Walters Land Limited

FORMER HOOVER CANDY SITE, MERTHYR TYDFIL

Geoenvironmental & Geotechnical Site Investigation and Outline Remediation Strategy

14275/JJ/25/DS

Intégral
Géotechnique

CLIENT:	**Walters Land Limited**
PROJECT:	**Former Hoover Candy Site, Merthyr Tydfil**
TITLE:	**Geoenvironmental & Geotechnical Site Investigation and Otline Remediation Strategy**
JOB NO:	**14275**
DOCUMENT REF:	**14275/JJ/25/DS**

Revision	Purpose Description	Originated	Reviewed	Authorised	Date
0	Final	LP/JJ	RB	HP	Feb' 2025

Geotechnical Engineers:

Intégral Géotechnique (Wales) Limited
Integral House
7 Beddau Way
Castlegate Business Park
Caerphilly
CF83 2AX

Tel: 029 2080 7991

CONTENTS

CONTENTS (CONTINUED)

APPENDICES

FIGURES

1.0 INTRODUCTION

1.1 GENERAL

Walters Land Limited are proposing to redevelop the former Hoover Candy factory site in Merthyr Tydfil for residential end use. The location of the site is shown in Figure 1. A site plan showing the red line planning boundary is provided in Figures 2A and 2B.

Previous desk study and preliminary site investigation works have been undertaken at the site by Redstart / WSP and Quantum Geotechnic Limited, on behalf of Merthyr Tydfil County Borough Council.

Intégral Géotechnique (Wales) Limited are the appointed Geotechnical and Geo-environmental Consultants and have been commissioned by Walters Land Limited to review the available site investigation reports and to provide a Geoenvironmental and Geotechnical Site Investigation and Preliminary Remediation Strategy Report to support an outline planning application for the proposed redevelopment of the site. This document, by reference to the available site investigation data, provides information to enable a geotechnical and geoenvironmental appraisal of the site and provide a basis for any remediation and reclamation requirements and development design.

This report presents the findings of the available site investigation and discusses the geotechnical and geoenvironmental aspects of the project. This report also assesses the potential ground subsidence risk associated with historic coal mining related activities.

In this report, reference has been made to (and extracts taken from) the following available reports which have all been novated to our client (Walters Land Limited). For completeness, this document should be read in conjunction with the existing previous reports, which are listed below.

- Preliminary Sources (desk) Study Report prepared by Redstart / WSP of behalf of Merthyr Tydfil County Borough Council, Doc Ref: GC-4004-RED-75-XX-RP-L-001, dated March 2022
- Ground Investigation Factual Report prepared by Quantum Geotechnic Limited on behalf of Merthyr Tydfil County Borough Council, Report Ref: Q0838/FR (version 02), dated January 2023
- Ground Investigation Report (Draft) prepared by Redstart / WSP on behalf of Merthyr Tydfill Conty Borough Council, Doc Ref: GC-4005-RED-75-XX-RP-0002, Revision P01, dated November 2022.

1.1 GENERAL (CONTINUED)

- Ground Investigation Report (Final) prepared by Redstart / WSP on behalf of Merthyr Tydfill Conty Borough Council, Doc Ref: GC-4005-RED-75-XX-RP-0002, Revision P02, dated February 2024.

This report (including all appendices to it and any subsequent addendums or correspondence) has been prepared for the sole benefit, use and information of Walters Land Limited and no third party is entitled or permitted to rely on it. This report may not be used, reproduced or circulated (in whole or part) for any purpose without the written consent of Intégral Géotechnique (Wales) Limited. Intégral Géotechnique (Wales) Limited shall not be liable to any third party who does not have such express written permission to rely on the report for any losses they may suffer.

1.2 PROPOSED DEVELOPMENT

The site comprises three separate land parcels as follows: (1) the main former Hoover Candy factory area – to the west of Merthyr Road, (2) former car park area – to the east of Merthyr Road, and (3) former pumping station area – to the east of the Merthyr Road.

The vast majority of the site comprises the former Hoover Candy factory site area. The redevelopment proposals across this area of the site include the demolition of existing structures, site reclamation earthworks and the construction of residential housing with associated infrastructure such as access roads and car parking areas.

It is understood that future employment/commercial development is proposed on the smaller land parcels to the east of Merthyr Road.

A Development Framework Parameter Plan has been prepared by Hammond Architectural Limited, in Drawing No. DFP 01, Revision B, dated March 2025, and a copy presented in Appendix A.

1.3 SCOPE OF WORKS

The work instructed included a review of available information, as listed previously, followed by geotechnical and geoenvironmental reporting.

The desk study prepared originally by Redstart on behalf of Merthyr Tydfil County Borough Council comprised a review of:

- A Groundsure Report obtained for the site,

1.3 SCOPE OF WORKS (CONTINUED)

- Old Ordnance Survey maps covering the site, included within the Groundsure Report,
- A Radon GeoReport obtained from the British Geological Survey,
- A Consultants Coal Mining Report obtained from the Mining Remediation Authority,
- Geological maps of the area provided by the British Geological Survey,
- the Natural Resources Wales groundwater vulnerability map and aquifer database for the area,
- Existing site investigation data.

An updated Consultants Coal Mining Report and an updated BGS Radon GeoReport have been obtained as part of this review.

The desk study information was used to make an initial assessment of the site and to design an intrusive investigation. The intrusive investigation was designed by Redstart and carried out by specialist contractor Quantum Geotechnic Limited (QGL). The results of the intrusive works were presented within Report Ref: Q0838/FR, dated January 2023. The site investigation was designed in accordance with BS 5930:2015+A1:2020, the Code of Practice for Site Investigations, BS10175:2011+A2:2017, the code of practice for investigation of potentially contaminated sites, and 'Development of Land Affected by Contamination: A Guide for Developers' prepared by Welsh Local Government Association (WLGA)/Natural Resources Wales (NRW) Land Contamination Working Group, 2017.

The site investigation works were planned to reflect the variation in site uses. The various site areas considered were:

- Main Hoover site consisting of production and warehouse facilities,
- Hoover playing fields,
- Hoover car park,
- Hoover pumping station.

Following minor vegetation clearance, the intrusive site investigation works were undertaken between 27th June and 28th July 2022 and included:

- 5 No. cable percussive rotary follow-on boreholes,
- 6 No. internal dynamic sample rotary probe boreholes,
- 6 No. cable percussive boreholes (including 3 No. attempted re-drills following early termination upon refusal),
- 9 No. rotary core/rotary probe openhole boreholes,
- 36 No. windowless sample boreholes,

1.3 SCOPE OF WORKS (CONTINUED)

- 14 No. machine excavated trial pits,
- 9 No. in-situ variable head permeability tests,
- 28 No. installations of single or double gas/groundwater monitoring wells in selected boreholes, followed by groundwater and ground gas monitoring,
- Laboratory chemical and geotechnical testing.

1.4 LIMITATIONS

This document is intended to be a working document for further development in discussion with all concerned including the Local Planning Authority, Natural Resources Wales, the Mining Remediation Authority and the building control authority as appropriate.

"Contamination" is taken throughout the report to mean the "presence of one or more potentially harmful substances as a result of human activity". The use of the term in this way does not imply that harm is being or might be caused by the contamination. It should be noted that "contamination" can have different meanings under different regulatory regimes, for example, planning, building control and Part IIA of the Environmental Protection Act 1990. Naturally elevated concentrations of potentially harmful substances may also be of concern and the significance of any that have been found is also evaluated in this report.

It is important to recognise that there may be areas of contamination that have not been found, or that contaminants are present at concentrations above those that have been found. It is also important to recognise that contamination may be localised and that no investigation, however comprehensive, is capable of finding such occurrences other than by chance.

It should also be noted that vertical and lateral changes in ground conditions may be present between exploratory hole locations.

Access for the intrusive site investigation was limited at the time due to active and vacant buildings, areas of hardstanding and services.

2.0 THE SITE

2.1 SITE LOCATION AND DESCRIPTION

The site is located on the southern edge of Merthyr Tydfil at a National Grid Reference of 305737, 204199, see Figure 1.

The site comprises three separate land parcels as follows: (1) the main former Hoover Candy factory area – to the west of Merthyr Road, (2) former car park – to the east of Merthyr Road, and (3) former pumping station – to the east of the Merthyr Road. A site plan is presented in Figure 2.

The site is situated on ground which typically rises to the north from an approximate minimum elevation of 151m AOD in the south to an approximate maximum elevation of 162m AOD in the north.

The main site area comprises the former Hoover Candy manufacturing plant including the manufacturing plant to the south and the assembly plant to the north with an access road to separate the two plant buildings.

The southern area of the site is developed for use as a bowling green, pavilion and cricket pitch. In between the bowling green and Pentrebach station is an area of rough ground which is used for storage. Another storage area is located to the north of the bowling green at the location of former tennis courts. A burning area is located to the rear of the pavilion and a helipad is located on the northern edge of the cricket pitch.

A car park, former social club and gatehouse is located in between the cricket pitch and the Hoover manufacturing plant area. A new storage building which was formerly a polystyrene plant lies to the west of the car park and the social club.

There are access roads from the site entrance via Merthyr Road to east. The access roads follow the external areas of the plant and are typically of concrete construction and in a poor state of repair with many cracks and areas of settlement. The subsurface drainage was also considered to be potentially blocked.

To the west of the main manufacturing plant there are a number of disused buildings and tanks where chemical processes were undertaken. The plant buildings have significant asbestos sheet content such as roofing and cladding, but it is understood that most of the loose fibre material has been removed. Within the manufacturing plant several of the pits where presses and sumps were formerly present have been infilled with concrete.

2.1 SITE LOCATION AND DESCRIPTION (CONTINUED)

A Western Power Distribution (WPD) transformer station and fixed gas cylinder storage area is located to the west of the assembly plant area.

Two bridges exit the manufacturing plant to cross the River Taff. One bridge has been demolished to the east bank and these other is proposed to be removed at a later date. The bridge which joins the manufacturing and assembly plants is still in place.

The ground level increases in the southern part of the assembly plant with the southern part of the plant split level with an internal access ramp to access the plant floor.

Due to the rising ground levels, as discussed previously, a short retaining wall is present along much of the eastern boundary which increases in height to the north. A disused second exit with associated gatehouse and weighbridge is located within the north western corner of the site.

Additional smaller areas adjacent to the main site area also fall within the development boundary. A water pumping station is located to the east of the site and to the east of Merthyr Road and is linked to the former manufacturing plant by a tunnel. The ground level to the east is lower than the level along Merthyr Road. The former plant car park is located to the east of Merthyr Road and to the northeast of the site. The car park follows the gradient of Merthyr Road and rises to the north. The asphalt surfacing of the car park is deteriorated and has shrubs breaking through. An electricity pylon is located on the eastern edge of the car park and a gas pipeline marker was observed to the west of the site in line with the electricity pylon.

2.2 SITE OPERATIONS

The main site area is still occupied by the Hoover manufacturing and assembly plant buildings, but operations have ceased. The cricket ground within the southern area is also now disused.

2.3 SURROUNDING LAND USE

The surrounding areas are typically developed for commercial use with residential development to the southeast of the site and beyond the river to the southwest.

2.4 CONSULTATIONS WITH REGULATORS

A pre-application enquiry was made to the Coal Authority by Redstart/WSP following submittal of their Preliminary Sources (desk) Study Report and draft Ground Investigation Report.

Following receipt of the pre-application enquiry response and a review of the comment received therein, Redstart / WSP issued a revision to their Ground Investigation Report, as presented in Doc Ref: GC-4005-RED-75-XX-RP-0002, Revision P02**,** dated February 2024.

3.0 SITE HISTORY

The recent history of the site has been traced with the aid of a Groundsure Report, which was obtained previously as part of the Redstart Preliminary Sources (desk) Study Report, which contained historical maps of the area dated between 1875 and 2022. The full range of historical maps and discussion is presented within the Preliminary Sources (desk) Study Report Doc Ref: GC4005-RED-75-XX-RP-L-001, dated March 2022. Features such as shafts and levels, water features and buildings, and their approximate locations are discussed in the following commentary, but the maps and original desk study should be viewed to observe their more accurate locations and for more detailed context. A copy of the Groundsure Report is presented in Appendix B. The history of the site can be summarised as follows:

- The earliest edition of the map dated 1875 indicated that the main site area was largely undeveloped with areas of rough grass and spoil mounds. A number of tramways crossed the site particularly within the southern area which were used to deposits the spoil. A surface water feature also flowed approximately through the centre of the main site and across the southern area which separated the worked area of the site from an open green space with some trees. A sluice from an adjacent weir which flowed into Pentre-bach Dock Feeder flowed across the northern corner of the main site and then turns south to continue through the northeast additional site area. A road also crossed the additional northeast area. The tramways that cross the site connect Pentre-bach Iron Works to the southeast to Upper Abercanaid Pit to the west. They also link into the Taff Vale Railway which formed the west and southwest boundary of the site. The River Taff flows parallel to the railway. The tramways crossed the river via an existing bridge to the southwest of the main site area. Plymouth Iron Works is located approximately 250m to the north and Clyn-mil Pit is operational approximately 300m to the northeast. Residential development in the form of terraced properties are indicated to the east of the site within Upper Pentre Bach. Pentre-bach School is also located to the east. The properties are also present within the area of the additional eastern land parcel which is included as part of the site. Old shafts and levels were indicated to the north and northeast of the site. Abercanaid was well-established beyond the river to the south of the site.

3.0 SITE HISTORY (CONTINUED)

- The 1900 edition of the map indicated that the spoil mounds remained within the site but that some of the associated tramways had been removed. The surface water features remained within the site. Pentre-bach Iron Works was no longer present to the southeast but Upper Abercanaid Pit was still operation to the west. The tramways that remained across the site linked Upper Abercanaid Pit to a new Brick Works located in the vicinity of the former ironworks. A station had now been constructed at the southern corner of the main site adjacent to the railway line. Plymouth Iron Works to the north was no longer present and Clyn-mil Pit to the northeast was now disused.

- The 1919 edition of the map indicated some reprofiling of the spoil mounds within the site. There was evidence that the surface water feature which flowed through the site had been partially culverted. The two additional parcels of land to the northeast and east remained relatively unchanged. Upper Abercanaid Pit was disused by this time.

- It is understood that the first buildings were constructed with the main site area circa 1948. The 1964 edition of the map indicated two large factory buildings within the main site area and with some smaller buildings present around the main buildings. Access to the buildings was gained via Merthyr Road to the northeast. The northern area of the main site was indicated to be a slag heap. The northeast land parcel had been slightly reprofiled but remained undeveloped and the eastern land parcel was also undeveloped. The southern area of the site had been redeveloped as a sports ground which included a bowling green, a putting green and a pavilion. The former surface water features had been removed or diverted from beneath the site area. The road infrastructure had been improved as part of the redevelopment of the area which included a new roundabout adjacent to the southeast corner of the site. Development continued in the vicinity of the site including a factory beyond the road to the east. A pump house had been constructed to the northeast of the site in the area of the old shafts.

- By the 1972 edition of the map the northern assembly plant building had been constructed. New access had also been constructed into the site from the north and an improved road crossed the northeast additional site area. An overhead electricity line was indicated to cross the northern area of the site, and an electricity substation was located on the western edge. An additional small factory building had been constructed within the southern area of the site in between the sports ground and the main factory building.

3.0 SITE HISTORY (CONTINUED)

- The 1986 edition of the map indicated that the two original factory buildings had been joined to create one large building. There were two main buildings now within the main site area (the manufacturing and assembly plants) configured as they are in the present day. More factory units had been constructed beyond the river to the west of the site with a footbridge access across the river from the main site area. A new roundabout had been constructed adjacent to the northern boundary of the site. By this stage a pumping station which included a tank had been constructed within the eastern land parcel.

- The site has remained relatively unchanged between the late 1980's and the present day with the northeast land parcel utilised as a car park by the 1990's. development continued with new factory buildings constructed to the east of the site. The large factory located beyond the river to the west was demolished to slab level by 2016 and was fully cleared by 2019 in preparation for future redevelopment. The footbridge which connected into the main site area was no longer evident by the 2021 aerial photo.

4.0 SITE ENVIRONMENTAL SETTING

4.1 PHYSICAL SETTING

The site is located within a mainly commercial setting on the southern edge of Merthyr Tydfil at the head of a deep valley within the upland plateau of the South Wales Coalfield.

The site is situated on ground which typically rises to the north from an approximate minimum elevation of 150m AOD in the south to an approximate maximum elevation of 161m AOD in the north.

4.2 GEOLOGY

The 1:50,000 and 1:10,560 scale (Sheet No. SO 00 SE) geological maps of the area indicate that the majority of the site is underlain by bedrock strata of the South Wales Middle Coal Measures Formation of the Carboniferous period. However, the northern area of the site is indicated to be underlain by South Wales Lower Coal Measures Formation of the Carboniferous period. These strata typically comprise grey productive coal-bearing mudstones/siltstones, with seatearths and minor sandstones.

The northwest to southeast orientated Merthyr Church Fault is located approximately 100m to the northeast of the site.

The geology maps indicate strata dips in the area to be between 4^{o} and 10^{o} to the south and southeast.

The geological maps indicated a number of coal seams to outcrop beneath the site. These range from the Two Feet Nine (in the southern area of the site) down to the Amman Marine Band (AMB) 'on coal' seam in the north. A summary of the coal seam stratigraphy underlying the site (in stratigraphical order), as detailed on the geological maps, is as follows:

- The conjectured outcrop of the Two Feet Nine is shown crossing the southern half of the site, in a roughly east to west orientation. The generalised vertical section (GSV) shown on the geological maps indicates this coal seam to be approximately 0.80m thick.
- The conjectured outcrop of the Four Feet coal seam is shown crossing the southern half of the site. The GSV indicates this coal seam to be approximately 1.80m thick.

4.2 GEOLOGY (CONTINUED)

- The conjectured outcrop of the Upper Six Feet coal seam is shown crossing the central area of the site. The GSV indicates this coal seam to be approximately 0.90m thick.
- The conjectured outcrop of the Lower Six Feet coal seam is shown crossing the central area of the site. The GSV indicates this coal seam to be approximately 1.20m thick.
- The conjectured outcrop of the Nine Feet coal seam is shown crossing the northern area of the site. The GSV indicates this coal seam to be present as multiple leaves, with a combined thickness of approximately 3.70m.
- The conjectured outcrop of the Bute coal seam is shown crossing the northern area of the site. The GSV indicates this coal seam to be present as multiple leaves, with a combined thickness of approximately 1.20m.
- The conjectured outcrop of the Amman Marine Band (AMB) on Coal is shown crossing the northern area of the site. The GSV indicates this coal seam to be approximately 0.50m thick.

In addition to the above, the Seven Feet coal seam (approximately 1.20m thick) is indicated to outcrop approximately 250m north of the site. The GSV also indicates the presence of three unnamed thin coal seams to be present between the Lower Six Feet and the Nine Feel coal seams.

All the conjectured coal seam outcrops are indicated to terminate up against the Merthyr Church Fault to the east of the site.

Superficial deposits comprising Alluvium of the Quaternary period area indicated to overlie the bedrock strata beneath the site. Alluvium is a general term for clay, silt, sand and gravel. It is the unconsolidated detrital material deposited by a river, stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain or delta, or as a cone or fan at the base of a mountain slope. Synonym: alluvial deposits. Normally soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present.

A variable thickness of made ground is anticipated above the superficial deposits. These deposits are likely associated with the historical site uses and the construction of the factory buildings.

A summary of the anticipated geological succession is given below in Table 1.

4.2 GEOLOGY (CONTINUED)

Table 1 : Summary of Anticipated Site Geology		
Geological unit	**Horizon**	**Description**
Recent	Made ground	Various materials
Quaternary	Alluvium	Soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present
Carboniferous	South Wales Middle Coal Measures Formation and South Wales Lower Coal Measures Formation (northern edge)	Grey productive coal-bearing mudstones/siltstones, with seatearths and minor sandstones.

4.3 RADON

Information with regard to Radon Protective Measures is provided within the updated BGS Radon GeoReport a copy of which is presented in Appendix C. The report states that the site is located within a lower probability area, as less than 1% of properties are above action level, and that therefore no radon protective measures would be necessary in the construction of new buildings within the site.

4.4 MINING

The site is located within a coal mining reporting area and therefore a Consultants Coal Mining Report has been obtained from the Coal Authority and a copy is included in Appendix D.

An appraisal of the mining data and its significance is presented within Coal Mining Risk Assessment report Ref: 14275/JJ/25/CMRA, dated February 2025. The Coal mining risk assessment should be read in conjunction with this report.

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK

A network of unnamed minor drainage features and streams flow from the hillside to the east towards the River Taff, which is the primary surface water feature in the area flowing in a southerly direction to the west and southwest of the site and approximately following the path of the railway line.

The Natural Resources Wales groundwater vulnerability map and aquifer database classifies the bedrock beneath the site as a Secondary 'A' Aquifer. Secondary 'A' Aquifers are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

The Natural Resources Wales groundwater vulnerability map and aquifer database also classifies the superficial deposits beneath the site as Secondary 'A' Aquifer.

A perched water body could be encountered within the made ground. This would particularly be associated with the cohesive nature of the underlying Alluvium deposits.

It is considered possible that the existing site drainage could act as a pathway for potential surface contaminants.

The Groundsure Report indicates that there are no active discharge consents recorded within 250m of the site boundary.

The Groundsure Report states that there are no active groundwater or surface water abstractions recorded within 1km of the site boundary. The nearest historical groundwater abstraction is recorded 315m to the west with the water used for general washing/process washing. The nearest historical surface water abstraction is recorded 341m to the west from Nant Canaid at Glyn-drys with the water used for general use by Hoover.

Tables 2 and 3 present a summary of the hydrological features and key hydrogeological nature of the site.

4.5 HYDROLOGY, HYDROGEOLOGY AND FLOOD RISK (CONTINUED)

Table 2: Summary of Site Hydrology					
Feature	Distance from site	Flow	Classification	Abstraction	Discharge
River Taff	Approx. 20-50m to the west and southwest	Southerly	Inland river	No	Cardiff Bay
Surface run-off	On site	Flows into site drainage	N/A	No	Not known
Site Drainage	On site	Not known	N/A	No	Not known

Table 3: Summary of Site Hydrogeology				
Geological Unit	Aquifer Classification	Aquifer Characteristics	Source Protection Zone	Groundwater Abstractions
Made ground	Not classified	Highly variable permeability and porosity. Perched water may be present with variable flow directions.	No	None
Alluvium	Secondary A Aquifer	Variable moderate permeability and porosity with intergranular flow possible. High clay content likely to restrict flow.	No	None
South Wales Middle and Lower Coal Measures Formation	Secondary A Aquifer	Variable moderate permeability coal-bearing mudstones/siltstones and sandstones capable of supporting water supplies at a local rather than strategic scale	No	None

The Groundwater Vulnerability map of the area indicates the secondary bedrock aquifer to have a low vulnerability and the secondary superficial aquifer to have a low to medium vulnerability. The pollutant speed is intermediate with well-connected fractures.

The risk of river and coastal flooding is high along the western and south western boundary of the site associated with the location of the River Taff.

The highest risk on site with regards to surface water flooding is a 1 in 30-year return period at depths greater than 1.0m. The highest risk on site with regards to groundwater flooding is low.

4.6 LANDFILL SITES

The Groundsure Report indicates that there are no active, recent or historical landfill sites located within 500m of the site boundary.

There is one historical waste site located 4m northeast within Triangle Business Park. The entry refers to an historic planning application for a waste storage facility.

The Groundsure Report also discusses waste exemptions within 50m of the site boundary including three exemptions on site. Two exemptions are tied to the Hoover Factory for sorting mixed waste and preparatory treatments. Another on site exemption is tied to Pentrebach and is also a treating waste exemption for preparatory treatments. Two off site exemptions relate to R Tek for both treating and storage of waste.

4.7 POTENTIAL CONTAMINATION

Previous Uses

The various activities in the vicinity of the site which may have resulted in ground or water resource contamination on this site are listed below in Tables 4 and 5. Reference to Department of the Environment Industry Profiles has been made and a summary of the potential contaminants can be found in the tables.

Table 4: Potential Contaminants

Land Use: Spoil heaps and tramways from pre-1880		
Material/Process	**Contamination/Hazard**	**Evidence**
Spoil heaps present across the site likely to be derived from the collieries and the iron works	Metals, semi metals, non-metals, PAH, asbestos	Historical maps
Use and maintenance of the tramways and potential for leakage of fuel/oil	Petroleum hydrocarbons, creosotes, solvents, herbicide and asbestos	D of E Industry Profile
Undeveloped parkland across the southern area	No potential contaminants	History maps

4.7 POTENTIAL CONTAMINATION (CONTINUED)

Table 4: Potential Contaminants (Continued)		
Land Use: Construction of factory buildings from 1940's to late 1980's		
Material/Process	**Contamination/Hazard**	**Evidence**
Construction of the factory buildings which would have disturbed the ground and potential use of imported materials of unknown origin	Metals, semi metals, non-metals, PAH, asbestos	Historical maps
Contamination in relation to manufacturing processes within the factory buildings. This includes painting and metal plating processes, lubricant oil stores, effluent plant, concrete plant, battery storage, polystyrene plant and on-site electrical transformers. Also, with known fuel and chemical storage, diesel tanks, fuel tanks and lime tanks.	Metals, semi metals, non-metals, PAH, petroleum hydrocarbons, VOC's, SVOC's, BTEX and PCB's	Historical maps and known site uses
Southern area of the site which was developed as a sports ground with associated bowling green, putting green and pavilion building. These works would have disturbed the ground and may have utilised imported materials of unknown origin.	Metals, semi metals, non-metals, PAH, asbestos	Historical maps

Existing Uses

The operations on site have ceased. The current site uses would not add any additional contamination concerns.

Adjacent Site Uses

Table 5: Potential Contaminants: Adjacent Site Uses		
Potential Contamination Source	**Boundary**	**Associated Contaminants and Hazards**
Railway line	Western and south western	Metals, semi metals, non-metals, PAH, asbestos
Roundabout and road junction	Northern	No Potential Contaminants
Merthyr Road and another road along the edge of the former car park area	North eastern	No Potential Contaminants
Road network and roundabout	South western	No Potential Contaminants

4.8 OTHER ENVIRONMENTAL ISSUES

The Groundsure Report indicates that there is no environmentally sensitive land within 250m of the site boundary. The nearest area which is registered as a Site if Special Scientific Interest (SSSI) is located 478m to the west at Cwm Glo a Glyndrys. There are also areas of ancient woodland recorded within 2km of the site boundary with the nearest area located 358m to the west.

The Groundsure Report indicates one substantiated pollution incident to have been recorded on site. The incident involved contaminated water from firefighting run-off which caused a minor impact on water, no impact on land and a significant impact to air. An additional four incidents were recorded within 250m of the site boundary with impacts ranging from none to minor.

There are a number of registered industrial uses on site including the railway station, tanks, electricity substations, the Hoover factory buildings and a gas governor.

The Hoover factory had an historical permit for the release of substances into the environment for coating processes.

5.0 PRELIMINARY CONCEPTUAL SITE MODEL

5.1 RISK ASSESSMENT FRAMEWORK

In order to be consistent with current UK government policies and legislation, it is necessary to identify, assess, estimate, evaluate, and take appropriate action to deal with land contamination, in accordance with the procedures specified in the Environment Agency guidance Land Contamination Risk Management (LCRM) published in October 2020. This replaces the now withdrawn 'Model Procedures for the Management of Land Contamination CLR-11' (Environment Agency 2004).

The risk assessment process is designed to provide a reasoned, structured and pragmatic mechanism for the identification of any potential human health and controlled waters risks associated with land contamination and where necessary to develop a robust remediation strategy to ensure protection of the sensitive receptors (human health of future residents, controlled waters, etc).

In accordance with LCRM, the term 'land contamination' is defined as:

- All land affected by contamination – land that might have contamination present which may, or may or may not, meet the statutory definition of contaminated land,
- Land determined as contaminated land under Part 2A of the Environmental Protection Act 1990.

LCRM provides a tiered approach to risk assessment, comprising a preliminary risk assessment (including the development of an initial conceptual site model), a generic quantitative risk assessment and a detailed quantitative risk assessment. For each tier of risk assessment, the following steps must be followed:

1. Identify the hazard - establish contaminant sources,
2. Assess the hazard – use a source-pathway-receptor linkage approach to determine if there is potential for unacceptable risk,
3. Estimate the risk – predict what degree of harm or pollution may result and how likely it is to occur, and
4. Evaluate the risk – decide whether a risk is unacceptable.

LCRM also provides definitions of the following terms:

- Hazard – a property or situation that in particular circumstances could lead to harm or pollution,

5.1 RISK ASSESSMENT FRAMEWORK (CONTINUED)

- Risk – a combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence,
- Risk assessment – the formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard,
- Risk management – the formal process to identify, assess and determine the risks, and to select and take action to mitigate them.

The three essential elements to any risk are defined by LCRM as follows:

- A contaminant, or pollutant, that is in, on, or under the land and that has the potential to cause harm, or pollution (Source)
- A route by which a receptor is, or could be affected by a contaminant (Pathway)
- A receptor, i.e. something that could be adversely affected by a contaminant, for example a person, controlled waters, an organism, an ecosystem, or Part 2A receptors such as buildings, crops or animals (Receptor).

In order for there to be a potential risk, all three of the above elements must be present. If there is a source of contamination and a receptor (for example a resident or site user), then there is only a potential risk if there is a pathway linking the two. Such an active pathway is known as a relevant pollutant linkage. It is possible for the same contaminant to be linked to a receptor via a number of pathways, and hence it is important that all relevant pollutant linkages, to both human health and controlled waters, are separately identified on a site in order that a comprehensive conceptual model can be formed and ultimately a robust remediation strategy designed.

Current practice during Generic Quantitative Risk Assessment of land affected by contamination is to use generic soil screening values based on the appropriate proposed end use. These usually comprise risk-based Soil Guideline values (SGVs) or Generic Assessment Criteria (GACs) derived by the Environment Agency's Contaminated Land Exposure Assessment Model (CLEA). The SGVs and the supporting technical guidance were developed in order to assist in the assessment of long-term risk to human health from the exposure to contaminated soils.

Revised Statutory Guidance, published in 2012, to support Part 2A of the Environmental Protection Act 1990, introduced a new four category system for classifying land under Part 2A. Category 1 includes land where the level of risk is clearly unacceptable and Category 4 includes land where the level of risk posed is considered to be acceptably low. Under Part 2A, land would be determined as contaminated if it falls within Categories 1 or 2.

5.1 RISK ASSESSMENT FRAMEWORK (CONTINUED)

The revised Part 2A Statutory Guidance was accompanied by an Impact Assessment that identified a role for new 'Category 4 Screening Levels' (C4SLs) that would provide a simple test for determining when land is suitable for use and definitely not contaminated land. A Policy Companion Document including the C4SLs was published in March 2014 (England) and May 2014 (Wales).

The C4SLs have been based on the CLEA methodology and derived using the CLEA model, with modified toxicological and exposure parameters. To date, C4SLs have been released for six substances (arsenic, cadmium, chromium (VI), lead, benzo(a)pyrene and benzene).

The C4SLs have been derived on the assumption that where they exist, they will be used as generic screening criteria within generic quantitative risk assessment.

Following publication of the C4SLs, Land Quality Management (LQM), in conjunction with the Chartered Institute for Environmental Health (CIEH) released Suitable 4 Use Levels (S4ULs) in January 2015.

The S4ULs have been derived in accordance with UK legislation, and using a modified version of the Environment Agency's CLEA software. As such, the S4ULs are based on the concept of minimal or tolerable risk as described in Human Health Toxicological Assessment of Contaminants in Soil (Science Report SR2, Environment Agency 2009a).

S4ULs have been derived for a wider number of substances.

In addition to the existing SGVs, C4SLs and S4ULs, Atkins ATRISK^{soil} also provide a set of Soil Screening Values. These are currently intended to be used in conjunction with SGVs, although they intend to update these values in line with the C4SLs in due course.

We have reviewed all sets of values and intend to use the most appropriate assessment criteria as Tier 1 screening values in the first instance. Where a published S4UL is available, and considered appropriate, this will be used in the first instance.

5.2 CONCEPTUAL MODEL FRAMEWORK

The preliminary stage of the risk assessment process is to develop and define a conceptual site model, based on the desk study and any existing site investigation data. This is used to establish any potential contaminant sources, identify existing and future receptors and assess if there are any potentially active pathways by which a potential risk may be present.

5.2 CONCEPTUAL MODEL FRAMEWORK (CONTINUED)

The preliminary conceptual site model will be developed and refined as site specific data is gathered, such as actual ground conditions and chemical data, resulting in a more robust conceptual understanding of the site.

5.3 CRITICAL SENSITIVE RECEPTOR – HUMAN HEALTH

The proposed redevelopment of the main site area is for a residential end use with the northeast land parcel to be developed for commercial end-use. Therefore, the critical sensitive receptor from a human health perspective is an on-site residential receptor as this would be the most sensitive scenario.

In accordance with S4UL/C4SL and CLEA guidance for a standard residential with homegrown produce scenario, the critical sensitive receptor for a residential end use risk assessment is a female child, with exposure from 0 to 6 years. For any areas which are to be developed for commercial end use a second screen can be adopted. The critical sensitive receptor for commercial end use risk assessment is a female adult, with exposure from 16 to 65 years.

The standard residential with home grown produce end use conceptual model defined by S4UL/C4SL and CLEA is assumed to be suitable for the purposes of this assessment. A secondary assessment based on a commercial end use can be utilised as necessary.

5.4 CRITICAL SENSITIVE RECEPTOR – CONTROLLED WATERS

Based on the proposed redevelopment of the site for a mainly residential but with some commercial end use, and the findings of the desk study, the critical sensitive receptor from a controlled water perspective is groundwater within the Secondary 'A' Aquifer of the Alluvium and the underlying South Wales Middle and Lower Coal Measures Formation.

By considering groundwater as the critical sensitive receptor for controlled waters, the groundwater/hydrogeological risk assessment will also be protective of the River Taff which flows to the west of the site.

5.5 POTENTIAL CONTAMINANT SOURCES

As identified in the desk study, the site has been subject of to a number of historical potentially contaminative uses. Spoil heaps were present across the site from pre-1880 with the spoil generated from the nearby collieries and ironworks.

5.5 POTENTIAL CONTAMINANT SOURCES (CONTINUED)

Construction of the Hoover factories commenced in the 1940's and continued until the late 1980's. The factory buildings were utilised for a number of processes which would have potential to cause contamination.

The potential types of contaminants of concern are listed below:

- Metals, semi-metals, and inorganics within the shallow made ground,
- Polyaromatic hydrocarbons (PAH) within the shallow made ground,
- Petroleum Hydrocarbons (VPH/EPH) and BTEX within the shallow made ground,
- Volatile and Semi Volatile Organic Compounds (VOC/SVOC) within the shallow made ground,
- Polychlorinated Biphenyls (PCBs) within the shallow made ground in the vicinity of electrical transformers,
- Asbestos within the shallow made ground.

