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 125**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW086_glossop_v4**

This data is sourced from the British Geological Survey.

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

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Site Outline

Search buffers in metres (m)

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

15.2 Artificial and made ground (50k)

Records within 500m **9**

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 126**

ID	Location	LEX Code	Description	Rock description
1	11m W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	124m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	125m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	277m E	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

ID	Location	LEX Code	Description	Rock description
5	304m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	306m N	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
7	312m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
8	346m NE	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
9	363m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	**2**

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).

Location	Flow type	Maximum permeability	Minimum permeability
11m W	Mixed	Very High	Low
30m N	Mixed	Very High	Low

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 **7**

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 128**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**RTD2-XSV**	**RIVER TERRACE DEPOSITS, 2**	**SAND AND GRAVEL**
2	**On site**	**TILLD-DMTN**	**TILL, DEVENSIAN**	**DIAMICTON**
3	**On site**	**ALV-XCZ**	**ALLUVIUM**	**CLAY AND SILT**

ID	Location	LEX Code	Description	Rock description
4	55m N	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
5	104m W	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
6	214m NW	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
7	436m NW	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**4**

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).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Low**	**Very Low**
On site	**Mixed**	**High**	**Low**
11m N	Mixed	High	Low

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	8

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 130**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**HDW-SDST**	**HUDDERSFIELD WHITE ROCK - SANDSTONE**	**NAMURIAN**
2	**On site**	**MARSD-MDSI**	**MARSDEN FORMATION - MUDSTONE AND SILTSTONE**	**NAMURIAN**
4	88m E	HDW-SDST	HUDDERSFIELD WHITE ROCK - SANDSTONE	NAMURIAN

ID	Location	LEX Code	Description	Rock age
6	92m E	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
7	104m SE	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
9	183m NE	HDW-SDST	HUDDERSFIELD WHITE ROCK - SANDSTONE	NAMURIAN
10	442m NE	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
11	481m N	FLB-SDST	FLETCHER BANK GRIT - SANDSTONE	NAMURIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m **3**

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	**Fracture**	**Low**	**Low**
On site	**Fracture**	**High**	**Moderate**
11m N	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m **3**

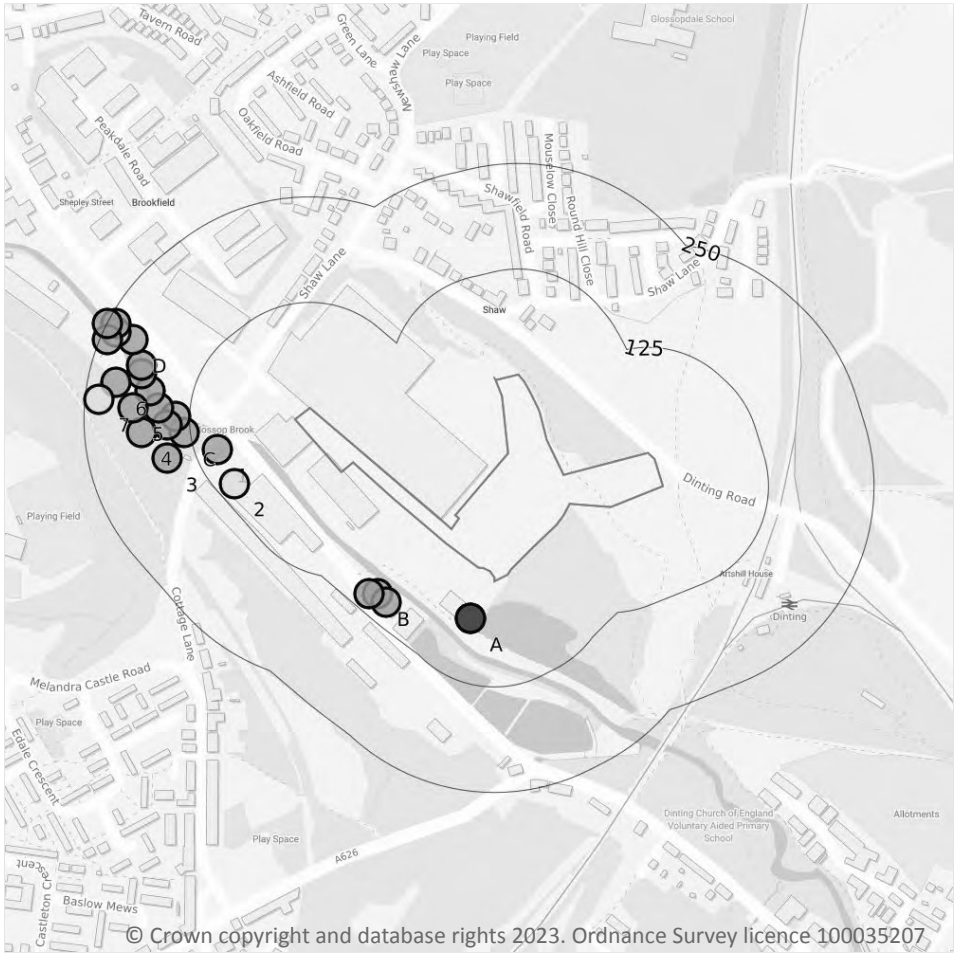
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 130**

ID	Location	Category	Description
3	**On site**	**FAULT**	**Fault, inferred**
5	88m E	FAULT	Fault, observed
8	159m NE	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m	**24**

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.

