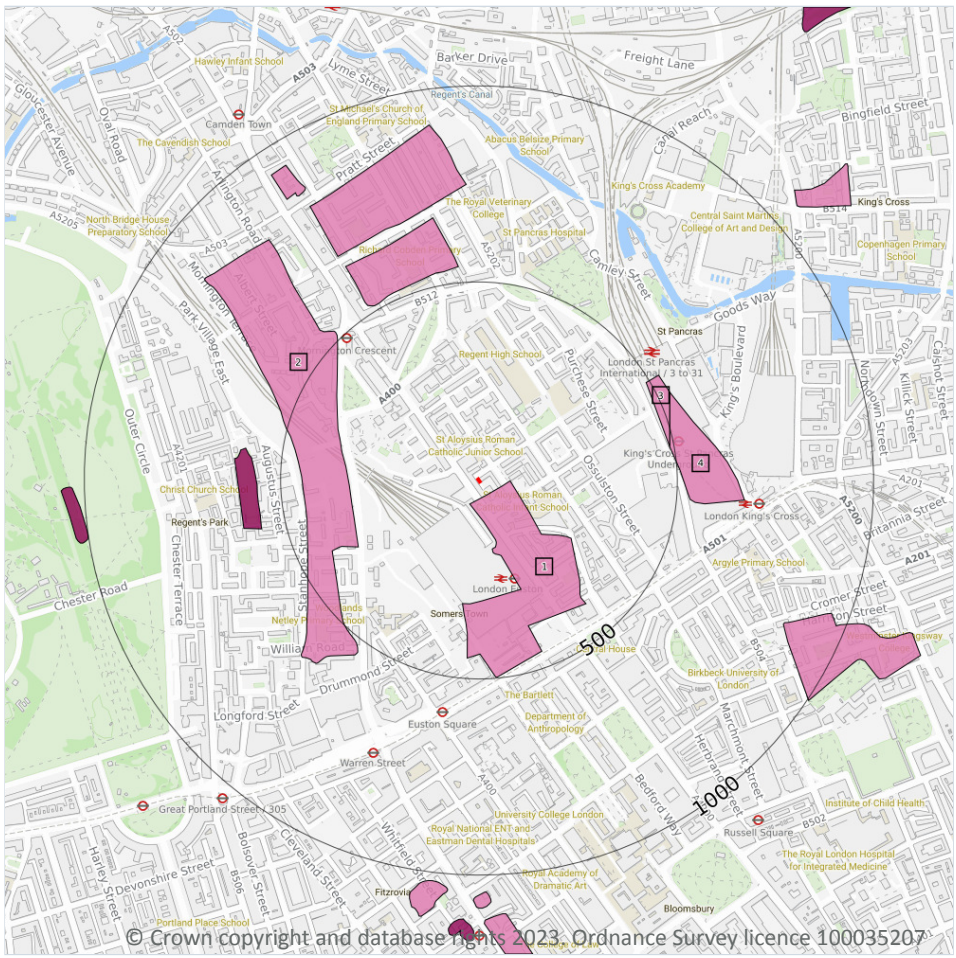
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 103 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ28SE**
2	481m E	Full	Full	Full	No coverage	TQ38SW

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	4

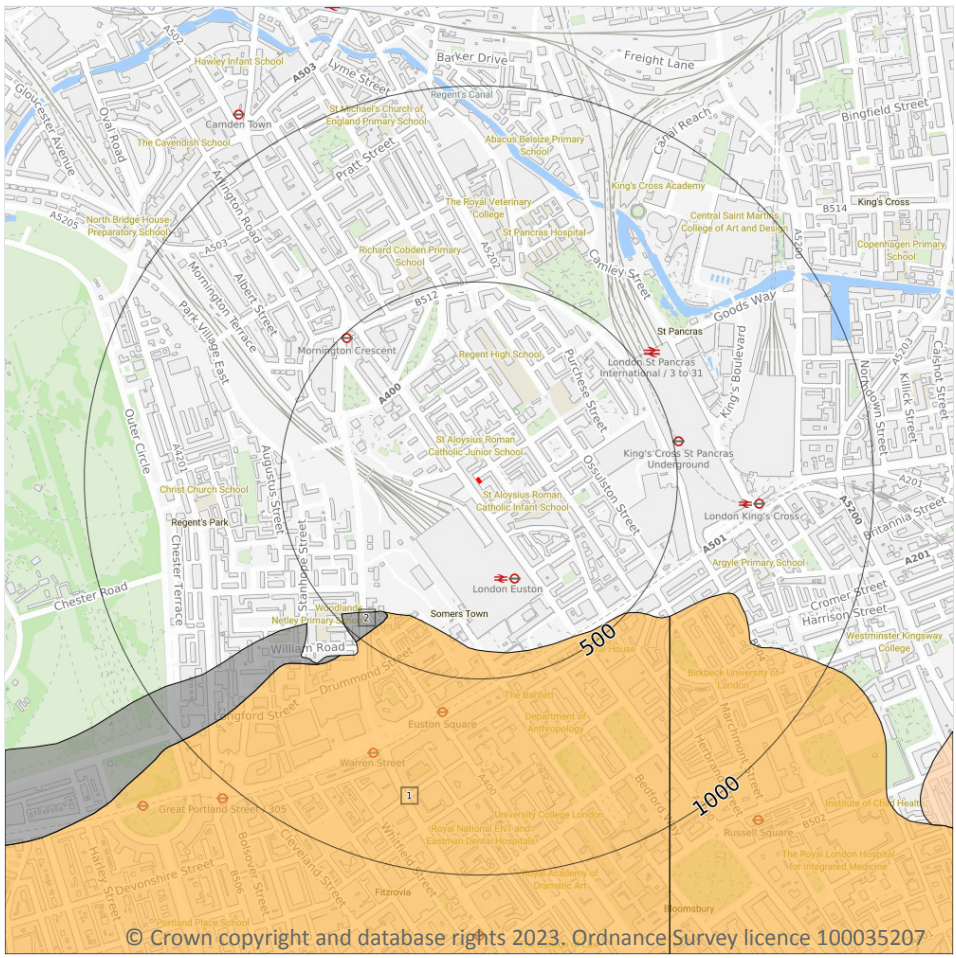
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 104 >**