The presence of gases such as methane and carbon dioxide should also be considered due to the presence of thick made ground and shallow underground coal workings which would be a potential source of mine gas.

5.6 POTENTIAL EXPOSURE PATHWAYS

Potential exposure pathways for the critical receptors (both human health and controlled waters) are listed below:

- Dermal contact with soil and/or soil derived dust,
- Ingestion of soil and/or soil attached to home-grown produce,
- Ingestion of home-grown produce,
- Inhalation of soil derived dust,
- Inhalation of vapours – indoor and outdoor air,
- Leaching of contaminants from made ground to groundwater,
- Transportation of contaminants within groundwater.

In addition, the following exposure pathways have also been considered:

- Ground gas generation and migration
- Building materials durability.

5.7 SUMMARY OF CONCEPTUAL EXPOSURE MODEL

A preliminary conceptual exposure model has been developed for the site. This is based on the findings of the desk study and historical review and includes all potential sources, pathways and receptors that may be present on site. Those that have been identified as being potentially active require further investigation in the form of sampling and testing of soils and groundwater, followed by appropriate risk assessment.

The preliminary conceptual exposure model will be reviewed and refined following the completion of the site works and laboratory testing.

The preliminary conceptual exposure model is presented below in Table 6.

Table 6: Preliminary Conceptual Exposure Model

Source		Receptor	Pathway	Potentially Active Pathway?
Origin	Contaminant			
Made Ground of unknown origin and historical land uses	Metals, semi-metals, non-metals, PAH, petroleum hydrocarbons, BTEX, VOC/SVOC, PCB, asbestos	Resident – human health	Dermal Contact with made ground/dust	✓
			Ingestion of soil and/or soil attached to home-grown produce	✓
			Ingestion of home-grown produce	✓
			Inhalation of dust	✓
			Inhalation of vapours – indoor/outdoor	✓
	Metals, semi-metals, inorganics, PAH, petroleum hydrocarbons, BTEX, VOC/SVOC	Groundwater quality	Leaching from made ground	✓
	Metals, semi-metals, inorganics, PAH, petroleum hydrocarbons, BTEX, VOC/SVOC	Surface water quality	Transportation within groundwater	✓
Made Ground of unknown origin and natural ground	pH and water-soluble sulphate	Building Materials Durability	Direct contact	✓
Ground and Mine Gas – organic, gas producing materials	Methane, carbon dioxide	Human health	Accumulation of gases in confined spaces, and/or migration off site, leading to asphyxiation, or risk of explosion	✓

6.0 AVAILABLE SITE INVESTIGATION DATA

Quantum Geotechnic Limited Fieldworks

As discussed previously, various reports have been prepared for the site and extensive intrusive site investigation data and test results are available and are the basis for this report. For completeness, this document should be read in conjunction with the existing previous reports. Following minor vegetation clearance, the intrusive site investigation works were undertaken between 27th June and 28th July 2022 and included:

- 5 No. cable percussive rotary follow-on boreholes,
- 6 No. internal dynamic sample rotary probe boreholes,
- 6 No. cable percussive boreholes (including 3 No attempted re-drills following early termination upon refusal),
- 9 No. rotary core/rotary probe openhole boreholes,
- 36 No. windowless sample boreholes,
- 14 No. machine excavated trial pits,
- 9 No. in-situ variable head permeability tests,
- 28 No. installations of single or double gas/groundwater monitoring wells in selected boreholes,
- Groundwater and ground gas monitoring,
- Laboratory chemical and geotechnical testing.

The information from the above intrusive site investigation has been reviewed and the findings have been summarised within this report. The locations of the exploratory holes are shown in Figure 2a and Figure 2b. A summary of the boreholes drilled across the site (including locations, depths, termination stratum, and drilling method) is presented below in Table 7.

Table 7: Summary of Quantum Boreholes

Borehole Ref:	Depth (m)	Termination Stratum	Easting	Northing	Ground Level (m AOD)	Drilling Method
RBH101	45.00	Coal Measures	305961.637	203980.383	149.4	Cable Percussion, Rotary Cored, Rotary Openhole
RBH102	49.00	Coal Measures	305913.62	204047.92	149.9	Cable Percussion, Rotary Openhole
RBH103	42.00	Coal Measures	305732.038	203975.344	151.0	Cable Percussion, Rotary Openhole
RBH104	42.00	Coal Measures	305832.159	204157.051	151.0	Cable Percussion, Rotary Cored, Rotary Openhole
RBH105	30.70	Coal Measures	305892.68	204229.87	149.6	Rotary Cored, Rotary Openhole
RBH106	40.00	Coal Measures	305667.235	204070.361	151.4	Rotary Openhole
RBH107	40.00	Coal Measures	305769.03	204244.24	151.6	Rotary Openhole
RBH108	4.00	Coal Measures	305734.2	204292.11	151.6	Cable Percussion Rotary Openhole

6.0 AVAILABLE SITE INVESTIGATION DATA (CONTINUED)

Table 7: Summary of Quantum Boreholes

Borehole Ref:	Depth (m)	Termination Stratum	Easting	Northing	Ground Level (m AOD)	Drilling Method
RBH108A	36.50	Coal Measures	305734.2	204292.11	151.6	Cable Percussion, Rotary Cored, Rotary Openhole
RBH109	45.00	Coal Measures	305679.576	204398.934	156.4	Rotary Openhole
RBH110	30.00	Coal Measures	305757.347	204474.844	157.2	Rotary Openhole
RBH111	44.00	Coal Measures	305654.79	204446.02	157.3	Rotary Openhole
RBH112	45.00	Coal Measures	305660.771	204594.792	163.2	Cable Percussion, Rotary Cored, Rotary Openhole
RBH113	6.50	Coal Measures	305532.541	204519.788	157.1	Cable Percussion
RBH113A	47.00	Coal Measures	305533.007	204519.788	157.1	Cable Percussion, Rotary Openhole
RBH114	39.00	Coal Measures	305559.13	204604.39	161.3	Cable Percussion, Rotary Openhole
IBH102	30.00	Coal Measures	305698.557	204297.882	151.6	Dynamic Sampling, Rotary Openhole
IBH103	28.50	Coal Measures	305632.05	204236.96	151.7	Dynamic Sampling, Rotary Openhole
IBH104	27.00	Coal Measures	305785.69	204121.64	151.8	Dynamic Sampling, Rotary Openhole
IBH105	31.20	Coal Measures	305831.49	204088.05	151.8	Dynamic Sampling, Rotary Openhole
IBH106	33.00	Coal Measures	305799.99	204064.3	151.8	Dynamic Sampling, Rotary Openhole
IBH107	32.00	Coal Measures	305812.12	204073.67	151.8	Dynamic Sampling, Rotary Openhole
CP101	13.80	Alluvium	305952.611	203879.039	149.9	Cable Percussion
CP102	7.90	Alluvium	305837.706	203910.534	149.8	Cable Percussion
CP103	6.20	Alluvium	305853.802	204060.193	150.9	Cable Percussion
CP104	5.10	Alluvium	305687.254	204049.094	151.3	Cable Percussion
CP105	2.00	Made Ground	305650.55	204121.69	151.3	Cable Percussion
CP105A	3.00	Made Ground	305653.44	204118.32	151.3	Cable Percussion
CP105B	4.05	Alluvium	305647.99	204120.46	151.3	Cable Percussion
CP106	0.90	Made Ground	305619.292	204212.64	151.6	Cable Percussion
CP106A	3.80	Alluvium	305617.907	204214.442	151.6	Cable Percussion
WS101	4.50	Alluvium	305917.882	203992.548	149.6	Windowless Sampling
WS102	4.50	Alluvium	305938.182	203902.958	149.8	Windowless Sampling
WS103	4.30	Alluvium	305874.799	203949.53	149.7	Windowless Sampling
WS104	6.20	Alluvium	305817.55	203996.24	150.7	Windowless Sampling
WS105	6.20	Alluvium	305797.72	204200.51	151.2	Windowless Sampling
WS106	3.55	Alluvium	305854.656	204127.586	151.0	Windowless Sampling

6.0 AVAILABLE SITE INVESTIGATION DATA (CONTINUED)

Table 7: Summary of Quantum Boreholes

Borehole Ref:	Depth (m)	Termination Stratum	Easting	Northing	Ground Level (m AOD)	Drilling Method
WS107	6.00	Alluvium	305797.32	204013.27	151.0	Windowless Sampling
WS108	4.70	Alluvium	305752.512	203963.263	151.0	Windowless Sampling
WS109	5.10	Alluvium	305744.63	204008.85	151.1	Windowless Sampling
WS110	4.50	Alluvium	305705.355	204006.324	151.4	Windowless Sampling
WS111	4.65	Alluvium	305698.51	204035.9	151.3	Windowless Sampling
WS112	2.20	Made Ground	305684.62	204066.93	151.5	Windowless Sampling
WS113	3.30	Alluvium	305680.87	204133.84	150.8	Windowless Sampling
WS114	3.45	Alluvium	305643.455	204148.828	151.0	Windowless Sampling
WS116	3.70	Alluvium	305653.31	204171.16	150.8	Windowless Sampling
WS117	1.70	Made Ground	305613.7	204190.9	151.7	Windowless Sampling
WS118	1.70	Made Ground	305613.676	204190.888	151.7	Windowless Sampling
WS119	3.70	Made Ground	305623.214	204208.001	151.6	Windowless Sampling
WS120	2.40	Made Ground	305636.53	204259.49	151.8	Windowless Sampling
WS121	4.50	Alluvium	305716.72	204281.51	151.7	Windowless Sampling
WS122	2.40	Alluvium	305895.73	204244.41	150.0	Windowless Sampling
WS123	2.00	Made Ground	305909.73	204255.58	150.8	Windowless Sampling
WS124	2.40	Alluvium	305877.98	204214.5	149.4	Windowless Sampling
WS125	2.45	Alluvium	305648.51	204465.93	157.8	Windowless Sampling
WS126	6.20	Made Ground	305648.51	204465.93	157.8	Windowless Sampling
WS127	4.50	Alluvium	305701.3	204344.25	152.8	Windowless Sampling
WS128	4.54	Alluvium	305602.226	204242.38	151.7	Windowless Sampling
WS129	5.55	Alluvium	305581.874	204322.263	155.6	Windowless Sampling
WS130	4.30	Alluvium	305552.884	204472.516	156.9	Windowless Sampling
WS131	4.80	Made Ground	305565.985	204550.626	157.3	Windowless Sampling
WS132	6.20	Made Ground	305700.461	204437.821	156.5	Windowless Sampling
WS133	6.20	Made Ground	305676.399	204482.452	158.0	Windowless Sampling
WS134	6.00	Made Ground	305646.921	204546.577	160.6	Windowless Sampling
WS135	6.00	Made Ground	305623.62	204604.933	162.1	Windowless Sampling
WS136	6.00	Made Ground	305534.69	204618.684	161.0	Windowless Sampling
WS137	6.20	Alluvium	305856.882	204014.021	150.1	Windowless Sampling

6.0 AVAILABLE SITE INVESTIGATION DATA (CONTINUED)

A summary of the machine excavated trial pits carried out across the site (including locations, depths, and termination stratum) is presented below in Table 8.

Table 8: Summary of Quantum Trial Pits

Trial Pit Ref:	Depth (m)	Easting	Northing	Ground Level (m AOD)	Termination Stratum
TP101	4.00	305934.92	204022.256	149.4	Made Ground
TP102	4.00	305990.872	203945.211	149.0	Made Ground
TP103	4.00	305997.061	203881.518	149.9	Alluvium
TP104	4.00	305996.977	203835.083	149.9	Made Ground
TP105	4.00	305952.61	203879.04	149.9	Alluvium
TP106	4.00	305952.611	203879.039	149.9	Made Ground
TP107	4.00	305866.734	203887.106	149.7	Alluvium
TP108	3.20	305806.812	203943.362	149.9	Made Ground
TP109	0.50	305874.799	203988.352	149.6	Made Ground
TP110	4.00	305851.92	204032.732	150.2	Made Ground
TP111	1.00	305546.444	204606.429	161.0	Made Ground
TP112	3.00	305521.679	204618.004	160.2	Made Ground
TP113	3.00	305630.394	204575.629	161.7	Made Ground
TP114	2.00	305684.809	204542.092	160.7	Made Ground

A summary of the groundwater and ground gas monitoring installations is presented below in Table 9.

Table 9: Summary of Quantum Standpipe Installations

Borehole Ref:	Standpipe Ref (M=3 or more rounds of monitoring apply)	Standpipe Depth (m bgl)	Response Zone (m bgl)	
			Top	Bottom
RBH101	A (M)	9.00	5.00	9.00
RBH102	A (M)	22.00	8.50	22.00
RBH102	B (M)	8.50	5.50	8.50
RBH103	A (M)	12.00	6.00	12.00
RBH104	A (M)	36.50	34.00	36.50
RBH104	B (M)	8.00	6.00	8.00
RBH105	A (M)	15.00	13.00	15.00
RBH106	A (M)	14.10	11.10	14.10
RBH106	B (M)	7.00	4.00	7.00
RBH107	A (2 rounds only)	34.00	31.00	34.00

6.0 AVAILABLE SITE INVESTIGATION DATA (CONTINUED)

Table 9: Summary of Quantum Standpipe Installations

Borehole Ref:	Standpipe Ref (M=3 or more rounds of monitoring apply)	Standpipe Depth (m bgl)	Response Zone (m bgl)	
			Top	Bottom
RHB107	B (M)	6.50	5.50	6.50
RBH108	A (M)	12.00	7.00	12.00
RBH109	A (M)	25.00	24.00	25.00
RBH109	B (M)	13.00	12.00	13.00
RBH110	A (M)	25.00	23.00	25.00
RBH111	A (M)	11.00	9.00	11.00
RBH112	A (M)	38.00	37.00	38.00
RBH112	B (M)	13.00	12.00	13.00
RBH113A	A (M)	27.00	25.00	27.00
RBH113A	B (M)	11.00	9.00	11.00
RBH114	A (M)	13.00	10.00	13.00
IBH102	A (M)	26.00	23.00	26.00
IBH103	A (1 dip only)	16.00	13.00	16.00
IBH104	A (3 dips-no gas)	24.00	21.00	24.00
IBH104	B (3 dips- no gas)	8.00	5.00	8.00
IBH105	A (M)	28.00	25.00	28.00
IBH106	A (M)	30.00	27.00	30.00
IBH106	B (M)	9.00	6.00	9.00
IBH107	A (M)	28.70	25.70	28.70
IBH107	B (M)	8.00	5.00	8.00
CP101	A (M)	8.00	5.00	8.00
CP102	A (M)	7.90	4.50	7.90
CP103	A (M)	6.20	1.00	6.20
WS102	A	2.00	1.00	2.00
WS117	A	1.70	1.00	1.70
WS121	A	4.00	1.00	4.00
WS128	A	4.00	1.00	4.00
WS129	A	5.00	1.00	5.00
WS130	A	4.00	1.00	4.00
WS132	A	6.20	3.00	6.20

Following completion of the fieldworks, QGL undertook 4 No. monitoring visits to record ground gas concentrations and groundwater levels within selected borehole standpipes. Those boreholes with three or more monitoring rounds are marked with a 'M' in column 2 of Table 7 above.

The ground gas and groundwater level monitoring rounds were carried out on 26th July 2022, 1st August 2022, 10th August 2022, 17th August 2022, and 23rd August 2022. Not all wells were monitored at each date. Water level only gauging visits commenced earlier than the above dates with the first undertaken on 7th July 2022.

6.0 AVAILABLE SITE INVESTIGATION DATA (CONTINUED)

The gas monitoring comprised testing for methane, carbon dioxide, oxygen, carbon monoxide and hydrogen sulphide using a GA2000 calibrated gas analyser.

Available BGS Borehole Records

BGS records of historical boreholes were obtained and reviewed by Redstart / WSP as part of their desk study. The BGS records were mainly utilised as a source of additional information for the mining assessment.

A total of 84 No. records were identified within 250m radius of the site.

Four of these were confidential and not obtained. A large proportion of the boreholes were unobtainable due to other reasons, including 21 No. by Wardell Armstrong, for a proposed development at Pentrebach.

A further 26 No. records were of depths less than 10m and so of little relevance to the mining assessment. Of the remaining logs, four were located on-site, and 15 No. were outside of the site. All penetrated rockhead. A summary of the pertinent BGS borehole records that have been reviewed (and are considered applicable to the site area) is presented below in Table 10.

Table 10: Summary BGS Borehole Records

Borehole Ref:	Depth (m bgl)	Easting	Northing	Ground Level (m AOD)
SO00SE261	33.50	305930	204240	150.0
SO00SE262	42.10	305700	204420	156.5
SO00SE264	40.10	305720	20500	159.0
SO00SE549	61.00	305650	204280	151.8
SO00SE260	42.30	305880	204150	152.0
SO00SE236	24.00	305950	204300	149.3
SO00SE235	36.30	305970	204210	149.8
SO00SE234	45.40	305930	204120	150.9
SO00SE259	46.70	306000	204030	148.5
SO00SE263	30.70	305820	204420	156.0
SO00SE258	41.12	306080	204020	149.0
SO00SE237	33.00	306050	204200	149.4
SO00SE233	42.30	306050	204140	150.3
SO00SE232	41.70	306100	204070	150.8

The locations of the available BGS borehole recorded are shown in Figure 2a and Figure 2b.

7.0 GROUND CONDITIONS

7.1 SUMMARY OF GROUND CONDITIONS

The ground conditions have been summarised using the existing intrusive site investigation data which includes shallow trial pits excavated to a maximum depth of 4.0m, windowless sample boreholes drilled to a maximum depth of 6.2m, cable percussion boreholes drilled to a maximum depth of 13.8m, dynamic sampling and rotary openhole boreholes drilled to a maximum depth of 33.0m, cable percussion with follow on rotary openhole or cored boreholes drilled to a maximum depth of 49.0m. The full detailed logs are presented within the Ground Investigation Factual Report prepared by Quantum Geotechnic Limited on behalf of Merthyr Tydfil County Borough Council, Report Ref: Q0838/FR, dated January 2023.

The logs from all the exploratory holes are also presented in Appendices E to H. The location of all the exploratory trial pits and boreholes are shown on Figures 2A and 2B.

A summary of the ground sequence and thicknesses encountered across the site is presented below in Table 11.

Table 11: Summary of Ground Sequence and Thicknesses

Strata	Stratum Thickness (m) Average thickness in brackets (m)
Hard surfacing and internal floor slabs	0.05 - 0.30
Topsoil	0.10 - 0.30
Made Ground	1.35 - 9.9 (3.65)
Superficial Deposits-fine grained (silt or clay)	0.05 - 1.5 (0.85)
Superficial Deposits-granular	2.6 – 24.0 (17.6)
Sandstone, Mudstone, Siltstone with coals	3.0 – 31.3 (only proven to base of borehole)

7.2 HARDSTANDING AND FLOORS SLABS, TOPSOIL AND MADE GROUND

Hardstanding was encountered at the majority of the exploration locations. Asphalt surfacing was typically 0.08m thick with the concrete pavements generally thicker at 0.25m thick. The internal floor slab within the production building ranged from 0.2m to 0.3m thick.

Turf and topsoil was present within one third of the exploratory holes within the southern former sports ground area. The topsoil material typically comprised black slightly gravelly silt.

Variable made ground was present across the site. However, beneath approximately two thirds of the production building footprint the made ground comprised a consistent layer of gravel comprising slag between 3.3m and 5.3m thick.

Away from the production building the made ground was found to be granular and ranging from black silty sandy gravel (in areas very silty and containing cobbles) to a silty gravelly sand (locally very silty). Several holes also encountered reworked alluvial clay at the base of the made ground. Most of the material comprised a mix of shale and mudstone clasts and in areas with a horizon of coal dust or material rich in coal clasts which would suggest that the material is colliery spoil. The location of coal rich materials was found to be random across the site.

Thinner than average made ground was encountered within the pumping station area and intermittently outside the central parts of the production building where the made ground was as thin as 1.45m to 2.0m. Thicker made ground was encountered within the former car park area with a thickness range of between approximately 6.0m and 9.9m. The thicker material was often grey or greyish brown with fragments of mudstone and siltstone, resembling colliery spoil.

Obstructions were encountered within the top 4.0m of the made ground. Obstructions included a rubber tyre, a concrete pipe, unknown obstructions and gas pipes. Full details of obstructions are provided within the exploratory logs.

7.3 FINE-GRAINED ALLUVIUM

Where present fine-grained alluvium lies at the top of an alluvial sequence, with a coarse-grained component beneath.

Fine-grained alluvium was present in approximately half the exploratory holes drilled or excavated across the main Hoover site area to the west of Merthyr Road, and also beneath the former car park site area.

7.3 FINE-GRAINED ALLUVIUM (CONTINUED)

The material varies from black to brown, soft silty clayey silt (occasionally containing wood fragments) to sandy clay (which can be gravelly).

The fine-grained alluvium deposits were noted to be absent within the exploratory holes positioned across the former pumping station site area.

7.4 COARSE-GRAINED ALLUVIUM

Coarse-grained alluvium is present across the site, and it has a substantial variation in thickness, which reflects variable depths bedrock.

The deepest areas of coarse-grained alluvium (around 21 to 24m thickness) are associated with a depression in rockhead. The depression sits beneath most of the Hoover warehouse building and passes through the centre line of the Hoover production building and out through the centre/eastern parts of the cricket pitch.

Thinner coarse alluvium is associated with the disused car park (where it is around 2.60m to 3.10m thick).

7.5 COAL MEASURES BEDROCK

South Wales Middle Coal Measures Formation are known to be present beneath the site underlying the superficial Alluvium deposits. The boreholes found the strata to comprise competent layers of dark grey to grey siltstones, mudstones, seatearth and coal. Occasional thin to thick beds of pale grey sandstone were also encountered. The depths to bedrock vary across the site.

Rockhead Summary

A summary of the depths to bedrock, as proven within the on-site exploratory holes carried out by Quantum Geotechnic Limited, is presented below in Table 12.

7.5 COAL MEASURES BEDROCK (CONTINUED)

Table 12: Depths to Rockhead (Quantum Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Depth to Rockhead (m bgl)	Rockhead Elevation (m AOD)
RBH101	149.4	23.0	126.4
RBH102	149.9	25.4	124.5
RBH103	151.0	13.9	137.1
RBH104	151.0	27.6	123.4
RBH105	149.6	20.0	129.6
RBH106	151.4	14.1	137.3
RBH107	151.6	22.5	129.1
RBH108A	151.6	25.4	126.2
RBH109	156.**4**	27.2	129.2
RBH110	157.2	9.6	147.6
RBH111	157.**3**	26.1	131.2
RBH112	163.2	13.9	149.3
RBH113A	157.**1**	27.8	129.3
BH114	161.**3**	22.8	138.5
IBH102	151.6	26.1	125.5
IBH103	151.7	25.2	126.5
IBH104	151.**8**	24.0	127.8
IBH105	151.8	28.0	123.8
IBH106	151.8	30.0	121.8
IBH107	151.**8**	28.7	123.1

Borehole records found the bedrock strata to comprise competent layers of dark grey to grey siltstones, mudstones, seat-earth and black coal. Occasional pale grey sandstones strata are also present, and these vary from thin to thick beds.

Total core recovery of the holes is above 90% throughout, with the solid core and RQD values not appearing to have much of a correlation with depth.

Bedding partings (smooth planar) within recorded covered core samples of the bedrock were observed to dip in the range 5 -10 degrees, which is consistent with the dips shown on the published geological maps of the area.

A summary of the depths to bedrock as detailed within the available BGS borehole records, is presented below in Table 13.

7.5 COAL MEASURES BEDROCK (CONTINUED)

Table 13: Depths to Rockhead (BGS Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Depth to Rockhead (m bgl)	Rockhead Elevation (m AOD)
SO00SE261	150.0	14.7	135.3
SO00SE262	156.5	15.8	140.7
SO00SE264	159.0	10.7	148.3
SO00SE549	151.8	30.0	121.8
SO00SE260	152.0	26.8	125.2
SO00SE236	149.3	3.9	145.4
SO00SE235	149.8	15.0	134.8
SO00SE234	150.9	25.3	125.6
SO00SE259	148.5	25.5	123.0
SO00SE263	156.0	7.9	148.1
SO00SE258	149.0	20.3	128.7
SO00SE237	149.4	7.2	142.2
SO00SE233	150.3	18.9	131.4
SO00SE232	150.8	21.4	129.4

Encountered Coal Seams

A number of intact coal seams were encountered within the drilled depths of the rotary boreholes. A summary of the encountered coal seams is presented below in Table 14.

Table 14: Encountered Coal Seams (Quantum Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Rockhead Elevation (m AOD)	Approx. Depth to Top of Coal (m)	Elevation of Top of Coal (m AOD)	Coal Thickness (m)
RBH101	149.4	126.4	31.0	118.4	0.45
			37.9	111.5	0.60
			39.5	109.9	0.50
RBH102	149.9	124.5	29.5	120.4	0.50
			30.5	119.4	0.50
			37.6	112.3	1.20
			40.0	109.9	0.50
RBH103	151.0	137.1	19.1	131.9	0.40
			22.1	128.9	0.90
			29.1	121.9	1.10
RBH104	151.0	123.4	36.5	114.5	1.65
			39.1	111.9	0.90
RBH105	149.6	129.6	25.5	124.1	1.60
			28.2	121.4	1.40

7.5 COAL MEASURES BEDROCK (CONTINUED)

Table 14: Encountered Coal Seams (Quantum Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Rockhead Elevation (m AOD)	Approx. Depth to Top of Coal (m)	Elevation of Top of Coal (m AOD)	Coal Thickness (m)
RBH106	151.4	137.3	16.4	134.9	1.20
RBH107	151.6	129.1	22.5	129.1	0.50
			26.2	125.4	1.20
			29.1	122.5	0.90
			34.1	117.5	0.90
RBH108A	151.6	126.2	28.0	123.6	0.60
RBH109	156.4	129.2	34.0	122.4	0.60
			35.2	121.2	1.20
			43.3	113.1	1.10
RBH110	157.2	147.6	21.2	136.0	1.80
			27.3	129.9	0.70
RBH111	157.3	131.2	28.1	129.2	1.30
			39.1	118.2	3.80
RBH112	163.2	149.3	19.1	144.1	0.45
			20.5	142.7	1.00
			29.3	133.9	1.80
RBH113A	157.1	129.3	30.1	127.0	1.10
			32.0	125.1	1.00
			33.4	123.7	0.70
			34.4	122.7	1.50
			44.60	112.5	0.40
RBH114	161.3	138.5	31.20	130.1	1.70
IBH102	151.6	125.5	27.40	124.2	1.20
IBH105	151.8	123.8	29.20	122.6	0.90

A summary of the coal seams as detailed within the BGS borehole records, is presented below in Table 15.

Table 15: Encountered Coal Seams (BGS Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Rockhead Elevation (m AOD)	Approx. Depth to Top of Coal (m)	Elevation of Top of Coal (m AOD)	Coal Thickness (m)
SO00SE261	150.0	135.3	22.4	127.6	1.3
			25.6	124.4	1.3
			30.5	119.5	1.4
SO00SE262	156.5	140.7	40.5	116.0	0.8
SO00SE264	159.0	148.3	36.0	123.0	2.1
			38.5	120.5	0.7
SO00SE549	151.8	121.8	56.8	95.0	1.2

7.5 COAL MEASURES BEDROCK (CONTINUED)

Table 15: Encountered Coal Seams (BGS Borehole Records)

Borehole Ref:	Ground Level (m AOD)	Rockhead Elevation (m AOD)	Approx. Depth to Top of Coal (m)	Elevation of Top of Coal (m AOD)	Coal Thickness (m)
SO00SE260	152.0	125.2	35.8	116.2	1.1
			38.5	113.5	1.3
SO00SE236	149.3	145.4	14.5	134.8	1.7
			17.3	132.0	1.9
			22.4	129.9	1.2
SO00SE235	149.8	134.8	26.4	123.4	1.1
			28.9	120.9	1.3
SO00SE234	150.9	125.6	27.2	123.7	1.2
			31.3	119.6	0.4
			33.8	117.1	0.2
			44.4	106.5	0.9
SO00SE259	148.5	123.0	29.9	118.6	1.0
			37.9	110.6	1.2
			41.7	106.8	0.4
			44.1	104.4	0.4
SO00SE263	156.0	148.1	8.2	147.8	1.1
SO00SE258	149.0	128.7	22.7	126.3	0.4
			29.9	119.1	1.3
			38.6	110.4	1.1
SO00SE237	149.4	142.2	11.1	138.3	1.0
			14.4	135.0	0.4
			17.2	132.2	0.2
			26.7	122.7	1.3
			29.6	119.8	1.4
SO00SE233	150.3	131.4	23.9	126.4	1.0
			27.4	122.9	0.4
			30.0	120.3	0.3
			37.6	112.7	1.1
			40.5	109.8	1.2
SO00SE232	150.8	129.4	24.4	126.4	1.2
			32.2	118.6	1.2
			38.5	112.3	0.5
			41.2	109.6	0.2

Possible Mine Workings

In addition to the encountered coal seams (as detailed in Tables 14 and 15), a 3.8m high void was recorded during the drilling of rotary borehole RBH111 between depths of approximately 39.1m and 42.9m bgl. This void could be associated with historical underground mine workings, possibly targeting the Nine Feet seam.

7.6 GROUNDWATER

Given the proximity to the river and the local geology, shallow groundwater was anticipated.

Relatively shallow groundwater was encountered in cable percussive boreholes at a variety of depths ranging between approximately 6.60m and 7.80m bgl. Groundwater strikes recorded in the rotary boreholes were encountered at generally similar depths, although some were deeper.

In general, water strikes were not encountered in the 5.0m to 6.0m deep windowless sample boreholes with the exception of WS128, where a strike was recorded at a depth of approximately 4.0m bgl.

Groundwater strikes were not encountered in the 4.0 m deep trial pits, except for TP106 and TP108, where inflows were recorded at depths of approximately 3.20m bgl and 2.70m bgl respectively. Both these trial pits were located in the cricket pitch area.

Where double standpipes/piezometers were installed with one pipe in the alluvium and one pipe in the Coal Measures, such as RBH109, groundwater was slightly elevated in the Coal Measures standpipe, e.g. RBH109 had an 18cm difference in levels. In other dual pipe installations, the difference was less, around 10cm. This suggests that the Coal Measures may be fed by slightly elevated heads in the hills surrounding the site.

7.7 MATERIAL PROPERTIES

Classification tests were undertaken on the encountered materials. The full detailed results are presented within the Ground Investigation Factual Report prepared by Quantum Geotechnic Limited on behalf of Merthyr Tydfil County Borough Council, Report Ref: Q0838/FR, dated January 2023 and a detailed discussion is provided within Ground Investigation Report prepared by Redstart on behalf of Merthyr Tydfill Conty Borough Council, Doc Ref: GC-4005-RED-75-XX-RP-0002, dated February 2024.

Made Ground

The reworked fine alluvium was found to have a low plasticity although the ash fill at some locations was found to be cohesive and of an intermediate plasticity.

Samples were also tested for organic matter content with the results indicating elevated levels reflecting the heterogeneity in the material and suggested that the material comprised colliery spoil with fragments of coal.

7.7 MATERIAL PROPERTIES (CONTINUED)

Follow up calorific value tests were undertaken, and all the samples could have potential to smoulder if exposed to a heat source. The samples taken from the cricket pitch area indicated lower results and are of less concern.

Slag expansion tests were undertaken, and the volume increase was found to be reasonably low.

Fine-Grained Alluvium

Atterberg Limits classify the cohesive alluvium as having a low plasticity (gravelly sandy clay), intermediate plasticity (silts) and high plasticity (sandy clays). The SPT N values gave a range of extremely low strength to high strength within the cohesive alluvium.

Coarse-Grained Alluvium

The coarse alluvium had SPT N values which ranged from dense to very dense. The strength was found to vary within bands and not necessarily increase with depth.

South Wales Middle Coal Measures Formation

The intact rock compressive strength would be about 15MPa based on the test results. The results show a scatter and no trend in increase with depth.

7.8 FALLING HEAD PERMEABILITY TESTS

Within the made ground results of 2.04×10^{-5} m/s, 2.04×10^{-5} m/s, 2.83×10^{-6} m/s and 1.86×10^{-6}m/s were achieved. It should be noted that the last result did have cohesive alluvium at the base.

Within the coarse alluvium results of 1.86×10^{-5} m/s, 6.42×10^{-5} m/s, 3.87×10^{-4} m/s, 1.97×10^{-5} m/s and 1.97×10^{-5} m/s were achieved.

8.0 CONTAMINATION SUMMARY

A total of 136 No. soil samples were tested during the intrusive site investigation works. This was followed by leachate testing of 29 No. samples and the testing of groundwater from two rounds of groundwater monitoring. The full detailed results are presented within the Ground Investigation Factual Report prepared by Quantum Geotechnic Limited on behalf of Merthyr Tydfil County Borough Council, Report Ref: Q0838/FR, dated January 2023 and a detailed discussion is provided within Ground Investigation Report prepared by Redstart on behalf of Merthyr Tydfill Conty Borough Council, Doc Ref: GC-4005-RED-75-XX-RP-0002, dated February 2024.

A summary of all the contamination test results are presented in Appendices I to K and the findings of the laboratory chemical testing have also been summarised below.

8.1 SOIL CONTAMINATION

The Suitable 4 Use Levels (S4ULs) published by LQM have been adopted as critical concentrations against which soil contaminant concentrations can be compared. In the absence of additional published S4ULs, the Category 4 Screening Levels (C4SLs) derived by DEFRA and Soil Screening Values (SSVs) derived by Atkins ATRISK^{soil} for a residential with homegrown produce end use have been adopted, where considered appropriate.

For any results which fail the residential within homegrown produce a second screen was undertaken for commercial land use areas.

The results of the laboratory testing indicate that some of the analysed chemical elements or compounds are present at concentrations above the appropriate thresholds. The initial screening indicates exceedances of arsenic, barium, beryllium, nickel, speciated PAH compounds (Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(a)pyrene, Chrysene and Dibenzo(ah)anthracene) and aromatic petroleum hydrocarbon (>EC16-12 and >EC21-35). Asbestos was detected within two samples.

8.2 SOIL LEACHATE

A number of elevated readings were recorded when compared to the UK EQS values. Elevations of zinc, copper, vanadium, nickel and lead were recorded. It should be noted that the testing suite did not include barium, aluminium or manganese. When WAC style leaching testing is reviewed it was noted that barium leaches at low levels. Despite high aluminium concentrations in the soils, dissolved aluminium in groundwater are lower than the chosen EQS suggesting that leaching of this metal would not be a concern. However, manganese is present in groundwater above EQS values and would require consideration.