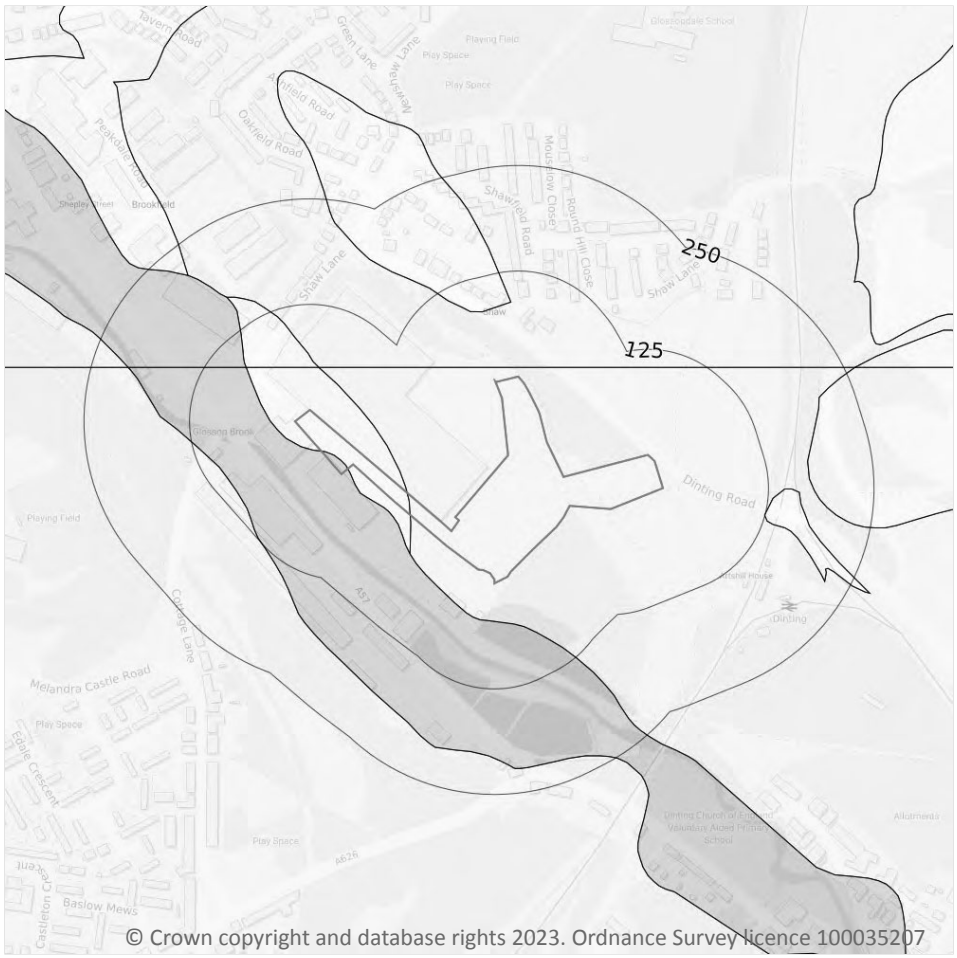
Features are displayed on the Boreholes map on **page 133**

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	52m S	401700 394700	E R CARPENTER PLC GLOSSOP 1	-	Y	N/A
A	52m S	401700 394700	E R CARPENTER PLC GLOSSOP 2	-	Y	N/A
B	97m SW	401590 394730	GLOSOP BROOK PHASE 2 111	5.8	N	193759

ID	Location	Grid reference	Name	Length	Confidential	Web link
B	99m SW	401600 394720	GLOSOP BROOK PHASE 2 TP302	1.2	N	193766
1	99m W	401400 394900	GLOSSOP SEWERAGE SCHEME - SEE SK09SW/25 A-F LEN F	2.74	N	193682
B	104m SW	401580 394730	GLOSOP BROOK PHASE 2 TP301	1.1	N	193765
2	104m W	401420 394860	DINTING VALE GLOSSOP	18.29	N	193685
C	133m W	401360 394920	GLOSOP BROOK PHASE 2 TP206	0.7	N	193764
C	142m W	401350 394940	GLOSOP BROOK PHASE 2 TP205	0.2	N	193762
C	152m W	401340 394930	GLOSOP BROOK PHASE 2 TP206	1.1	N	193763
3	159m W	401340 394890	GLOSOP BROOK PHASE 2 110	6.0	N	193758
C	162m W	401330 394950	GLOSOP BROOK PHASE 2 TP204	1.2	N	193761
C	175m W	401320 394970	GLOSOP BROOK PHASE 2 107	5.2	N	193755
4	183m W	401310 394920	GLOSOP BROOK PHASE 2 109	5.8	N	193757
C	190m W	401310 394990	GLOSOP BROOK PHASE 2 TP203	1.1	N	193760
5	192m W	401300 394950	GLOSOP BROOK PHASE 2 108	5.2	N	193756
C	193m W	401310 395000	GLOSSOP BROOK PHASE 2 105	6.0	N	193615
D	214m W	401300 395030	GLOSSOP BROOK PHASE 2 TP303	1.0	N	193617
6	216m W	401280 394980	GLOSOP BROOK PHASE 2 106	6.0	N	193754
7	233m W	401260 394960	GLOSOP BROOK PHASE 2 4	10.2	N	193753
D	236m W	401280 395040	GLOSSOP BROOK PHASE 2 2	10.25	N	193609
D	241m NW	401280 395050	GLOSSOP BROOK PHASE 2 103	5.8	N	193613
D	241m W	401270 395030	GLOSSOP BROOK PHASE 2 3	4.0	N	193610
D	249m W	401270 395050	GLOSSOP BROOK PHASE 2 TP202	0.2	N	193616

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	**4**

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).