ID	Location	LEX Code	Description	Rock description
1	36m SE	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
2	324m W	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
3	482m E	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
4	489m E	WGR-ARTDP	Worked Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m	2

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 106 >**

ID	Location	LEX Code	Description	Rock description
1	381m SW	LHGR-XSV	Lynch Hill Gravel Member - Sand And Gravel	Sand And Gravel
2	409m SW	LASI-CZ	Langley Silt Member - Silty Clay	Clay, Silty

This data is sourced from the British Geological Survey.

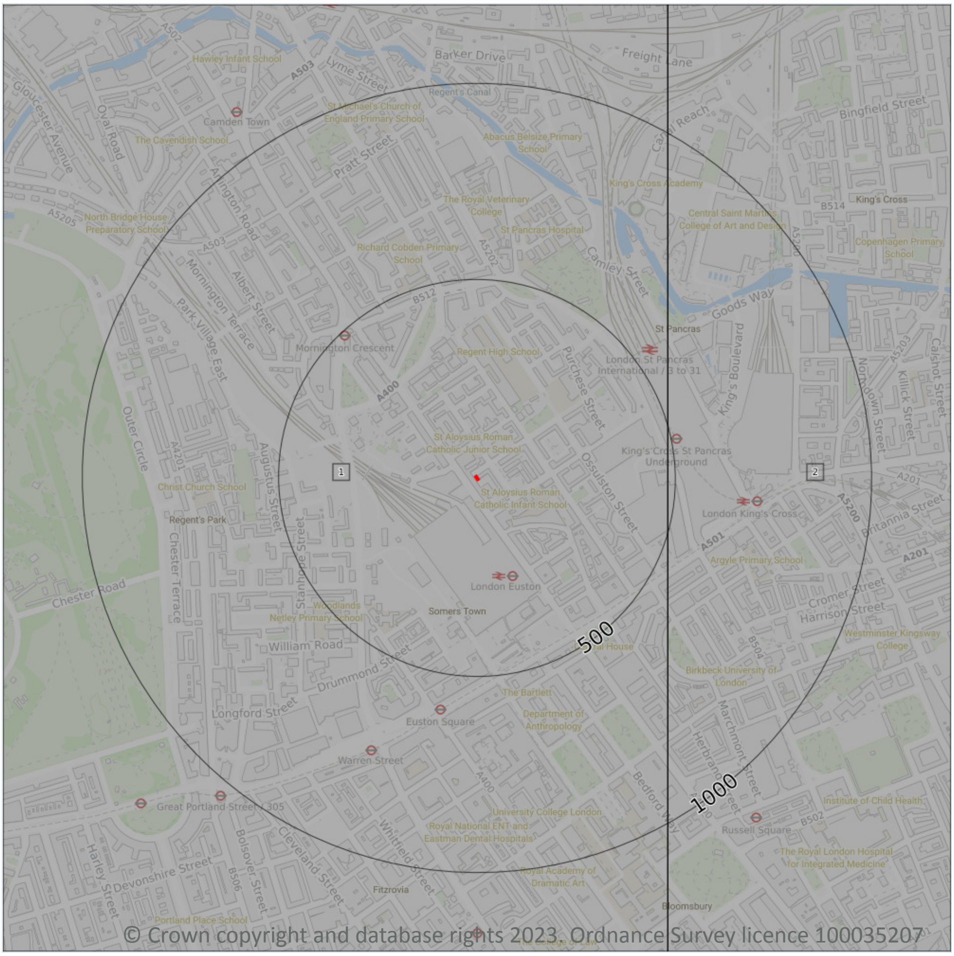
14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m **2**

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 108 >

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLAY**	**London Clay Formation - Clay**	**Eocene Epoch**
2	481m E	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

