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	5

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 158 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SWLCM-MDSS**	**SOUTH WALES LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**
3	55m NE	SWLCM-MDSS	SOUTH WALES LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
6	143m SE	SWMCM-MDSS	SOUTH WALES MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
10	363m E	SWMCM-MDSS	SOUTH WALES MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	380m N	SWLCM-SDST	SOUTH WALES LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN

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	**Fracture**	**Moderate**	**Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m **13**

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 158 >**

ID	Location	Category	Description
2	**On site**	**ROCK**	**Coal seam, inferred**
4	55m NE	FAULT	Fault, inferred, displacement unknown
5	139m NE	ROCK	Coal seam, inferred
7	143m SE	FOSSIL_HORIZON	Marine band
8	234m E	ROCK	Coal seam, inferred
9	289m E	ROCK	Coal seam, inferred
11	363m E	FOSSIL_HORIZON	Marine band

ID	Location	Category	Description
13	395m E	ROCK	Coal seam, inferred
14	432m E	ROCK	Coal seam, inferred
15	435m E	ROCK	Coal seam, inferred
16	461m S	ROCK	Coal seam, inferred
17	485m SW	ROCK	Coal seam, inferred
18	500m SE	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m	18

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.

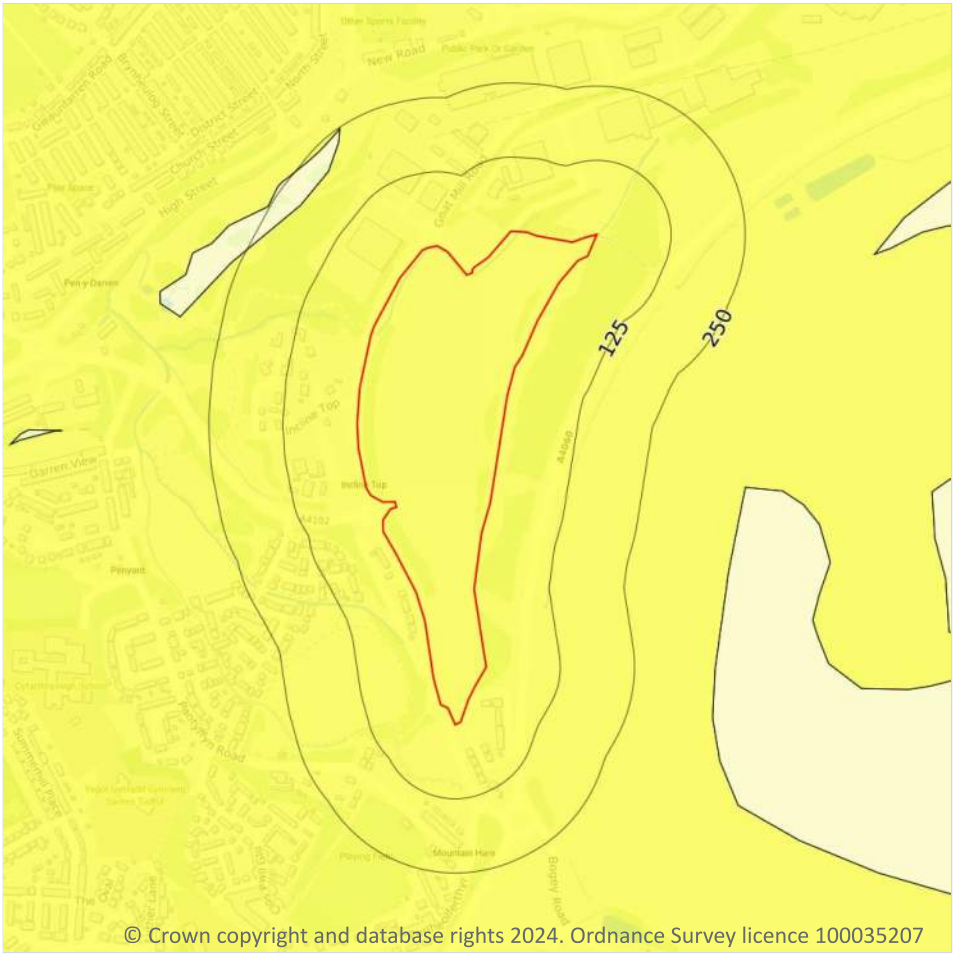
Features are displayed on the Boreholes map on **page 161 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**306300 207000**	**BORE TO DETERMINE STRATA**	**45.72**	**N**	**259487** ↗
A	61m S	306126 206415	INCLINE TOP O C S TP8008	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	65m S	306116 206435	INCLINE TOP O C S TP8011	-	Y	N/A
2	71m S	306086 206565	INCLINE TOP O C S TP8012	-	Y	N/A
3	119m S	306065 206419	INCLINE TOP O C S TP8007	-	Y	N/A
4	133m S	306067 206362	INCLINE TOP O C S TP8001	-	Y	N/A
B	154m S	306360 206310	LONGTOWN 724, LN3	45.11	N	259466 ↗
B	154m S	306360 206310	LONGTOWN 724, LN3A	16.46	N	259465 ↗
5	166m S	306052 206320	INCLINE TOP O C S TP8022	-	Y	N/A
6	175m S	306016 206384	INCLINE TOP O C S TP8016	-	Y	N/A
7	185m S	306015 206351	INCLINE TOP O C S TP8013	-	Y	N/A
8	196m S	306017 206319	INCLINE TOP O C S TP8009	-	Y	N/A
9	199m W	305850 206883	INCLINE TOP O C S TP8025	-	Y	N/A
10	210m SW	305970 206426	INCLINE TOP O C S TP8006	-	Y	N/A
11	214m SW	305944 206531	INCLINE TOP O C S TP8015	-	Y	N/A
12	217m S	305985 206341	INCLINE TOP O C S TP8014	-	Y	N/A
13	230m W	305835 207021	INCLINE TOP O C S TP8023	-	Y	N/A
14	240m SW	305956 206358	INCLINE TOP O C S TP8002	-	Y	N/A