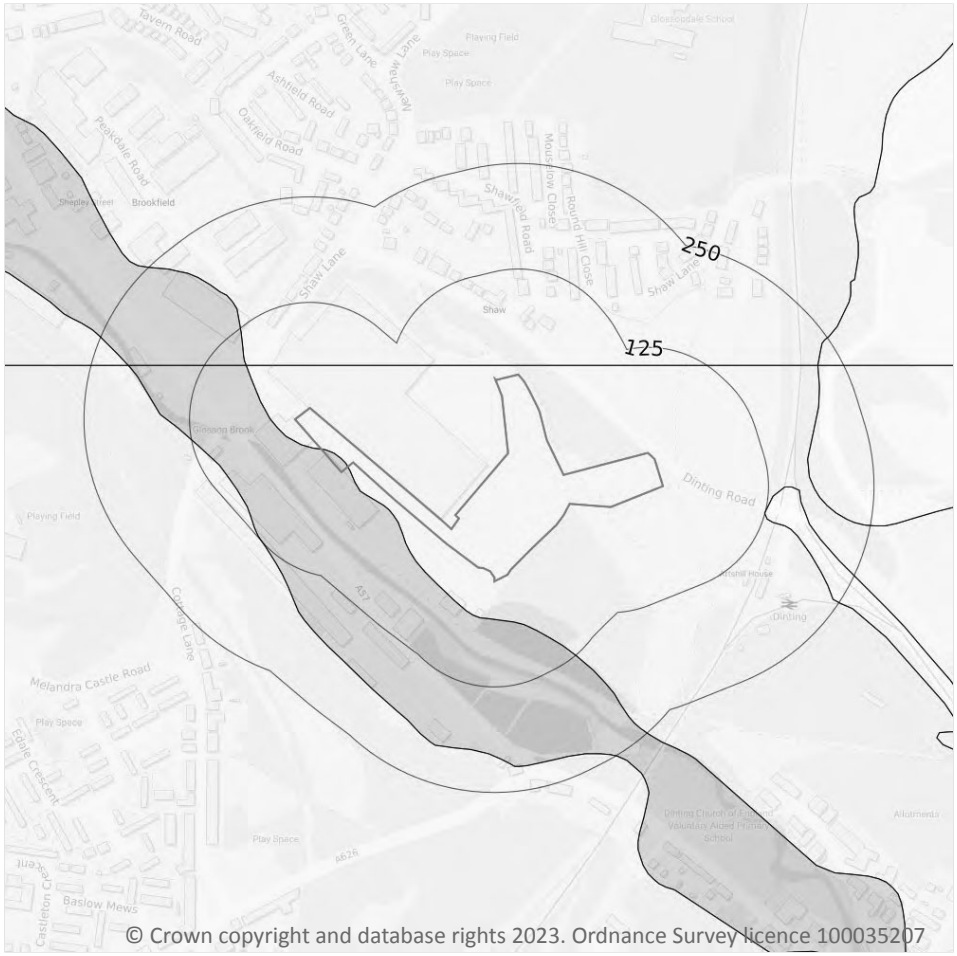
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 135**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

Location	Hazard rating	Details
11m N	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	**3**

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.

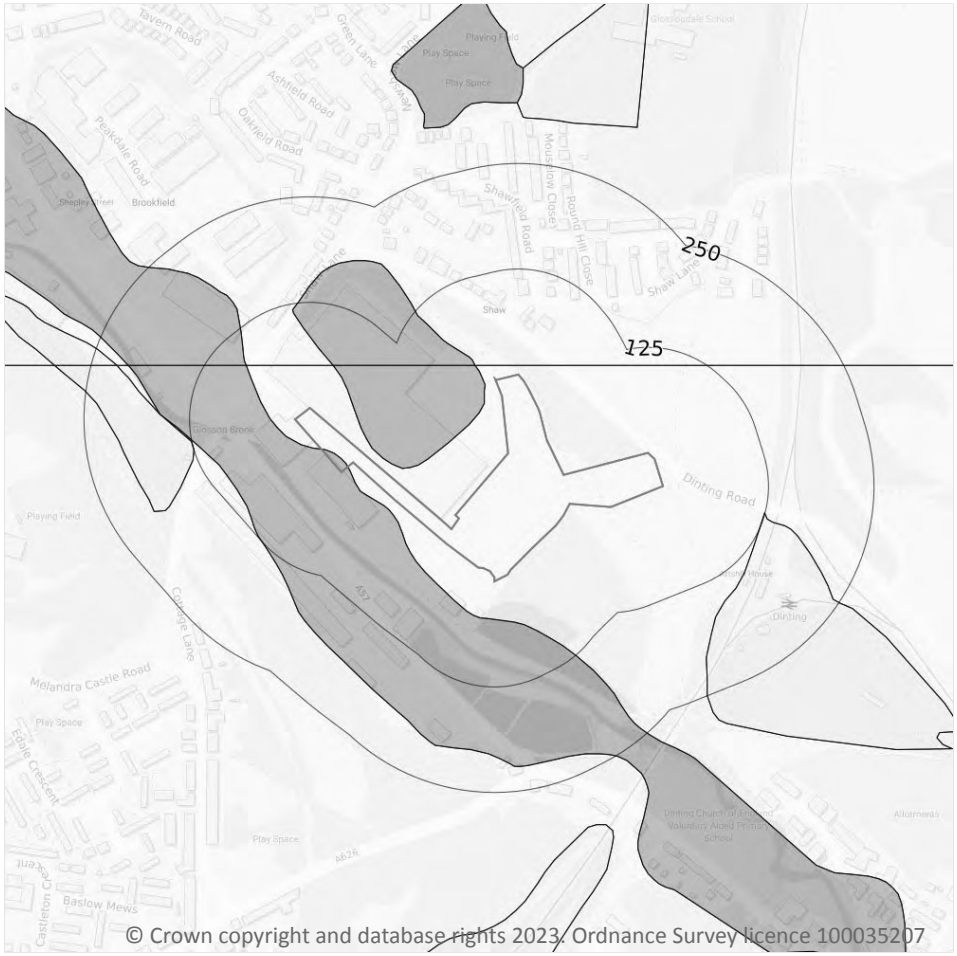
Features are displayed on the Natural ground subsidence - Running sands map on **page 137**