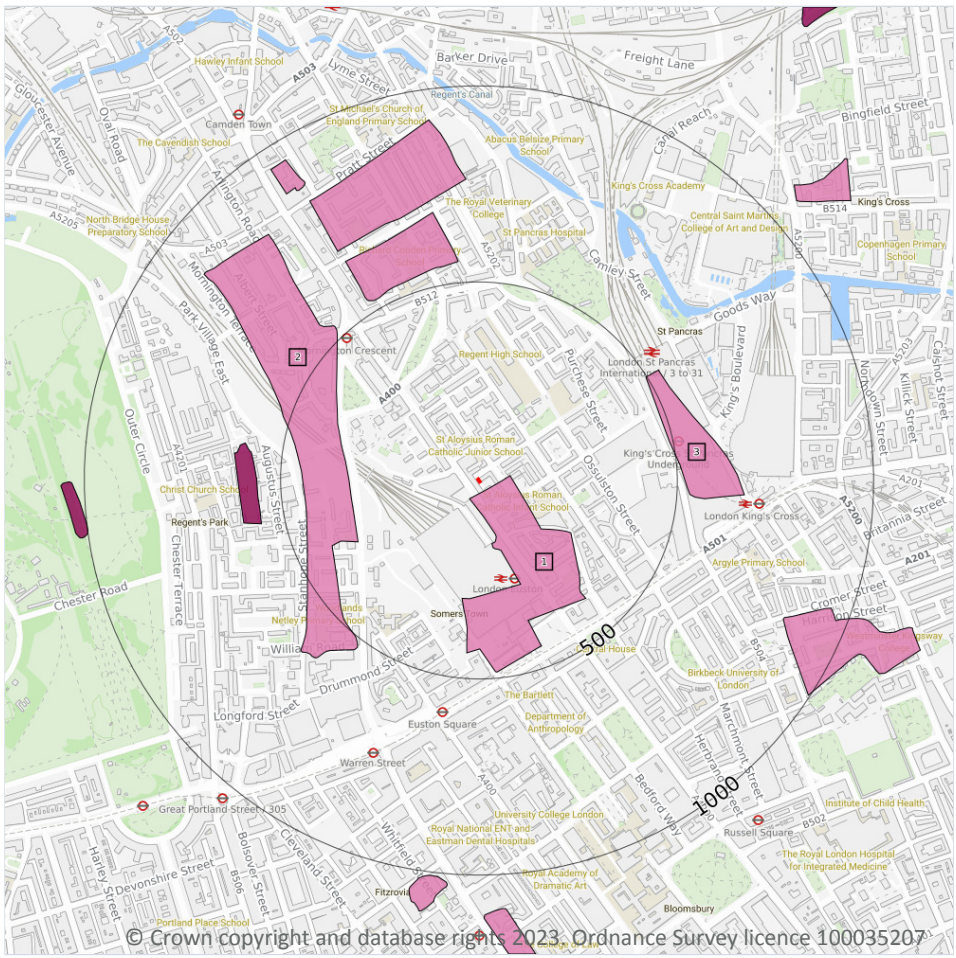
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 110 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW256_north_london_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



15.2 Artificial and made ground (50k)

Records within 500m	3

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 111 >**

ID	Location	LEX Code	Description	Rock description
1	24m SE	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
2	323m W	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
3	486m E	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

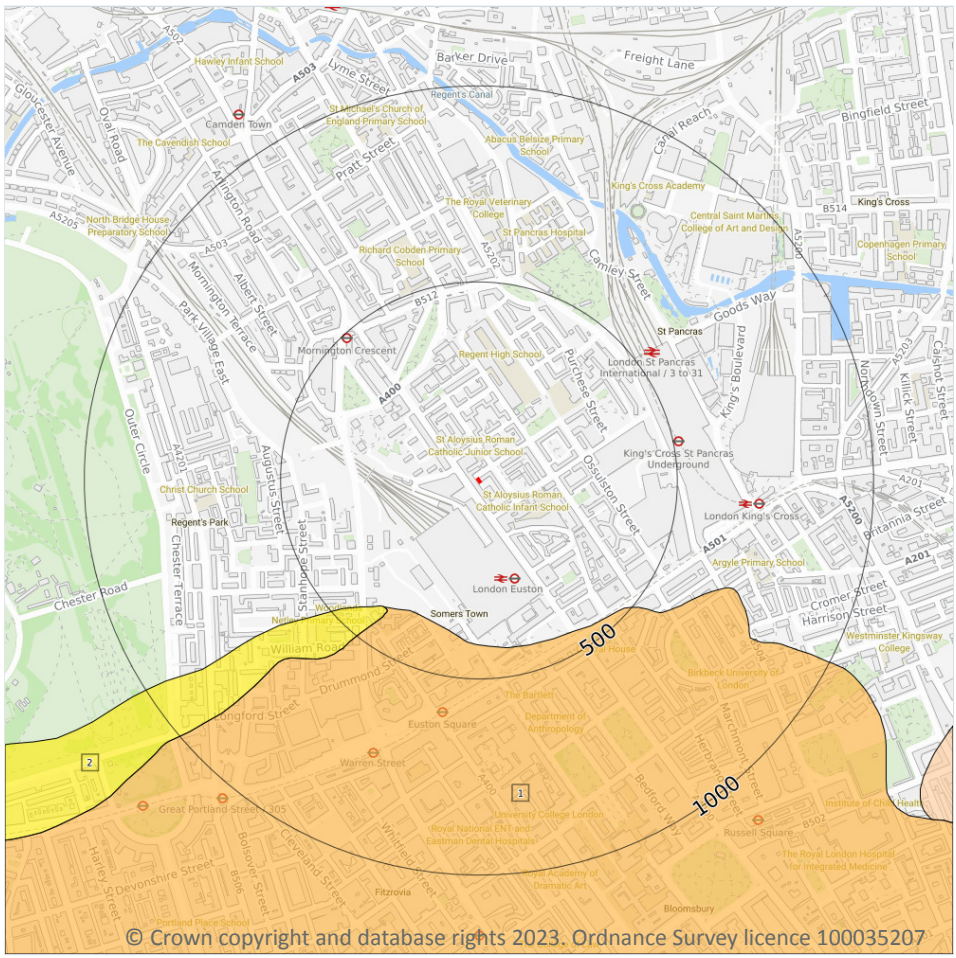
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **2**