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



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Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	1

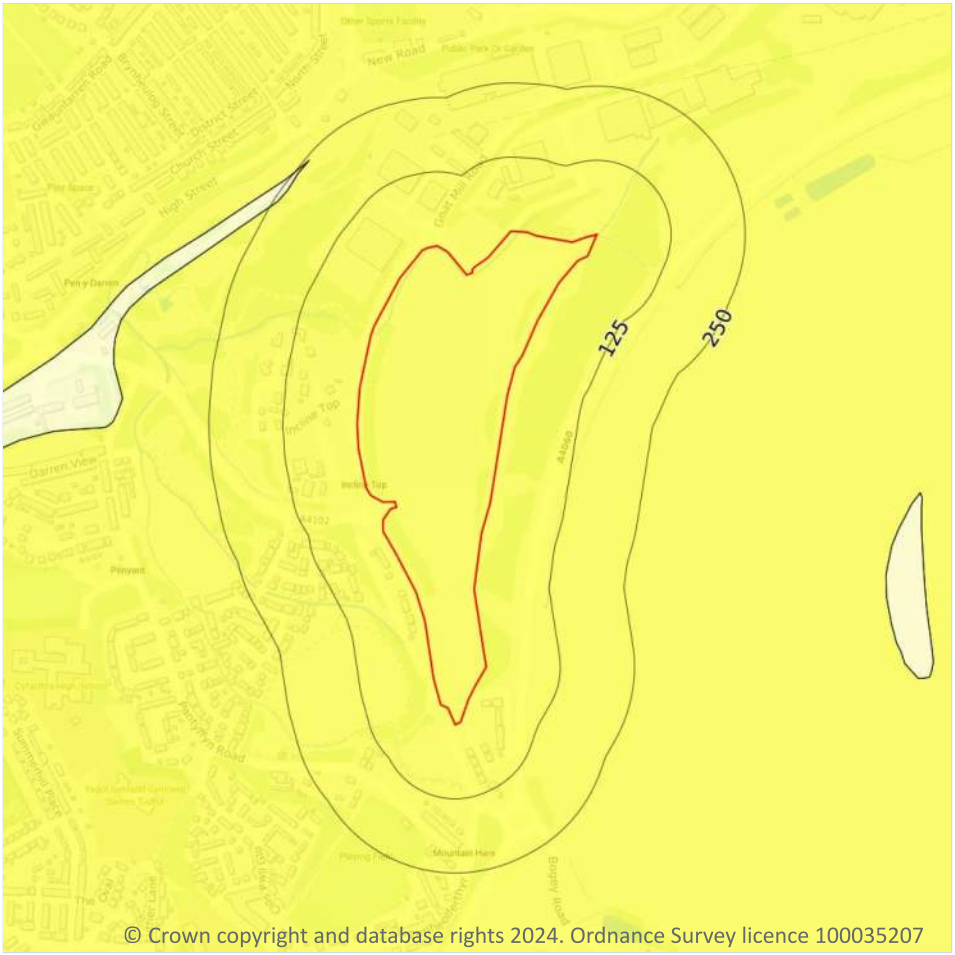
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 163 >**