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.**

Location	Hazard rating	Details
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
11m N	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



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	**5**

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.

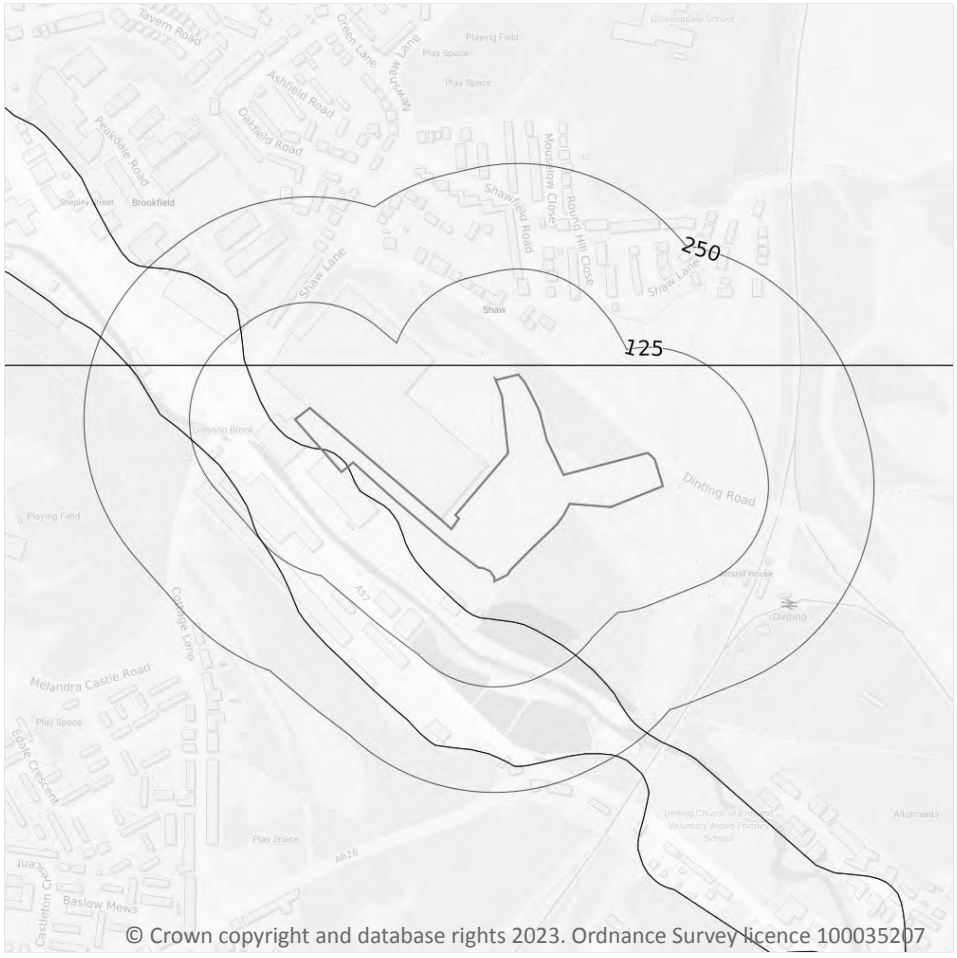
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 139**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

Location	Hazard rating	Details
11m W	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.
11m N	Negligible	Compressible strata are not thought to occur.
30m N	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	**3**