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 113 >**

ID	Location	LEX Code	Description	Rock description
1	369m SW	LHGR-XSV	LYNCH HILL GRAVEL MEMBER	SAND AND GRAVEL
2	398m SW	LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock

Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m **1**

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 115 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-XCZS**	**LONDON CLAY FORMATION - CLAY, SILT AND SAND**	**YPRESIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Very Low**

This data is sourced from the British Geological Survey.

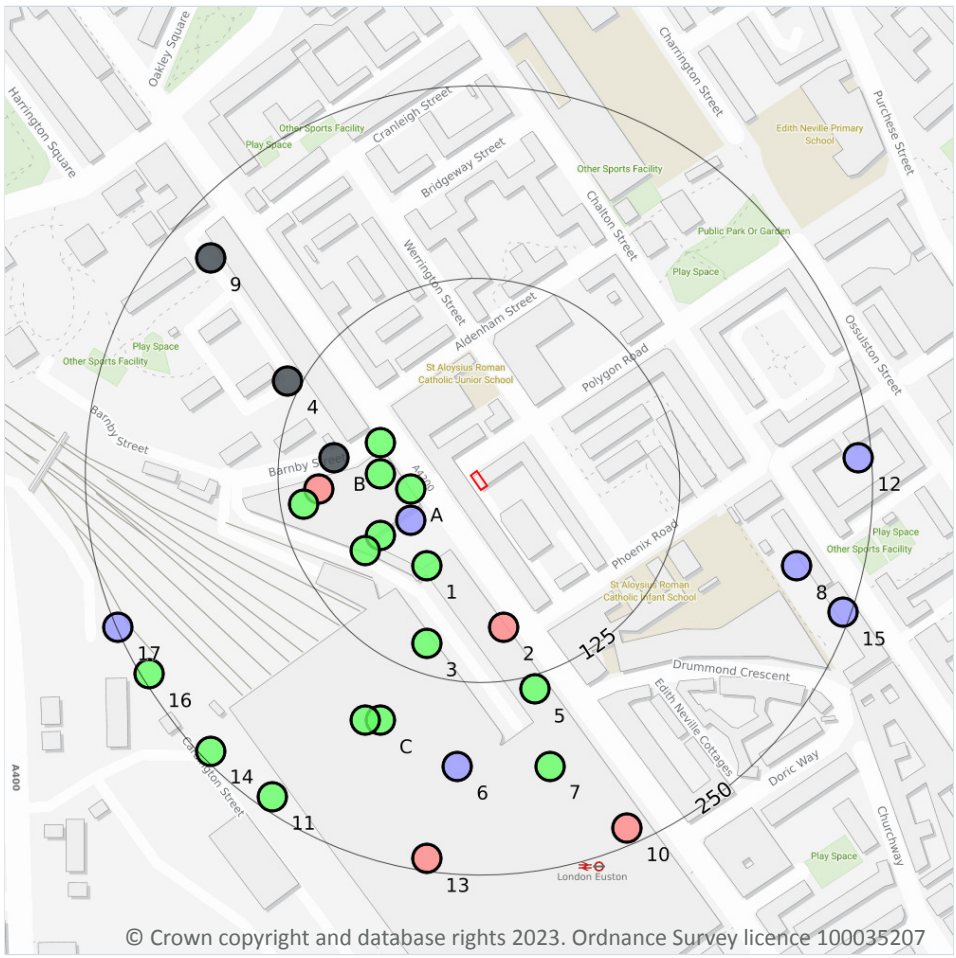
15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m	28