Location	Hazard rating	Details
On site	**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	1

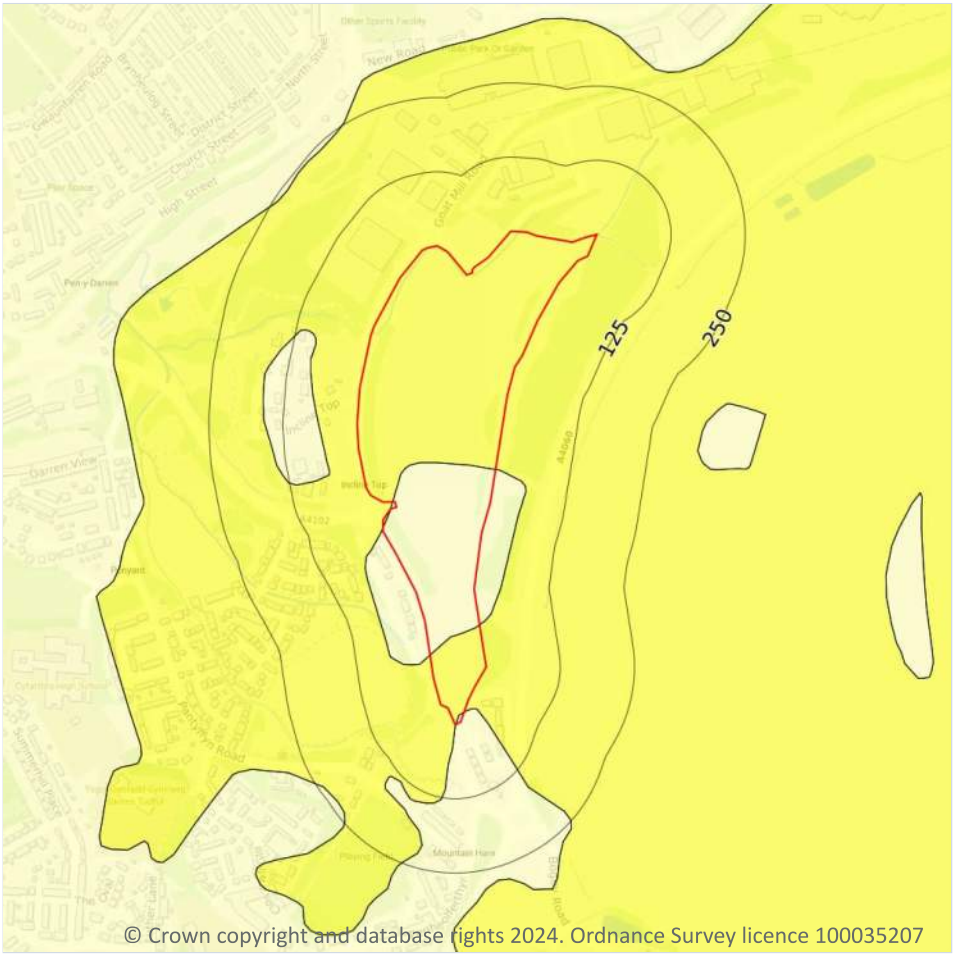
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 164 >**