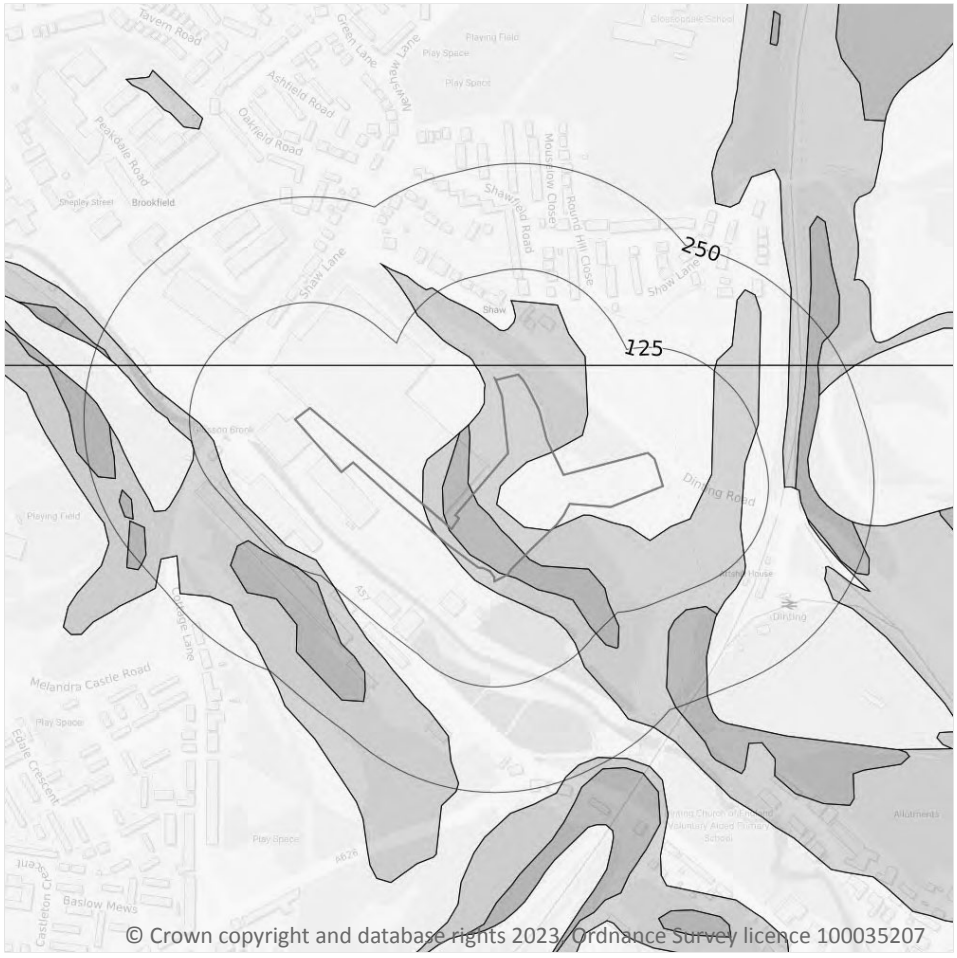
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 141**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
11m N	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



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17.5 Landslides

Records within 50m	5

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.

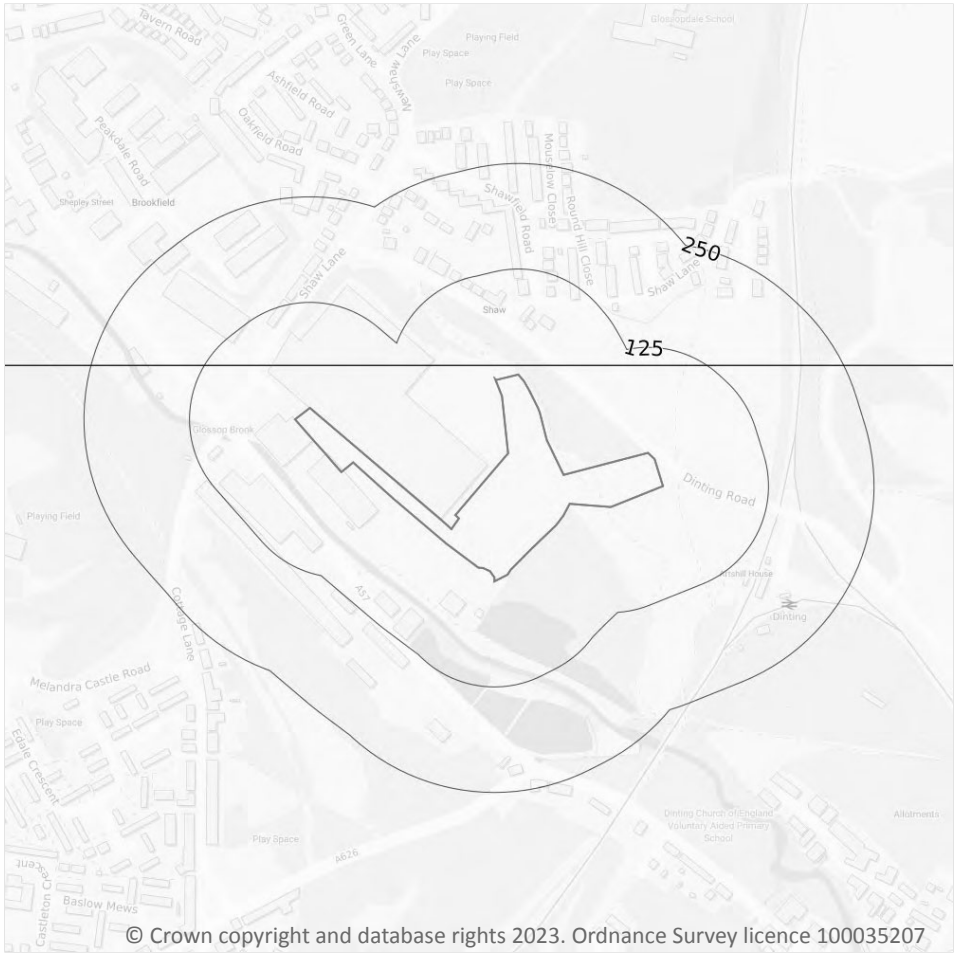
Features are displayed on the Natural ground subsidence - Landslides map on **page 143**

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.**

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**
On site	**Moderate**	**Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.**
11m N	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
30m N	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



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Site Outline

Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m	**2**

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.