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 117 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	40m W	529470 182980	EUSTON STATION DEVELOPMNT BH15	23.47	N	592859 ↗
A	48m SW	529470 182960	EUSTON STATION RECONSTRUCTION BH23	4.51	N	15937322 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	59m W	529450 182990	EUSTON STATION BH3	18.29	N	592230 ↗
1	61m SW	529480 182930	EUSTON STATION RECONSTRUCTION BH24	19.96	N	15937324 ↗
A	62m W	529450 183010	EUSTON STATION DEVELOPMNT BH16	24.08	N	592860 ↗
A	70m SW	529450 182950	EUSTON STATION BH2	18.29	N	592229 ↗
A	84m SW	529440 182940	EUSTON STATION DEVELOPMNT BH14	23.77	N	592858 ↗
B	89m W	529420 183000	EVERSHOLT HOUSE EVERSHOLT STREET LONDON 1	-	Y	N/A
2	91m S	529530 182890	EUSTON STATION DEVELOPMNT BH12	43.05	N	592856 ↗
B	99m W	529410 182980	EUSTON STATION DEVELOPMENT BH2	46.79	N	592846 ↗
3	105m S	529480 182880	EUSTON STATION DEVELOPMNT BH11	21.64	N	592855 ↗
B	110m W	529400 182970	EUSTON STATION 1	18.29	N	592228 ↗
4	134m NW	529390 183050	EVERSHOLT HOUSE EVERSHOLT STREET LONDON 2	-	Y	N/A
5	134m S	529550 182850	EUSTON STATION RECONSTRUCTION BH22	19.35	N	15937321 ↗
C	163m S	529450 182830	EUSTON STATION DEVELOPMENT BH9	24.38	N	592853 ↗
C	167m SW	529440 182830	EUSTON STATION RECONSTRUCTION BH25	19.81	N	15937325 ↗
6	180m S	529500 182800	EUSTON STATION BHS1-5	6.09	N	592221 ↗
7	185m S	529560 182800	EUSTON STATION DEVELOPMNT BH18	21.34	N	592862 ↗
8	207m E	529720 182930	L.C.C.RELIEF SECTION X	2.59	N	592249 ↗
9	220m NW	529340 183130	EVERSHOLT HOUSE EVERSHOLT STREET LONDON 3	-	Y	N/A
10	239m SE	529610 182760	EUSTON STATION DEVELOPMENT BH6	42.37	N	592850 ↗
11	241m SW	529380 182780	EUSTON STATION DEVELOPMNT BH10	21.64	N	592854 ↗
12	241m E	529760 183000	OSSULTON STREET TP 2	2.74	N	592715 ↗
13	242m S	529480 182740	EUSTON STATION DEVELOPMENT BH5	41.6	N	592849 ↗
14	244m SW	529340 182810	EUSTON STATION RECONSTRUCTION BH26	20.42	N	15937326 ↗
15	245m E	529750 182900	L.C.C.RELIEF SECTION A	2.44	N	592248 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
16	245m SW	529300 182860	EUSTON STATION RECONSTRUCTION 9	18.92	N	15934741 ↗
17	249m W	529280 182890	EUSTON STATION RECONSTRUCTION 17	6.09	N	15934918 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays

17.1 Shrink swell clays

Records within 50m	1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 120 >**

Location	Hazard rating	Details
On site	**Moderate**	**Ground conditions predominantly high plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands

17.2 Running sands

Records within 50m	1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 121 >**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits

17.3 Compressible deposits

Records within 50m	1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 122 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits

17.4 Collapsible deposits

Records within 50m	1

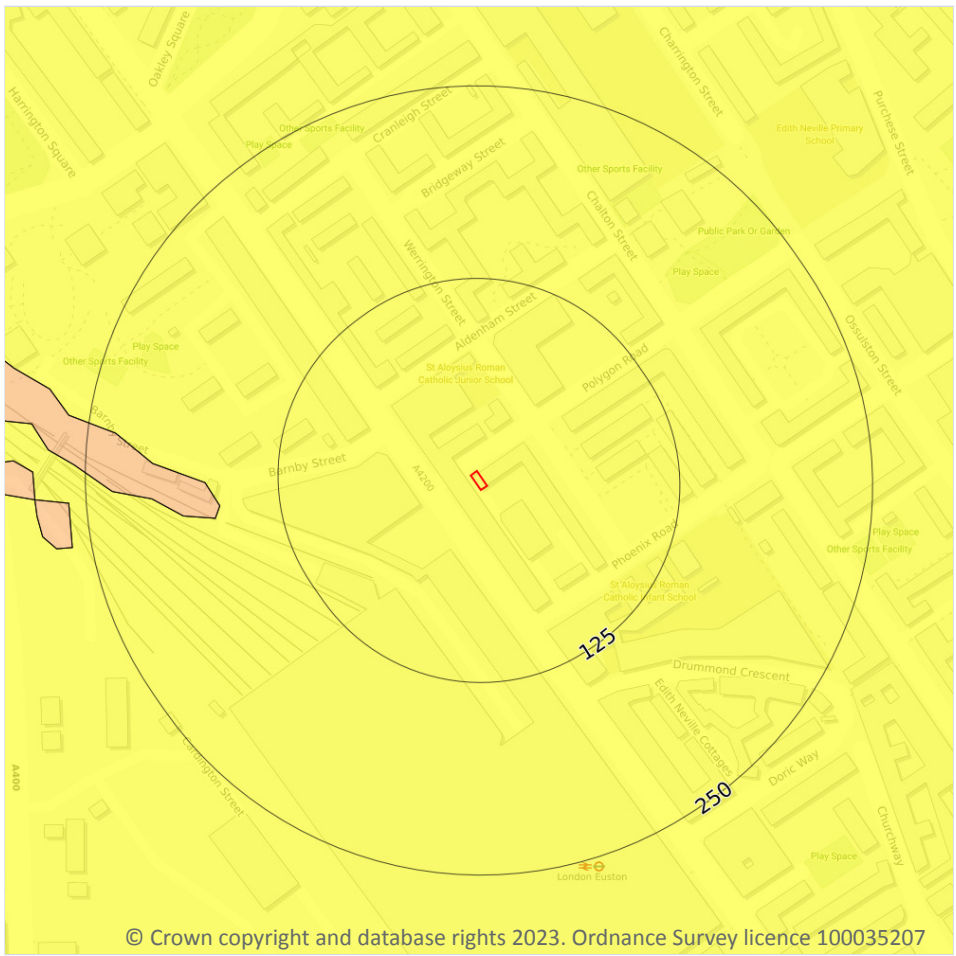
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 123 >**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m	1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 124 >**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks

17.6 Ground dissolution of soluble rocks

Records within 50m	1

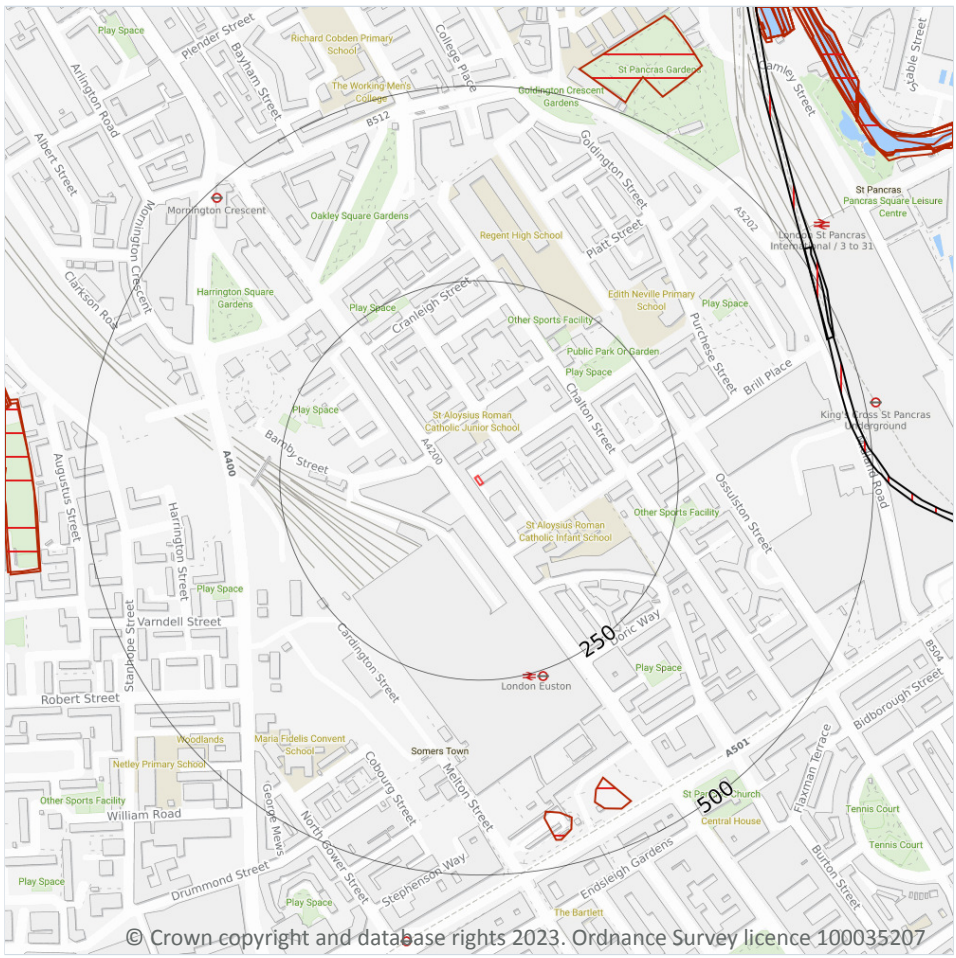
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 125 >**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	0