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



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	2

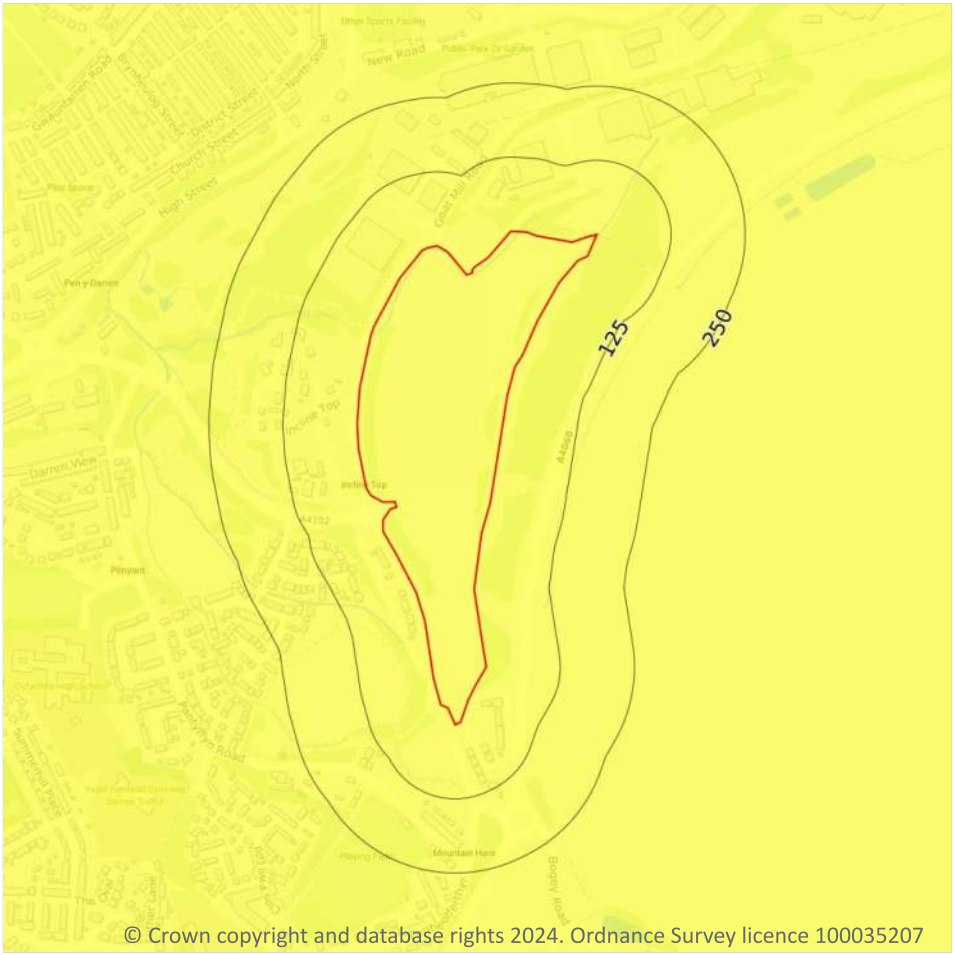
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 165 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Very low**	**Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

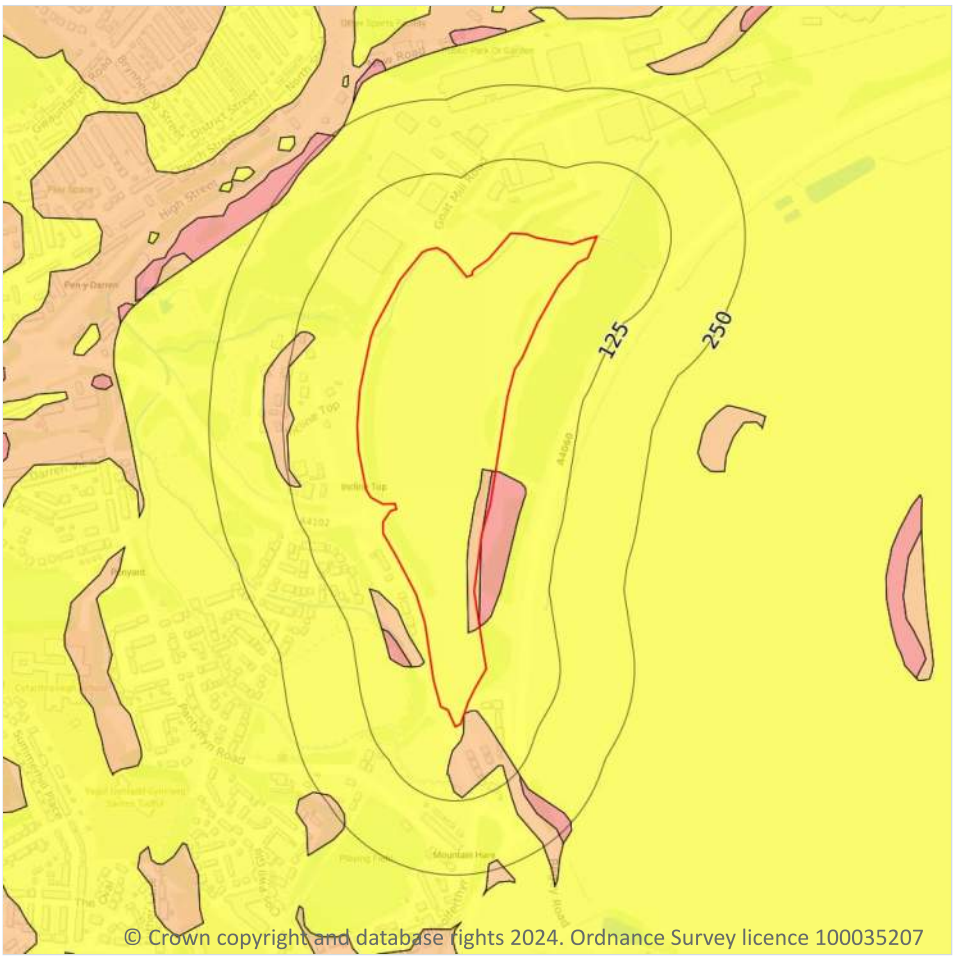
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 167 >**