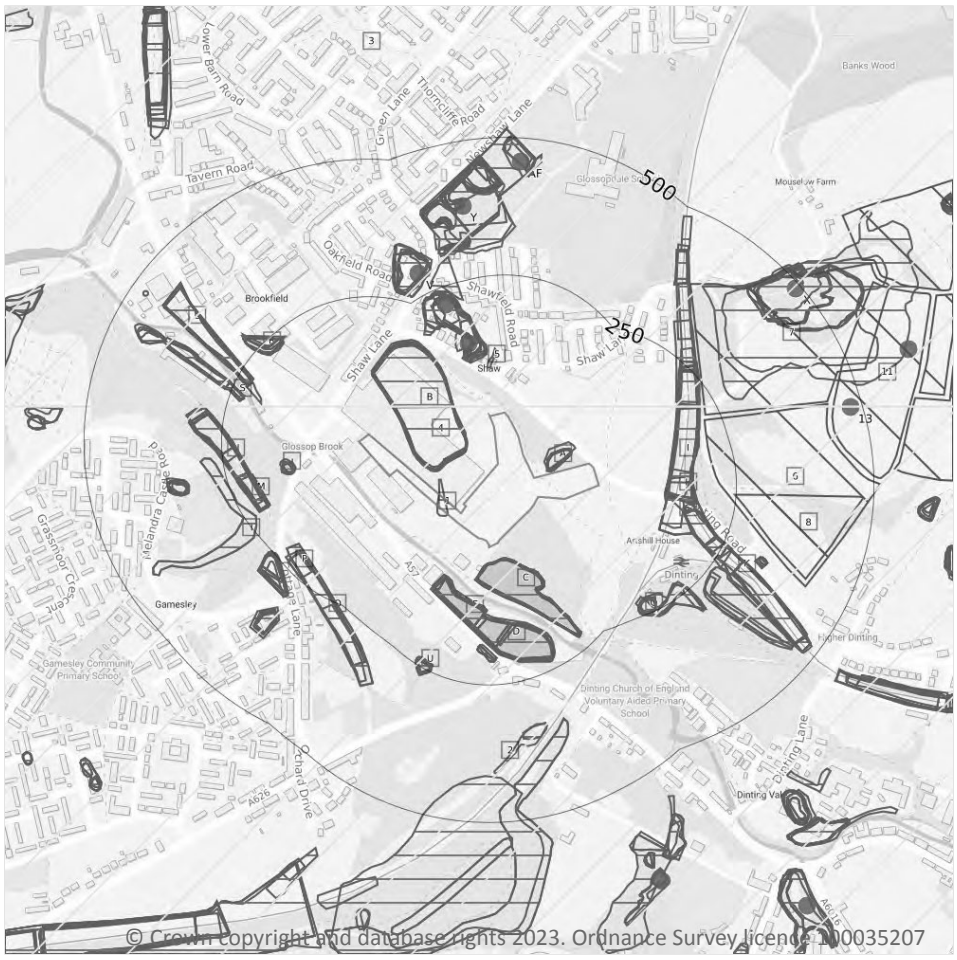
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 145**

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.**

Location	Hazard rating	Details
11m N	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, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities

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 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.

18.2 BritPits

Records within 500m	**7**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 147**

ID	Location	Details	Description
F	137m N	Name: Brookfield Clay Pit Address: Brookfield, Hadfield, GLOSSOP, Derbyshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	217m N	Name: Brookfield Gravel Pit Address: Hadfield, GLOSSOP, Derbyshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
V	289m N	Name: Brookfield Gravel Pit Address: Hadfield, GLOSSOP, Derbyshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
Y	383m N	Name: Newshaw Lane Brick Yard Address: Hadfield, GLOSSOP, Derbyshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AF	456m N	Name: Newshaw Lane Brick Yard Address: Hadfield, GLOSSOP, Derbyshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