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	22

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on **page 127 >**

ID	Location	Land Use	Year of mapping	Mapping scale
3	473m E	Tunnel	1894	1:10560
A	478m E	Tunnel	1973	1:10000
-	654m E	Tunnel	1894	1:10560
-	655m E	Tunnel	1873	1:10560
-	655m E	Tunnel	1873	1:10560
-	811m E	Tunnel	1894	1:10560
-	814m E	Tunnel	1873	1:10560
-	814m E	Tunnel	1873	1:10560
-	845m E	Tunnel	1873	1:10560
-	845m E	Tunnel	1873	1:10560
-	857m NE	Tunnel	1938	1:10560
-	857m NE	Tunnel	1914	1:10560
-	861m NE	Railway Tunnel	1994	1:10000
-	861m NE	Railway Tunnel	1966	1:10560
-	861m NE	Railway Tunnel	1940	1:10560
-	861m NE	Railway Tunnel	1976	1:10000
-	861m NE	Railway Tunnel	1957	1:10560
-	861m NE	Railway Tunnel	1971	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
-	974m NW	Tunnel	1973	1:10000
-	974m NW	Tunnel	1989	1:10000
-	985m NW	Tunnel	1938	1:10560
-	985m NW	Tunnel	1914	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	2

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
23m SE	Stone
447m SW	Unspecified

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 135 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m **4**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**	**No data**
8m N	No data	No data	No data	No data	No data	No data	No data
9m W	No data	No data	No data	No data	No data	No data	No data
14m NW	No data	No data	No data	No data	No data	No data	No data

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m **4**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**22**	**3.8**	**485**	**333**	**0.7**	**73**	**104**	**33**	**37**
8m N	22	3.8	506	348	0.6	75	109	35	38
9m W	22	3.8	563	387	0.7	74	116	34	42
14m NW	24	4.2	568	390	0.7	78	123	37	41

This data is sourced from the British Geological Survey.

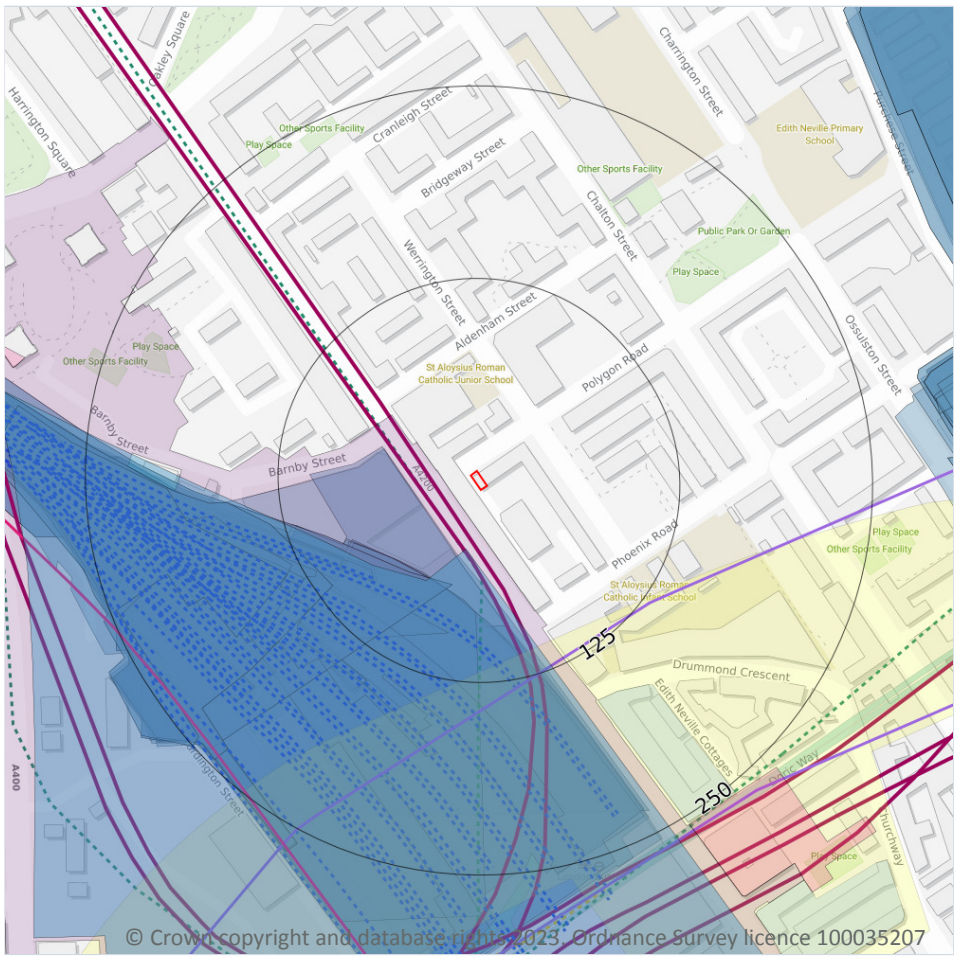
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



22.1 Underground railways (London)

Records within 250m	1

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Line Name	Line Section	Track Type	Depth (m bgl)	Operational hours
26m SW	Northern Line	Northern Line	Tunnel	19.91	Mon-Thu: Early 0512 Late 2358 Fri-Sun: Early 0522