8.3 GROUNDWATER

The groundwater samples were screened against the relevant Environmental Quality Standards (EQS) or Drinking Water Standards (DWS), whichever was lower, during two rounds of groundwater monitoring.

Levels of dissolved vanadium and lead were not found in the groundwater samples despite elevations within the leachate tests. It should also be noted that the groundwater and the river water did not record detectable levels of TPH suggesting that the elevations within the made ground has not mobilised to the groundwater.

During round 1 there were marginal exceedances of beryllium, cadmium, selenium and lead.

A single elevated concentration of ammonia was recorded in an up-gradient borehole and therefore the detected concentration of ammonia could be from an off-site source.

Exceedances of copper, zinc, nickel, barium, manganese and ammoniacal nitrogen were recorded during round 2.

It was concluded that the main elevations were with regards to zinc and manganese. The elevated zinc (using round 2 which was considered more representative) was where an acid spill had previously occurred, but the concentrations reduce down the flow path. This suggests that the dilution is lowering the dissolved metal value in the downgradient area and that the source is relatively small in magnitude. The elevated manganese concentrations were from installations in a deep coal bed.

8.4 GROUND AND MINE GASES

Ground gas monitoring was undertaken as part of the intrusive works. During the monitoring visits, methane remained at undetectable levels and carbon dioxide remained below 5%. Gas flow rates were often recorded below the limit of detection of the equipment. The ground gas risk is therefore considered to be low and gas protection measures would not be required.

The site is located within a high-risk development area as designated by the Mining Remediation Authority and is known to be underlain by shallow underground mine workings targeting several coal seams. As such, a mine gas risk assessment has been undertaken.

8.4 GROUND AND MINE GASES (CONTINUED)

There are many sources of gas in old mine workings including desorption of gas from coal and rocks, oxidation of coal, decomposition of old wood (such as pit props) and acidic mine drainage reacting with carbonate in the rocks around the seam or shaft.

All shallow mine workings have potential to generate mine gas. However, for there to be a potential risk to residential site end users, such gases would need a viable pathway to the surface (such as a mine shaft or a fault).

Figure 13.1 Decision Support Tool for Mine Gas Risk Assessment, included within CL:AIRE document Good Practice for Risk Assessment for Coal Mine Gas Emissions, dated October 2021 includes a flow chart to aid the risk assessment process and decision making.

Based on desk-based research and existing ground investigation data, and utilising the CL:AIRE Decision Support Tool for Mine Gas Risk Assessment, the potential risk from coal mine gas emissions at the development site is considered below:

The first stage of the flow chart asks if the site is within a Coal Authority defined Coal Mining Reporting Area. Since the site is located within a Coal Authority defined Coal Mining Reporting Area, the flow chart then asks if all of the following statements are true:

- Mine entries >50m from site boundary,
- Workings >150m depth,
- No faults or other potential pathways connecting surface to deeper unflooded workings,
- Outside area of past or probable shallow workings on Coal Authority viewer.

Based on the information gained from the desk-based research and ground investigation data, it is considered that the first stage statements are not all true. As such, in accordance with the flow chart a second stage of assessment is necessary.

The second stage of the flow chart asks if all of the following statements are true:

- Workings between 30m and 150m but permanently flooded or covered by 10m+ of low permeability superficial deposits,
- Mine entries >50m from site boundary.

8.4 GROUND AND MINE GASES (CONTINUED)

Due to the presence of shallow underground workings recorded at depths less than 30m beneath the site and the presence of mine entries within 50m of the site boundary, the above statements are not all true and therefore, in accordance with the flow chart a third stage of assessment is necessary.

The third stage of the flow chart asks if any of the following statements are true:

- Mine entries on site or <20m from the site boundary,
- Workings below site <30m depth and unflooded or variable water level (not permanently flooded),
- Faults or other pathways connecting surface to deeper unflooded workings,
- Within area of past or probable shallow workings on Coal Authority viewer.

Our response to the third stage questions is as follows:

There are two mine shafts recorded within 20m of the site boundary. As such, the first statement is true.

There are recorded workings at less than 30m depth, but the groundwater observations made during the ground investigation would imply the workings are flooded. As such the second statement is considered to be not true.

A mine abandonment plan does indicate a fault to in close proximity to the eastern site boundary. However, any workings connected to this fault will be flooded based on groundwater observations. As such, the third statement is considered to be not true.

The site is located within a Coal Authority defined area of past shallow workings. As such, the final statement is true.

As there are statements in the final stage of the flow chart that are true (i.e., not all the statements can be discounted), further consideration and assessment is required in order to determine the level of potential mine gas risk at the site.

A summary of the further considerations and the result of the further assessment is outlined below:

- Despite shallow workings being recorded beneath the site it should be noted that the workings are water filled (based on rotary drilling findings), which would displace any gas.

8.4 GROUND AND MINE GASES (CONTINUED)

- Any residual gases which may still be present would need a viable pathway to the surface e.g., via faulted ground or a pathway feature such as a mine entry.

- There are two mine shafts recorded off-site (but within 20m of the site boundary). However, no buildings will be constructed over (of within the defined worst-cast exclusion zones) around these mine entries. As such, these mine entries will not form a viable pathway.

- A mine abandonment plan indicates an underground expression of fault beneath the eastern area of the site. However, the surface outcrop of this fault is recorded off-site to the east. The underground expression of the fault is considered to be connected to flooded workings. Additionally, consideration needs to be given to the in-situ superficial deposits that overlie the potentially faulted bedrock.

- The superficial deposits are significantly thick with low permeability. Considering the thickness and low permeability of the superficial deposits, it is considered that any potential pathway to the surface, via any potentially faulted ground, is broken.

Based on the above further consideration and assessment, the potential mine gas risk at the site is assessed as low.

This low-risk designation has subsequently been confirmed by the programme of gas monitoring which recorded low levels of methane, carbon dioxide and flow rates. No additional mitigation measures are considered to be required for dealing with any potential mine gases at the site.

9.0 OUTLINE REMEDIATION AND RECLAMATION STRATEGY

9.1 GENERAL

Based upon our review of the existing site investigation data, it is envisaged that the required works will be split into two parts. Firstly, remediation, reclamation and enabling works will be required to prepare a suitably remediated surface for hand over to the developers. Secondly, upon completion of the development works, an imported clean capping layer placed over a hi-vis geotextile separation membrane is envisaged in all gardens and areas of soft landscaping, to be placed by the developer.

9.2 REMEDIATION, RECLAMATION AND ENABLING WORKS TO REMEDIATED FORMATION LEVELS

The reclamation and remediation works would be required in order to prepare the site to a standard that would be suitable for the proposed residential development. These works would typically comprise the following:

- Demolition and removal of the existing buildings
- Excavation of the existing factory and other building slabs, removal of buried foundations and disused services including the out of use drainage manholes and conduits
- Post demolition supplementary site investigation works to confirm the previous findings and investigate previously inaccessible areas of the site
- Derive Site Specific Target Levels (SSTLs)
- Excavation of made ground
- Processing the excavated materials by removing visually unacceptable materials such as former pipework, tanks and vessels which may contain hazardous substances
- Placing back the acceptable excavated materials and compacting these in layers in accordance with the specification for Highway Works

Following demolition of the remaining above ground structures, and breaking out of floor slabs, supplementary site investigation works would be carried out to investigate previously inaccessible areas of the site, and supplement/confirm the previous site investigation works.

The supplementary site investigation works will comprise additional trial pitting, drilling of boreholes, sampling and testing of soil and groundwater and gas monitoring.

Specific soil and groundwater testing will be required in the areas of the site where heavy industrial activities have previously been undertaken. This will include up and down gradient and boundary monitoring.

9.2 REMEDIATION, RECLAMATION AND ENABLING WORKS TO REMEDIATED SURFACE (CONTINUED)

The resulting data gained from the supplementary works, together with the existing information will be used to update the human health and groundwater risk assessments and derive Site Specific Target Levels (SSTLs) to inform the remedial works.

The supplemental site investigation works will also supplement the geotechnical and ground engineering considerations and constraints within the site.

The supplementary post demolition site investigation works will also further define the shallow mining risk areas (as discussed in more detail within Coal Mining Risk Assessment report Ref: 14275/JJ/25/CMRA, dated February 2025).

Prior to the supplemental site investigation works being carried out, liaison with both Natural Resources Wales and Local Authority Environment Health Department will be established in order that regulatory feedback for the proposals may be obtained at an early stage.

During the execution of the proposed reclamation and remediation strategy, the processed fill materials would be sampled and tested for the various relevant contaminants, during the works and during the validation process at the completion of the works.

The reclamation and remediation works should be monitored, and a validation report provided. The validation report should include the results of all sampling and testing undertaken during the works and issued upon completion.

In conjunction with the remediation works additional enabling works will be required. These enabling works will include:

- Site clearance works
- Potential ecological works
- Site wide geotechnical and geo-environmental works including earthworks
- Temporary boundary fencing to secure site
- Works adjacent to public highway and access (kerb realignment, footpath, crossing)
- Relocation or protection (including exclusion zone) of any underground services which cross the site.

To minimise risks to controlled waters, infiltration in (or hydraulically above) previously developed/contaminated areas of the site should be minimised.

9.2 REMEDIATION, RECLAMATION AND ENABLING WORKS TO REMEDIATED SURFACE (CONTINUED)

Accordingly, the site's hard surfaced areas should be positively drained (and contained) via a piped drainage system to a suitable outfall.

9.3 FINAL REMEDIAL MITIGATION MEASURES TO BE INCORPORATED BY DEVELOPER

Following completion of the site reclamation, remediation and enabling works to the remediated surface, the following final remedial mitigation measures are likely to be required:

- Incorporation of appropriate foundations applicable to the remediated and reclaimed plateau specification. In parts of the site where there is high to medium risk of ground subsidence from old shallow mine workings, the affected ground needs to be stabilised by drilling and grouting.
- Provision of a minimum of 600mm of clean subsoil and topsoil in the proposed garden and landscaping areas. The capping soils should be placed on top of a hi-vis geotextile separation/alert membrane in order to maintain the integrity of the capping layer.
- Allowances must be made for the provision of additional structural make up to highway, driveway and hard finished areas based on a CBR value in the range of 3 to 4%.
- Allowances should also be made to use TPH/PAH/VOC resistant foil lined domestic drinking water supply pipes throughout.

10.0 RECLAMATION/REMEDIATION SITE MONITORING AND VALIDATION REPORTS

The remediation and reclamation works should be subject to engineering and geo-environmental monitoring with chemical and geotechnical testing carried out to the development plateau areas.

On completion of the works, specific validation reports up to the remediated surface should be issued for regulatory approval.

11.0 FINAL VALIDATION OF CAPPING SOILS

After the remediated site has been acquired by a housing developer for development, the housing developer will be responsible for the placement and independent validation of the garden capping soils. The capping soils will be placed on a plot specific basis as the individual dwellings are completed.

On completion of the garden capping works, plot specific validation reports for the capping soils should be issued for regulatory approval. This will include verification of capping thickness, incorporation of the required geotextile separation membrane, and validation of soil chemistry appropriate for a residential end use.

12.0 INITIAL GEOTECHNICAL RECOMMENDATIONS

Following successful implementation of the recommended site reclamation earthworks which generally involves the breaking out of obstructions (foundations, basements, pits, etc), excavation of the made ground to typically 2.0m below underside of foundation (locally deeper), sorting, processing, and screening, and placement of acceptable materials in well compacted engineered layers back up to the required remediation formation level, to suit development engineering levels, the prepared formation should be capable of supporting shallow reinforced concrete raft foundations.

Subject to the results of appropriate verification testing on the re-engineered formation, an allowable bearing pressure of 50 to 75kN/m^2 should be achievable.

Foundations should be reinforced for a 3m soft spot and a 1.5m cantilever at building corners.

These initial recommendations are subject to the findings of the supplementary site investigation and subsequent confirmatory testing following completion of the prepared formation.

It should also be noted a materials management plan (MMP) will be required to control an appropriate material reuse strategy to ensure the maximum benefit from available materials and controlling final mitigation measures.

APPENDIX A

CONCEPT FRAMEWORK OPTION PLAN

DESIGN PRINCIPLES

- Site Boundary
- Extent of 15m safeguarded area for POS / GI / ATR / Metro Station
- Variable 10-15m safeguarded area for POS / GI / ATR

STRATEGIC LAND USE REQUIREMENTS

- Residential
- Community Hub
- Employment development (1.5ha)
- Potential location for Community Heat Hub
- Future Metro Station / Platform (indicative)
- Green Infrastructure / Open Space (1.79 ha minimum)
- Location of POS / SUDS attenuation feature (indicative)
- Existing Boundary Trees (retain where site remediation permits)
- Indicative strategic tree planting
- Play / Heritage Opportunities

ACCESS & MOVEMENT

- A1 — New northerly access onto Merthyr Road
- A2 — New southerly access onto Merthyr Road (south of existing access)
- PB — Pentrebach Station (Existing)
- M — New/Relocated Metro/Rail Station
- Future Metro Transport Hub area (Interchange & Parking)
- FB — Existing Footbridge
- Potential location for future ATR bridge over rail line & river
- Primary Street (Site access)
- Primary Street (indicative alignment)
- Indicative Access/Replacement bus turning area for Metro Station & Transport Hub indicative)
- Existing access to Employment area / Community Heat Hub
- Access to Community Hub
- Active Travel Route (Foot / Cycle - indicative)
- Toucan Crossing
- ATR connectivity (wider area)
- BUS — Existing / Proposed Bus Stop(s)

FOCAL POINT / GATEWAY BUILDING

- Built form outward facing
- Gateway Focal Building

KEY SITE FEATURES / CONSTRAINTS

- Overhead Pylon + Easement
- Mineshaft
- Existing Sub Station, access & screening
- Existing surface water outfall (6m easement - refer to CCTV)
- Existing water main (12m easement - refer to CCTV)

CLIENT: Walters Land	SCALE @ A3: 1:1250	DATE: Mar'25	DRAWN BY: GB
JOB TITLE: Hoover Site	JOB NO.: 2479	DRAWING NO.: DFP 01	REVISION: B
DRAWING TITLE: Development Framework Parameter Plan			

REV.	DESCRIPTION	DATE
B	ATR / Boundary / Access updates	Apr'25-
A	Updated Key	-

0 — 100m

N

hammond Architectural Ltd
10 Gold Tops
Newport
NP20 4PH
t. 01633 844970
e. info@hammond-ltd.co.uk
www.hammond-ltd.co.uk

APPENDIX B

GROUNDSURE REPORT

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Hoover Factory, Merthyr Tydfil

Order Details

Date: 04/02/2022

Your ref: PO_4800510468_Hoover_Factory

Our Ref: HMD-191-8496648

Client: Capita (Real Estate & Infrastructure) Limited

Site Details

Location: 305737 204199

Area: 18.14 ha

Authority: Merthyr Tudful - Merthyr Tydfil County Borough Council

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	56	43	154	285	-
33	1.2	Historical tanks	9	1	17	26	-
35	1.3	Historical energy features	6	2	12	22	-
37	1.4	Historical petrol stations	0	0	0	0	-
37	1.5	Historical garages	0	0	9	2	-
38	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
39	2.1	Historical industrial land uses	79	57	203	371	-
65	2.2	Historical tanks	28	1	30	36	-
69	2.3	Historical energy features	17	4	26	54	-
72	2.4	Historical petrol stations	0	0	0	0	-
73	2.5	Historical garages	0	0	18	5	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
75	3.1	Active or recent landfill	0	0	0	0	-
75	3.2	Historical landfill (BGS records)	0	0	0	0	-
76	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
76	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
76	3.5	Historical waste sites	0	1	0	0	-
76	3.6	Licensed waste sites	0	0	0	0	-
77	3.7	Waste exemptions	3	2	6	11	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
80	4.1	Recent industrial land uses	13	6	25	-	-
83	4.2	Current or recent petrol stations	0	0	1	1	-
83	4.3	Electricity cables	0	0	0	0	-
84	4.4	Gas pipelines	0	0	0	0	-
84	4.5	Sites determined as Contaminated Land	0	0	0	0	-

84	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
84	4.7	Regulated explosive sites	0	0	0	0	-
84	4.8	Hazardous substance storage/usage	0	0	0	0	-
85	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
85	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
85	**4.11**	**Licensed pollutant release (Part A(2)/B)**	1	2	6	3	-
87	4.12	Radioactive Substance Authorisations	0	0	0	0	-
87	**4.13**	**Licensed Discharges to controlled waters**	2	0	1	13	-
89	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
89	4.15	Pollutant release to public sewer	0	0	0	0	-
90	4.16	List 1 Dangerous Substances	0	0	0	0	-
90	**4.17**	**List 2 Dangerous Substances**	0	1	1	0	-
90	**4.18**	**Pollution Incidents (EA/NRW)**	1	1	3	5	-
91	4.19	Pollution inventory substances	0	0	0	0	-
92	4.20	Pollution inventory waste transfers	0	0	0	0	-
92	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
93	**5.1**	**Superficial aquifer**	Identified (within 500m)				
95	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
97	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
99	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
99	5.5	Groundwater vulnerability- local information	None (within 0m)				
100	**5.6**	**Groundwater abstractions**	0	0	0	1	0
101	**5.7**	**Surface water abstractions**	0	0	0	2	0
102	5.8	Potable abstractions	0	0	0	0	0
102	5.9	Source Protection Zones	0	0	0	0	-
102	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
103	**6.1**	**Water Network (OS MasterMap)**	4	11	47	-	-

108	6.2	Surface water features	1	4	28	-	-
109	6.3	WFD Surface water body catchments	1	-	-	-	-
109	6.4	WFD Surface water bodies	1	0	0	-	-
109	6.5	WFD Groundwater bodies	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
111	7.1	Risk of flooding from rivers and the sea	High (within 50m)				
112	7.2	Historical Flood Events	1	3	4	-	-
113	7.3	Flood Defences	0	0	0	-	-
113	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
113	7.5	Flood Storage Areas	0	0	0	-	-
114	7.6	Flood Zone 2	Identified (within 50m)				
115	7.7	Flood Zone 3	Identified (within 50m)				
Page	Section	Surface water flooding					
116	8.1	Surface water flooding	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
118	9.1	Groundwater flooding	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
119	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	1	0
120	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
120	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
120	10.4	Special Protection Areas (SPA)	0	0	0	0	0
120	10.5	National Nature Reserves (NNR)	0	0	0	0	0
121	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
121	10.7	Designated Ancient Woodland	0	0	0	8	60
124	10.8	Biosphere Reserves	0	0	0	0	0
124	10.9	Forest Parks	0	0	0	0	0
124	10.10	Marine Conservation Zones	0	0	0	0	0
124	10.11	Green Belt	0	0	0	0	0
124	10.12	Proposed Ramsar sites	0	0	0	0	0

125	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
125	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
125	10.15	Nitrate Sensitive Areas	0	0	0	0	0
125	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
126	10.17	SSSI Impact Risk Zones	0	-	-	-	-
126	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
127	11.1	World Heritage Sites	0	0	0	-	-
128	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
128	11.3	National Parks	0	0	0	-	-
128	**11.4**	**Listed Buildings**	0	0	34	-	-
131	11.5	Conservation Areas	0	0	0	-	-
131	**11.6**	**Scheduled Ancient Monuments**	0	0	2	-	-
132	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
133	**12.1**	**Agricultural Land Classification**	Grade 5 (within 250m)				
134	12.2	Open Access Land	0	0	0	-	-
134	12.3	Tree Felling Licences	0	0	0	-	-
135	12.4	Environmental Stewardship Schemes	0	0	0	-	-
135	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
136	13.1	Priority Habitat Inventory	0	0	0	-	-
136	13.2	Habitat Networks	0	0	0	-	-
136	13.3	Open Mosaic Habitat	0	0	0	-	-
136	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
137	**14.1**	**10k Availability**	Identified (within 500m)				
138	14.2	Artificial and made ground (10k)	0	0	0	0	-
139	14.3	Superficial geology (10k)	0	0	0	0	-

139	14.4	Landslip (10k)	0	0	0	0	-
140	14.5	Bedrock geology (10k)	0	0	0	0	-
140	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
141	15.1	50k Availability	Identified (within 500m)				
142	15.2	Artificial and made ground (50k)	2	0	1	1	-
143	15.3	Artificial ground permeability (50k)	2	0	-	-	-
144	15.4	Superficial geology (50k)	1	2	0	0	-
145	15.5	Superficial permeability (50k)	Identified (within 50m)				
145	15.6	Landslip (50k)	0	0	0	0	-
145	15.7	Landslip permeability (50k)	None (within 50m)				
146	15.8	Bedrock geology (50k)	2	0	2	0	-
147	15.9	Bedrock permeability (50k)	Identified (within 50m)				
147	15.10	Bedrock faults and other linear features (50k)	7	0	7	11	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
149	16.1	BGS Boreholes	25	34	39	-	-
Page	Section	Natural ground subsidence					
154	17.1	Shrink swell clays	Very low (within 50m)				
156	17.2	Running sands	Low (within 50m)				
158	17.3	Compressible deposits	Moderate (within 50m)				
160	17.4	Collapsible deposits	Very low (within 50m)				
162	17.5	Landslides	Moderate (within 50m)				
164	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
166	18.1	Natural cavities	0	0	0	0	-
167	18.2	BritPits	0	1	6	15	-
171	18.3	Surface ground workings	51	16	135	-	-
179	18.4	Underground workings	1	9	39	51	105
186	18.5	Historical Mineral Planning Areas	0	0	0	0	-

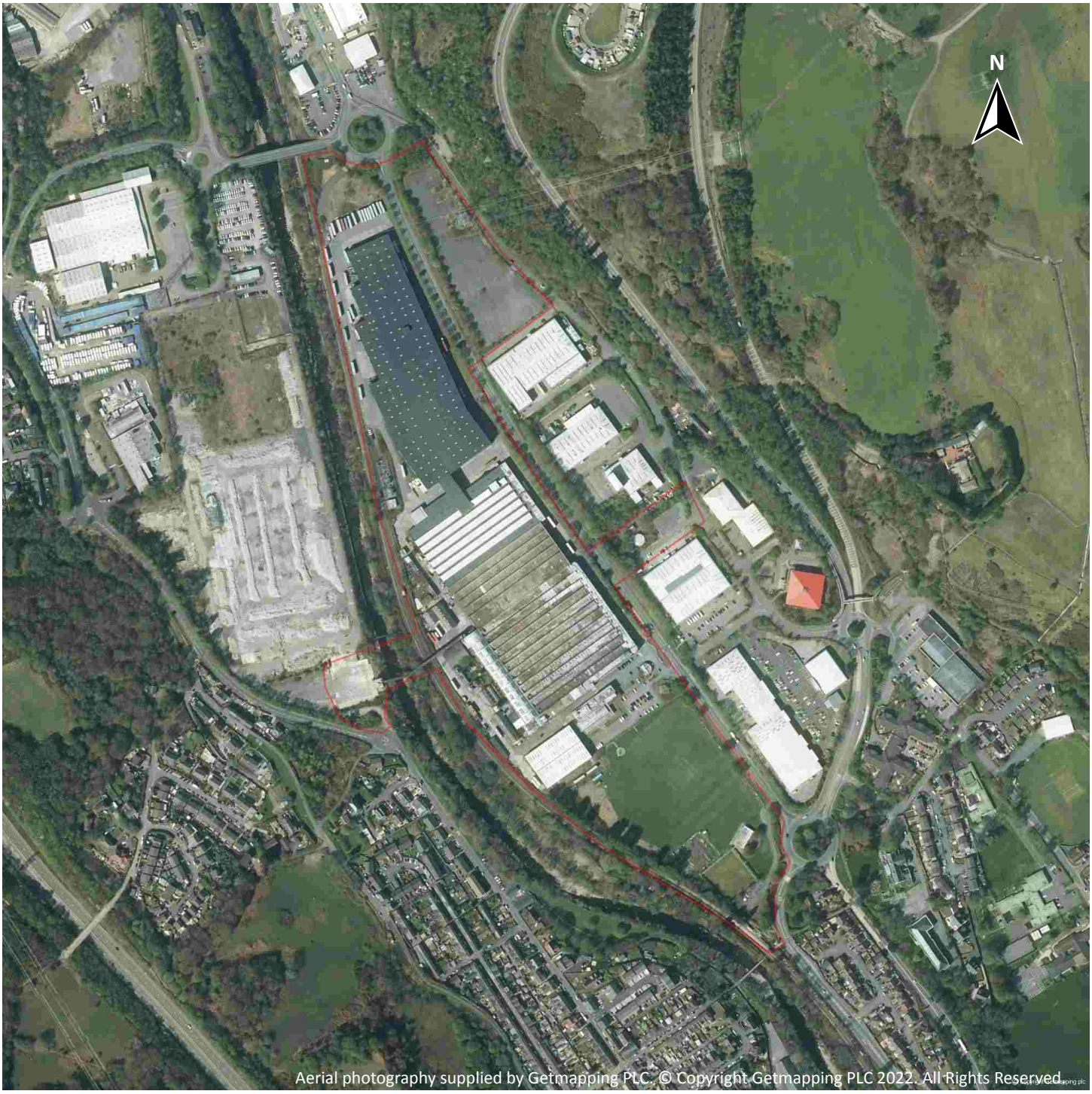
187	**18.6**	**Non-coal mining**	1	0	0	1	5
188	18.7	Mining cavities	0	0	0	0	0
188	18.8	JPB mining areas	None (within 0m)				
188	**18.9**	**Coal mining**	Identified (within 0m)				
188	18.10	Brine areas	None (within 0m)				
189	18.11	Gypsum areas	None (within 0m)				
189	18.12	Tin mining	None (within 0m)				
189	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
190	**19.1**	**Radon**	Between 1% and 3% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
192	**20.1**	**BGS Estimated Background Soil Chemistry**	8	15	-	-	-
193	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
194	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
195	21.1	Underground railways (London)	0	0	0	-	-
195	21.2	Underground railways (Non-London)	0	0	0	-	-
196	21.3	Railway tunnels	0	0	0	-	-
196	**21.4**	**Historical railway and tunnel features**	12	11	19	-	-
198	21.5	Royal Mail tunnels	0	0	0	-	-
198	**21.6**	**Historical railways**	0	0	1	-	-
198	**21.7**	**Railways**	8	5	4	-	-
199	21.8	Crossrail 1	0	0	0	0	-
199	21.9	Crossrail 2	0	0	0	0	-
199	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 14/04/2020

Site Area: 18.14ha

Recent site history - 2017 aerial photograph

Capture Date: 17/06/2017

Site Area: 18.14ha

Recent site history - 2010 aerial photograph

Capture Date: 22/05/2010

Site Area: 18.14ha

Recent site history - 2008 aerial photograph

Capture Date: 12/05/2008

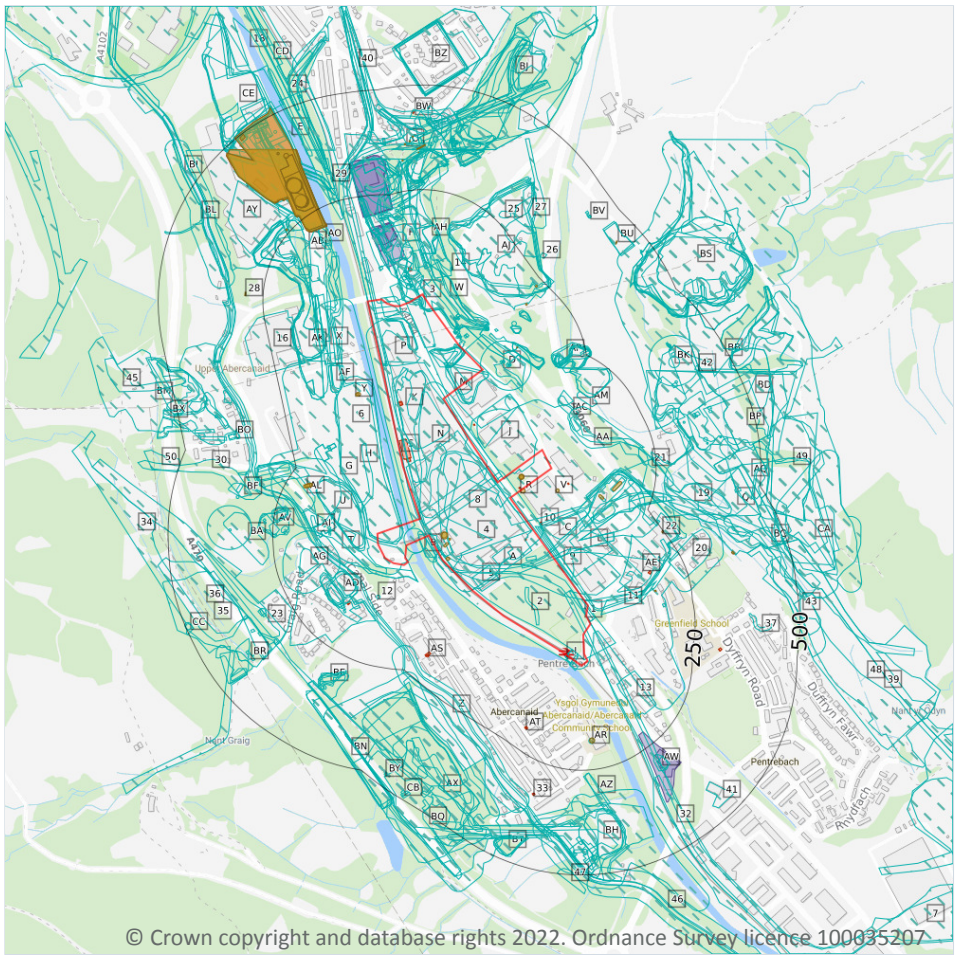
Site Area: 18.14ha

Recent site history - 2000 aerial photograph

Capture Date: 18/06/2000

Site Area: 18.14ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	538

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Railway Building**	**1901**	**1013041**

ID	Location	Land use	Dates present	Group ID
2	On site	Unspecified Pit	1875	1028160
3	On site	Unspecified Ground Workings	1948	1039083
4	On site	Unspecified Factory	1964 - 1968	1061176
5	On site	Unspecified Factory	1988	1082250
6	On site	Unspecified Heaps	1964 - 1968	1122836
7	On site	Railway Sidings	1948	1129318
8	On site	Unspecified Heap	1875 - 1901	1150164
A	On site	Unspecified Commercial/Industrial	1948	995691
A	On site	Unspecified Pit	1875	1028161
A	On site	Unspecified Factory	1988	1129887
B	On site	Unspecified Pit	1948	1028159
B	On site	Unspecified Heap	1922	1046939
C	On site	Iron Works	1875	1016008
C	On site	Railway Sidings	1875	1074511
D	On site	Lime Kiln	1875	1032640
D	On site	Unspecified Ground Workings	1901	1055301
D	On site	Unspecified Old Shafts	1938	1057924
D	On site	Unspecified Pit	1922	1062448
D	On site	Unspecified Pit	1938	1105305
D	On site	Unspecified Pit	1915	1122584
D	On site	Unspecified Pit	1948	1128159
D	On site	Unspecified Ground Workings	1921	1133857
E	On site	Railway Sidings	1938	1043509
F	On site	Unspecified Ground Workings	1921 - 1922	1043806
F	On site	Unspecified Ground Workings	1921 - 1968	1053771
F	On site	Unspecified Pit	1901 - 1903	1067566
F	On site	Unspecified Ground Workings	1922	1100547
F	On site	Unspecified Ground Workings	1901	1108350

ID	Location	Land use	Dates present	Group ID
F	**On site**	**Unspecified Ground Workings**	**1938**	**1114717**
F	**On site**	**Unspecified Ground Workings**	**1915**	**1120275**
F	**On site**	**Unspecified Ground Workings**	**1938**	**1125123**
F	**On site**	**Unspecified Ground Workings**	**1903**	**1147955**
G	**On site**	**Unspecified Factory**	**1988**	**1049427**
H	**On site**	**Unspecified Heaps**	**1922**	**1050184**
H	**On site**	**Unspecified Heap**	**1948**	**1121737**
I	**On site**	**Railway Station**	**1901**	**1060951**
I	**On site**	**Railway Station**	**1922 - 1968**	**1127208**
J	**On site**	**Unspecified Factory**	**1988**	**1063801**
K	**On site**	**Unspecified Heap**	**1901**	**1064320**
K	**On site**	**Refuse Heap**	**1964 - 1968**	**1127622**
L	**On site**	**Mineral Railway Sidings**	**1901**	**1065331**
M	**On site**	**Unspecified Ground Workings**	**1901**	**996803**
M	**On site**	**Unspecified Heap**	**1964**	**1072424**
M	**On site**	**Unspecified Heap**	**1922**	**1079178**
M	**On site**	**Unspecified Heap**	**1948**	**1107218**
N	**On site**	**Unspecified Heap**	**1948**	**1072701**
N	**On site**	**Unspecified Ground Workings**	**1922**	**1085810**
N	**On site**	**Unspecified Factory**	**1964 - 1968**	**1139254**
N	**On site**	**Unspecified Factory**	**1988**	**1156717**
O	**On site**	**Mineral Railway Sidings**	**1921 - 1922**	**1100180**
P	**On site**	**Unspecified Heap**	**1948**	**1103120**
P	**On site**	**Unspecified Ground Workings**	**1915**	**1118948**
P	**On site**	**Unspecified Heaps**	**1938**	**1146881**
Q	**On site**	**Mineral Railway Sidings**	**1922**	**1140998**
T	**On site**	**Coal Pit**	**1875**	**1005025**
D	0m NE	Engine House	1875	1019125

ID	Location	Land use	Dates present	Group ID
D	4m NE	Mortar Mill	1875	996497
9	5m NE	Refuse Heap	1875	1019515
I	5m SW	Railway Station	1988	1068599
D	6m NE	Old Shafts	1921	1033368
L	7m NE	Brick Works	1901	1072994
D	8m NE	Unspecified Old Shafts	1938 - 1948	1144684
D	9m NE	Unspecified Old Shafts	1901	1075278
D	9m NE	Unspecified Old Shafts	1922	1048724
D	10m NE	Unspecified Old Shafts	1903 - 1915	1155652
D	11m NE	Unspecified Old Shafts	1915	1106177
F	11m N	Cuttings	1948	994289
L	11m NE	Unspecified Commercial/Industrial	1948	995694
T	12m S	Railway Sidings	1875	993784
D	12m NE	Unspecified Old Shafts	1901	1125899
L	12m NE	Brick Works	1922	1137264
C	15m NE	Unspecified Factory	1964 - 1968	1108251
F	15m NW	Old Coal Level	1948	1136974
J	19m NE	Unspecified Pit	1964	1028163
U	20m SW	Mineral Railway Sidings	1901	1024460
D	20m NE	Railway Sidings	1938	1143394
D	21m NE	Railway Sidings	1922	1152767
D	22m NE	Railway Sidings	1915	1047497
D	23m NE	Old Shafts	1921	1033369
D	26m NE	Unspecified Old Shafts	1922	1037109
F	28m NW	Air Shafts	1915	1104974
F	28m NW	Unspecified Disused Shafts	1964 - 1968	1148266
F	29m NW	Air Shafts	1948	1041178
U	30m W	Unspecified Disused Pit	1948	1067327