ID	Location	Details	Description
13	479m E	Name: Mouselow Quarry (Clay) Address: GLOSSOP, Derbyshire Commodity: Clay & Shale Status: Active	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which is actively extracting mineral products, or in the case of wharfs and rail depots, is actively handing minerals
X	491m NE	Name: Mouselow Address: Mouselow, GLOSSOP, Derbyshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m **170**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 147**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Pond**	**1879**	**1:10560**
A	4m E	Mill Pond	1924	1:10560
A	4m E	Mill Pond	1938	1:10560
A	4m E	Mill Pond	1897	1:10560
A	4m E	Mill Pond	1938	1:10560
A	7m E	Pond	1979	1:10000
A	7m E	Mill Pond	1969	1:10560
A	7m E	Pond	1990	1:10000
A	7m E	Mill Pond	1911	1:10560
A	8m E	Mill Pond	1938	1:10560
A	8m E	Mill Pond	1936	1:10560
A	8m E	Mill Pond	1897	1:10560
A	10m E	Reservoir	1879	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
B	21m W	Reservoir	1938	1:10560
B	21m W	Reservoir	1936	1:10560
B	21m W	Reservoir	1897	1:10560
B	21m W	Reservoir	1938	1:10560
B	22m W	Reservoir	1938	1:10560
B	22m W	Reservoir	1919	1:10560
B	23m W	Reservoir	1897	1:10560
B	23m W	Reservoir	1911	1:10560
4	24m W	Water Body	1969	1:10560
B	24m W	Reservoir	1924	1:10560
B	27m W	Cuttings	1879	1:10560
C	28m S	Reservoir	1938	1:10560
C	28m S	Reservoir	1936	1:10560
C	28m S	Reservoir	1897	1:10560
C	28m S	Reservoir	1979	1:10000
C	28m S	Water Body	1969	1:10560
C	28m S	Reservoir	1990	1:10000
C	29m S	Reservoir	1911	1:10560
C	30m S	Reservoir	1924	1:10560
C	30m S	Reservoir	1938	1:10560
C	30m S	Reservoir	1897	1:10560
C	30m S	Reservoir	1938	1:10560
C	30m S	Reservoir	1919	1:10560
B	69m NW	Disused Reservoir	1980	1:10000
B	69m NW	Water Body	1954	1:10560
5	86m N	Unspecified Ground Workings	1897	1:10560
D	89m SW	Mill Pond	1879	1:10560
E	91m SW	Reservoir	1979	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
E	91m SW	Reservoir	1990	1:10000
D	92m SW	Water Bodies	1969	1:10560
D	94m SW	Ponds	1924	1:10560
D	94m SW	Ponds	1938	1:10560
D	94m SW	Ponds	1897	1:10560
E	94m SW	Reservoirs	1938	1:10560
E	94m SW	Reservoirs	1936	1:10560
E	94m SW	Reservoir	1897	1:10560
D	94m SW	Water Bodies	1938	1:10560
D	94m SW	Reservoirs	1911	1:10560
D	95m SW	Water Body	1919	1:10560
F	103m N	Old Gravel Pit	1919	1:10560
F	104m N	Old Gravel Pit	1938	1:10560
F	105m N	Old Gravel Pit	1938	1:10560
F	107m N	Old Gravel Pit	1924	1:10560
F	109m N	Old Gravel Pit	1954	1:10560
F	112m N	Unspecified Pit	1911	1:10560
F	112m N	Unspecified Pit	1911	1:10560
F	116m N	Old Gravel Pit	1938	1:10560
F	116m N	Old Gravel Pit	1936	1:10560
F	116m N	Old Gravel Pit	1897	1:10560
G	121m E	Cuttings	1938	1:10560
G	121m E	Cuttings	1936	1:10560
G	121m E	Cuttings	1897	1:10560
H	123m E	Cuttings	1924	1:10560
I	123m E	Cuttings	1979	1:10000
I	123m E	Cuttings	1969	1:10560
I	123m E	Cuttings	1990	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
I	123m E	Cuttings	1938	1:10560
I	123m E	Cuttings	1897	1:10560
G	124m E	Cuttings	1938	1:10560
I	124m E	Cuttings	1919	1:10560
J	124m W	Unspecified Heap	1938	1:10560
J	125m W	Unspecified Heap	1919	1:10560
J	125m W	Unspecified Heap	1924	1:10560
I	126m E	Cuttings	1911	1:10560
H	127m E	Reservoir	1879	1:10560
D	128m S	Reservoir	1979	1:10000
D	128m S	Reservoir	1990	1:10000
I	128m E	Pond	1879	1:10560
J	129m W	Unspecified Heap	1911	1:10560
J	129m W	Unspecified Heap	1911	1:10560
F	130m N	Reservoir	1879	1:10560
J	131m W	Unspecified Heap	1938	1:10560
J	131m W	Unspecified Heap	1936	1:10560
I	133m E	Cuttings	1924	1:10560
F	133m N	Reservoir	1879	1:10560
D	145m S	Reservoirs	1938	1:10560
D	145m S	Reservoirs	1936	1:10560
D	145m S	Reservoir	1897	1:10560
G	161m E	Cuttings	1938	1:10560
G	161m E	Cuttings	1897	1:10560
G	162m E	Cuttings	1924	1:10560
K	162m E	Cuttings	1911	1:10560
G	165m E	Cuttings	1979	1:10000
G	165m E	Cuttings	1969	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
G	165m E	Cuttings	1990	1:10000
D	177m S	Cuttings	1879	1:10560
D	179m S	Pond	1924	1:10560
D	179m S	Pond	1938	1:10560
D	179m S	Pond	1897	1:10560
F	181m N	Old Gravel Pit	1911	1:10560
F	189m N	Refuse Heap	1954	1:10560
L	191m W	Mill Pond	1938	1:10560
I	192m NE	Cuttings	1980	1:10000
I	192m NE	Cuttings	1954	1:10560
M	197m W	Cuttings	1919	1:10560
M	199m W	Cuttings	1979	1:10000
M	199m W	Cuttings	1969	1:10560
M	199m W	Cuttings	1990	1:10000
N	200m W	Cuttings	1924	1:10560
N	201m W	Cuttings	1938	1:10560
N	201m W	Cuttings	1936	1:10560
N	201m W	Cuttings	1897	1:10560
N	202m W	Cuttings	1938	1:10560
N	203m W	Cuttings	1938	1:10560
O	205m W	Cuttings	1979	1:10000
O	205m W	Cuttings	1990	1:10000
N	206m W	Cuttings	1911	1:10560
O	210m W	Cuttings	1969	1:10560
O	211m W	Cuttings	1938	1:10560
P	216m W	Cuttings	1897	1:10560
Q	217m SE	Unspecified Ground Workings	1897	1:10560
F	217m N	Unspecified Ground Workings	1924	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
Q	220m SE	Unspecified Ground Workings	1919	1:10560
N	221m W	Cuttings	1919	1:10560
L	222m NW	Mill Pond	1919	1:10560
Q	223m SE	Unspecified Heap	1969	1:10560
R	223m NW	Unspecified Heap	1938	1:10560
R	223m NW	Unspecified Heap	1938	1:10560
Q	223m SE	Unspecified Heap	1924	1:10560
S	223m W	Filter Beds	1938	1:10560
S	223m W	Filter Beds	1938	1:10560
L	224m NW	Mill Pond	1938	1:10560
L	224m NW	Mill Pond	1936	1:10560
L	224m NW	Mill Pond	1897	1:10560
L	224m W	Filter Beds	1924	1:10560
L	224m W	Filter Beds	1938	1:10560
L	224m NW	Mill Pond	1924	1:10560
L	224m NW	Mill Pond	1938	1:10560
L	224m NW	Mill Pond	1897	1:10560
R	225m NW	Unspecified Ground Workings	1919	1:10560
Q	226m SE	Unspecified Heap	1938	1:10560
Q	226m SE	Unspecified Heap	1938	1:10560
Q	226m SE	Unspecified Pit	1924	1:10560
Q	227m SE	Unspecified Heap	1938	1:10560
Q	227m SE	Unspecified Heap	1938	1:10560
R	227m NW	Unspecified Heap	1924	1:10560
N	227m W	Cuttings	1979	1:10000
N	227m W	Cuttings	1969	1:10560
N	227m W	Cuttings	1990	1:10000
R	227m NW	Unspecified Heap	1938	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
R	231m NW	Unspecified Ground Workings	1897	1:10560
T	231m W	Unspecified Ground Workings	1979	1:10000
T	231m W	Unspecified Ground Workings	1990	1:10000
U	234m SW	Mill Pond	1879	1:10560
U	235m SW	Mill Pond	1938	1:10560
U	235m SW	Mill Pond	1936	1:10560
U	235m SW	Mill Pond	1897	1:10560
U	239m S	Mill Pond	1924	1:10560
U	239m S	Mill Pond	1938	1:10560
U	239m S	Mill Pond	1897	1:10560
U	239m S	Mill Pond	1969	1:10560
U	240m S	Mill Pond	1911	1:10560
G	240m E	Cuttings	1924	1:10560
U	241m SW	Mill Pond	1938	1:10560
P	247m W	Unspecified Heap	1969	1:10560
P	248m W	Unspecified Heap	1924	1:10560
P	249m W	Unspecified Ground Workings	1919	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**0**