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



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	6

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.

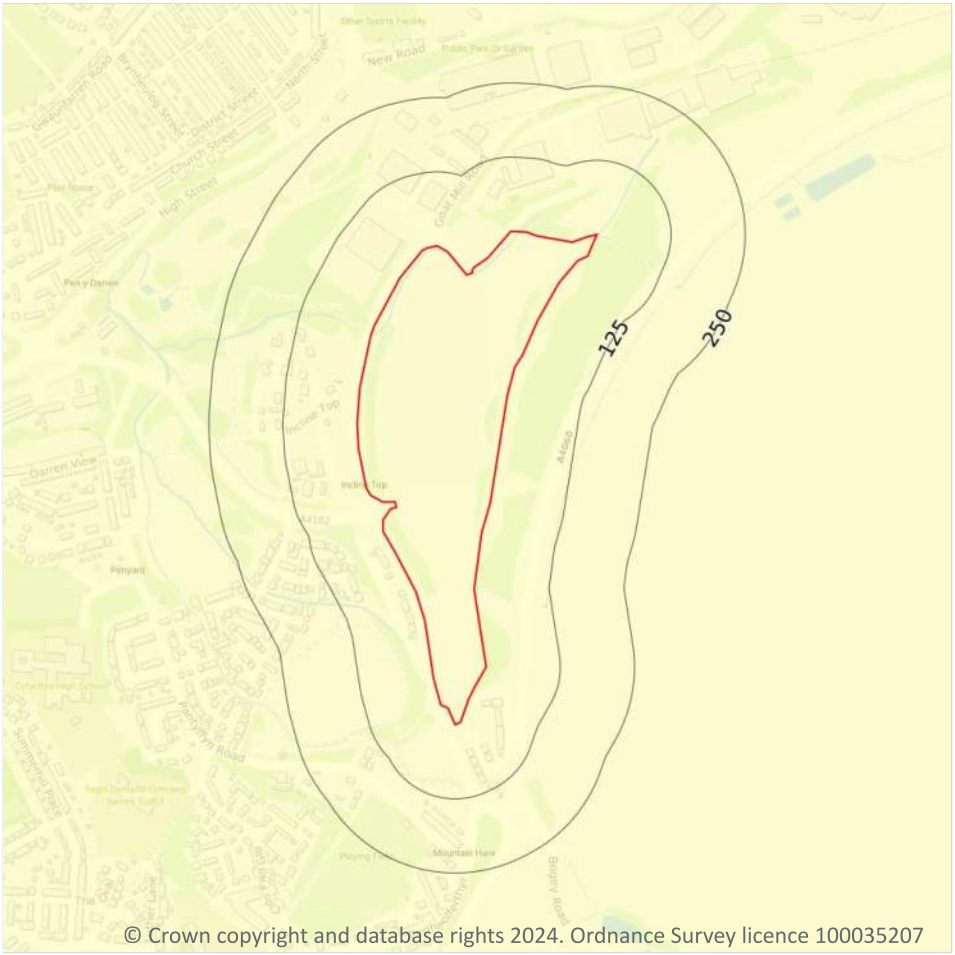
Features are displayed on the Natural ground subsidence - Landslides map on **page 168 >**

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.**
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**
11m S	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
34m S	Moderate	Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.