ID	Location	Land use	Dates present	Group ID
D	30m E	Unspecified Ground Workings	1948	996804
U	32m W	Unspecified Disused Pit	1922	1089846
11	33m NE	Sawmill	1875	1004832
F	33m NW	Air Shafts	1922	1092050
U	35m W	Unspecified Heap	1964 - 1968	1092287
F	35m NW	Garage	1988	1033772
F	35m NW	Air Shafts	1921	1071077
F	41m NW	Air Shafts	1903	1027658
F	42m NW	Old Coal Level	1922	1154628
D	45m NE	Old Lime Kilns	1921	1062531
O	47m NE	Tramway Sidings	1901	1139064
D	49m E	Old Lime Kilns	1938 - 1948	1042821
O	49m NE	Tramway Sidings	1903	1037417
D	50m E	Old Lime Kilns	1915	1075152
F	50m NW	Air Shafts	1948	1116001
F	51m NW	Air Shafts	1915	1051718
F	51m NW	Unspecified Disused Shafts	1964 - 1968	1142700
W	51m NE	Coal Level	1901	1007490
F	55m NW	Air Shafts	1922	1099008
L	55m NE	Refuse Heap	1922	1055540
W	55m NE	Unspecified Ground Workings	1948	1096158
D	56m E	Old Lime Kilns	1921	1041711
F	58m NW	Air Shafts	1921	1063129
D	60m E	Old Lime Kilns	1922	1092209
O	61m N	Railway Sidings	1875	1104858
D	62m E	Old Lime Kiln	1938	1014939
D	63m E	Old Lime Kilns	1948	1126163
X	63m W	Unspecified Ground Workings	1901	1077068

ID	Location	Land use	Dates present	Group ID
D	63m E	Old Lime Kilns	1915	1085615
F	64m NW	Air Shafts	1903	1027646
F	65m N	Cuttings	1903	994290
X	66m W	Unspecified Ground Workings	1903	1126850
D	68m NE	Unspecified Ground Workings	1922	1145718
F	68m N	Old Coal Level	1921	1032271
D	70m NE	Coal Level	1921	1047108
D	71m NE	Coal Level	1922 - 1938	1124514
D	74m NE	Coal Level	1915	1138876
F	76m N	Cuttings	1903	994291
Z	77m SW	Disused Canal	1922	1090618
Z	81m SW	Disused Canal	1948	1153257
12	84m SW	Unspecified Disused Shaft	1964 - 1988	1047368
AA	85m NE	Unspecified Ground Workings	1964 - 1968	1104929
F	85m N	Old Coal Level	1915	1032270
D	86m NE	Unspecified Ground Workings	1948	1059147
D	86m NE	Coal Level	1948	1007491
D	87m NE	Unspecified Ground Workings	1915	1084025
AB	88m W	Unspecified Ground Workings	1875	1118814
13	89m SE	Unspecified Depot	1988	1012585
AC	89m NE	Unspecified Ground Workings	1901	1140835
AD	90m SW	Unspecified Heaps	1922	1068344
14	91m NE	Old Coal Level	1938	1089600
F	92m NW	Unspecified Heap	1948	1000274
AA	92m NE	Unspecified Heap	1948	1000270
AD	92m SW	Refuse Heap	1964 - 1968	1111870
AD	93m SW	Unspecified Heap	1948	1000273
AE	94m NE	Unspecified Factory	1988	1014505

ID	Location	Land use	Dates present	Group ID
AF	97m W	Unspecified Heap	1901	1047935
AF	97m W	Unspecified Heap	1948	1102635
AG	98m W	Burial Ground	1988	1053348
AH	99m N	Unspecified Ground Workings	1915	1156273
AI	100m W	Railway Building	1901	1013040
X	101m W	Cuttings	1938 - 1948	1130408
AH	102m N	Unspecified Heaps	1948	1021416
15	103m W	Cuttings	1948	994288
L	105m NE	Railway Sidings	1948	1086743
AI	109m W	Unspecified Old Shafts	1922	1036031
AI	111m W	Unspecified Old Shafts	1922	1127909
F	112m N	Unspecified Heap	1948	1000276
AI	112m W	Unspecified Old Shafts	1948	992625
AI	112m W	Unspecified Old Shafts	1948	1067879
D	115m NE	Coal Level	1938	1135961
AJ	116m NE	Coal and Ironstone Pit	1875	1024819
D	116m NE	Unspecified Heap	1948	1057551
AK	116m W	Unspecified Ground Workings	1922	1035343
AK	116m W	Unspecified Ground Workings	1922	1097065
AL	117m NW	Dock	1875	1012556
AK	117m W	Ground Workings and Refuse Heap	1915 - 1921	1115187
D	117m NE	Unspecified Heap	1915	1139157
AD	118m SW	Coal Pit	1875	1005026
AC	119m NE	Unspecified Heap	1948	1000271
AJ	119m NE	Unspecified Disused Pit	1922	1135466
AJ	120m NE	Unspecified Ground Workings	1915 - 1921	1050188
AK	120m W	Unspecified Ground Workings	1938	1056607
AK	120m W	Unspecified Ground Workings	1938	1147908

ID	Location	Land use	Dates present	Group ID
AJ	121m NE	Unspecified Disused Pit	1938 - 1948	1144245
AB	125m NW	Cuttings	1938 - 1948	1156503
D	125m NE	Unspecified Disused Shaft	1964 - 1988	1056170
F	128m NW	Air Shafts	1903	1027645
L	128m NE	Unspecified Heap	1964 - 1968	1111811
AF	128m W	Unspecified Heaps	1948	1021417
AD	129m SW	Saw Pit	1875	1022483
AK	130m W	Unspecified Heap	1968	1118423
AK	130m W	Unspecified Heap	1964	1147021
AJ	131m NE	Unspecified Disused Pit	1901	1152359
AJ	132m NE	Unspecified Pit	1903	1028170
AD	132m SW	Unspecified Disused Pit	1948	1038742
AD	132m SW	Railway Sidings	1875	993785
L	134m NE	Refuse Heap	1948	1146311
L	136m SE	Unspecified Tanks	1875	1009922
AD	137m SW	Unspecified Disused Pit	1901	1096457
AD	137m SW	Refuse Heap	1875	1092292
G	146m W	Engine Houses	1901	1023913
AB	147m NW	Unspecified Heap	1901	1065056
AD	149m SW	Smithy	1875	1032866
AJ	149m NE	Coal Level	1903	1007489
L	149m E	Unspecified Tanks	1901	1009923
AG	150m W	Burial Ground	1875	1034861
AM	152m NE	Unspecified Heap	1948	1000272
AN	153m NW	Unspecified Heap	1903	1060640
AO	153m NW	Unspecified Heap	1901	1000277
D	153m NE	Unspecified Ground Workings	1915	996805
D	154m NE	Unspecified Pit	1922	1034859

ID	Location	Land use	Dates present	Group ID
D	154m NE	Unspecified Pit	1948	1054037
AD	156m SW	Unspecified Disused Pit	1922	1120456
G	159m W	Unspecified Old Shaft	1922	1041001
AO	160m NW	Unspecified Ground Workings	1903	1121315
G	160m W	Unspecified Old Shaft	1948	1064643
AP	166m E	Unspecified Ground Workings	1901	1097169
AM	166m NE	Unspecified Old Quarry	1901	1036405
AM	166m NE	Unspecified Old Quarry	1948	1056254
AP	167m E	Unspecified Ground Workings	1903	1034499
AP	167m E	Unspecified Ground Workings	1921	1091555
AQ	168m E	Unspecified Pit	1922	1097797
AF	168m W	Unspecified Heap	1922	1097034
AF	168m W	Unspecified Heap	1922	1152798
AL	168m NW	Old Dock	1948	1138051
D	170m NE	Unspecified Ground Workings	1964 - 1968	1115950
AN	171m NW	Unspecified Ground Workings	1901	1110573
AP	172m E	Unspecified Ground Workings	1938	1051128
AP	172m E	Unspecified Ground Workings	1964 - 1968	1125702
AP	172m E	Unspecified Ground Workings	1948	1039418
AP	174m E	Unspecified Ground Workings	1915	1146933
AM	174m NE	Unspecified Old Quarry	1922	1133728
AR	175m S	Unspecified Tank	1964 - 1988	1122190
AP	177m E	Unspecified Ground Workings	1922	1043012
AE	178m E	Unspecified Tank	1875	1016567
16	178m W	Unspecified Factory	1988	1153714
F	184m N	Unspecified Ground Workings	1901	1144145
F	190m N	Unspecified Disused Shaft	1964 - 1988	1115610
17	192m S	Disused Canal	1988	1061249

ID	Location	Land use	Dates present	Group ID
F	193m N	Unspecified Heaps	1948	1021415
F	195m N	Unspecified Heap	1903	1000275
F	198m N	Garage	1988	1033771
L	199m E	Unspecified Heap	1964 - 1968	1094849
18	205m N	Railway Sidings	1948	1124869
F	207m N	Air Shafts	1903	1027667
AU	208m NW	Gas Works	1915	1078041
AU	208m NW	Gas Works	1938	1148777
AV	211m W	Unspecified Old Quarry	1922	1022758
19	211m E	Unspecified Disused Pit	1901	1015559
AU	212m NW	Unspecified Works	1964 - 1968	1119117
AU	212m NW	Gas Works	1921 - 1922	1088206
AL	213m NW	Railway Sidings	1875	993783
AV	213m W	Unspecified Heap	1948	1000289
O	216m N	Unspecified Commercial/Industrial	1915	995693
20	219m NE	Unspecified Factory	1988	1014506
AV	219m W	Old Air Shafts	1922	1010435
AV	220m W	Unspecified Ground Workings	1875	1142951
AV	221m W	Unspecified Ground Workings	1948	1095474
AV	226m W	Unspecified Pit	1901	1028162
AN	230m NW	Unspecified Heap	1901	1113406
21	232m E	Unspecified Heap	1964 - 1968	1094794
O	233m N	Mineral Railway Sidings	1915	1087857
AV	234m W	Unspecified Pit	1948	1028158
AQ	240m E	Coal Pit	1875	1005041
AX	241m SW	Coal Pit	1875	1005031
AX	242m SW	Unspecified Disused Mine	1964 - 1968	1085218
AU	247m N	Railway Sidings	1901	1111455

ID	Location	Land use	Dates present	Group ID
AL	252m NW	Old Dock	1922	1044153
23	254m SW	Railway Sidings	1948	1063682
AY	257m NW	Unspecified Factory	1988	1078765
AZ	257m S	Unspecified Pit	1948	1084639
24	258m N	Railway Sidings	1901 - 1903	1099240
AZ	258m S	Unspecified Heap	1964 - 1968	1131573
AU	258m NW	Gas Holder Station	1988	1006107
BA	261m W	Unspecified Heap	1948	1000292
25	263m NE	Unspecified Disused Pit	1915	1068073
O	264m N	Unspecified Heap	1964 - 1968	1109238
AX	265m SW	Unspecified Commercial/Industrial	1948	995692
O	265m N	Coal Level	1915	1146762
AU	266m N	Railway Sidings	1915	1051677
O	267m N	Coal Level	1922	1061405
O	267m N	Coal Level	1922	1139314
AV	267m W	Old Air Shafts	1922	1010436
AV	268m W	Old Coal Shaft	1948	992173
O	268m N	Unspecified Heap	1915 - 1921	1118831
AU	269m NW	Unspecified Tanks	1948	1091755
AU	269m NW	Unspecified Tanks	1964 - 1988	1148631
AU	270m NW	Gasometers	1938	1142083
AU	270m NW	Gasometers	1915 - 1921	1073226
O	270m N	Old Coal Level	1948	1032268
AQ	271m E	Refuse Heaps	1948	1004690
AQ	271m NE	Unspecified Ground Workings	1901	1126191
AU	271m NW	Gasometer	1922	1137843
O	272m N	Coal Level	1938	1076230
O	272m N	Coal Level	1938	1085532

ID	Location	Land use	Dates present	Group ID
BB	272m NE	Opencast Coal Workings	1988	1007164
AX	273m SW	Unspecified Pit	1922	1050119
O	274m N	Coal Level	1921	1066829
AW	275m SE	Refuse Heap	1964 - 1968	1134456
BC	276m E	Unspecified Ground Workings	1964 - 1968	1142983
BD	277m NE	Ironstone Level	1875	992453
AY	277m NW	Unspecified Factory	1964 - 1968	1140854
AQ	279m NE	Unspecified Ground Workings	1964 - 1968	1117322
E	280m N	Railway Sidings	1901	1118353
BE	281m SW	Unspecified Heaps	1948	1021421
AU	281m N	Railway Sidings	1922	1077814
AU	281m N	Railway Sidings	1922	1118808
26	282m NE	Unspecified Disused Shaft	1964 - 1988	1141210
BE	282m SW	Unspecified Heap	1922	1085240
AX	282m SW	Unspecified Ground Workings	1988	1151609
27	285m NE	Railway Sidings	1875	993779
BE	286m SW	Unspecified Heap	1875	1101653
BE	287m SW	Unspecified Heap	1964 - 1968	1145409
BE	288m SW	Unspecified Ground Workings	1901	996801
AX	288m SW	Unspecified Ground Workings	1964 - 1968	1133800
AW	289m SE	Garage	1988	1033773
AX	294m SW	Unspecified Heap	1948	1115921
BF	295m W	Unspecified Ground Workings	1875	996798
AX	296m SW	Railway Sidings	1922	1114202
29	298m N	Railway Building	1948	1013039
BA	302m W	Old Coal Shaft	1948	992171
BG	307m SW	Railway Sidings	1901	1085460
BH	307m S	Unspecified Disused Mine	1964 - 1968	1130924

ID	Location	Land use	Dates present	Group ID
BG	310m SW	Goods Shed	1922 - 1948	1120334
AU	311m NW	Gasometer	1922	1120778
30	314m W	Railway Sidings	1948	993782
BI	316m W	Disused Canal	1915 - 1921	1054695
BG	317m SW	Railway Building	1901	1013037
BI	317m W	Disused Canal	1938 - 1948	1106578
31	318m N	Railway Sidings	1921	1058827
BJ	319m N	Unspecified Ground Workings	1938	1148416
BK	320m NE	Unspecified Disused Pit	1948	1114226
32	320m SE	Cuttings	1875	994345
BG	321m SW	Railway Station	1922 - 1948	1098963
O	321m N	Unspecified Pit	1948	1073697
BJ	322m N	Ground Workings and Refuse Heap	1915	1007282
AQ	322m E	Railway Sidings	1875	1151452
E	322m N	Railway Sidings	1915	1108636
BI	322m W	Old Canal	1901	1004655
BL	323m W	Disused Canal	1988	1063494
O	323m N	Unspecified Ground Workings	1922	1084321
BH	324m S	Coal Pit	1875	1005032
BG	324m SW	Railway Station	1901	1053875
BJ	326m N	Unspecified Ground Workings	1875	1048809
BH	328m S	Unspecified Pit	1922	1074349
O	328m N	Unspecified Pit	1921	1149892
AX	330m SW	Unspecified Heap	1875 - 1901	1133011
E	331m N	Railway Sidings	1922	1041997
E	331m N	Railway Sidings	1922	1107072
AQ	333m E	Air Shafts	1875	1027655
BE	334m SW	Old Air Shaft	1922 - 1948	1149831

ID	Location	Land use	Dates present	Group ID
BL	336m W	Disused Canal	1922	1052971
BE	338m SW	Unspecified Disused Shaft	1964 - 1968	1092966
BF	340m W	Unspecified Pit	1922	1091995
O	341m N	Drift	1938	1075832
O	342m N	Unspecified Ground Workings	1968	1078757
O	342m N	Unspecified Ground Workings	1964	1108497
BF	342m W	Old Coal Shaft	1922	992174
AX	342m SW	Railway Sidings	1901	1051108
O	344m N	Disused Drift	1948	1000056
BH	345m S	Unspecified Heaps	1948	1021423
34	345m SW	Tramway Sidings	1922 - 1948	1085211
O	346m N	Unspecified Disused Tip	1975	1058080
O	346m N	Unspecified Disused Tip	1982	1074829
BH	346m S	Unspecified Disused Tip	1988	1005146
35	346m SW	Refuse Heap	1964 - 1968	1034438
BK	347m NE	Unspecified Disused Shaft	1964 - 1968	1140915
BJ	347m N	Unspecified Ground Workings	1965	1048751
BH	349m S	Unspecified Pit	1901	1099397
BM	349m W	Ironstone Level	1875	992436
BA	349m W	Old Air Shafts	1922	1010434
O	351m N	Unspecified Drift	1915	1009875
AU	352m NW	Wire Works	1901	993624
AU	352m NW	Railway Sidings	1921	1112415
BJ	354m N	Unspecified Disused Tips	1982	1078804
BJ	354m N	Unspecified Disused Tips	1975	1155672
BG	355m SW	Railway Building	1948	1013042
O	355m N	Coal Level	1901 - 1903	1038934
BG	356m SW	Railway Building	1922	1013044

ID	Location	Land use	Dates present	Group ID
BK	356m NE	Old Air Shaft	1948	1003773
BH	357m S	Engine Houses	1948	1134050
BH	357m S	Unspecified Heap	1964 - 1968	1120814
BN	358m SW	Unspecified Pit	1964 - 1968	1111701
BN	359m SW	Cuttings	1901	1118979
O	360m N	Unspecified Old Shaft	1915	1146321
O	361m N	Unspecified Old Shaft	1922	1061251
O	361m N	Unspecified Old Shaft	1948	1090515
O	361m N	Unspecified Old Shaft	1922	1128861
AQ	361m E	Air Shafts	1901	1027657
O	361m N	Drift	1921	1012106
AU	364m NW	Disused Wire Works	1903	1022160
O	365m N	Drift Mill	1922	1143059
BN	365m SW	Cuttings	1922 - 1948	1101219
AQ	365m E	Unspecified Disused Shafts	1964 - 1968	1063786
BK	366m NE	Disused Clay Pit	1901	1015258
AQ	366m E	Air Shafts	1875	1027656
BO	366m W	Engine House	1922	1095387
36	367m SW	Refuse Heap	1948	1118243
O	367m N	Old Shaft	1921	1016163
O	367m N	Unspecified Old Shaft	1938	1073820
O	367m N	Unspecified Old Shaft	1938	1154819
BO	367m W	Engine House	1875	1089555
BO	368m W	Unspecified Heap	1875	1000288
O	368m N	Smithy	1875	1032867
O	368m N	Unspecified Old Shaft	1901	1154189
E	369m N	Railway Sidings	1965	1033994
AQ	369m E	Unspecified Disused Shafts	1964 - 1968	1155333

ID	Location	Land use	Dates present	Group ID
O	371m N	Engine House	1875	1019124
E	372m N	Railway Sidings	1901	1077181
AQ	375m E	Air Shafts	1875	1027647
O	378m N	Unspecified Old Shaft	1903	1003255
BC	379m NE	Unspecified Ground Workings	1901	1095235
37	380m E	Unspecified Ground Workings	1901	996806
O	380m N	Unspecified Heap	1948	1050053
38	380m NE	Railway Sidings	1875	993786
BK	382m NE	Engine House	1875	1019126
O	384m N	Cuttings	1938	994292
O	385m N	Unspecified Heap	1921	1105200
BK	385m NE	Unspecified Old Shaft	1903	1003254
BO	386m W	Railway Sidings	1901 - 1922	1059733
BO	388m W	Unspecified Ground Workings	1875	1130993
BD	388m E	Unspecified Ground Workings	1964	1122546
BD	388m E	Unspecified Ground Workings	1968	1129254
AU	388m NW	Unspecified Tank	1938	1102073
BK	388m NE	Unspecified Old Shaft	1901	1080139
AU	388m NW	Gasometer	1915	1057691
BK	389m NE	Disused Pit	1921	993629
AU	390m NW	Unspecified Tanks	1948	1009924
BP	390m E	Tramway Sidings	1922	1105665
BK	390m NE	Unspecified Disused Pit	1938	1036038
BK	390m NE	Unspecified Disused Pit	1938	1116596
BK	390m NE	Unspecified Old Shaft	1903	1119803
AU	390m NW	Gasometer	1922	1074178
BK	391m NE	Unspecified Disused Pit	1922	1088166
BK	391m NE	Unspecified Disused Pit	1922	1124517

ID	Location	Land use	Dates present	Group ID
BK	392m NE	Unspecified Disused Pit	1915	1136814
BQ	392m S	Railway Sidings	1875	1130076
BR	394m SW	Railway Building	1922	1013043
O	395m N	Coal Level	1875	1007519
BQ	398m SW	Unspecified Heaps	1948	1021422
BO	398m W	Tramway Sidings	1901	1014624
AU	399m NW	Unspecified Tank	1921	1128118
O	399m N	Unspecified Ground Workings	1875	1056543
AQ	399m E	Unspecified Level	1948	1022217
AQ	400m E	Unspecified Level	1922	1046779
O	401m N	Unspecified Ground Workings	1922	1080871
O	401m N	Unspecified Ground Workings	1922	1127433
39	401m E	Unspecified Pit	1922	1129267
40	404m N	Disused Mineral Railway Sidings	1948	1012579
AQ	405m E	Clay Pit	1901	1018892
BS	405m NE	Unspecified Disused Pit	1903	1038798
BS	405m NE	Unspecified Disused Pit	1948	1096131
AU	406m NW	Unspecified Tank	1938	1121910
AU	406m NW	Unspecified Tank	1915	1118158
BR	407m SW	Unspecified Heap	1948	1000291
BR	408m SW	Unspecified Heaps	1964 - 1968	1129893
AU	408m NW	Gasometer	1922	1141690
BO	408m W	Old Air Shaft	1922	1003774
BH	409m S	Engine Houses	1901	1154948
AQ	409m E	Air Shafts	1875	1027648
41	410m SE	Unspecified Works	1988	1020629
42	412m NE	Unspecified Heap	1938	1140448
BS	414m NE	Unspecified Ground Workings	1921	1099867

ID	Location	Land use	Dates present	Group ID
BS	414m NE	Unspecified Heaps	1964 - 1968	1102582
BS	415m NE	Unspecified Disused Pit	1922	1135922
AU	415m NW	Unspecified Tank	1921	1016566
BH	416m S	Engine Houses	1922	1123734
BS	416m NE	Unspecified Disused Pit	1901	1144369
BS	416m NE	Unspecified Ground Workings	1915	1076936
BH	418m S	Engine Houses	1875	1127307
BS	420m NE	Unspecified Disused Pit	1938	1106823
BM	422m W	Unspecified Heaps	1922	1111091
BO	423m W	Tramway Sidings	1901	1014625
BR	423m SW	Refuse Heap	1922	1075168
BM	425m W	Unspecified Ground Workings	1948	1132095
BT	425m S	Unspecified Pit	1922	1105079
BO	426m W	Unspecified Ground Workings	1968	1082735
BU	427m NE	Unspecified Mill	1922	1101364
BU	428m NE	Unspecified Mill	1915	1064441
BV	430m NE	Coal Pit	1922 - 1948	1117783
BT	430m S	Unspecified Pit	1875	1108667
BT	431m S	Unspecified Pit	1901	1049290
BT	431m S	Unspecified Pit	1948	1134281
BV	431m NE	Coal Pit	1915	1048091
BV	431m NE	Coal Pit	1921	1005029
AU	432m NW	Dairy	1982	1131358
AU	433m NW	Unspecified Depot	1992	1012586
BT	434m S	Unspecified Pit	1964 - 1968	1089858
BJ	436m N	Refuse Heap	1922	1096163
AX	436m SW	Railway Building	1901	1013045
BJ	438m N	Unspecified Ground Workings	1901	1080808

ID	Location	Land use	Dates present	Group ID
BH	438m S	Engine Houses	1875	1078082
BM	438m W	Unspecified Heap	1964 - 1968	1082234
AQ	441m E	Engine House	1875	1019143
BS	441m NE	Coal and Ironstone Pit	1875	1024820
43	441m E	Old Coal Level	1948	1108914
BM	441m W	Unspecified Ground Workings	1901	1083335
BQ	445m SW	Unspecified Pit	1964 - 1968	1095726
BH	446m S	Engine Houses	1875	1139081
BO	447m W	Engine House	1875	1019123
BJ	451m N	Unspecified Ground Workings	1903	1155134
BH	455m S	Engine Houses	1875	1112363
AU	457m NW	Dairy	1975	1124568
44	457m NE	Unspecified Old Level	1901	1004902
BP	457m NE	Unspecified Ground Workings	1901	1111834
AU	457m NW	Unspecified Tank	1921	1016568
BX	461m W	Unspecified Ground Workings	1968	1135647
45	465m W	Railway Sidings	1875	993781
BY	467m SW	Railway Sidings	1901	1144985
BY	469m S	Cuttings	1988	1108432
AX	471m SW	Railway Building	1901	1013046
BQ	473m SW	Unspecified Ground Workings	1964 - 1968	1104451
AQ	473m NE	Tramway Sidings	1901	1062329
BZ	473m N	Isolation Hospital	1938	1055285
BZ	474m N	Corporation Isolation Hospital	1915	1016531
CA	475m E	Unspecified Disused Mine	1964 - 1968	1118596
CB	476m SW	Railway Sidings	1901	1141755
BZ	476m N	Isolation Hospital	1948	1036929
CB	476m SW	Smithy	1875	1032870

ID	Location	Land use	Dates present	Group ID
BZ	476m N	Hospital	1965	1150447
BZ	477m N	Hospital	1975	1047975
BZ	477m N	Hospital	1982 - 1992	1079164
BZ	477m N	Isolation Hospital	1922	1103133
BZ	479m N	Isolation Hospital	1921	1118597
AU	482m NW	Unspecified Tank	1922 - 1948	1139757
AU	483m NW	Unspecified Tank	1915	1057447
BX	483m W	Unspecified Heap	1964	1000287
CC	484m SW	Old Coal Level	1922	1057756
46	484m S	Disused Canal	1964 - 1968	1107235
CC	485m SW	Unspecified Heap	1948	1000290
CD	485m N	Railway Sidings	1922	1089749
CD	485m N	Railway Sidings	1922	1090053
BX	486m W	Unspecified Ground Workings	1964	1122173
47	486m S	Unspecified Heap	1968	1000293
48	488m E	Coal Pit	1875	1005033
CE	489m NW	Unspecified Ground Workings	1938	1112327
BB	489m NE	Unspecified Ground Workings	1922 - 1938	1126113
CE	489m NW	Unspecified Ground Workings	1915 - 1921	1132624
CA	490m E	Ironstone Level	1875	992454
CE	491m NW	Unspecified Ground Workings	1875	1095216
AU	492m NW	Unspecified Tank	1921	1045928
AU	492m NW	Unspecified Heap	1922	1063078
AU	492m NW	Unspecified Heap	1922	1115001
BB	492m NE	Ground Workings and Refuse Heap	1915 - 1921	1086153
BB	493m NE	Unspecified Heaps	1948	1021451
BB	494m NE	Unspecified Disused Pit	1901 - 1903	1127132
BQ	496m SW	Unspecified Heap	1964 - 1968	1122359

ID	Location	Land use	Dates present	Group ID
49	496m NE	Unspecified Heaps	1964 - 1968	1083481
BP	497m NE	Clay Pits	1922	1009852
AU	498m NW	Unspecified Ground Workings	1921	1101754
CE	499m NW	Unspecified Heap	1901	1146659
50	499m W	Unspecified Heap	1922	1120722

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**53**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
B	**On site**	**Unspecified Tank**	**1984 - 1998**	**163562**
B	**On site**	**Unspecified Tank**	**1998**	**149667**
B	**On site**	**Tanks**	**1998**	**156258**
B	**On site**	**Unspecified Tank**	**1979 - 1992**	**160647**
B	**On site**	**Unspecified Tank**	**1962 - 1998**	**164160**
R	**On site**	**Unspecified Tank**	**1998**	**149670**
R	**On site**	**Unspecified Tank**	**1984**	**160700**
R	**On site**	**Unspecified Tank**	**1998**	**161848**
R	**On site**	**Unspecified Tank**	**1984 - 1992**	**164147**
V	48m SE	Unspecified Tank	1900	149669
Y	64m W	Unspecified Tank	1984 - 1998	165633
Y	68m W	Unspecified Tank	1984 - 1992	163868
D	97m NE	Unspecified Tank	1875	149673

ID	Location	Land use	Dates present	Group ID
L	130m SE	Tanks	1875	156259
L	154m E	Tanks	1900	156260
AE	163m E	Unspecified Tank	1875	149660
AR	174m S	Unspecified Tank	1962 - 1983	159032
D	182m NE	Unspecified Tank	1900	149672
AL	193m NW	Tanks	1984	163886
AL	194m NW	Tanks	1998	161436
AL	197m NW	Tanks	1984 - 1992	162846
AU	204m NW	Gas Works	1971	162383
AU	207m NW	Gas Holder Station	1984	167846
AU	207m NW	Gas Works	1979	158805
AU	211m NW	Gas Works	1919	158867
D	229m NE	Unspecified Tank	1875	149671
22	246m NE	Unspecified Tank	1875	149668
AN	256m NW	Unspecified Tank	1988 - 1992	165740
AU	259m NW	Gas Works	1984	166108
AU	259m NW	Gas Holder Station	1988 - 1992	167258
AU	260m NW	Gas Holder Station	1998	158552
AU	270m NW	Gas Holder	1984 - 1998	168061
AU	270m NW	Gasholders	1988 - 1992	158129
AU	270m NW	Tanks	1979	156234
AU	270m NW	Gasometers	1979 - 1984	166420
AU	272m NW	Unspecified Tank	1962	149676
AU	272m NW	Gasometer	1971	155799
AU	273m NW	Gasometers	1919	168337
28	291m W	Unspecified Tank	1998	149666
AU	309m NW	Gas Holder	1984 - 1998	160835
AU	310m NW	Unspecified Tank	1962	149675

ID	Location	Land use	Dates present	Group ID
AU	310m NW	Gasometer	1971	155801
O	322m N	Unspecified Tank	1875	149677
O	338m N	Unspecified Tank	1875	149678
O	346m N	Tanks	1875	156256
O	359m N	Unspecified Tank	1875	149680
O	365m N	Unspecified Tank	1875	149679
BC	366m E	Tanks	1875	156261
O	376m N	Unspecified Tank	1875	149687
AU	392m NW	Gasometer	1919	155800
AU	410m NW	Unspecified Tank	1919	149674
BU	437m NE	Tank or Trough	1875	157952
AU	488m NW	Unspecified Tank	1919	149694

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**42**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gas Governing Station**	**1998**	**87694**
K	**On site**	**Electricity Substation**	**1988 - 1992**	**91832**
K	**On site**	**Electricity Substation**	**1984**	**95270**
R	**On site**	**Electricity Substation**	**1998**	**85712**
S	**On site**	**Electricity Substation**	**1971 - 1992**	**91246**
S	**On site**	**Electricity Substation**	**1998**	**93475**

ID	Location	Land use	Dates present	Group ID
10	22m NE	Electricity Substation	1992 - 1998	89733
J	28m NE	Electricity Substation	1998	85711
V	53m SE	Electricity Substation	1998	85714
F	62m NW	Electricity Substation	1984	85720
AD	133m SW	Electricity Substation	1982 - 1998	93943
AE	164m NE	Electricity Substation	1980 - 1998	93938
AS	178m SW	Electricity Substation	1998	90281
AS	185m SW	Electricity Substation	1982	88823
AS	186m SW	Electricity Substation	1988	88720
AT	195m SW	Electricity Substation	1982 - 1988	93290
AT	195m SW	Electricity Substation	1998	92865
AU	204m NW	Gas Works	1971 - 1979	96102
AU	207m NW	Gas Holder Station	1984	89850
AU	211m NW	Gas Works	1919	93005
AU	259m NW	Gas Holder Station	1988 - 1998	91307
AU	259m NW	Gas Works	1984	95338
AU	270m NW	Gas Holder	1984 - 1998	95078
AU	270m NW	Gasholders	1988 - 1992	90201
AU	270m NW	Gasometers	1979 - 1984	94333
AU	272m NW	Gasometer	1971	87294
AU	273m NW	Gasometers	1919	91846
AU	309m NW	Gas Holder	1984 - 1998	89492
AU	310m NW	Gasometer	1971	87296
Q	312m E	Electricity Substation	1960 - 1998	95401
33	325m S	Electricity Substation	1982 - 1988	90088
F	329m N	Electricity Substation	1984	85721
F	329m N	Electricity Substation	1979 - 1992	91551
F	337m N	Electricity Transformer	1971	87767

ID	Location	Land use	Dates present	Group ID
F	338m N	Electricity Substation	1998	88999
AU	358m NW	Electricity Substation	1984	85723
AU	392m NW	Gasometer	1919	87295
AU	396m NW	Electricity Substation	1979 - 1984	91168
BW	433m N	Electricity Substation	1981 - 1992	94595
BW	433m N	Electricity Transformer	1969	87766
AU	444m NW	Electricity Transformer	1971	87769
AU	444m NW	Electricity Substation	1979 - 1984	94037

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	**11**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
F	78m N	Garage	1971	29666
F	115m N	Garage	1962	28598
F	125m N	Garage	1984	28543

ID	Location	Land use	Dates present	Group ID
F	138m N	Garage	1979 - 1984	31824
F	200m N	Garage	1971 - 1998	31099
F	201m N	Garage	1979	31588
F	201m N	Garage	1984	29053
F	201m N	Garage	1984 - 1992	30576
AW	214m SE	Garage	1998	28557
F	260m N	Garage	1962	29697
AW	272m SE	Garage	1983 - 1992	31011

This data is sourced from Ordnance Survey / Groundsure.