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

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	**4**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 147**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
6	208m E	Mouselow	Clay, shale	Surface mineral working	Refused	22/7/58
7	225m E	Mouselow	Clay, shale	Surface mineral working	Valid	29/7/49
8	248m E	Mouselow	Clay, shale	Surface mineral working	Refused	28/7/49
11	439m E	Mouselow	Sandstone (gritstone)	Surface mineral working	Valid	29/7/49

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	**5**

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 147**

ID	Location	Name	Commodity	Class	Likelihood
2	**On site**	**Not available**	**Vein Mineral**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
3	11m N	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
20	942m E	Not available	Vein Mineral	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

ID	Location	Name	Commodity	Class	Likelihood
-	952m E	Not available	Vein Mineral	B	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered
-	955m E	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 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.

18.8 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.

18.9 Coal mining

Records on site	**1**

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

Location	Details
On site	**The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.**

This data is sourced from the Coal Authority.

18.10 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.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 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 Radon

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Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 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 159**

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.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	**6**

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	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
1m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
11m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	**0**

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).

This data is sourced from the British Geological Survey.

20.3 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.

21 Railway infrastructure and projects

Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

21.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

21.2 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.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	27

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 163**

Location	Land Use	Year of mapping	Mapping scale
133m E	Railway Sidings	1880	2500
149m E	Railway Sidings	1974	1250
167m SE	Railway Sidings	1938	10560
170m W	Railway Sidings	1938	10560
170m W	Railway Sidings	1936	10560
170m W	Railway Sidings	1897	10560
177m W	Railway Sidings	1911	10560
181m W	Railway Sidings	1898	2500
182m W	Railway Sidings	1897	10560
187m W	Railway Sidings	1898	2500
188m SE	Railway Sidings	1924	10560
198m SE	Railway Sidings	1938	10560
203m SE	Railway Sidings	1967	2500
206m SE	Railway Sidings	1969	10560
207m SE	Railway Sidings	1974	1250
208m SE	Railway Sidings	1921	2500
209m SE	Railway Sidings	1897	10560

Location	Land Use	Year of mapping	Mapping scale
211m SE	Railway Sidings	1938	10560
211m SE	Railway Sidings	1936	10560
211m SE	Railway Sidings	1897	10560
212m SE	Railway Sidings	1919	10560
214m SE	Railway Sidings	1911	10560
216m SE	Railway Sidings	1898	2500
217m SE	Railway Sidings	1919	10560
217m SE	Railway Sidings	1898	2500
217m SE	Railway Sidings	1921	2500
238m SE	Railway	1880	-

This data is sourced from Ordnance Survey/Groundsure.

21.5 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.

21.6 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.

21.7 Railways

Records within 250m	**16**

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 163**

Location	Name	Type
139m E		rail
140m E	Not given	Single Track
140m E	Not given	Single Track
141m E	Not given	Single Track
155m E		rail
156m E	Not given	Single Track
164m E		rail
168m E	Not given	Single Track
174m E	Not given	Single Track
190m SE	Glossop Line	rail
190m SE	Not given	Single Track
207m SE		rail
207m SE	Not given	Single Track
220m SE	Dinting Vale Viaduct	rail
220m SE	Dinting Vale Viaduct	rail
222m SE	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 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.

21.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

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.

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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