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	2

Railway tunnels taken from contemporary Ordnance Survey mapping.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Type
31m SW	Railway Tunnel
154m S	Railway Tunnel

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	34

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Land Use	Year of mapping	Mapping scale
36m SW	Railway	1876	-
37m SW	Railway	1896	-
64m S	Railway Sidings	1973	10000
64m S	Railway Sidings	1989	10000
65m SW	Railway	1916	-
66m SW	Railway	1930	-
66m SW	Railway	1896	-
67m SW	Railway	1930	-

Location	Land Use	Year of mapping	Mapping scale
86m SW	Railway Sidings	1970	2500
88m SW	Railway Sidings	1985	1250
88m SW	Railway Sidings	1969	1250
89m SW	Railway Sidings	1991	1250
91m SW	Railway	1935	-
98m SW	Railway Sidings	1896	2500
98m SW	Railway Sidings	1959	1250
98m SW	Railway Sidings	1952	1250
99m SW	Railway Sidings	1952	2500
100m SW	Railway Sidings	1916	2500
107m SW	Railway Sidings	1876	2500
114m SW	Railway Sidings	1968	10560
114m SW	Railway Sidings	1957	10560
114m SW	Railway Sidings	1948	10560
118m SW	Railway Sidings	1894	10560
127m SW	Railway Sidings	1911	10560
130m SW	Railway Sidings	1882	10560
135m SW	Railway Sidings	1938	10560
135m SW	Railway Sidings	1920	10560
205m W	Railway	1896	-
205m W	Railway	1874	-
229m SW	Railway Sidings	1876	2500
229m W	Railway Sidings	1968	2500
238m S	Tunnel	1930	-
242m SW	Railway Sidings	1896	2500
247m W	Railway Sidings	1952	2500

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	64

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Name	Type
84m SW	London Euston to Crewe Line	rail
88m SW	London Euston to Crewe Line	rail
90m SW	Not given	Single Track
111m SW	Not given	Multi Track
114m SW	London Euston to Crewe Line	rail
117m SW	London Euston to Crewe Line	rail
127m SW	Not given	Single Track
129m SW	London Euston to Crewe Line	rail
133m SW	London Euston to Crewe Line	rail
138m SW	Not given	Single Track
142m SW	Not given	Single Track
144m SW	Not given	Single Track

Location	Name	Type
145m SW	London Euston to Crewe Line	rail
148m SW	London Euston to Crewe Line	rail
148m SW	Not given	Single Track
149m SW	Not given	Single Track
156m SW	Not given	Multi Track
158m SW	London Euston to Crewe Line	rail
160m SW		rail
162m SW	London Euston to Crewe Line	rail
166m SW		rail
167m SW	Not given	Single Track
167m W	Not given	Single Track
171m SW	London Euston to Crewe Line	rail
175m W	London Euston to Crewe Line	rail
175m SW	London Euston to Crewe Line	rail
177m W	Not given	Single Track
182m SW	Not given	Multi Track
185m SW	London Euston to Crewe Line	rail
188m SW	London Euston to Crewe Line	rail
188m SW	London Euston to Crewe Line	rail
188m W	Not given	Single Track
189m SW	London Euston to Crewe Line	rail
191m W	Not given	Multi Track
192m W	Not given	Single Track
197m SW	Not given	Single Track
198m W	London Euston to Crewe Line	rail
199m W	Not given	Single Track
201m SW	London Euston to Crewe Line	rail
202m W	London Euston to Crewe Line	rail

Location	Name	Type
204m SW	Not given	Single Track
204m SW		rail
209m W	Not given	Multi Track
209m SW		rail
212m SW	London Euston to Crewe Line	rail
213m SW	London Euston to Crewe Line	rail
213m W	Not given	Single Track
213m W	Not given	Single Track
215m W	London Euston to Crewe Line	rail
224m W	Not given	Multi Track
227m W	London Euston to Crewe Line	rail
235m SW	London Euston to Crewe Line	rail
235m W	Not given	Multi Track
236m W	London Euston to Crewe Line	rail
236m SW	Not given	Single Track
238m S	London Euston to Crewe Line	rail
238m W	London Euston to Crewe Line	rail
240m S	London Euston to Crewe Line	rail
244m SW	London Euston to Crewe Line	rail
244m SW		rail
246m W	London Euston to Crewe Line	rail
246m W	London Euston to Crewe Line	rail
248m W	London Euston to Crewe Line	rail
248m W	Not given	Single Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	1

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Route Type	Name	Under consultation
121m SE	Tunnelled route	Central Core	No

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	4

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

Features are displayed on the Railway infrastructure and projects map on **page 139 >**

Location	Track Type	Speed (mph)	Speed (km/h)	Status
240m SW	Surface Running Track	31mph	50kph	Current preferred consultation route
251m W	Surface Running Track	31mph	50kph	Current preferred consultation route
393m W	Surface Running Track	62mph	100kph	Current preferred consultation route
456m W	Surface Running Track	62mph	100kph	Current preferred consultation route

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

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