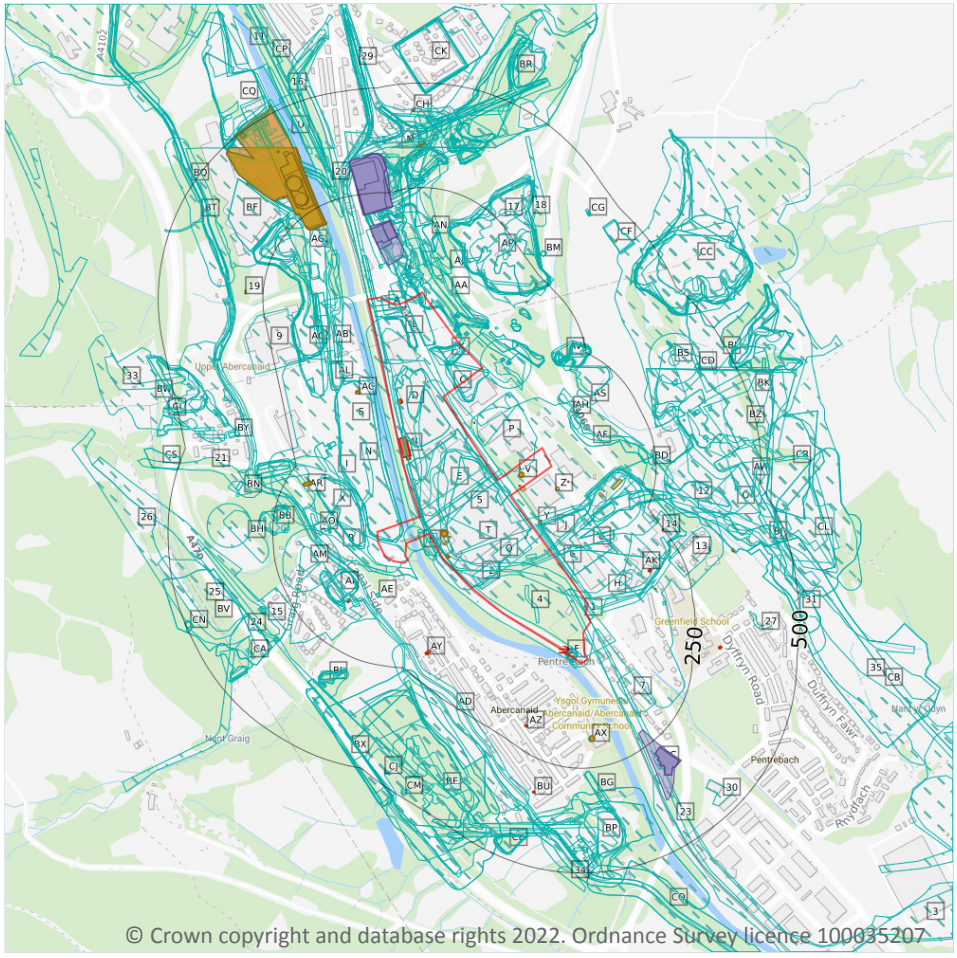
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m	710

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 39**

ID	Location	Land Use	Date	Group ID
1	On site	Railway Building	1901	1013041
2	On site	Unspecified Factory	1988	1082250
3	On site	Railway Sidings	1948	1129318

ID	Location	Land Use	Date	Group ID
4	On site	Unspecified Pit	1875	1028160
5	On site	Unspecified Heap	1875	1150164
A	On site	Unspecified Pit	1901	1067566
A	On site	Unspecified Ground Workings	1901	1108350
A	On site	Unspecified Ground Workings	1921	1043806
A	On site	Unspecified Ground Workings	1915	1120275
A	On site	Unspecified Ground Workings	1922	1043806
A	On site	Unspecified Ground Workings	1922	1100547
A	On site	Unspecified Ground Workings	1922	1043806
A	On site	Unspecified Ground Workings	1922	1100547
A	On site	Unspecified Ground Workings	1948	1039083
A	On site	Unspecified Pit	1903	1067566
A	On site	Unspecified Ground Workings	1903	1147955
A	On site	Unspecified Ground Workings	1968	1053771
A	On site	Unspecified Ground Workings	1964	1053771
A	On site	Unspecified Ground Workings	1938	1125123
A	On site	Unspecified Ground Workings	1938	1114717
B	On site	Unspecified Heap	1922	1046939
B	On site	Unspecified Pit	1948	1028159
B	On site	Unspecified Heap	1922	1046939
C	On site	Unspecified Ground Workings	1901	996803
C	On site	Unspecified Heap	1922	1079178
C	On site	Unspecified Heap	1948	1107218
C	On site	Unspecified Heap	1964	1072424
C	On site	Unspecified Heap	1922	1079178
D	On site	Unspecified Heap	1901	1064320
D	On site	Refuse Heap	1968	1127622
D	On site	Refuse Heap	1964	1127622

ID	Location	Land Use	Date	Group ID
E	On site	Unspecified Heap	1901	1150164
E	On site	Unspecified Factory	1988	1156717
E	On site	Unspecified Ground Workings	1922	1085810
E	On site	Unspecified Heap	1948	1072701
E	On site	Unspecified Factory	1968	1139254
E	On site	Unspecified Factory	1964	1139254
E	On site	Unspecified Ground Workings	1922	1085810
F	On site	Railway Station	1901	1060951
F	On site	Railway Station	1922	1127208
F	On site	Railway Station	1948	1127208
F	On site	Railway Station	1968	1127208
F	On site	Railway Station	1964	1127208
G	On site	Mineral Railway Sidings	1901	1065331
H	On site	Mineral Railway Sidings	1901	1065331
I	On site	Unspecified Factory	1988	1049427
J	On site	Iron Works	1875	1016008
J	On site	Railway Sidings	1875	1074511
K	On site	Unspecified Ground Workings	1901	1055301
K	On site	Lime Kiln	1875	1032640
K	On site	Unspecified Ground Workings	1921	1133857
K	On site	Unspecified Pit	1915	1122584
K	On site	Unspecified Pit	1922	1062448
K	On site	Unspecified Pit	1922	1062448
K	On site	Unspecified Pit	1948	1128159
K	On site	Unspecified Pit	1938	1105305
K	On site	Unspecified Old Shafts	1938	1057924
K	On site	Unspecified Pit	1938	1105305
K	On site	Unspecified Old Shafts	1938	1057924

ID	Location	Land Use	Date	Group ID
L	**On site**	**Unspecified Ground Workings**	**1915**	**1118948**
L	**On site**	**Unspecified Heap**	**1948**	**1103120**
L	**On site**	**Unspecified Heaps**	**1938**	**1146881**
L	**On site**	**Unspecified Heaps**	**1938**	**1146881**
M	**On site**	**Mineral Railway Sidings**	**1922**	**1100180**
M	**On site**	**Mineral Railway Sidings**	**1922**	**1100180**
N	**On site**	**Unspecified Heaps**	**1922**	**1050184**
N	**On site**	**Unspecified Heap**	**1948**	**1121737**
N	**On site**	**Unspecified Heaps**	**1922**	**1050184**
O	**On site**	**Mineral Railway Sidings**	**1922**	**1140998**
P	**On site**	**Unspecified Factory**	**1988**	**1063801**
Q	**On site**	**Unspecified Factory**	**1988**	**1129887**
Q	**On site**	**Unspecified Commercial/Industrial**	**1948**	**995691**
Q	**On site**	**Unspecified Pit**	**1875**	**1028161**
R	**On site**	**Coal Pit**	**1875**	**1005025**
S	**On site**	**Unspecified Heaps**	**1968**	**1122836**
S	**On site**	**Unspecified Heaps**	**1964**	**1122836**
T	**On site**	**Unspecified Factory**	**1968**	**1061176**
T	**On site**	**Unspecified Factory**	**1964**	**1061176**
U	**On site**	**Railway Sidings**	**1938**	**1043509**
K	0m NE	Engine House	1875	1019125
K	4m NE	Mortar Mill	1875	996497
6	5m NE	Refuse Heap	1875	1019515
F	5m SW	Railway Station	1988	1068599
K	6m NE	Old Shafts	1921	1033368
G	7m NE	Brick Works	1901	1072994
K	8m NE	Unspecified Old Shafts	1938	1144684
K	8m NE	Unspecified Old Shafts	1938	1144684

ID	Location	Land Use	Date	Group ID
K	9m NE	Unspecified Old Shafts	1901	1075278
K	9m NE	Unspecified Old Shafts	1922	1048724
K	9m NE	Unspecified Old Shafts	1922	1048724
K	10m NE	Unspecified Old Shafts	1915	1155652
K	10m NE	Unspecified Old Shafts	1948	1144684
K	11m NE	Unspecified Old Shafts	1915	1106177
A	11m N	Cuttings	1948	994289
G	11m NE	Unspecified Commercial/Industrial	1948	995694
R	12m S	Railway Sidings	1875	993784
K	12m NE	Unspecified Old Shafts	1901	1125899
G	12m NE	Brick Works	1922	1137264
G	12m NE	Brick Works	1922	1137264
K	14m NE	Unspecified Old Shafts	1903	1155652
J	15m NE	Unspecified Factory	1968	1108251
J	15m NE	Unspecified Factory	1964	1108251
A	15m NW	Old Coal Level	1948	1136974
P	19m NE	Unspecified Pit	1964	1028163
X	20m SW	Mineral Railway Sidings	1901	1024460
K	20m NE	Railway Sidings	1938	1143394
K	21m NE	Railway Sidings	1922	1152767
K	21m NE	Railway Sidings	1922	1152767
K	22m NE	Railway Sidings	1915	1047497
K	23m NE	Old Shafts	1921	1033369
K	26m NE	Unspecified Old Shafts	1922	1037109
K	26m NE	Unspecified Old Shafts	1922	1037109
A	28m NW	Air Shafts	1915	1104974
A	28m NW	Unspecified Disused Shafts	1968	1148266
A	28m NW	Unspecified Disused Shafts	1964	1148266

ID	Location	Land Use	Date	Group ID
A	29m NW	Air Shafts	1948	1041178
X	30m W	Unspecified Disused Pit	1948	1067327
K	30m E	Unspecified Ground Workings	1948	996804
X	32m W	Unspecified Disused Pit	1922	1089846
X	32m W	Unspecified Disused Pit	1922	1089846
H	33m NE	Sawmill	1875	1004832
A	33m NW	Air Shafts	1922	1092050
A	33m NW	Air Shafts	1922	1092050
X	35m W	Unspecified Heap	1968	1092287
X	35m W	Unspecified Heap	1964	1092287
A	35m NW	Garage	1988	1033772
A	35m NW	Air Shafts	1921	1071077
A	41m NW	Air Shafts	1903	1027658
A	42m NW	Old Coal Level	1922	1154628
A	42m NW	Old Coal Level	1922	1154628
K	45m NE	Old Lime Kilns	1921	1062531
M	47m NE	Tramway Sidings	1901	1139064
A	47m NW	Unspecified Ground Workings	1921	1053771
K	49m E	Old Lime Kilns	1938	1042821
M	49m NE	Tramway Sidings	1903	1037417
K	50m E	Old Lime Kilns	1915	1075152
K	50m E	Old Lime Kilns	1948	1042821
A	50m NW	Air Shafts	1948	1116001
A	51m NW	Air Shafts	1915	1051718
A	51m NW	Unspecified Disused Shafts	1968	1142700
A	51m NW	Unspecified Disused Shafts	1964	1142700
AA	51m NE	Coal Level	1901	1007490
A	55m NW	Air Shafts	1922	1099008

ID	Location	Land Use	Date	Group ID
A	55m NW	Air Shafts	1922	1099008
G	55m NE	Refuse Heap	1922	1055540
G	55m NE	Refuse Heap	1922	1055540
AA	55m NE	Unspecified Ground Workings	1948	1096158
K	56m E	Old Lime Kilns	1921	1041711
A	58m NW	Air Shafts	1921	1063129
K	60m E	Old Lime Kilns	1922	1092209
K	60m E	Old Lime Kilns	1922	1092209
M	61m N	Railway Sidings	1875	1104858
K	62m E	Old Lime Kiln	1938	1014939
K	63m E	Old Lime Kilns	1948	1126163
AB	63m W	Unspecified Ground Workings	1901	1077068
K	63m E	Old Lime Kilns	1915	1085615
A	64m NW	Air Shafts	1903	1027646
A	65m N	Cuttings	1903	994290
AB	66m W	Unspecified Ground Workings	1903	1126850
A	68m N	Old Coal Level	1921	1032271
K	68m NE	Unspecified Ground Workings	1922	1145718
K	68m NE	Unspecified Ground Workings	1922	1145718
K	70m NE	Coal Level	1921	1047108
K	71m NE	Coal Level	1938	1124514
K	71m NE	Coal Level	1938	1124514
K	73m NE	Coal Level	1922	1124514
K	73m NE	Coal Level	1922	1124514
K	74m NE	Coal Level	1915	1138876
A	76m N	Cuttings	1903	994291
AD	77m SW	Disused Canal	1922	1090618
AD	81m SW	Disused Canal	1948	1153257

ID	Location	Land Use	Date	Group ID
AE	84m SW	Unspecified Disused Shaft	1988	1047368
AE	84m SW	Unspecified Disused Shaft	1968	1047368
AE	84m SW	Unspecified Disused Shaft	1964	1047368
AF	85m NE	Unspecified Ground Workings	1968	1104929
AF	85m NE	Unspecified Ground Workings	1964	1104929
A	85m N	Old Coal Level	1915	1032270
K	86m NE	Unspecified Ground Workings	1948	1059147
K	86m NE	Coal Level	1948	1007491
K	87m NE	Unspecified Ground Workings	1915	1084025
AG	88m W	Unspecified Ground Workings	1875	1118814
7	89m SE	Unspecified Depot	1988	1012585
AH	89m NE	Unspecified Ground Workings	1901	1140835
AI	90m SW	Unspecified Heaps	1922	1068344
AI	90m SW	Unspecified Heaps	1922	1068344
AJ	91m NE	Old Coal Level	1938	1089600
AJ	91m NE	Old Coal Level	1938	1089600
A	92m NW	Unspecified Heap	1948	1000274
AF	92m NE	Unspecified Heap	1948	1000270
AI	92m SW	Refuse Heap	1968	1111870
AI	92m SW	Refuse Heap	1964	1111870
AI	93m SW	Unspecified Heap	1948	1000273
AK	94m NE	Unspecified Factory	1988	1014505
AL	97m W	Unspecified Heap	1901	1047935
AL	97m W	Unspecified Heap	1948	1102635
AM	98m W	Burial Ground	1988	1053348
AN	99m N	Unspecified Ground Workings	1915	1156273
AO	100m W	Railway Building	1901	1013040
AB	101m W	Cuttings	1948	1130408

ID	Location	Land Use	Date	Group ID
AB	102m W	Cuttings	1938	1130408
AN	102m N	Unspecified Heaps	1948	1021416
8	103m W	Cuttings	1948	994288
G	105m NE	Railway Sidings	1948	1086743
AO	109m W	Unspecified Old Shafts	1922	1036031
AO	109m W	Unspecified Old Shafts	1922	1036031
AO	111m W	Unspecified Old Shafts	1922	1127909
AO	111m W	Unspecified Old Shafts	1922	1127909
A	112m N	Unspecified Heap	1948	1000276
AO	112m W	Unspecified Old Shafts	1948	992625
AO	112m W	Unspecified Old Shafts	1948	1067879
K	115m NE	Coal Level	1938	1135961
K	115m NE	Coal Level	1938	1135961
AP	116m NE	Coal and Ironstone Pit	1875	1024819
K	116m NE	Unspecified Heap	1948	1057551
AQ	116m W	Unspecified Ground Workings	1922	1097065
AQ	116m W	Unspecified Ground Workings	1922	1035343
AR	117m NW	Dock	1875	1012556
AQ	117m W	Ground Workings and Refuse Heap	1915	1115187
K	117m NE	Unspecified Heap	1915	1139157
AI	118m SW	Coal Pit	1875	1005026
AH	119m NE	Unspecified Heap	1948	1000271
AP	119m NE	Unspecified Disused Pit	1922	1135466
AP	119m NE	Unspecified Disused Pit	1922	1135466
AP	120m NE	Unspecified Ground Workings	1921	1050188
AQ	120m W	Unspecified Ground Workings	1938	1056607
AQ	120m W	Unspecified Ground Workings	1938	1147908
AP	121m NE	Unspecified Disused Pit	1948	1144245

ID	Location	Land Use	Date	Group ID
AQ	122m W	Ground Workings and Refuse Heap	1921	1115187
AP	123m NE	Unspecified Disused Pit	1938	1144245
AP	123m NE	Unspecified Disused Pit	1938	1144245
AP	123m NE	Unspecified Ground Workings	1915	1050188
AG	125m NW	Cuttings	1948	1156503
K	125m NE	Unspecified Disused Shaft	1988	1056170
K	125m NE	Unspecified Disused Shaft	1968	1056170
K	125m NE	Unspecified Disused Shaft	1964	1056170
A	128m NW	Air Shafts	1903	1027645
AG	128m NW	Cuttings	1938	1156503
G	128m NE	Unspecified Heap	1968	1111811
G	128m NE	Unspecified Heap	1964	1111811
AL	128m W	Unspecified Heaps	1948	1021417
AI	129m SW	Saw Pit	1875	1022483
AQ	130m W	Unspecified Heap	1968	1118423
AQ	130m W	Unspecified Heap	1964	1147021
AP	131m NE	Unspecified Disused Pit	1901	1152359
AP	132m NE	Unspecified Pit	1903	1028170
AI	132m SW	Unspecified Disused Pit	1948	1038742
AI	132m SW	Railway Sidings	1875	993785
G	134m NE	Refuse Heap	1948	1146311
G	136m SE	Unspecified Tanks	1875	1009922
AI	137m SW	Unspecified Disused Pit	1901	1096457
AI	137m SW	Refuse Heap	1875	1092292
I	146m W	Engine Houses	1901	1023913
AG	147m NW	Unspecified Heap	1901	1065056
AI	149m SW	Smithy	1875	1032866
AP	149m NE	Coal Level	1903	1007489

ID	Location	Land Use	Date	Group ID
G	149m E	Unspecified Tanks	1901	1009923
AM	150m W	Burial Ground	1875	1034861
AS	152m NE	Unspecified Heap	1948	1000272
AT	153m NW	Unspecified Heap	1903	1060640
AU	153m NW	Unspecified Heap	1901	1000277
K	153m NE	Unspecified Ground Workings	1915	996805
K	154m NE	Unspecified Pit	1922	1034859
K	154m NE	Unspecified Pit	1922	1034859
K	154m NE	Unspecified Pit	1948	1054037
AI	156m SW	Unspecified Disused Pit	1922	1120456
AI	156m SW	Unspecified Disused Pit	1922	1120456
I	159m W	Unspecified Old Shaft	1922	1041001
I	159m W	Unspecified Old Shaft	1922	1041001
AU	160m NW	Unspecified Ground Workings	1903	1121315
I	160m W	Unspecified Old Shaft	1948	1064643
AV	166m E	Unspecified Ground Workings	1901	1097169
AS	166m NE	Unspecified Old Quarry	1948	1056254
AS	166m NE	Unspecified Old Quarry	1901	1036405
AV	167m E	Unspecified Ground Workings	1903	1034499
AV	167m E	Unspecified Ground Workings	1921	1091555
AW	168m E	Unspecified Pit	1922	1097797
AW	168m E	Unspecified Pit	1922	1097797
AL	168m W	Unspecified Heap	1922	1152798
AL	168m W	Unspecified Heap	1922	1097034
AR	168m NW	Old Dock	1948	1138051
K	170m NE	Unspecified Ground Workings	1968	1115950
K	170m NE	Unspecified Ground Workings	1964	1115950
AT	171m NW	Unspecified Ground Workings	1901	1110573

ID	Location	Land Use	Date	Group ID
AV	172m E	Unspecified Ground Workings	1938	1051128
AV	172m E	Unspecified Ground Workings	1938	1051128
AV	172m E	Unspecified Ground Workings	1968	1125702
AV	172m E	Unspecified Ground Workings	1964	1125702
AV	172m E	Unspecified Ground Workings	1948	1039418
AV	174m E	Unspecified Ground Workings	1915	1146933
AS	174m NE	Unspecified Old Quarry	1922	1133728
AX	175m S	Unspecified Tank	1988	1122190
AX	175m S	Unspecified Tank	1968	1122190
AX	175m S	Unspecified Tank	1964	1122190
A	176m N	Unspecified Ground Workings	1968	1053771
A	176m N	Unspecified Ground Workings	1964	1053771
AV	177m E	Unspecified Ground Workings	1922	1043012
AV	177m E	Unspecified Ground Workings	1922	1043012
AK	178m E	Unspecified Tank	1875	1016567
9	178m W	Unspecified Factory	1988	1153714
A	184m N	Unspecified Ground Workings	1901	1144145
A	190m N	Unspecified Disused Shaft	1988	1115610
A	190m N	Unspecified Disused Shaft	1968	1115610
A	190m N	Unspecified Disused Shaft	1964	1115610
10	192m S	Disused Canal	1988	1061249
A	193m N	Unspecified Heaps	1948	1021415
A	195m N	Unspecified Heap	1903	1000275
A	198m N	Garage	1988	1033771
G	199m E	Unspecified Heap	1968	1094849
G	199m E	Unspecified Heap	1964	1094849
11	205m N	Railway Sidings	1948	1124869
A	207m N	Air Shafts	1903	1027667

ID	Location	Land Use	Date	Group ID
BA	208m NW	Gas Works	1915	1078041
BA	208m NW	Gas Works	1938	1148777
BB	211m W	Unspecified Old Quarry	1922	1022758
12	211m E	Unspecified Disused Pit	1901	1015559
BA	212m NW	Gas Works	1922	1088206
BA	212m NW	Gas Works	1922	1088206
BA	212m NW	Unspecified Works	1968	1119117
BA	212m NW	Unspecified Works	1964	1119117
BB	213m W	Unspecified Heap	1948	1000289
AR	213m NW	Railway Sidings	1875	993783
M	214m N	Mineral Railway Sidings	1921	1100180
M	216m N	Unspecified Commercial/Industrial	1915	995693
13	219m NE	Unspecified Factory	1988	1014506
BB	219m W	Old Air Shafts	1922	1010435
BA	220m NW	Gas Works	1921	1088206
BB	220m W	Unspecified Ground Workings	1875	1142951
BB	221m W	Unspecified Ground Workings	1948	1095474
BB	226m W	Unspecified Pit	1901	1028162
AT	230m NW	Unspecified Heap	1901	1113406
BD	232m E	Unspecified Heap	1968	1094794
BD	232m E	Unspecified Heap	1964	1094794
M	233m N	Mineral Railway Sidings	1915	1087857
BB	234m W	Unspecified Pit	1948	1028158
AW	240m E	Coal Pit	1875	1005041
BE	241m SW	Coal Pit	1875	1005031
BE	242m SW	Unspecified Disused Mine	1968	1085218
BE	242m SW	Unspecified Disused Mine	1964	1085218
BA	247m N	Railway Sidings	1901	1111455

ID	Location	Land Use	Date	Group ID
AR	252m NW	Old Dock	1922	1044153
AR	252m NW	Old Dock	1922	1044153
15	254m SW	Railway Sidings	1948	1063682
BF	257m NW	Unspecified Factory	1988	1078765
BG	257m S	Unspecified Pit	1948	1084639
16	258m N	Railway Sidings	1903	1099240
BG	258m S	Unspecified Heap	1968	1131573
BG	258m S	Unspecified Heap	1964	1131573
BA	258m NW	Gas Holder Station	1988	1006107
BH	261m W	Unspecified Heap	1948	1000292
17	263m NE	Unspecified Disused Pit	1915	1068073
M	264m N	Unspecified Heap	1968	1109238
BE	265m SW	Unspecified Commercial/Industrial	1948	995692
M	265m N	Coal Level	1915	1146762
BA	266m N	Railway Sidings	1915	1051677
M	267m N	Coal Level	1922	1139314
M	267m N	Coal Level	1922	1061405
BB	267m W	Old Air Shafts	1922	1010436
BB	268m W	Old Coal Shaft	1948	992173
M	268m N	Unspecified Heap	1915	1118831
BA	269m NW	Unspecified Tanks	1948	1091755
BA	269m NW	Unspecified Tanks	1988	1148631
BA	269m NW	Unspecified Tanks	1968	1148631
BA	269m NW	Unspecified Tanks	1964	1148631
BA	270m NW	Gasometers	1938	1142083
BA	270m NW	Gasometers	1915	1073226
M	270m N	Old Coal Level	1948	1032268
M	270m N	Unspecified Heap	1964	1109238

ID	Location	Land Use	Date	Group ID
AW	271m E	Refuse Heaps	1948	1004690
AW	271m NE	Unspecified Ground Workings	1901	1126191
BA	271m NW	Gasometer	1922	1137843
BA	271m NW	Gasometer	1922	1137843
M	272m N	Coal Level	1938	1076230
M	272m N	Coal Level	1938	1085532
BI	272m NE	Opencast Coal Workings	1988	1007164
M	272m N	Unspecified Ground Workings	1922	1053771
M	272m N	Unspecified Ground Workings	1922	1053771
BE	273m SW	Unspecified Pit	1922	1050119
BE	273m SW	Unspecified Pit	1922	1050119
M	274m N	Coal Level	1921	1066829
BC	275m SE	Refuse Heap	1968	1134456
BC	275m SE	Refuse Heap	1964	1134456
BJ	276m E	Unspecified Ground Workings	1968	1142983
BJ	276m E	Unspecified Ground Workings	1964	1142983
BK	277m NE	Ironstone Level	1875	992453
BF	277m NW	Unspecified Factory	1968	1140854
BF	277m NW	Unspecified Factory	1964	1140854
M	278m N	Unspecified Heap	1921	1118831
AW	279m NE	Unspecified Ground Workings	1968	1117322
AW	279m NE	Unspecified Ground Workings	1964	1117322
BA	280m NW	Gasometers	1921	1073226
U	280m N	Railway Sidings	1901	1118353
BL	281m SW	Unspecified Heaps	1948	1021421
BA	281m N	Railway Sidings	1922	1077814
BA	281m N	Railway Sidings	1922	1118808
BL	282m SW	Unspecified Heap	1922	1085240

ID	Location	Land Use	Date	Group ID
BL	282m SW	Unspecified Heap	1922	1085240
BM	282m NE	Unspecified Disused Shaft	1988	1141210
BM	282m NE	Unspecified Disused Shaft	1968	1141210
BM	282m NE	Unspecified Disused Shaft	1964	1141210
BE	282m SW	Unspecified Ground Workings	1988	1151609
18	285m NE	Railway Sidings	1875	993779
BL	286m SW	Unspecified Heap	1875	1101653
M	286m N	Tramway Sidings	1901	1139064
BL	287m SW	Unspecified Heap	1968	1145409
BL	287m SW	Unspecified Heap	1964	1145409
BE	288m SW	Unspecified Ground Workings	1968	1133800
BE	288m SW	Unspecified Ground Workings	1964	1133800
BL	288m SW	Unspecified Ground Workings	1901	996801
BC	289m SE	Garage	1988	1033773
BE	294m SW	Unspecified Heap	1948	1115921
BN	295m W	Unspecified Ground Workings	1875	996798
BE	296m SW	Railway Sidings	1922	1114202
20	298m N	Railway Building	1948	1013039
BH	302m W	Old Coal Shaft	1948	992171
BO	307m SW	Railway Sidings	1901	1085460
BP	307m S	Unspecified Disused Mine	1968	1130924
BP	307m S	Unspecified Disused Mine	1964	1130924
BO	310m SW	Goods Shed	1948	1120334
BA	311m NW	Gasometer	1922	1120778
BA	311m NW	Gasometer	1922	1120778
BO	312m SW	Goods Shed	1922	1120334
21	314m W	Railway Sidings	1948	993782
BQ	316m W	Disused Canal	1915	1054695

ID	Location	Land Use	Date	Group ID
BO	317m SW	Railway Building	1901	1013037
BQ	317m W	Disused Canal	1938	1106578
22	318m N	Railway Sidings	1921	1058827
BR	319m N	Unspecified Ground Workings	1938	1148416
BR	319m N	Unspecified Ground Workings	1938	1148416
BQ	320m W	Disused Canal	1921	1054695
BS	320m NE	Unspecified Disused Pit	1948	1114226
23	320m SE	Cuttings	1875	994345
BO	321m SW	Railway Station	1948	1098963
BO	321m SW	Railway Station	1922	1098963
M	321m N	Unspecified Pit	1948	1073697
BR	322m N	Ground Workings and Refuse Heap	1915	1007282
AW	322m E	Railway Sidings	1875	1151452
U	322m N	Railway Sidings	1915	1108636
BQ	322m W	Old Canal	1901	1004655
BT	323m W	Disused Canal	1988	1063494
M	323m N	Unspecified Ground Workings	1922	1084321
M	323m N	Unspecified Ground Workings	1922	1084321
BP	324m S	Coal Pit	1875	1005032
BO	324m SW	Railway Station	1901	1053875
BR	326m N	Unspecified Ground Workings	1875	1048809
BP	328m S	Unspecified Pit	1922	1074349
BP	328m S	Unspecified Pit	1922	1074349
M	328m N	Unspecified Pit	1921	1149892
BE	330m SW	Unspecified Heap	1901	1133011
U	331m N	Railway Sidings	1922	1041997
U	331m N	Railway Sidings	1922	1107072
AW	333m E	Air Shafts	1875	1027655

ID	Location	Land Use	Date	Group ID
BQ	334m W	Disused Canal	1948	1106578
BL	334m SW	Old Air Shaft	1948	1149831
BT	336m W	Disused Canal	1922	1052971
BT	336m W	Disused Canal	1922	1052971
BL	337m SW	Old Air Shaft	1922	1149831
BL	338m SW	Unspecified Disused Shaft	1968	1092966
BL	338m SW	Unspecified Disused Shaft	1964	1092966
BN	340m W	Unspecified Pit	1922	1091995
BN	340m W	Unspecified Pit	1922	1091995
M	341m N	Drift	1938	1075832
M	341m N	Drift	1938	1075832
M	342m N	Unspecified Ground Workings	1968	1078757
M	342m N	Unspecified Ground Workings	1964	1108497
BN	342m W	Old Coal Shaft	1922	992174
BE	342m SW	Railway Sidings	1901	1051108
M	344m N	Disused Drift	1948	1000056
BP	345m S	Unspecified Heaps	1948	1021423
24	345m SW	Tramway Sidings	1922	1085211
M	346m N	Unspecified Disused Tip	1975	1058080
M	346m N	Unspecified Disused Tip	1982	1074829
BP	346m S	Unspecified Disused Tip	1988	1005146
BV	346m SW	Refuse Heap	1968	1034438
BV	346m SW	Refuse Heap	1964	1034438
BS	347m NE	Unspecified Disused Shaft	1968	1140915
BS	347m NE	Unspecified Disused Shaft	1964	1140915
BR	347m N	Unspecified Ground Workings	1965	1048751
BP	349m S	Unspecified Pit	1901	1099397
BW	349m W	Ironstone Level	1875	992436

ID	Location	Land Use	Date	Group ID
BH	349m W	Old Air Shafts	1922	1010434
M	351m N	Unspecified Drift	1915	1009875
BA	352m NW	Wire Works	1901	993624
BA	352m NW	Railway Sidings	1921	1112415
BR	354m N	Unspecified Disused Tips	1975	1155672
BR	354m N	Unspecified Disused Tips	1982	1078804
BO	355m SW	Railway Building	1948	1013042
M	355m N	Coal Level	1901	1038934
BO	356m SW	Railway Building	1922	1013044
BS	356m NE	Old Air Shaft	1948	1003773
BP	357m S	Engine Houses	1948	1134050
BP	357m S	Unspecified Heap	1968	1120814
BP	357m S	Unspecified Heap	1964	1120814
BX	358m SW	Unspecified Pit	1968	1111701
BX	358m SW	Unspecified Pit	1964	1111701
BX	359m SW	Cuttings	1901	1118979
M	360m N	Unspecified Old Shaft	1915	1146321
M	361m N	Unspecified Old Shaft	1922	1061251
M	361m N	Unspecified Old Shaft	1922	1128861
M	361m N	Unspecified Old Shaft	1948	1090515
AW	361m E	Air Shafts	1901	1027657
M	361m N	Drift	1921	1012106
M	364m N	Coal Level	1903	1038934
BA	364m NW	Disused Wire Works	1903	1022160
M	365m N	Drift Mill	1922	1143059
M	365m N	Drift Mill	1922	1143059
BX	365m SW	Cuttings	1948	1101219
AW	365m E	Unspecified Disused Shafts	1968	1063786

ID	Location	Land Use	Date	Group ID
AW	365m E	Unspecified Disused Shafts	1964	1063786
BS	366m NE	Disused Clay Pit	1901	1015258
AW	366m E	Air Shafts	1875	1027656
BY	366m W	Engine House	1922	1095387
25	367m SW	Refuse Heap	1948	1118243
M	367m N	Old Shaft	1921	1016163
M	367m N	Unspecified Old Shaft	1938	1154819
M	367m N	Unspecified Old Shaft	1938	1073820
BY	367m W	Engine House	1875	1089555
26	367m SW	Tramway Sidings	1948	1085211
BY	368m W	Unspecified Heap	1875	1000288
BX	368m SW	Cuttings	1922	1101219
M	368m N	Smithy	1875	1032867
M	368m N	Unspecified Old Shaft	1901	1154189
U	369m N	Railway Sidings	1965	1033994
AW	369m E	Unspecified Disused Shafts	1968	1155333
AW	369m E	Unspecified Disused Shafts	1964	1155333
M	371m N	Engine House	1875	1019124
U	372m N	Railway Sidings	1901	1077181
AW	375m E	Air Shafts	1875	1027647
M	378m N	Unspecified Old Shaft	1903	1003255
BJ	379m NE	Unspecified Ground Workings	1901	1095235
27	380m E	Unspecified Ground Workings	1901	996806
M	380m N	Unspecified Heap	1948	1050053
28	380m NE	Railway Sidings	1875	993786
BS	382m NE	Engine House	1875	1019126
M	384m N	Cuttings	1938	994292
M	385m N	Unspecified Heap	1921	1105200

ID	Location	Land Use	Date	Group ID
BS	385m NE	Unspecified Old Shaft	1903	1003254
BY	386m W	Railway Sidings	1922	1059733
BY	388m W	Unspecified Ground Workings	1875	1130993
BK	388m E	Unspecified Ground Workings	1968	1129254
BK	388m E	Unspecified Ground Workings	1964	1122546
BY	388m W	Railway Sidings	1901	1059733
BA	388m NW	Unspecified Tank	1938	1102073
BA	388m NW	Gasometer	1915	1057691
BS	388m NE	Unspecified Old Shaft	1901	1080139
BS	389m NE	Disused Pit	1921	993629
BA	390m NW	Unspecified Tanks	1948	1009924
BZ	390m E	Tramway Sidings	1922	1105665
BS	390m NE	Unspecified Old Shaft	1903	1119803
BS	390m NE	Unspecified Disused Pit	1938	1036038
BS	390m NE	Unspecified Disused Pit	1938	1116596
BA	390m NW	Gasometer	1922	1074178
BA	390m NW	Gasometer	1922	1074178
BS	391m NE	Unspecified Disused Pit	1922	1088166
BS	391m NE	Unspecified Disused Pit	1922	1124517
BS	392m NE	Unspecified Disused Pit	1915	1136814
BE	392m S	Railway Sidings	1875	1130076
BE	393m SW	Unspecified Heap	1875	1133011
CA	394m SW	Railway Building	1922	1013043
M	395m N	Coal Level	1875	1007519
BE	398m SW	Unspecified Heaps	1948	1021422
BY	398m W	Tramway Sidings	1901	1014624
BA	399m NW	Unspecified Tank	1921	1128118
M	399m N	Unspecified Ground Workings	1875	1056543