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	1

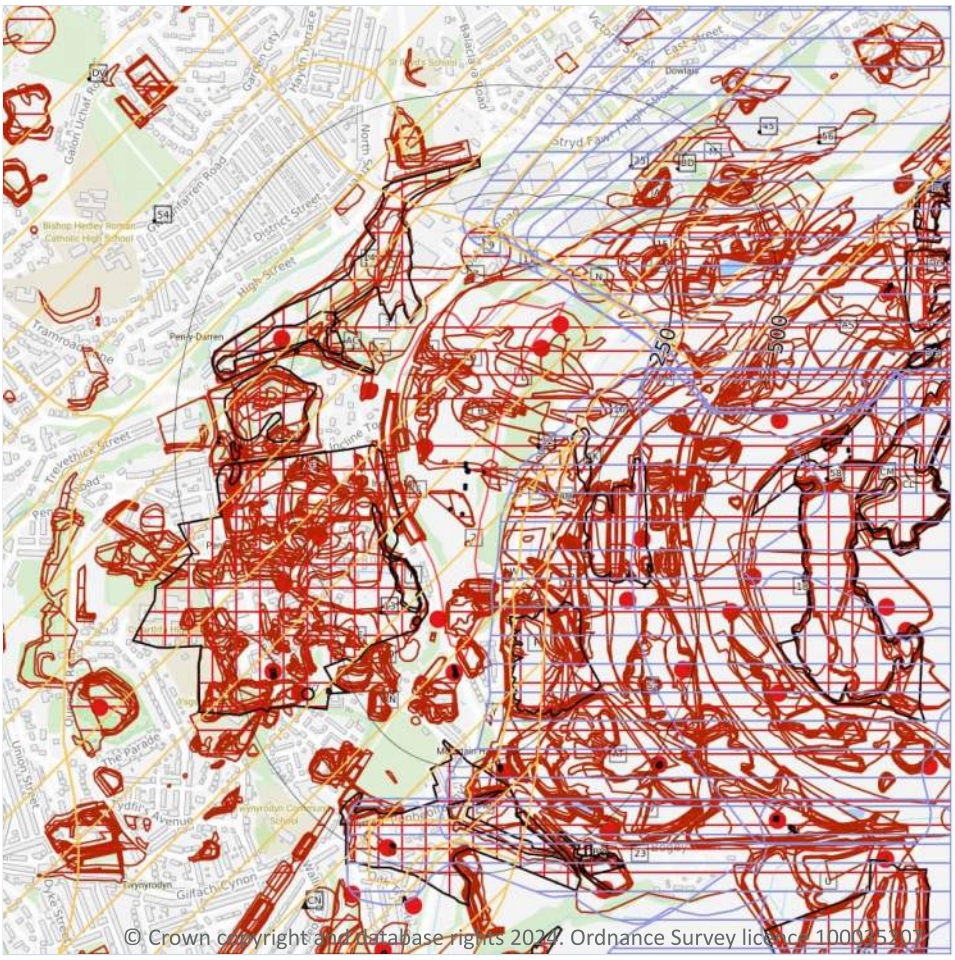
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 170 >**

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	28

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 and ground workings map on **page 172 >**

ID	Location	Details	Description
1	**On site**	**Name: Tan-y-ffold Level** **Address: Dowlais, MERTHYR TYDFIL, Mid Glamorgan** **Commodity: Coal, Deep** **Status: Ceased**	**Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)** **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**
4	15m NE	Name: Dowlais Iron Workings Address: Dowlais, MERTHYR TYDFIL, Mid Glamorgan Commodity: Ironstone 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
K	15m S	Name: Penrheol Ironstone Level Address: Mountain Hare, Dowlais, MERTHYR TYDFIL, Mid Glamorgan Commodity: Ironstone Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) 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
E	21m NE	Name: Great White Tip OCCS Address: MERTHYR TYDFIL, Mid Glamorgan Commodity: Coal, Surface Mined Status: Ceased	Type: Tip at a mine, quarry or other location from which mineral is being extracted. Working may be termed Slate Waste Tip, Shale Bing, Coal Tip or Coal Bing 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
I	35m S	Name: Pant-y-ffyn Address: MERTHYR TYDFIL, Mid Glamorgan Commodity: Ironstone Status: Ceased	Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots) 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