ID	Location	Land Use	Date	Group ID
AW	399m E	Unspecified Level	1948	1022217
AW	400m E	Unspecified Level	1922	1046779
AW	400m E	Unspecified Level	1922	1046779
M	401m N	Unspecified Ground Workings	1922	1080871
M	401m N	Unspecified Ground Workings	1922	1127433
CB	401m E	Unspecified Pit	1922	1129267
CB	401m E	Unspecified Pit	1922	1129267
29	404m N	Disused Mineral Railway Sidings	1948	1012579
AW	405m E	Clay Pit	1901	1018892
CC	405m NE	Unspecified Disused Pit	1948	1096131
CC	405m NE	Unspecified Disused Pit	1903	1038798
BA	406m NW	Unspecified Tank	1938	1121910
BA	406m NW	Unspecified Tank	1915	1118158
CA	407m SW	Unspecified Heap	1948	1000291
CA	408m SW	Unspecified Heaps	1968	1129893
CA	408m SW	Unspecified Heaps	1964	1129893
BA	408m NW	Gasometer	1922	1141690
BA	408m NW	Gasometer	1922	1141690
BY	408m W	Old Air Shaft	1922	1003774
BP	409m S	Engine Houses	1901	1154948
AW	409m E	Air Shafts	1875	1027648
30	410m SE	Unspecified Works	1988	1020629
CD	412m NE	Unspecified Heap	1938	1140448
CD	412m NE	Unspecified Heap	1938	1140448
CC	414m NE	Unspecified Ground Workings	1921	1099867
CC	414m NE	Unspecified Heaps	1968	1102582
CC	414m NE	Unspecified Heaps	1964	1102582
CC	415m NE	Unspecified Disused Pit	1922	1135922

ID	Location	Land Use	Date	Group ID
CC	415m NE	Unspecified Disused Pit	1922	1135922
BA	415m NW	Unspecified Tank	1921	1016566
BP	416m S	Engine Houses	1922	1123734
CC	416m NE	Unspecified Disused Pit	1901	1144369
CC	416m NE	Unspecified Ground Workings	1915	1076936
BP	418m S	Engine Houses	1875	1127307
CC	420m NE	Unspecified Disused Pit	1938	1106823
CC	420m NE	Unspecified Disused Pit	1938	1106823
BW	422m W	Unspecified Heaps	1922	1111091
BW	422m W	Unspecified Heaps	1922	1111091
BY	423m W	Tramway Sidings	1901	1014625
CA	423m SW	Refuse Heap	1922	1075168
CA	423m SW	Refuse Heap	1922	1075168
BW	425m W	Unspecified Ground Workings	1948	1132095
CE	425m S	Unspecified Pit	1922	1105079
CE	425m S	Unspecified Pit	1922	1105079
BY	426m W	Unspecified Ground Workings	1968	1082735
CF	427m NE	Unspecified Mill	1922	1101364
CF	427m NE	Unspecified Mill	1922	1101364
CF	428m NE	Unspecified Mill	1915	1064441
CG	430m NE	Coal Pit	1922	1117783
CG	430m NE	Coal Pit	1922	1117783
CE	430m S	Unspecified Pit	1875	1108667
CG	430m NE	Coal Pit	1938	1117783
CG	430m NE	Coal Pit	1938	1117783
CG	430m NE	Coal Pit	1948	1117783
CE	431m S	Unspecified Pit	1901	1049290
CE	431m S	Unspecified Pit	1948	1134281

ID	Location	Land Use	Date	Group ID
CG	431m NE	Coal Pit	1915	1048091
CG	431m NE	Coal Pit	1921	1005029
BA	432m NW	Dairy	1982	1131358
BA	433m NW	Unspecified Depot	1992	1012586
CE	434m S	Unspecified Pit	1968	1089858
CE	434m S	Unspecified Pit	1964	1089858
BR	436m N	Refuse Heap	1922	1096163
BR	436m N	Refuse Heap	1922	1096163
BE	436m SW	Railway Building	1901	1013045
BR	438m N	Unspecified Ground Workings	1901	1080808
BP	438m S	Engine Houses	1875	1078082
BW	438m W	Unspecified Heap	1968	1082234
BW	438m W	Unspecified Heap	1964	1082234
CC	441m NE	Coal and Ironstone Pit	1875	1024820
AW	441m E	Engine House	1875	1019143
31	441m E	Old Coal Level	1948	1108914
BW	441m W	Unspecified Ground Workings	1901	1083335
BE	445m SW	Unspecified Pit	1968	1095726
BE	445m SW	Unspecified Pit	1964	1095726
BP	446m S	Engine Houses	1875	1139081
BY	447m W	Engine House	1875	1019123
BR	451m N	Unspecified Ground Workings	1903	1155134
BP	455m S	Engine Houses	1875	1112363
BA	457m NW	Dairy	1975	1124568
32	457m NE	Unspecified Old Level	1901	1004902
BA	457m NW	Unspecified Tank	1921	1016568
BZ	457m NE	Unspecified Ground Workings	1901	1111834
CI	461m W	Unspecified Ground Workings	1968	1135647

ID	Location	Land Use	Date	Group ID
33	465m W	Railway Sidings	1875	993781
CJ	467m SW	Railway Sidings	1901	1144985
CJ	469m S	Cuttings	1988	1108432
BE	471m SW	Railway Building	1901	1013046
BE	473m SW	Unspecified Ground Workings	1968	1104451
BE	473m SW	Unspecified Ground Workings	1964	1104451
AW	473m NE	Tramway Sidings	1901	1062329
CK	473m N	Isolation Hospital	1938	1055285
CK	474m N	Corporation Isolation Hospital	1915	1016531
CL	475m E	Unspecified Disused Mine	1968	1118596
CL	475m E	Unspecified Disused Mine	1964	1118596
CM	476m SW	Railway Sidings	1901	1141755
CK	476m N	Isolation Hospital	1948	1036929
CK	476m N	Hospital	1965	1150447
CM	476m SW	Smithy	1875	1032870
CK	477m N	Hospital	1975	1047975
CK	477m N	Hospital	1982	1079164
CK	477m N	Hospital	1992	1079164
CK	477m N	Isolation Hospital	1922	1103133
CK	477m N	Isolation Hospital	1922	1103133
CK	479m N	Isolation Hospital	1921	1118597
BA	482m NW	Unspecified Tank	1938	1139757
BA	483m NW	Unspecified Tank	1915	1057447
CI	483m W	Unspecified Heap	1964	1000287
BA	483m NW	Unspecified Tank	1948	1139757
CN	484m SW	Old Coal Level	1922	1057756
CN	484m SW	Old Coal Level	1922	1057756
CO	484m S	Disused Canal	1968	1107235

ID	Location	Land Use	Date	Group ID
CO	484m S	Disused Canal	1964	1107235
CN	485m SW	Unspecified Heap	1948	1000290
CP	485m N	Railway Sidings	1922	1090053
CP	485m N	Railway Sidings	1922	1089749
BA	485m NW	Unspecified Tank	1922	1139757
BA	485m NW	Unspecified Tank	1922	1139757
CI	486m W	Unspecified Ground Workings	1964	1122173
34	486m S	Unspecified Heap	1968	1000293
35	488m E	Coal Pit	1875	1005033
CQ	489m NW	Unspecified Ground Workings	1938	1112327
CQ	489m NW	Unspecified Ground Workings	1938	1112327
BI	489m NE	Unspecified Ground Workings	1922	1126113
BI	489m NE	Unspecified Ground Workings	1922	1126113
CQ	489m NW	Unspecified Ground Workings	1915	1132624
CL	490m E	Ironstone Level	1875	992454
CQ	491m NW	Unspecified Ground Workings	1875	1095216
BI	491m NE	Unspecified Ground Workings	1938	1126113
BI	491m NE	Unspecified Ground Workings	1938	1126113
BA	492m NW	Unspecified Tank	1921	1045928
BA	492m NW	Unspecified Heap	1922	1115001
BA	492m NW	Unspecified Heap	1922	1063078
BI	492m NE	Ground Workings and Refuse Heap	1921	1086153
BI	493m NE	Ground Workings and Refuse Heap	1915	1086153
BI	493m NE	Unspecified Heaps	1948	1021451
BI	494m NE	Unspecified Disused Pit	1901	1127132
BE	496m SW	Unspecified Heap	1968	1122359
BE	496m SW	Unspecified Heap	1964	1122359
CR	496m NE	Unspecified Heaps	1968	1083481

ID	Location	Land Use	Date	Group ID
CR	496m NE	Unspecified Heaps	1964	1083481
BZ	497m NE	Clay Pits	1922	1009852
BA	498m NW	Unspecified Ground Workings	1921	1101754
BI	498m NE	Unspecified Disused Pit	1903	1127132
CQ	499m NW	Unspecified Heap	1901	1146659
CS	499m W	Unspecified Heap	1922	1120722
CS	499m W	Unspecified Heap	1922	1120722

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**95**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 39**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Unspecified Tank**	**1984**	**163562**
B	**On site**	**Unspecified Tank**	**1984**	**164160**
B	**On site**	**Unspecified Tank**	**1971**	**164160**
B	**On site**	**Unspecified Tank**	**1962**	**164160**
B	**On site**	**Unspecified Tank**	**1998**	**163562**
B	**On site**	**Tanks**	**1998**	**156258**
B	**On site**	**Unspecified Tank**	**1998**	**149667**
B	**On site**	**Unspecified Tank**	**1998**	**164160**
B	**On site**	**Unspecified Tank**	**1979**	**160647**
B	**On site**	**Unspecified Tank**	**1979**	**160647**
B	**On site**	**Unspecified Tank**	**1979**	**160647**
B	**On site**	**Unspecified Tank**	**1984**	**160647**
B	**On site**	**Unspecified Tank**	**1988**	**160647**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Unspecified Tank**	**1988**	**163562**
B	**On site**	**Unspecified Tank**	**1988**	**160647**
B	**On site**	**Unspecified Tank**	**1988**	**163562**
B	**On site**	**Unspecified Tank**	**1992**	**160647**
B	**On site**	**Unspecified Tank**	**1992**	**163562**
B	**On site**	**Unspecified Tank**	**1998**	**164160**
B	**On site**	**Unspecified Tank**	**1998**	**163562**
V	**On site**	**Unspecified Tank**	**1984**	**160700**
V	**On site**	**Unspecified Tank**	**1998**	**161848**
V	**On site**	**Unspecified Tank**	**1998**	**149670**
V	**On site**	**Unspecified Tank**	**1984**	**164147**
V	**On site**	**Unspecified Tank**	**1988**	**164147**
V	**On site**	**Unspecified Tank**	**1988**	**164147**
V	**On site**	**Unspecified Tank**	**1992**	**164147**
V	**On site**	**Unspecified Tank**	**1998**	**161848**
Z	48m SE	Unspecified Tank	1900	149669
AC	64m W	Unspecified Tank	1984	165633
AC	65m W	Unspecified Tank	1998	165633
AC	65m W	Unspecified Tank	1998	165633
AC	68m W	Unspecified Tank	1984	163868
AC	68m W	Unspecified Tank	1988	163868
AC	68m W	Unspecified Tank	1988	163868
AC	68m W	Unspecified Tank	1992	163868
K	97m NE	Unspecified Tank	1875	149673
G	130m SE	Tanks	1875	156259
G	154m E	Tanks	1900	156260
AK	163m E	Unspecified Tank	1875	149660
AX	174m S	Unspecified Tank	1962	159032

ID	Location	Land Use	Date	Group ID
AX	174m S	Unspecified Tank	1980	159032
AX	174m S	Unspecified Tank	1962	159032
AX	174m S	Unspecified Tank	1983	159032
K	182m NE	Unspecified Tank	1900	149672
AR	193m NW	Tanks	1984	163886
AR	194m NW	Tanks	1998	161436
AR	194m NW	Tanks	1998	161436
AR	197m NW	Tanks	1984	162846
AR	197m NW	Tanks	1988	162846
AR	197m NW	Tanks	1988	162846
AR	197m NW	Tanks	1992	162846
BA	204m NW	Gas Works	1971	162383
BA	207m NW	Gas Holder Station	1984	167846
BA	207m NW	Gas Works	1979	158805
BA	207m NW	Gas Works	1979	158805
BA	211m NW	Gas Works	1919	158867
K	229m NE	Unspecified Tank	1875	149671
14	246m NE	Unspecified Tank	1875	149668
AT	256m NW	Unspecified Tank	1988	165740
AT	256m NW	Unspecified Tank	1988	165740
AT	256m NW	Unspecified Tank	1992	165740
BA	259m NW	Gas Works	1984	166108
BA	259m NW	Gas Holder Station	1988	167258
BA	259m NW	Gas Holder Station	1988	167258
BA	259m NW	Gas Holder Station	1992	167258
BA	260m NW	Gas Holder Station	1998	158552
BA	270m NW	Gas Holder	1998	168061
BA	270m NW	Gasometers	1979	166420

ID	Location	Land Use	Date	Group ID
BA	270m NW	Gasometers	1979	166420
BA	270m NW	Tanks	1979	156234
BA	270m NW	Gasometers	1984	166420
BA	270m NW	Gasholders	1988	158129
BA	270m NW	Gasholders	1988	158129
BA	270m NW	Gasholders	1992	158129
BA	272m NW	Gas Holder	1984	168061
BA	272m NW	Gasometer	1971	155799
BA	272m NW	Unspecified Tank	1962	149676
BA	273m NW	Gasometers	1919	168337
19	291m W	Unspecified Tank	1998	149666
BA	309m NW	Gas Holder	1998	160835
BA	310m NW	Gas Holder	1984	160835
BA	310m NW	Gasometer	1971	155801
BA	310m NW	Unspecified Tank	1962	149675
M	322m N	Unspecified Tank	1875	149677
M	338m N	Unspecified Tank	1875	149678
M	346m N	Tanks	1875	156256
M	359m N	Unspecified Tank	1875	149680
M	365m N	Unspecified Tank	1875	149679
BJ	366m E	Tanks	1875	156261
M	376m N	Unspecified Tank	1875	149687
BA	392m NW	Gasometer	1919	155800
BA	410m NW	Unspecified Tank	1919	149674
CF	437m NE	Tank or Trough	1875	157952
BA	488m NW	Unspecified Tank	1919	149694

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	101

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 39**

ID	Location	Land Use	Date	Group ID
D	**On site**	**Electricity Substation**	**1984**	**95270**
D	**On site**	**Electricity Substation**	**1988**	**91832**
D	**On site**	**Electricity Substation**	**1988**	**91832**
D	**On site**	**Electricity Substation**	**1992**	**91832**
Q	**On site**	**Gas Governing Station**	**1998**	**87694**
V	**On site**	**Electricity Substation**	**1998**	**85712**
W	**On site**	**Electricity Substation**	**1984**	**91246**
W	**On site**	**Electricity Substation**	**1971**	**91246**
W	**On site**	**Electricity Substation**	**1998**	**93475**
W	**On site**	**Electricity Substation**	**1979**	**91246**
W	**On site**	**Electricity Substation**	**1979**	**91246**
W	**On site**	**Electricity Substation**	**1979**	**91246**
W	**On site**	**Electricity Substation**	**1984**	**91246**
W	**On site**	**Electricity Substation**	**1988**	**91246**
W	**On site**	**Electricity Substation**	**1988**	**91246**
W	**On site**	**Electricity Substation**	**1992**	**91246**
W	**On site**	**Electricity Substation**	**1998**	**93475**
Y	22m NE	Electricity Substation	1998	89733
Y	22m NE	Electricity Substation	1998	89733
Y	23m NE	Electricity Substation	1992	89733
P	28m NE	Electricity Substation	1998	85711
Z	53m SE	Electricity Substation	1998	85714
A	62m NW	Electricity Substation	1984	85720

ID	Location	Land Use	Date	Group ID
AI	133m SW	Electricity Substation	1982	93943
AI	134m SW	Electricity Substation	1988	93943
AI	136m SW	Electricity Substation	1998	93943
AI	136m SW	Electricity Substation	1998	93943
AK	164m NE	Electricity Substation	1984	93938
AK	164m NE	Electricity Substation	1983	93938
AK	164m NE	Electricity Substation	1988	93938
AK	164m NE	Electricity Substation	1992	93938
AK	165m NE	Electricity Substation	1998	93938
AK	165m NE	Electricity Substation	1980	93938
AK	165m NE	Electricity Substation	1983	93938
AY	178m SW	Electricity Substation	1998	90281
AY	178m SW	Electricity Substation	1998	90281
AY	185m SW	Electricity Substation	1982	88823
AY	186m SW	Electricity Substation	1988	88720
AZ	195m SW	Electricity Substation	1982	93290
AZ	195m SW	Electricity Substation	1988	93290
AZ	195m SW	Electricity Substation	1998	92865
AZ	195m SW	Electricity Substation	1998	92865
BA	204m NW	Gas Works	1971	96102
BA	207m NW	Gas Holder Station	1984	89850
BA	207m NW	Gas Works	1979	96102
BA	207m NW	Gas Works	1979	96102
BA	211m NW	Gas Works	1919	93005
BA	259m NW	Gas Works	1984	95338
BA	259m NW	Gas Holder Station	1988	91307
BA	259m NW	Gas Holder Station	1988	91307
BA	259m NW	Gas Holder Station	1992	91307

ID	Location	Land Use	Date	Group ID
BA	260m NW	Gas Holder Station	1998	91307
BA	270m NW	Gas Holder	1998	95078
BA	270m NW	Gasometers	1979	94333
BA	270m NW	Gasometers	1979	94333
BA	270m NW	Gasometers	1984	94333
BA	270m NW	Gasholders	1988	90201
BA	270m NW	Gasholders	1988	90201
BA	270m NW	Gasholders	1992	90201
BA	272m NW	Gas Holder	1984	95078
BA	272m NW	Gasometer	1971	87294
BA	273m NW	Gasometers	1919	91846
BA	309m NW	Gas Holder	1998	89492
BA	310m NW	Gas Holder	1984	89492
BA	310m NW	Gasometer	1971	87296
O	312m E	Electricity Substation	1960	95401
O	312m E	Electricity Substation	1984	95401
O	312m E	Electricity Substation	1983	95401
O	312m E	Electricity Substation	1988	95401
O	312m E	Electricity Substation	1992	95401
O	312m E	Electricity Substation	1998	95401
O	313m E	Electricity Substation	1962	95401
O	313m E	Electricity Substation	1980	95401
O	313m E	Electricity Substation	1983	95401
BU	325m S	Electricity Substation	1982	90088
BU	325m S	Electricity Substation	1988	90088
A	329m N	Electricity Substation	1984	85721
A	329m N	Electricity Substation	1979	91551
A	329m N	Electricity Substation	1979	91551

ID	Location	Land Use	Date	Group ID
A	329m N	Electricity Substation	1979	91551
A	329m N	Electricity Substation	1988	91551
A	329m N	Electricity Substation	1988	91551
A	329m N	Electricity Substation	1992	91551
A	330m N	Electricity Substation	1984	91551
A	337m N	Electricity Transformer	1971	87767
A	338m N	Electricity Substation	1998	88999
A	338m N	Electricity Substation	1998	88999
BA	358m NW	Electricity Substation	1984	85723
BA	392m NW	Gasometer	1919	87295
BA	396m NW	Electricity Substation	1979	91168
BA	396m NW	Electricity Substation	1979	91168
BA	396m NW	Electricity Substation	1979	91168
BA	396m NW	Electricity Substation	1984	91168
CH	433m N	Electricity Substation	1981	94595
CH	433m N	Electricity Substation	1992	94595
CH	433m N	Electricity Transformer	1969	87766
BA	444m NW	Electricity Transformer	1971	87769
BA	444m NW	Electricity Substation	1979	94037
BA	444m NW	Electricity Substation	1979	94037
BA	444m NW	Electricity Substation	1979	94037
BA	444m NW	Electricity Substation	1984	94037

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	**23**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

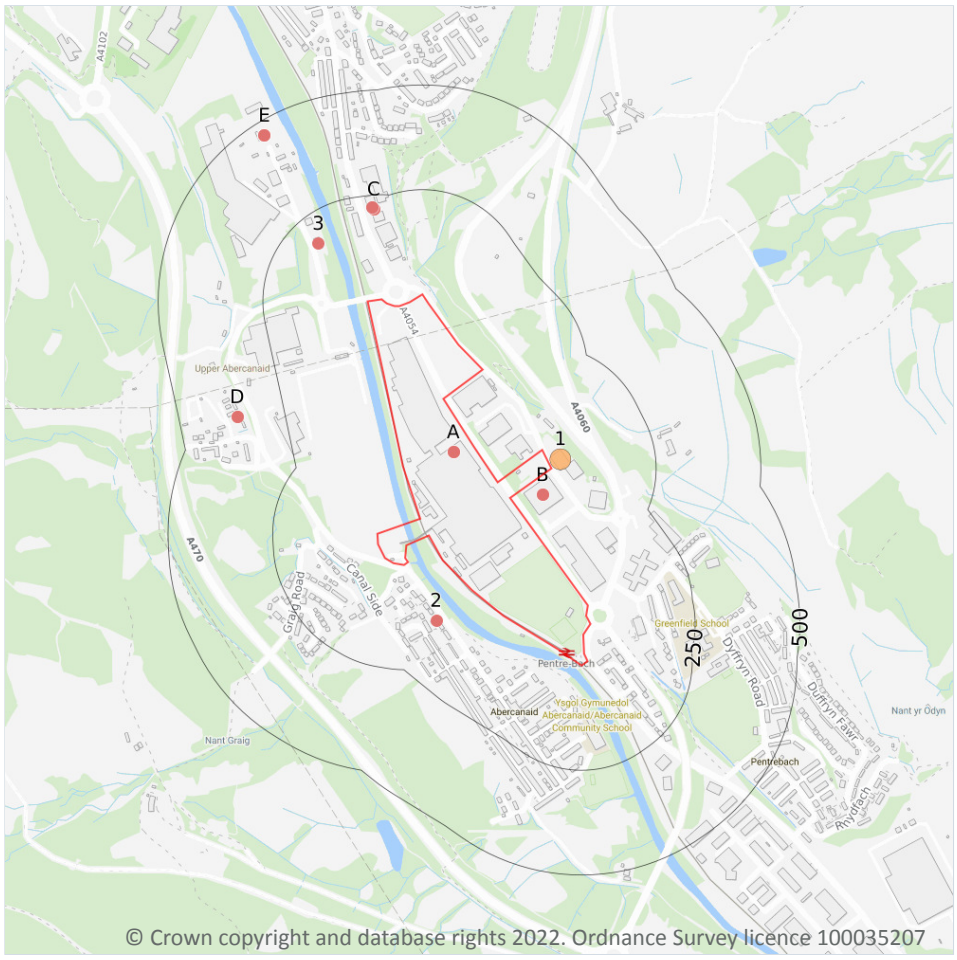
Features are displayed on the Past land use - un-grouped map on **page 39**

ID	Location	Land Use	Date	Group ID
A	78m N	Garage	1971	29666
A	115m N	Garage	1962	28598
A	125m N	Garage	1984	28543
A	138m N	Garage	1979	31824
A	138m N	Garage	1979	31824
A	138m N	Garage	1979	31824
A	138m N	Garage	1984	31824
A	200m N	Garage	1998	31099
A	201m N	Garage	1979	31588
A	201m N	Garage	1979	31588
A	201m N	Garage	1979	31588
A	201m N	Garage	1984	30576
A	201m N	Garage	1988	30576
A	201m N	Garage	1988	30576
A	201m N	Garage	1992	30576
A	201m N	Garage	1984	29053
A	201m N	Garage	1971	31099
BC	214m SE	Garage	1998	28557
A	260m N	Garage	1962	29697
BC	272m SE	Garage	1983	31011
BC	272m SE	Garage	1988	31011

ID	Location	Land Use	Date	Group ID
BC	272m SE	Garage	1992	31011
BC	272m SE	Garage	1984	31011

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	1

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 75**

ID	Location	Address	Further Details	Date
1	4m NE	Site Address: 3 & 4, Triangle Business Park, Pentrebach, Merthyr Tydfil, Mid Glamorgan, CF48 4TQ	Type of Site: Waste Storage Facility Planning application reference: P/14/0325 Description: Scheme comprises change of use of unit 3 from transport depot to a recycling waste storage facility. change of use of unit 4 to include waste sorting processes together with the construction of a side extension to accommodate two waste storage bays. Data source: Historic Planning Application Data Type: Point	26/01/2015

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	22

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 75**

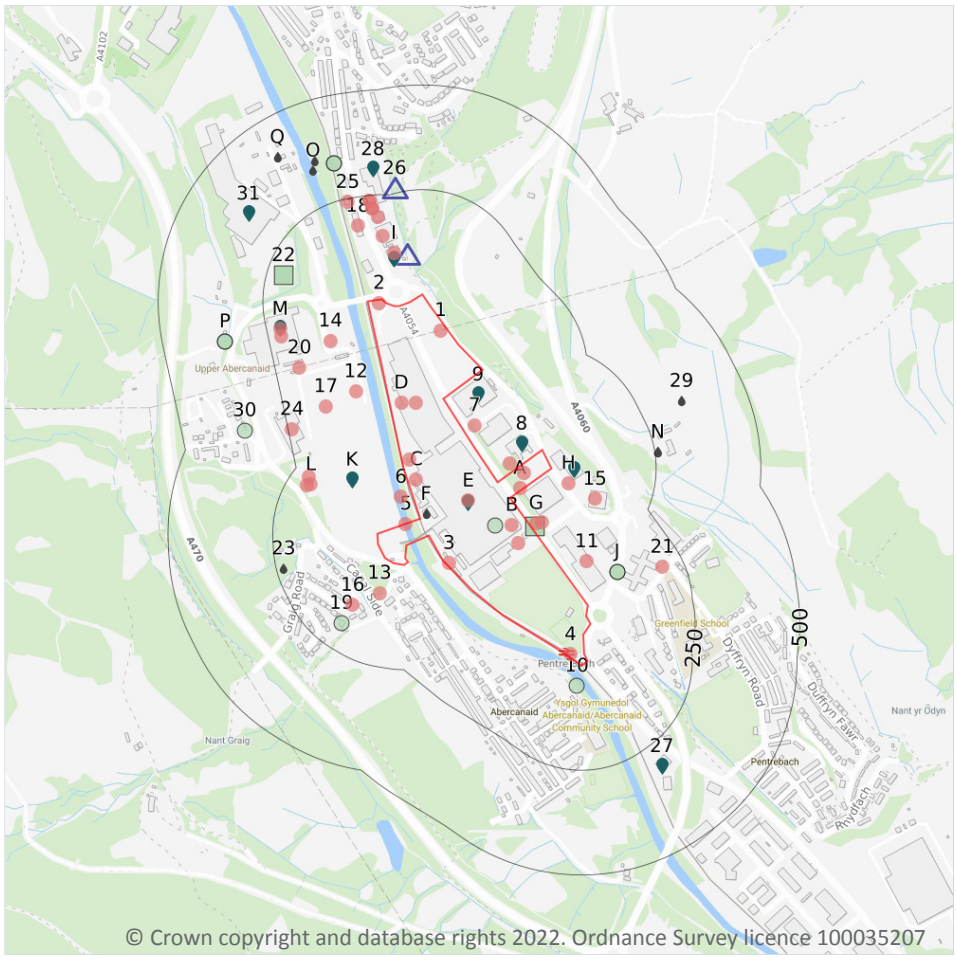
ID	Location	Site	Reference	Category	Sub-Category	Description
A	**On site**	**PENTREBACH, MERTHYR TYDFIL, CF48 4TU**	**WEX099064**	**Treating waste exemption**	**Not on a farm**	**Preparatory treatments (baling, sorting, shredding etc)**
A	**On site**	**Hoover Ltd, Hoover Candy Group, Pentrebach, Merthyr Tydfil, Merthyr Tydfil, CF484TU**	**NRW-WME024436**	**Treating waste exemption**	**Not on a farm**	**Sorting mixed waste**
A	**On site**	**Hoover Ltd, Hoover Candy Group, Pentrebach, Merthyr Tydfil, Merthyr Tydfil, CF484TU**	**NRW-WME024436**	**Treating waste exemption**	**Not on a farm**	**Preparatory treatments (baling, sorting, shredding etc)**
B	40m SE	R Tek Ltd, Unit 1-3, Triangle Business Park, Merthyr Tydfil, Merthyr Tydfil, CF48 4TQ	NRW-WME000205	Treating waste exemption	Waste Exemption - Non-Agricultural	Preparatory treatments (baling, sorting, shredding etc)
B	40m SE	R Tek Ltd, Unit 1-3, Triangle Business Park, Merthyr Tydfil, Merthyr Tydfil, CF48 4TQ	NRW-WME000205	Storing waste exemption	Waste Exemption - Non-Agricultural	Storage of waste in a secure place
2	113m SW	Davies Homes Ltd, Former Hoover factory, Stanfield Close, Abercanaid, Merthyr Tydfil, Merthyr Tydfil, CF48 1BJ	NRW-WME066854	Using waste exemption	Not on a farm	Use of waste in construction
3	181m NW	SW plastic solutions LTD, The Willows, Abercanaid Industrial Estate, Merthyr Tydfil, Merthyr Tydfil, CF481YF	NRW-WME032102	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	215m N	SPEEDY ASSET SERVICES LIMITED, Speedy Hire, Pentrebach Road, Merthyr Tydfil, Merthyr Tydfil, CF48 1YA	NRW-WME042623	Storing waste exemption	Not on a farm	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
C	215m N	SPEEDY ASSET SERVICES LIMITED, Speedy Hire, Pentrebach Road, Merthyr Tydfil, Merthyr Tydfil, CF48 1YA	NRW-WME042623	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	218m N	Speedy Asset Services Limited, Speedy Hire, Pentrebach Road, Merthyr Tydfil, Merthyr Tydfil, CF481YA	NRW-WME026901	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	218m N	Speedy Asset Services Limited, Speedy Hire, Pentrebach Road, Merthyr Tydfil, Merthyr Tydfil, CF481YA	NRW-WME026901	Treating waste exemption	Not on a farm	Sorting mixed waste
D	364m W	Glynderus Farm Abercanaid Merthyr Tydfil Merthyr Tydfil CF481YL	NRW-WME024877	Using waste exemption	Not on a farm	Use of waste in construction
D	364m W	Glynderus Farm Abercanaid Merthyr Tydfil Merthyr Tydfil CF481YL	NRW-WME024877	Using waste exemption	Not on a farm	Use of baled end-of-life tyres in construction
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Sorting mixed waste
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Manual treatment of waste
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Treating waste exemption	Not on a farm	Recovery of scrap metal
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Using waste exemption	Not on a farm	Use of waste in construction
E	466m NW	THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YF	WEX089880	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Licensed pollutant release (Part A(2)/B)

Licensed Discharges to controlled waters

List 2 Dangerous Substances

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	44

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Company	Address	Activity	Category
1	On site	Pylon	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
2	On site	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
3	On site	Tank	Mid Glamorgan, CF48	Tanks (Generic)	Industrial Features

ID	Location	Company	Address	Activity	Category
4	**On site**	**Pentre-Bach Rail Station**	**Mid Glamorgan, CF48**	**Railway Stations, Junctions and Halts**	**Public Transport, Stations and Infrastructure**
A	**On site**	**Electricity Sub Station**	**Mid Glamorgan, CF48**	**Electrical Features**	**Infrastructure and Facilities**
A	**On site**	**Tank**	**Mid Glamorgan, CF48**	**Tanks (Generic)**	**Industrial Features**
B	**On site**	**Hoover**	**Pentrebach, Merthyr Tydfil, Mid Glamorgan, CF48 4TU**	**Distribution and Haulage**	**Transport, Storage and Delivery**
B	**On site**	**Gas Governor**	**Mid Glamorgan, CF48**	**Gas Features**	**Infrastructure and Facilities**
C	**On site**	**Tank**	**Mid Glamorgan, CF48**	**Tanks (Generic)**	**Industrial Features**
C	**On site**	**Electricity Sub Station**	**Mid Glamorgan, CF48**	**Electrical Features**	**Infrastructure and Facilities**
D	**On site**	**Electricity Sub Station**	**Mid Glamorgan, CF48**	**Electrical Features**	**Infrastructure and Facilities**
D	**On site**	**Factory**	**Mid Glamorgan, CF48**	**Unspecified Works Or Factories**	**Industrial Features**
E	**On site**	**Factory**	**Mid Glamorgan, CF48**	**Unspecified Works Or Factories**	**Industrial Features**
5	0m N	Gantry	Mid Glamorgan, CF48	Travelling Cranes and Gantries	Industrial Features
G	15m NE	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
A	19m NW	Triangle Business Park (Parc Busnes Y Triongl)	Mid Glamorgan, CF48	Business Parks and Industrial Estates	Industrial Features
G	27m NE	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
6	28m W	Mast (Telecommunication)	Mid Glamorgan, CF48	Telecommunications Features	Infrastructure and Facilities
7	29m NE	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
H	54m SE	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
11	60m NE	Dreams Plc	Unit C1, Triangle Business Park, Pentrebach, Merthyr Tydfil, Mid Glamorgan, CF48 4TQ	Beds and Bedding	Consumer Products
12	73m W	Tank	Mid Glamorgan, CF48	Tanks (Generic)	Industrial Features
13	79m SW	Shaft	Mid Glamorgan, CF48	Unspecified Quarries Or Mines	Extractive Industries
14	107m W	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
I	114m N	Southern Vauxhall	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	New Vehicles	Motoring
15	127m SE	Business Centre	Mid Glamorgan, CF48	Business Parks and Industrial Estates	Industrial Features
16	136m SW	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
17	151m W	Merthyr Self Storage	Dragon Park B, Abercanaid, Merthyr Tydfil, Mid Glamorgan, CF48 1PQ	Container and Storage	Transport, Storage and Delivery
I	151m N	Thomas & Davies	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YB	New Vehicles	Motoring
18	182m N	Capitol Volkswagen	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	New Vehicles	Motoring
20	193m W	Pylon	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
I	197m N	HiQ Centre	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Vehicle Repair, Testing and Servicing	Repair and Servicing
L	198m NW	Tank	Mid Glamorgan, CF48	Tanks (Generic)	Industrial Features
21	200m NE	Electricity Sub Station	Mid Glamorgan, CF48	Electrical Features	Infrastructure and Facilities
L	204m NW	Tank	Mid Glamorgan, CF48	Tanks (Generic)	Industrial Features
L	213m NW	Hire Me Vehicle Rental	Unit A, Dragon Parc, Abercanaid, Merthyr Tydfil, Mid Glamorgan, CF48 1PQ	Vehicle Hire and Rental	Hire Services
M	218m W	Amnitec	Abercanaid, Merthyr Tydfil, Mid Glamorgan, CF48 1UX	General Construction Supplies	Industrial Products
I	218m N	Kwik-Fit (GB) Limited	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Vehicle Repair, Testing and Servicing	Repair and Servicing

ID	Location	Company	Address	Activity	Category
I	218m N	Enterprise Rent-A-Car	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Vehicle Hire and Rental	Hire Services
M	220m W	Factory	Mid Glamorgan, CF48	Unspecified Works Or Factories	Industrial Features
I	236m N	Yellohire	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Vehicle Hire and Rental	Hire Services
I	236m N	Enterprise Rent-A-Car	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Vehicle Hire and Rental	Hire Services
24	241m W	Factory	Mid Glamorgan, CF48	Unspecified Works Or Factories	Industrial Features
25	242m N	Speedy Hire Plc	Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Construction and Tool Hire	Hire Services

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**2**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Company	Address	LPG	Status
I	103m N	OBSOLETE	Pentrebach Road, Ysgubor Newydd, Merthyr Tydfil, Merthyr Tydfil, CF48 1YB	Not Applicable	Obsolete
26	262m N	OBSOLETE	Pentrebach Road, Ysgubor Newydd, Merthyr Tydfil, Merthyr Tydfil, CF48 1YA	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	12

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Address	Details	
E	**On site**	**Hoover Ltd, Pentrebach**	**Process: Coating Processes Status: Historical Permit Permit Type: Part B**	**Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified**
8	41m NW	Merthyr Institute for the Blind, Unit 4, Triangle Business Park, Pentrebach, Merthyr Tydfil, CF48 4TQ	Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
9	41m SE	R-Tek Ltd, Unit 1, Triangle Business Park, Pentrebach	Process: Solvent Emissions Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

ID	Location	Address	Details	
H	53m E	Glamorgan Paint Stovers, Unit 7, Triangle Business Park	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
H	53m E	Top Coat Wales Ltd (Formerly Glamorgan Paint Stovers), Unit 7, Triangle Business Park, Merthyr Tydfill, Mid Glamorgan, CF48 4TQ	Process: Coating Processes Status: Historic Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
I	100m N	Southern Vauxhall, Pentrebach Road, Merthyr Tydfil, CF48 1YA	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
K	126m W	Impress Merthyr Tydfil Limited, Dragon Parc, Abercainaid	Process: Flexible Packaging Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
K	126m W	Us Can Europe, Dragon Parc, Abercanaid, Merthyr Tydfil, CF48 1PQ	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
M	217m W	Amnitec Ltd, Abercanaid, Merthyr Tydfil, Mid Glamorgan, CF48 1UX	Process: Surface Cleaning Status: Pending Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
27	307m SE	iRG, New Road, Pentrebach, Merthyr Tydfil, Mid Glamorgan, CF48 4UB	Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
28	311m N	Evans Halshaw, Pentrebach Road, Merthyr Tydfil, Mid Glamorgan, CF48 1YA	Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
31	353m NW	Triumph Business Systems, TBS (South Wales) Ltd., The Willows, Abercanaid, Merthyr Tydfill, Mid Glamorgan, CF47 0YD	Process: Coating Processes Status: Historic Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	16

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Address	Details	
F	**On site**	**MERTHYR TYDFIL - HOOVER LTD PENTREB, MERTHYR TYDFIL - HOOVER LTD PENT, PENTREBACH**	**Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AE2022001 Permit Version: 1 Receiving Water: RIVER TAFF**	**Status: REVOKED - UNSPECIFIED Issue date: 20/02/1964 Effective Date: 20/02/1964 Revocation Date: 20/01/1985**
F	**On site**	**MERTHYR TYDFIL - HOOVER LTD PENTREB, MERTHYR TYDFIL - HOOVER LTD PENT, PENTREBACH**	**Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AE2022001 Permit Version: 2 Receiving Water: RIVER TAFF**	**Status: CONSENT EXPIRED - TIME LIMIT Issue date: 21/01/1985 Effective Date: 21/01/1985 Revocation Date: 24/02/1993**
23	233m W	BEHIND 7-12 ANTHONY GROVE MERTHYR, BEHIND 7-12 ANTHONY GROVE MERT, MERTHYR TYDFIL, MERTHYR TY	Effluent Type: UNSPECIFIED Permit Number: AN0073701 Permit Version: 1 Receiving Water: SOAK AWAY	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 29/06/1988 Effective Date: 29/06/1988 Revocation Date: 31/03/1995
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267902 Permit Version: 1 Receiving Water: TRIB OF THE RIVER TAFF	Status: REVOKED - UNSPECIFIED Issue date: 20/09/1996 Effective Date: 20/09/1996 Revocation Date: 19/12/1997
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267802 Permit Version: 1 Receiving Water: TRIBUTARY OF THE RIVER TAFF	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 20/09/1996 Effective Date: 20/09/1996 Revocation Date: 07/10/1997

ID	Location	Address	Details	
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267902 Permit Version: 2 Receiving Water: TRIB OF THE RIVER TAFF	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 19/12/1997 Effective Date: 20/12/1997 Revocation Date: 06/01/1999
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267801 Permit Version: 1 Receiving Water: TRIBUTARY OF THE RIVER TAFF	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 20/09/1996 Effective Date: 20/09/1996 Revocation Date: 07/10/1997
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267901 Permit Version: 1 Receiving Water: TRIB OF RIVER TAFF	Status: REVOKED - UNSPECIFIED Issue date: 20/09/1996 Effective Date: 20/09/1996 Revocation Date: 21/11/1997
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0267901 Permit Version: 2 Receiving Water: TRIB OF RIVER TAFF	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 21/11/1997 Effective Date: 22/11/1997 Revocation Date: 06/01/1999
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0268001 Permit Version: 1 Receiving Water: TRIB OF RIVER TAFF	Status: REVOKED - UNSPECIFIED Issue date: 20/09/1996 Effective Date: 20/09/1996 Revocation Date: 21/11/1997
N	256m E	AREA C (FINAL EFFLUENT LAGOON) GRAW, AREA C (FINAL EFFLUENT LAGOON) G, GRAWETH FARM OCCS MERTHYR TYDFI, MERTHYR TYDFIL	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AN0268001 Permit Version: 2 Receiving Water: TRIB OF RIVER TAFF	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 21/11/1997 Effective Date: 22/11/1997 Revocation Date: 06/01/1999
O	338m NW	CSO WILLOW GAS WORKS MERTHYR TYDFIL, CSO WILLOW GAS WORKS, MERTHYR TYDFIL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AN0091001 Permit Version: 2 Receiving Water: TAFF	Status: Effective Issue date: 20/12/2001 Effective Date: 21/12/2001 Revocation Date: -

ID	Location	Address	Details	
29	349m NE	PENTREBACH TIP - POINT Y	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: AG0004102 Permit Version: 1 Receiving Water: UNNAMED WATERCOURSE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/11/1980 Effective Date: 25/11/1980 Revocation Date: 23/09/1992
O	359m N	CSO WILLOW GAS WORKS MERTHYR TYDFIL, Nr 4 Eastfield Place, Twynyrodyn, Merthyr Tydfil, CF47 0UP	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AN0091001 Permit Version: 3 Receiving Water: RIVER TAFF	Status: Effective Issue date: 07/10/2019 Effective Date: 07/10/2019 Revocation Date: -
Q	406m NW	GROUNDWATER REMEDIATION TREATMENT @, FORMER WILLOWS GASWORKS, THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YH	Effluent Type: GROUNDWATER - BOREHOLE Permit Number: EPRNB3735AW Permit Version: 1 Receiving Water: GROUNDWATER	Status: SURRENDERED UNDER EPR 2010 Issue date: 15/04/2013 Effective Date: 15/04/2013 Revocation Date: 23/12/2013
Q	406m NW	GROUNDWATER REMEDIATION TREATMENT @, FORMER WILLOWS GASWORKS, THE WILLOWS, ABERCANAID INDUSTRIAL ESTATE, MERTHYR TYDFIL, CF48 1YH	Effluent Type: GROUNDWATER - BOREHOLE Permit Number: EPRNB3735AW Permit Version: 1 Receiving Water: GROUNDWATER	Status: SURRENDERED UNDER EPR 2010 Issue date: 15/04/2013 Effective Date: 15/04/2013 Revocation Date: 23/12/2013

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	2

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Name	Status	Receiving Water	Authorised Substances
G	8m NE	Hoover Ltd, Euopean Appliance, Pentrebach Road, Pentrebach,	Not Active	River Taff	Chromium, Copper, Lead, Nickel, Zinc
22	210m W	Triumph Business Systems, The Willows, Abercanaid, Merthyr	Not Active	River Taff	Chromium, Copper, Lead, Nickel, Zinc

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	10

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 80**

ID	Location	Details	
B	**On site**	**Incident Date: 04/11/2002** **Incident Identification: 118733** **Pollutant: Contaminated Water** **Pollutant Description: Firefighting Run-Off**	**Water Impact: Category 3 (Minor)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 2 (Significant)**
10	49m S	Incident Date: 30/06/2003 Incident Identification: 169843 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
J	103m NE	Incident Date: 30/04/2016 Incident Identification: 1602098 Pollutant: Oils and Fuels Pollutant Description: Petrol	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
J	103m NE	Incident Date: 30/04/2016 Incident Identification: 1602098 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
19	186m SW	Incident Date: 28/05/2001 Incident Identification: 6864 Pollutant: Sewage Materials Pollutant Description: Grey Water	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
O	338m N	Incident Date: 20/04/2016 Incident Identification: 1601874 Pollutant: Sewage Material Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
O	338m N	Incident Date: 20/04/2016 Incident Identification: 1601874 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
30	352m W	Incident Date: 26/11/2002 Incident Identification: 123260 Pollutant: Inert Materials and Wastes Pollutant Description: Rocks and Gravel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
P	353m W	Incident Date: 04/05/2016 Incident Identification: 1602160 Pollutant: Oils and Fuels Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	353m W	Incident Date: 04/05/2016 Incident Identification: 1602160 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

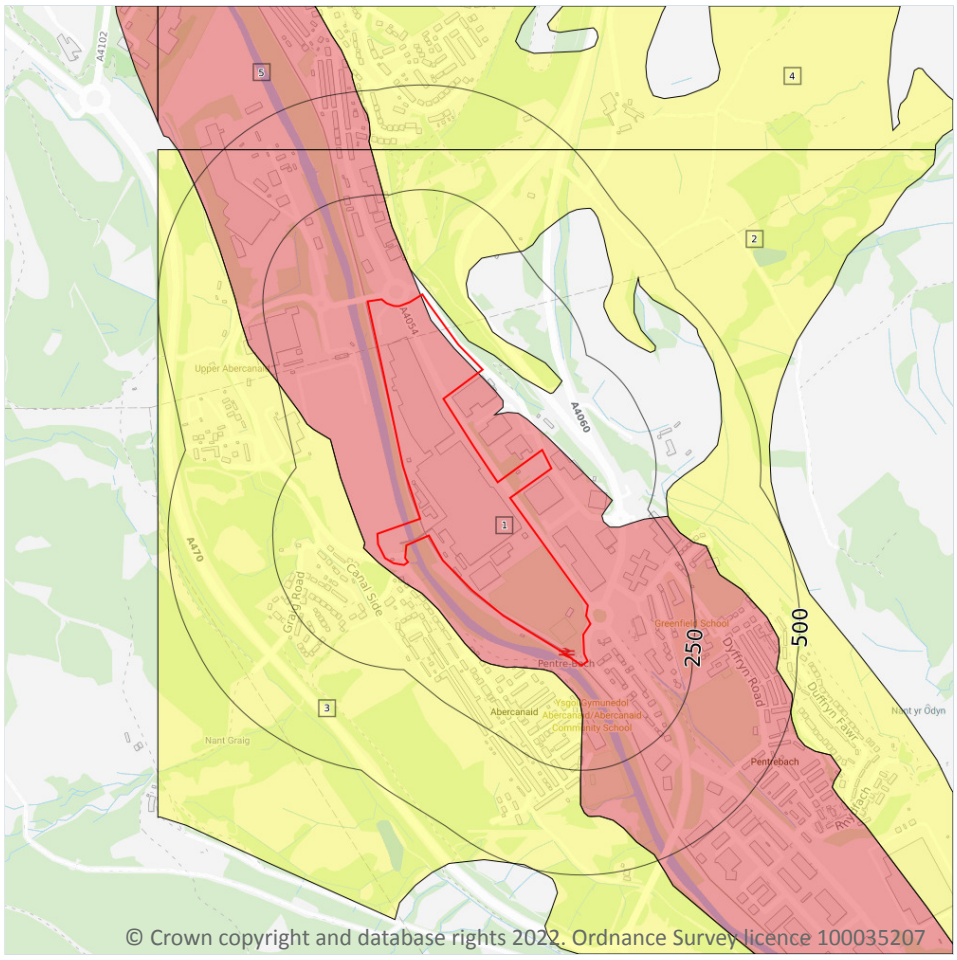
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

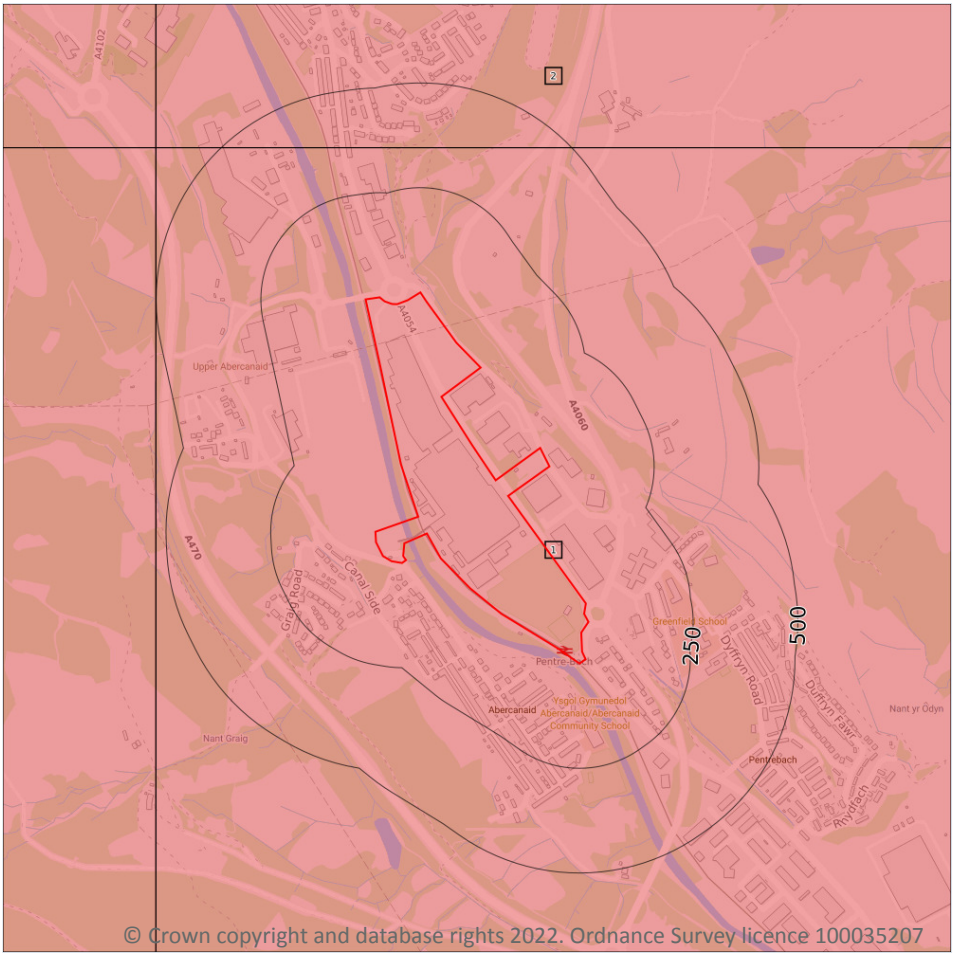
Features are displayed on the Hydrogeology map on **page 93**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	15m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	18m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	345m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	358m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

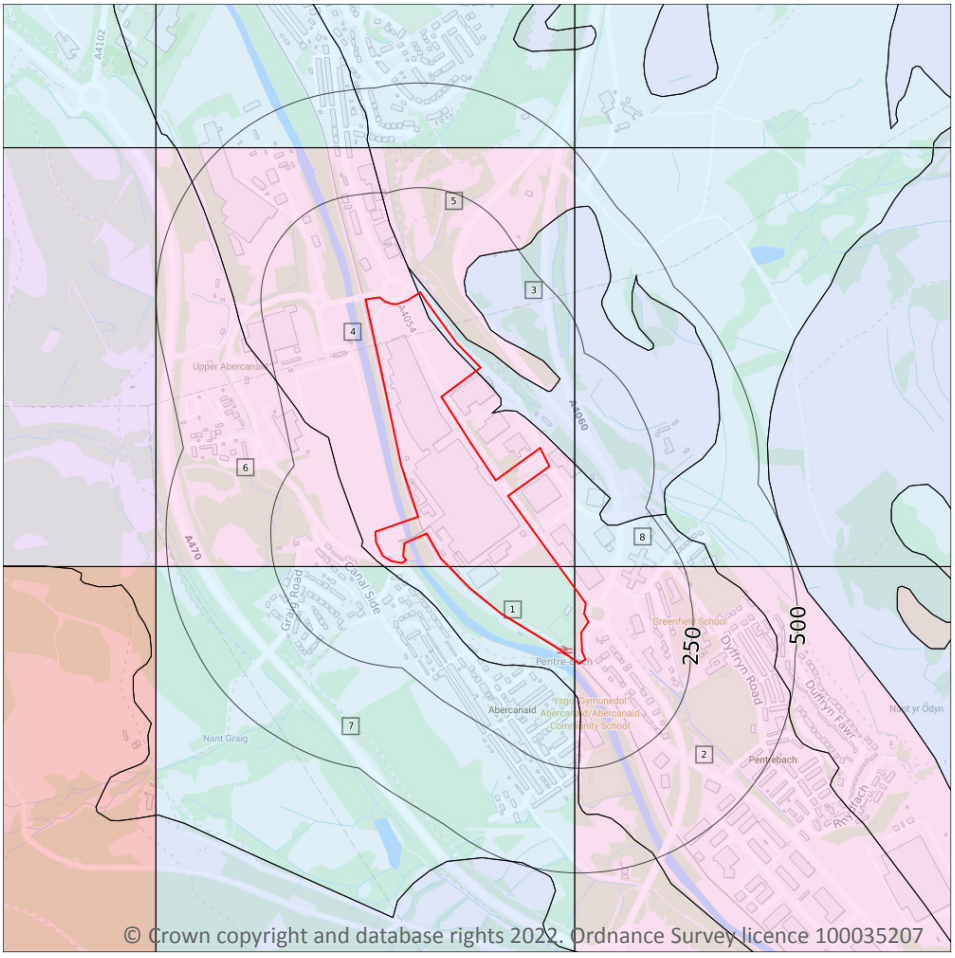
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 95**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	345m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	8

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 97**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year**	**Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Medium**	**Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures**
2	**On site**	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: <40% Dilution value: >550mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: No Data**	**Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures**
3	**On site**	**Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: <40% Dilution value: >550mm/year**	**Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low**	**Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures**
4	**On site**	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: <40% Dilution value: >550mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low**	**Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures**
5	14m NE	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
6	18m SW	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	20m SW	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
8	30m NE	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

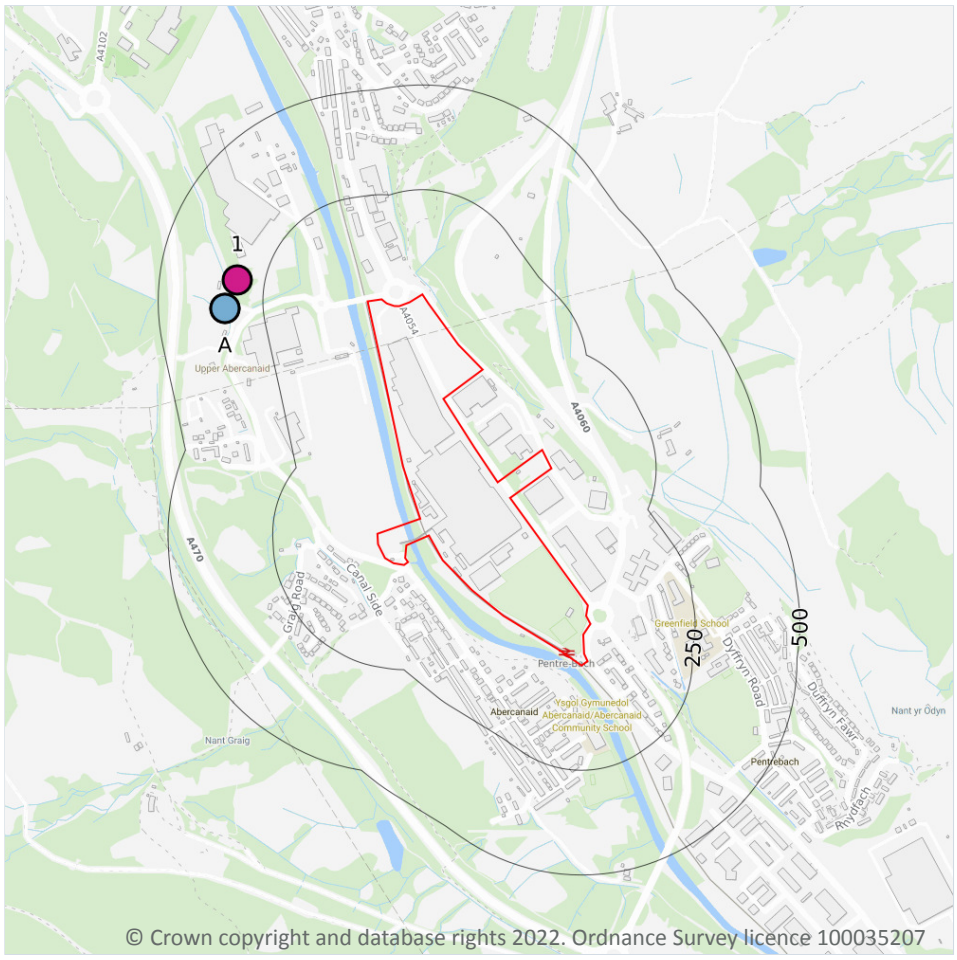
5.5 Groundwater vulnerability- local information

Records on site	**0**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	1

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 100**

ID	Location	Details	
1	315m W	Status: Historical Licence No: 21/57/22/0035 Details: General Washing/Process Washing Direct Source: EAW Groundwater Point: BOREHOLE AT TBS (SOUTH WALES) LTD Data Type: Point Name: TBS (South Wales) Ltd Easting: 305190 Northing: 204690	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/06/1994 Expiry Date: - Issue No: 100 Version Start Date: 14/10/1999 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**2**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 100**

ID	Location	Details	
A	341m W	Status: Historical Licence No: 21/57/22/0025 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: EAW Surface Water Point: NANT CANAID AT GLYN-DYRYS Data Type: Point Name: Hoover Plc Easting: 305160 Northing: 204620	Annual Volume (m^3): 509152 Max Daily Volume (m^3): 1818.4 Original Application No: - Original Start Date: 25/07/1979 Expiry Date: - Issue No: 100 Version Start Date: 30/10/2003 Version End Date: -
A	341m W	Status: Historical Licence No: 21/57/22/0025 Details: Non-Evaporative Cooling Direct Source: EAW Surface Water Point: NANT CANAID AT GLYN-DYRYS Data Type: Point Name: Hoover Plc Easting: 305160 Northing: 204620	Annual Volume (m^3): 509152 Max Daily Volume (m^3): 1818.4 Original Application No: - Original Start Date: 25/07/1979 Expiry Date: - Issue No: 100 Version Start Date: 30/10/2003 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

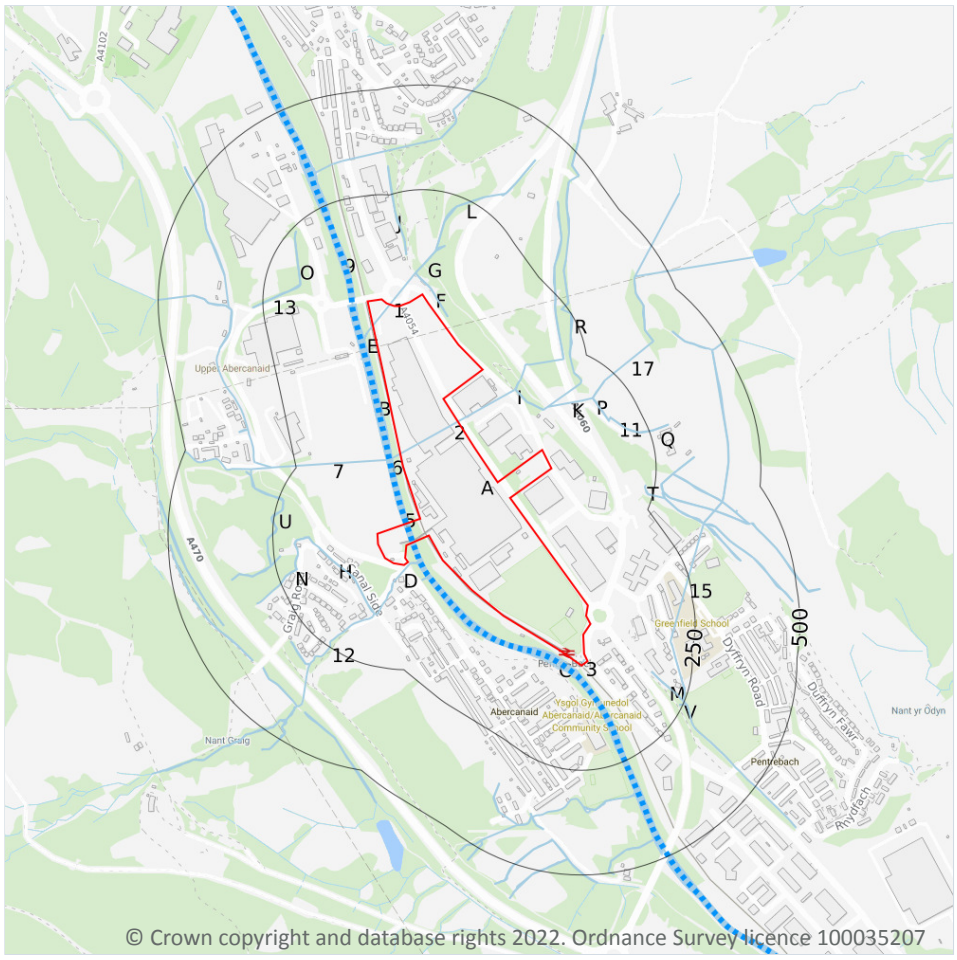
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	62

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 103**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**Not provided**	**Watercourse contains water year round (in normal circumstances)**	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
3	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
5	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Afon Taf**
D	5m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
D	6m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
E	17m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	18m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	25m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Taf
6	28m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Taf
7	28m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Cannaid
B	28m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Taf
D	31m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Taf
9	34m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Afon Taf

ID	Location	Type of water feature	Ground level	Permanence	Name
D	47m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
D	50m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	54m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	76m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
H	88m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	90m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	90m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	90m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	91m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
I	93m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	94m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
I	96m N	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
I	99m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
J	101m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	103m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
K	103m N	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
G	108m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	108m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	111m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
D	126m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	127m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
D	127m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
D	127m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
D	150m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
M	154m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	155m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig

ID	Location	Type of water feature	Ground level	Permanence	Name
O	165m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
11	171m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	172m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	172m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	180m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Nant Graig
R	183m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
12	188m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Nant Graig
13	188m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	192m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	192m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	194m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
15	195m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
M	195m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
17	222m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
T	227m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	227m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
T	231m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	233m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	234m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	242m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	246m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	246m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**33**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 103**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 103**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**River WB catchment**	**Taff - conf Taf Fechan to conf R Cynon**	**GB109057033100**	**Taff u s Cynon**	**South East Valleys**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.

Features are displayed on the Hydrology map on **page 103**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
4	**On site**	**River**	**Taff - conf Taf Fechan to conf R Cynon**	**GB109057033100**	**Moderate**	**Good**	**Moderate**	**2016**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1

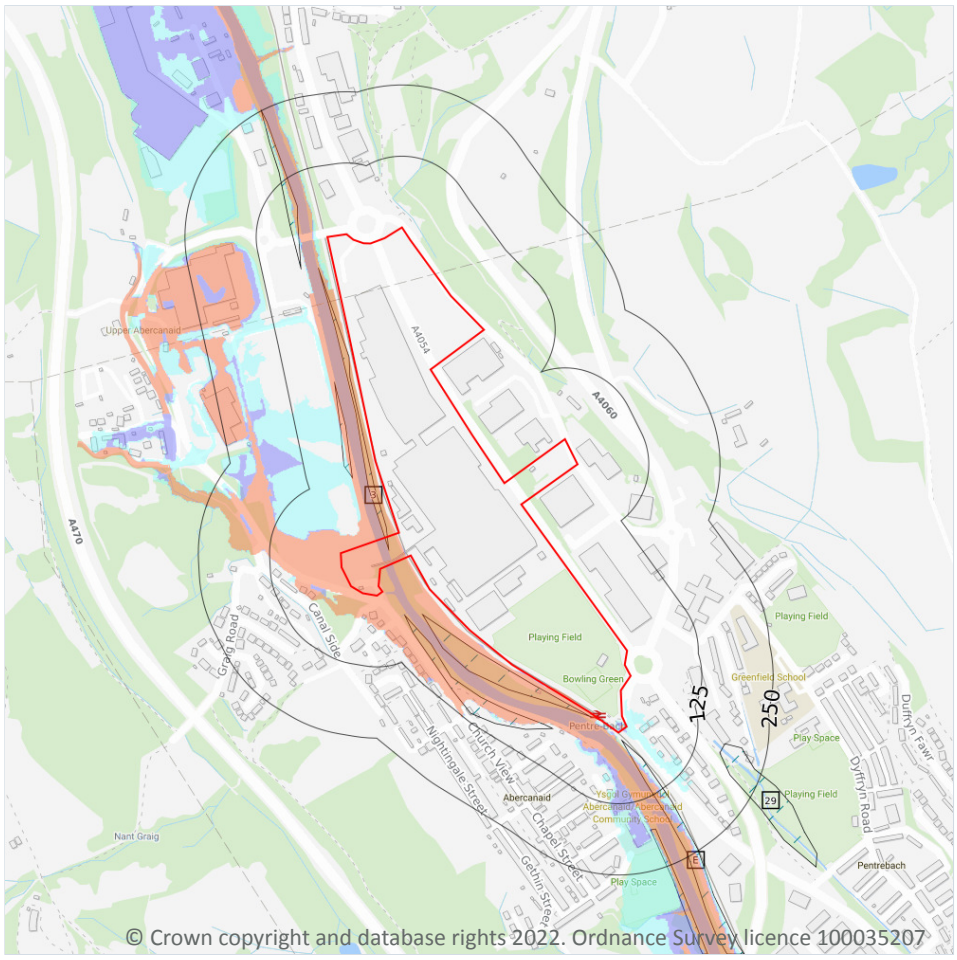
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 103**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**SE Valleys Carboniferous Coal Measures**	**GB40902G201900**	**Poor**	**Poor**	**Good**	**2017**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	158

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 111**

Distance	Flood risk category
On site	**High**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	**8**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

Features are displayed on the River and coastal flooding map on **page 111**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
3	**On site**	**Pentrebach December 1979 07**	**1979-12-27 1979-12-27**	**Main river**	**Channel capacity exceeded (no raised defences)**	**Fluvial**
B	5m SW	Pentrebach December 1979 05	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
E	15m SE	Pentrebach December 1979 02	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
H	38m W	Pentrebach December 1979 07	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
D	50m W	Pentrebach December 1979 08	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
F	57m SE	Pentrebach December 1979 05	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
29	170m E	Pentrebach December 1979 03	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial
C	180m S	Pentrebach December 1979 02	1979-12-27 1979-12-27	Main river	Channel capacity exceeded (no raised defences)	Fluvial

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

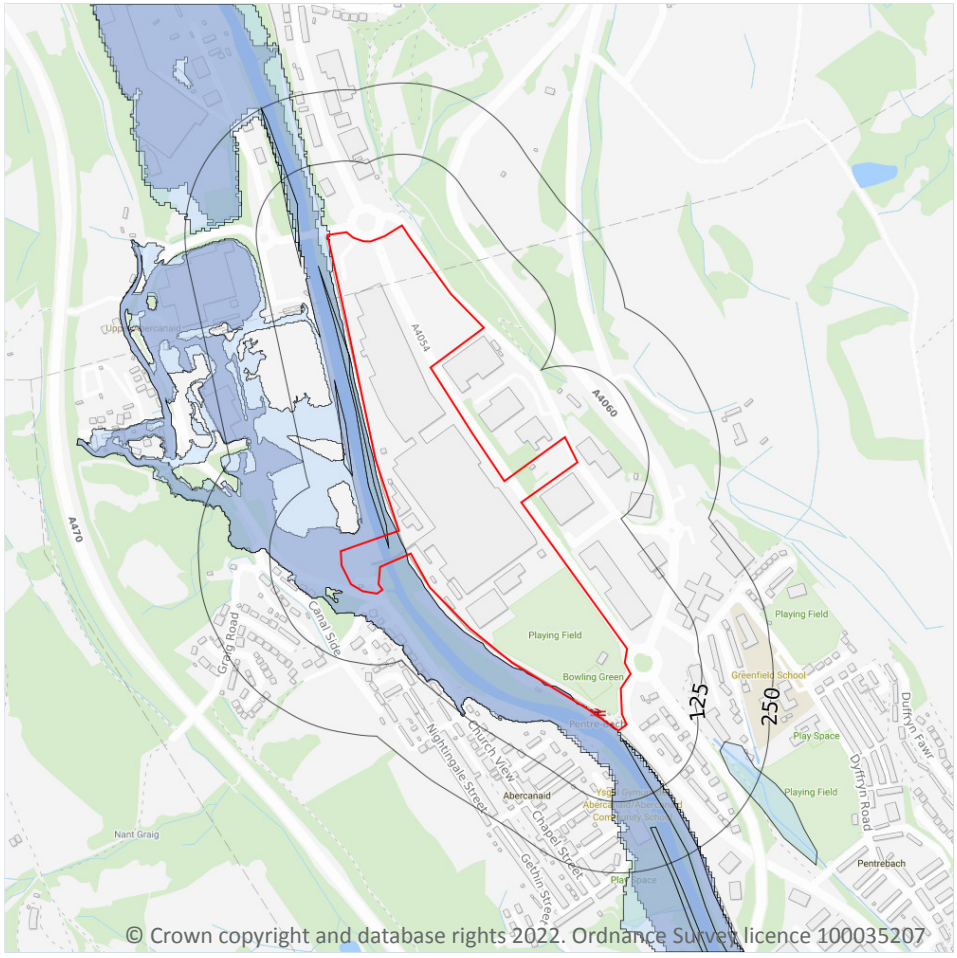
7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on **page 111**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

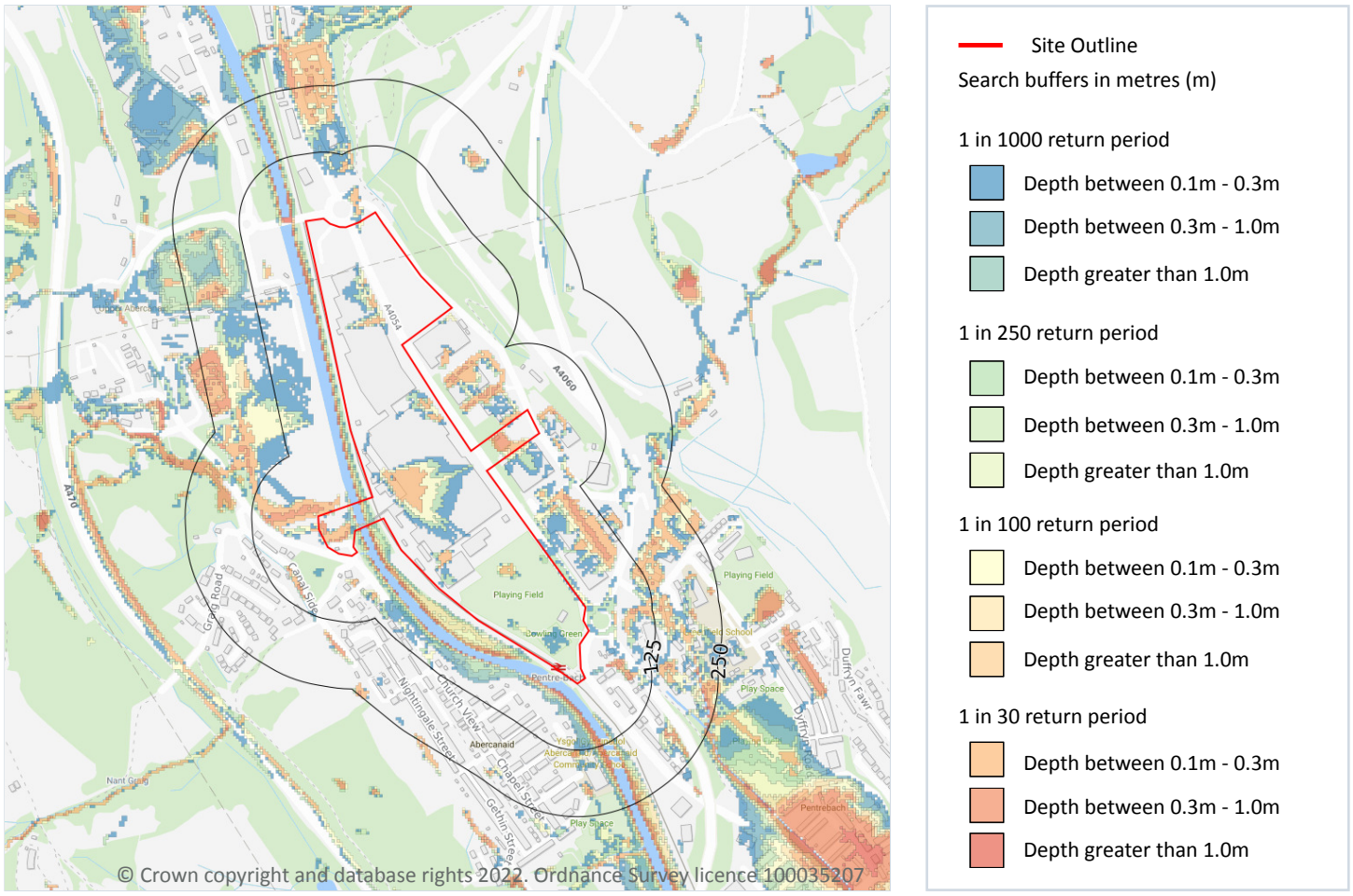
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 111**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 116**

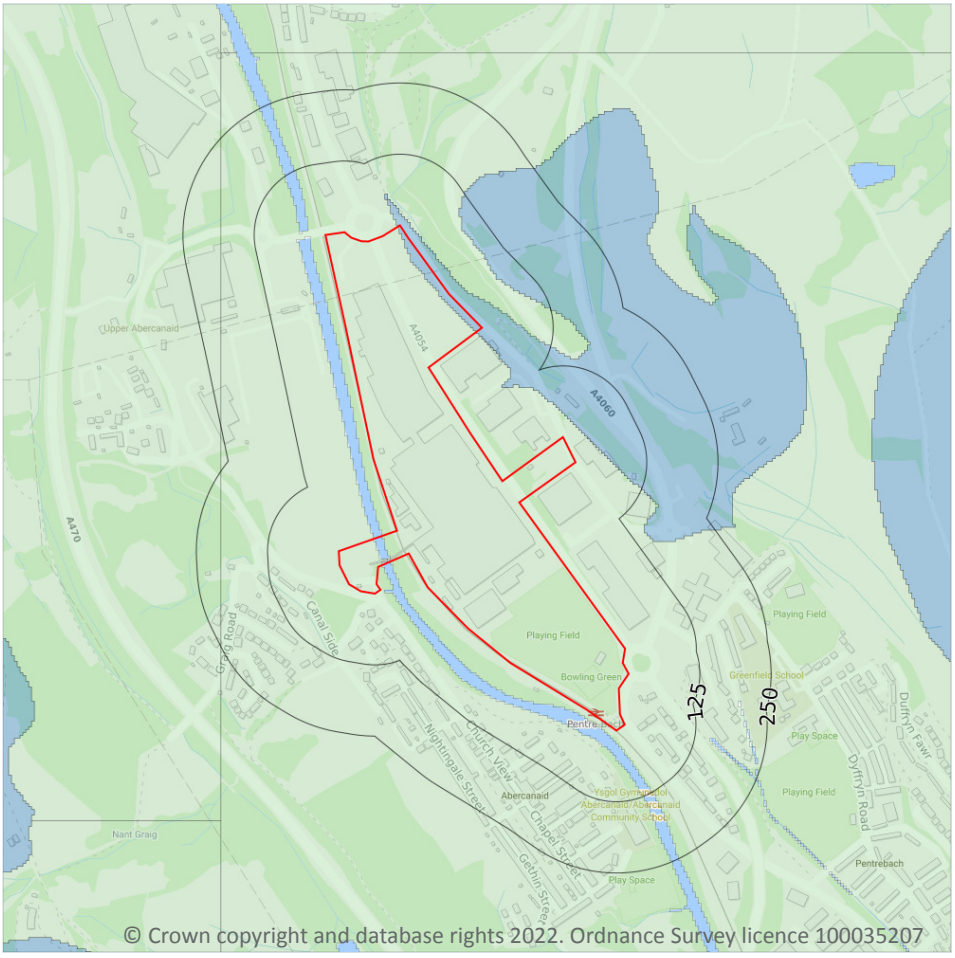
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

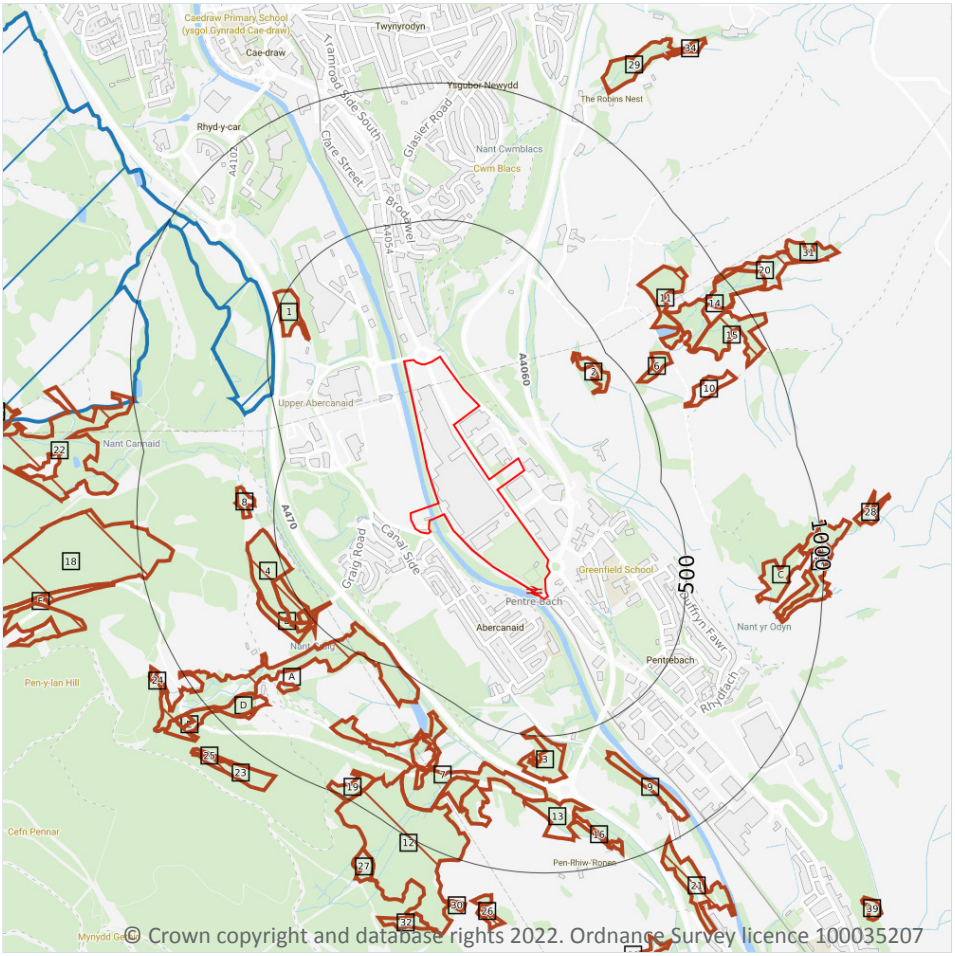
Highest risk on site	**Low**
Highest risk within 50m	**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 118**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	1

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on **page 119**

ID	Location	Name	Data source
5	478m W	CWM GLO A GLYNDYRYS	Natural Resources Wales

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

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

10.7 Designated Ancient Woodland

Records within 2000m	68

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 119**

ID	Location	Name	Woodland Type
1	358m W	Unknown	Ancient Semi Natural Woodland
2	364m NE	Unknown	Ancient Semi Natural Woodland
A	408m SW	Unknown	Ancient Semi Natural Woodland
B	414m SW	Unknown	Ancient Semi Natural Woodland
3	470m S	Unknown	Ancient Semi Natural Woodland
4	472m W	Unknown	Ancient Semi Natural Woodland
B	486m SW	Unknown	Ancient Semi Natural Woodland
B	496m SW	Unknown	Ancient Semi Natural Woodland
6	521m NE	Unknown	Ancient Semi Natural Woodland
7	567m SW	Unknown	Ancient Semi Natural Woodland
8	571m W	Unknown	Ancient Semi Natural Woodland
9	605m SE	Unknown	Ancient Semi Natural Woodland
10	633m E	Unknown	Ancient Semi Natural Woodland
11	678m NE	Unknown	Ancient Semi Natural Woodland
12	709m S	Unknown	Ancient Semi Natural Woodland
A	724m SW	Unknown	Restored Ancient Woodland Site

ID	Location	Name	Woodland Type
13	730m S	Unknown	Restored Ancient Woodland Site
14	739m NE	Unknown	Ancient Semi Natural Woodland
15	739m NE	Unknown	Ancient Semi Natural Woodland
C	762m E	Unknown	Restored Ancient Woodland Site
16	794m S	Unknown	Ancient Semi Natural Woodland
D	827m SW	Unknown	Restored Ancient Woodland Site
C	831m E	Unknown	Restored Ancient Woodland Site
17	844m E	Unknown	Ancient Semi Natural Woodland
18	876m W	Unknown	Ancient Semi Natural Woodland
D	877m SW	Unknown	Plantation on Ancient Woodland Site
19	888m SW	Unknown	Ancient Semi Natural Woodland
20	941m NE	Unknown	Ancient Semi Natural Woodland
E	983m SW	Unknown	Ancient Woodland Site of Unknown Category
21	985m SE	Unknown	Ancient Semi Natural Woodland
22	998m W	Unknown	Ancient Semi Natural Woodland
23	1038m SW	Unknown	Plantation on Ancient Woodland Site
E	1072m SW	Unknown	Ancient Woodland Site of Unknown Category
24	1076m SW	Unknown	Plantation on Ancient Woodland Site
25	1085m SW	Unknown	Ancient Woodland Site of Unknown Category
26	1097m S	Unknown	Ancient Semi Natural Woodland
F	1112m W	Unknown	Ancient Semi Natural Woodland
27	1126m SW	Unknown	Ancient Semi Natural Woodland
28	1129m E	Unknown	Ancient Semi Natural Woodland
29	1143m NE	Unknown	Restored Ancient Woodland Site
30	1148m S	Unknown	Ancient Semi Natural Woodland
31	1227m NE	Unknown	Ancient Semi Natural Woodland
32	1239m S	Unknown	Plantation on Ancient Woodland Site
F	1253m W	Unknown	Plantation on Ancient Woodland Site

ID	Location	Name	Woodland Type
33	1290m S	Unknown	Ancient Semi Natural Woodland
F	1351m W	Unknown	Ancient Semi Natural Woodland
34	1384m NE	Unknown	Ancient Semi Natural Woodland
35	1418m W	Unknown	Ancient Semi Natural Woodland
-	1497m S	Unknown	Plantation on Ancient Woodland Site
-	1521m W	Unknown	Ancient Semi Natural Woodland
-	1533m S	Unknown	Ancient Semi Natural Woodland
39	1596m SE	Unknown	Ancient Woodland Site of Unknown Category
-	1603m W	Unknown	Ancient Semi Natural Woodland
-	1605m W	Unknown	Plantation on Ancient Woodland Site
-	1609m W	Unknown	Plantation on Ancient Woodland Site
-	1614m S	Unknown	Ancient Semi Natural Woodland
-	1655m S	Unknown	Plantation on Ancient Woodland Site
-	1717m S	Unknown	Ancient Semi Natural Woodland
-	1718m S	Unknown	Restored Ancient Woodland Site
-	1742m W	Unknown	Plantation on Ancient Woodland Site
-	1747m W	Unknown	Plantation on Ancient Woodland Site
-	1789m S	Unknown	Ancient Semi Natural Woodland
-	1800m S	Unknown	Ancient Semi Natural Woodland
-	1841m SE	Unknown	Ancient Semi Natural Woodland
-	1843m W	Unknown	Ancient Woodland Site of Unknown Category
-	1852m S	Unknown	Ancient Semi Natural Woodland
-	1858m W	Unknown	Plantation on Ancient Woodland Site
-	1961m SE	Unknown	Restored Ancient Woodland Site

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

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

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

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

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

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

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

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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

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	34

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 127**

ID	Location	Name	Grade	Reference Number	Listed date
1	85m S	Llwyn-Yr-Eos House, Situated On The NW Side Of Abercanaid Just E Of The Former Glamorganshire Canal	II	11497	22/08/1975
2	88m E	Nw And N Facing Garden Walls At Pentrebach House, Adjoinging The Traffic Roundabout At S End Of Merthyr Road (A4064) And Enclosing The Garden Ground To NW And N Of The House	II	11504	22/08/1975
3	117m E	Pentrebach House, Between Abercanaid And Pentrebach, Just E Of The Roundabout On The A4064	II	11503	22/08/1975

ID	Location	Name	Grade	Reference Number	Listed date
A	136m SW	6, River Row, Abercanaid, Cf48 1Uj, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	81728	22/08/1975
A	138m SW	5, River Row, Abercanaid, Cf48 1Uj, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	81727	22/08/1975
A	140m SW	4, River Row, Abercanaid, Cf48 1Uj, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	81726	22/08/1975
A	142m SW	3, River Row, Abercanaid, Cf48 1Uj, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	81725	22/08/1975
A	144m SW	2, River Row, Abercanaid, Cf48 1Uj, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	81724	22/08/1975
A	146m SW	Nos.1-6 (Consec) River Row, Abercanaid, Mid Glamorgan, Situated On The NE Side Of Abercanaid Facing The Afon Taf	II	11502	22/08/1975
B	148m SW	1 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	11498	22/08/1975
B	151m SW	2 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81729	22/08/1975
B	154m SW	3 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81730	22/08/1975
B	156m SW	4 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81731	22/08/1975
B	158m SW	5 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81732	22/08/1975
B	160m SW	6 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81733	22/08/1975
B	161m SW	8 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81734	22/08/1975
B	163m SW	80 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81747	22/08/1975
B	165m SW	7 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	11499	22/08/1975
B	165m SW	9 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81735	22/08/1975
B	166m SW	79 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81746	22/08/1975

ID	Location	Name	Grade	Reference Number	Listed date
B	166m SW	81 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81748	22/08/1975
B	168m SW	78 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81745	22/08/1975
B	169m SW	10 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81736	22/08/1975
B	171m SW	11 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81737	22/08/1975
B	172m SW	77 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81744	22/08/1975
B	172m SW	12 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81738	22/08/1975
B	172m SW	76 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	11501	22/08/1975
B	177m SW	74 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81742	22/08/1975
4	177m SW	Sion Independent Chapel, Situated On Corner Of Chapel Street And Cardiff Street, Behind Narrow Railed Forecourt With Stone Gatepiers	II	21318	08/02/1999
B	177m SW	75 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81743	22/08/1975
B	178m SW	70 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	11500	22/08/1975
B	181m SW	73 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81741	22/08/1975
B	183m SW	71 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81739	22/08/1975

ID	Location	Name	Grade	Reference Number	Listed date
B	189m SW	72 Nightingale Street, Situated On The NW Side Of Abercanaid Between The Afon Taf And The Former Glamorganshire Canal	II	81740	22/08/1975

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	**2**

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.

Features are displayed on the Visual and cultural designations map on **page 127**

ID	Location	Ancient monument name	Reference number
5	178m N	Merthyr Tramroad Tunnel (Trevithick's Tunnel)	4048
6	212m SW	Abercanaid haystack boiler	4023

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

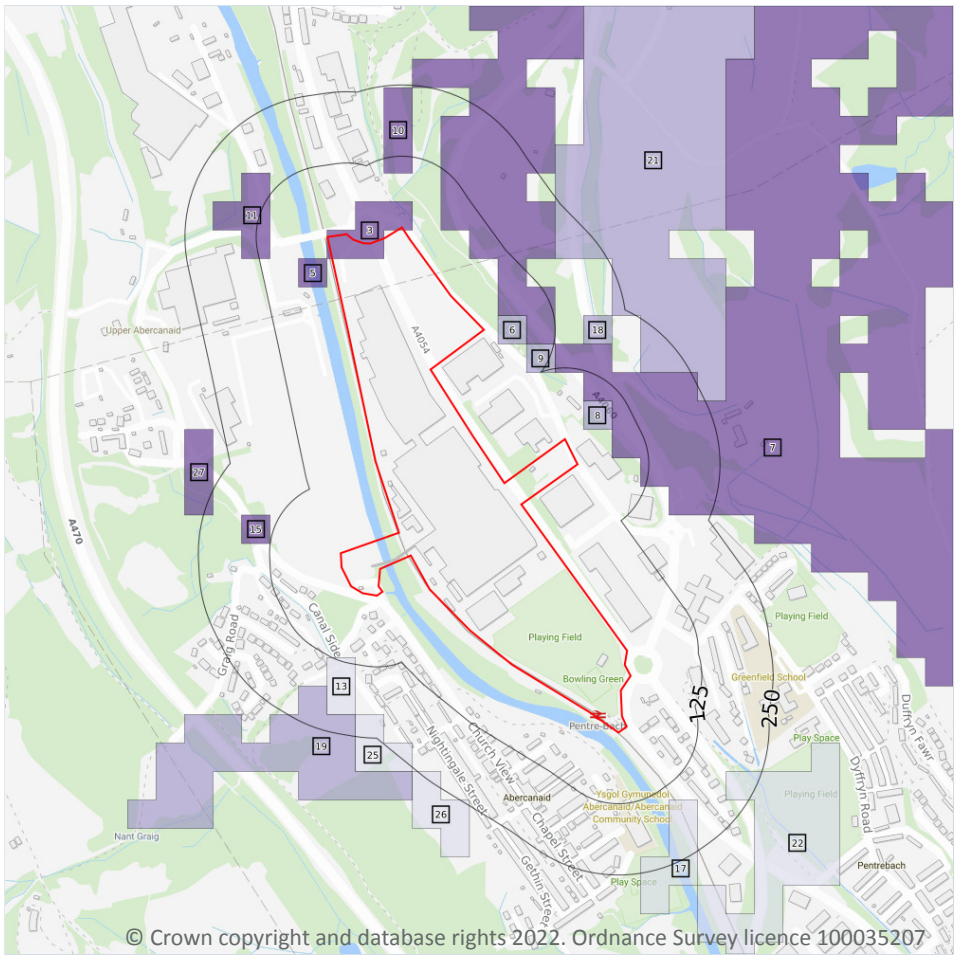
11.7 Registered Parks and Gardens

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



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	18

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 133**

ID	Location	Classification	Description
3	**On site**	**Grade 5**	**Very poor quality agricultural land**
5	9m W	Grade 5	Very poor quality agricultural land
6	25m E	Grade 4	Poor quality agricultural land

ID	Location	Classification	Description
7	35m NE	Grade 5	Very poor quality agricultural land
8	37m NE	Grade 4	Poor quality agricultural land
9	79m E	Grade 4	Poor quality agricultural land
10	95m N	Grade 5	Very poor quality agricultural land
11	101m W	Grade 5	Very poor quality agricultural land
13	113m S	Grade 3b	Moderate quality agricultural land
15	125m W	Grade 5	Very poor quality agricultural land
17	148m SE	Grade 3b	Moderate quality agricultural land
18	170m N	Grade 4	Poor quality agricultural land
19	174m S	Grade 4	Poor quality agricultural land
21	177m NE	Grade 4	Poor quality agricultural land
22	191m SE	Grade 3b	Moderate quality agricultural land
25	209m S	Grade 3b	Moderate quality agricultural land
26	225m SW	Grade 3b	Moderate quality agricultural land
27	234m W	Grade 5	Very poor quality agricultural land

This data is sourced from Natural Resources Wales.

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.

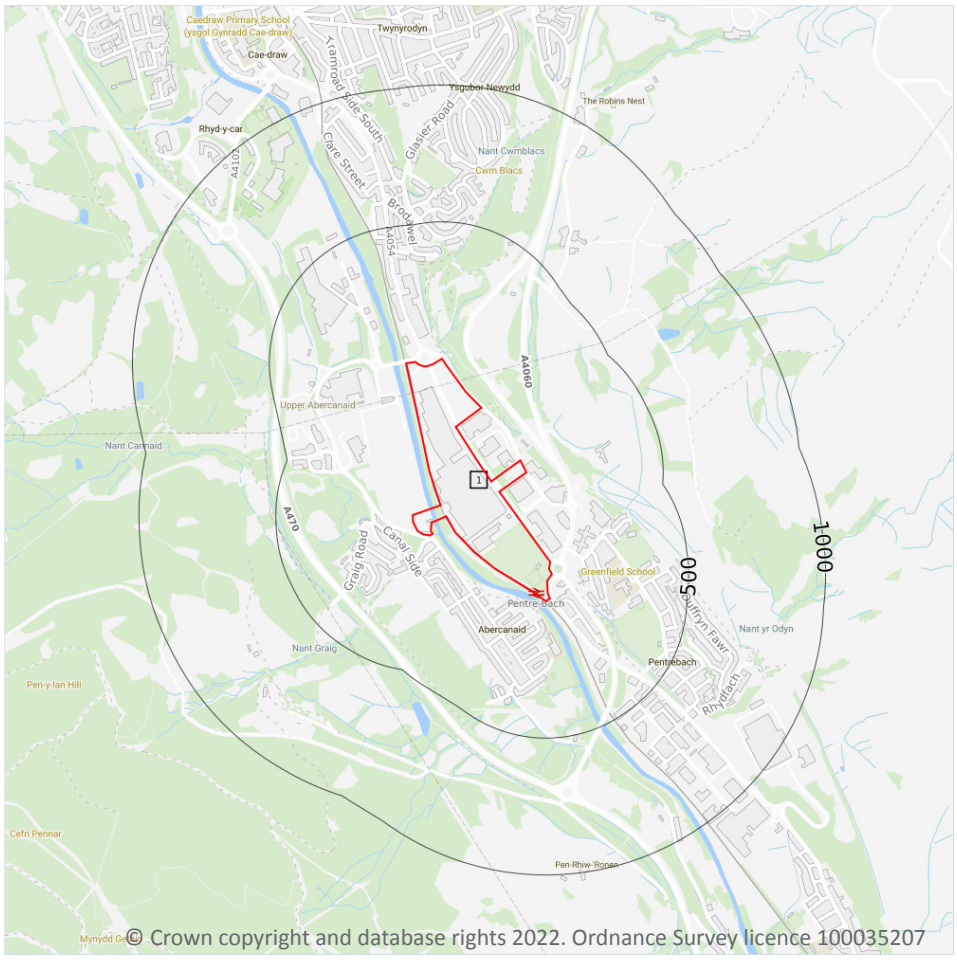
13.4 Limestone Pavement Orders

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	1

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 137**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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.

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

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

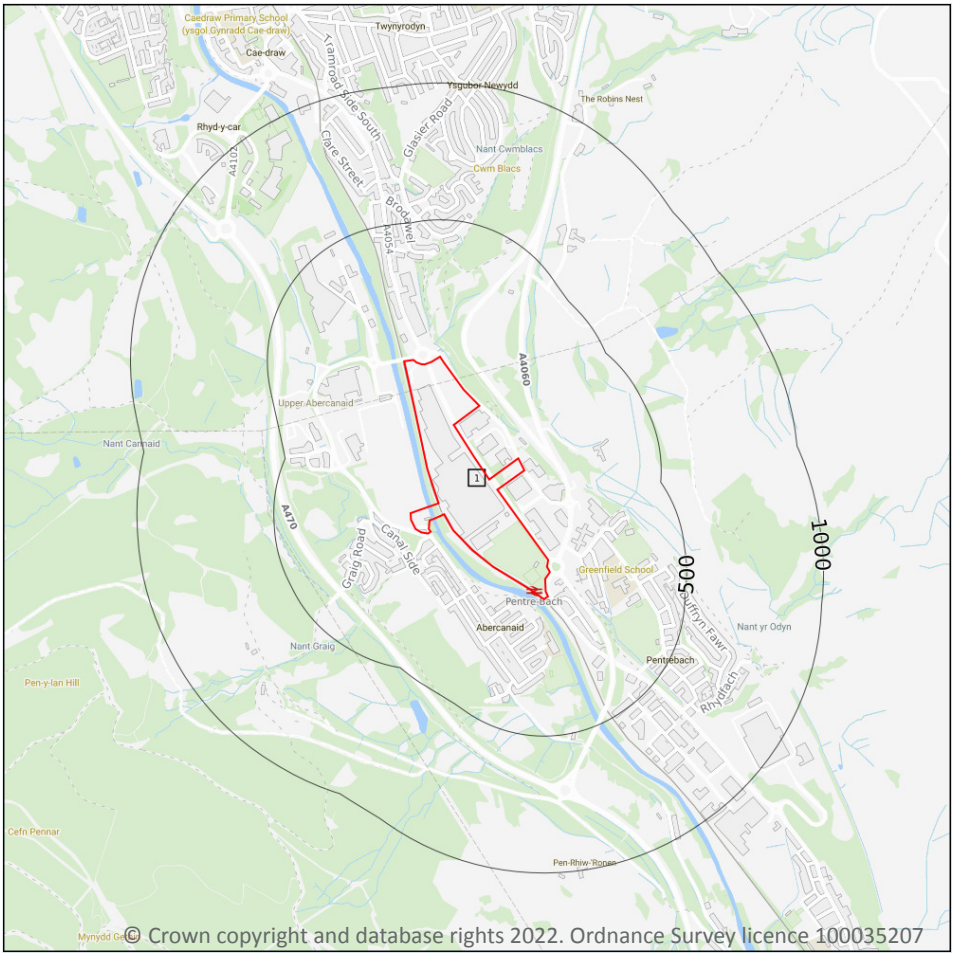
14.6 Bedrock faults and other linear features (10k)

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

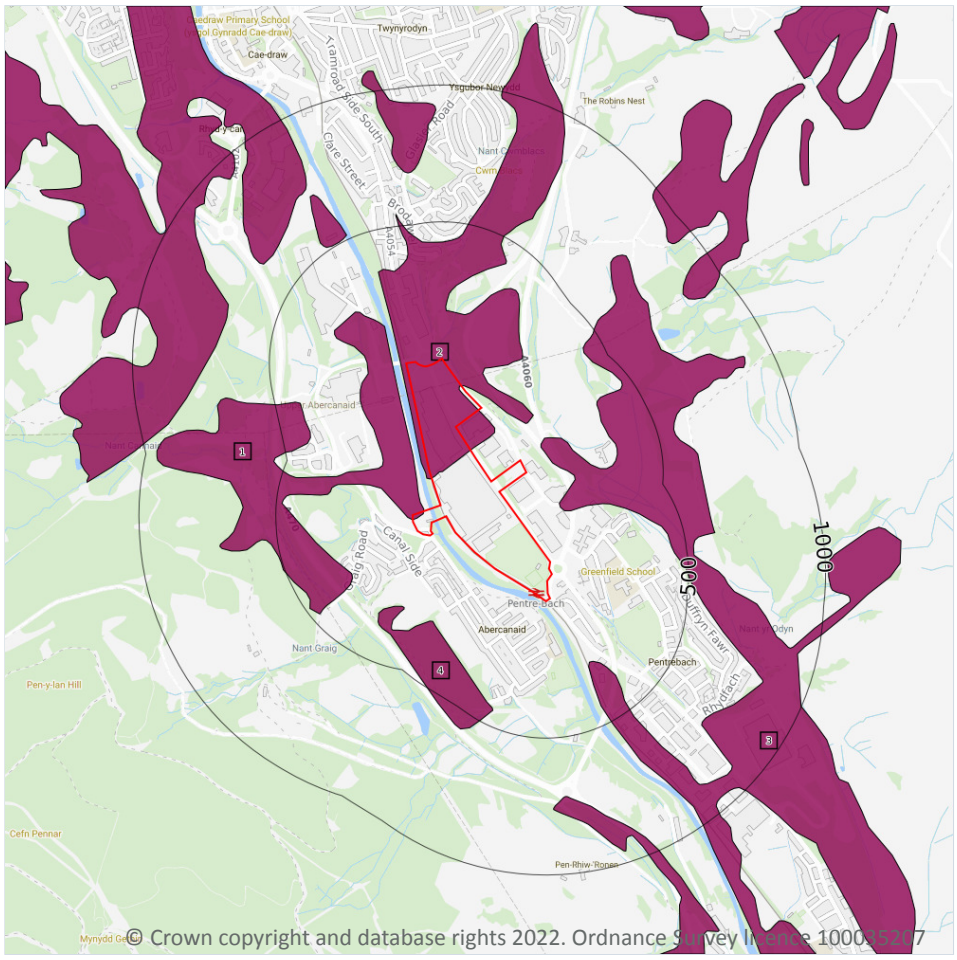
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 141**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW231_merthyr_v4**

This data is sourced from the British Geological Survey.

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



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 **4**

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 142**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
2	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
3	89m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	274m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

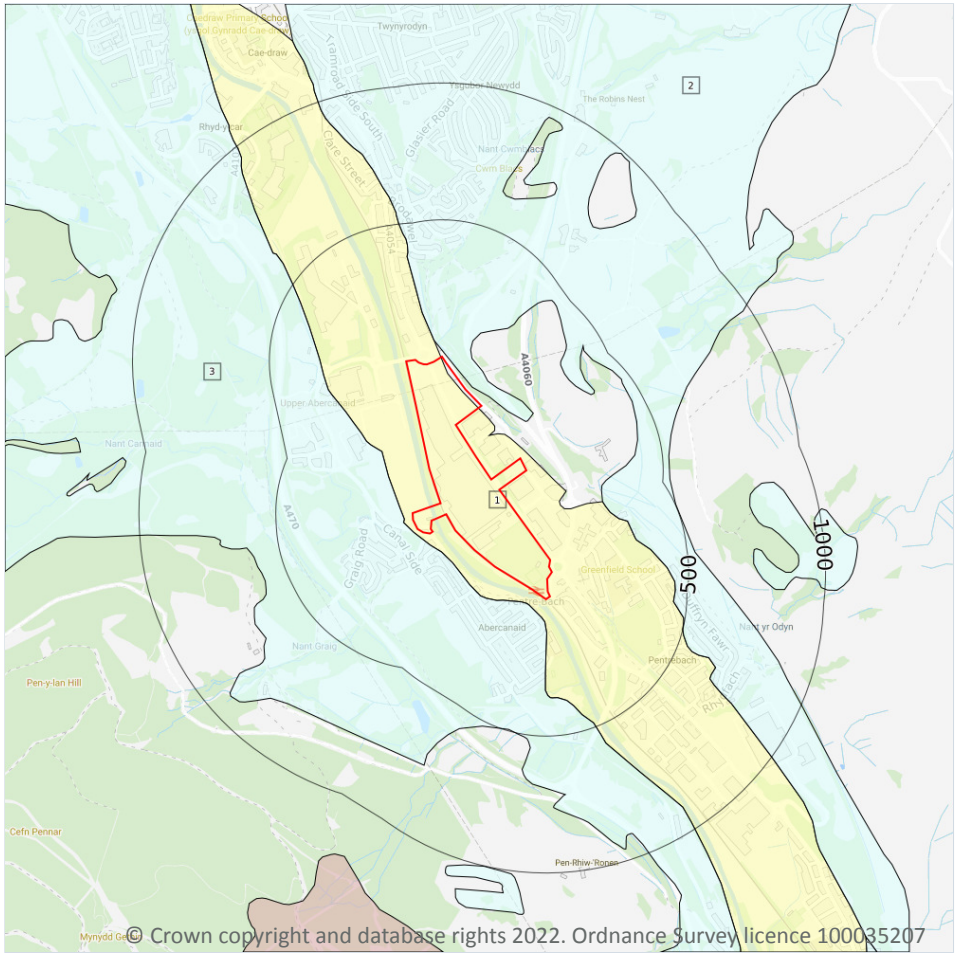
Records within 50m	**2**

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
On site	**Mixed**	**Very High**	**Low**
On site	**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	3

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 144**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
2	15m NE	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
3	18m SW	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial 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 any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**
15m E	Mixed	High	Low
18m S	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.

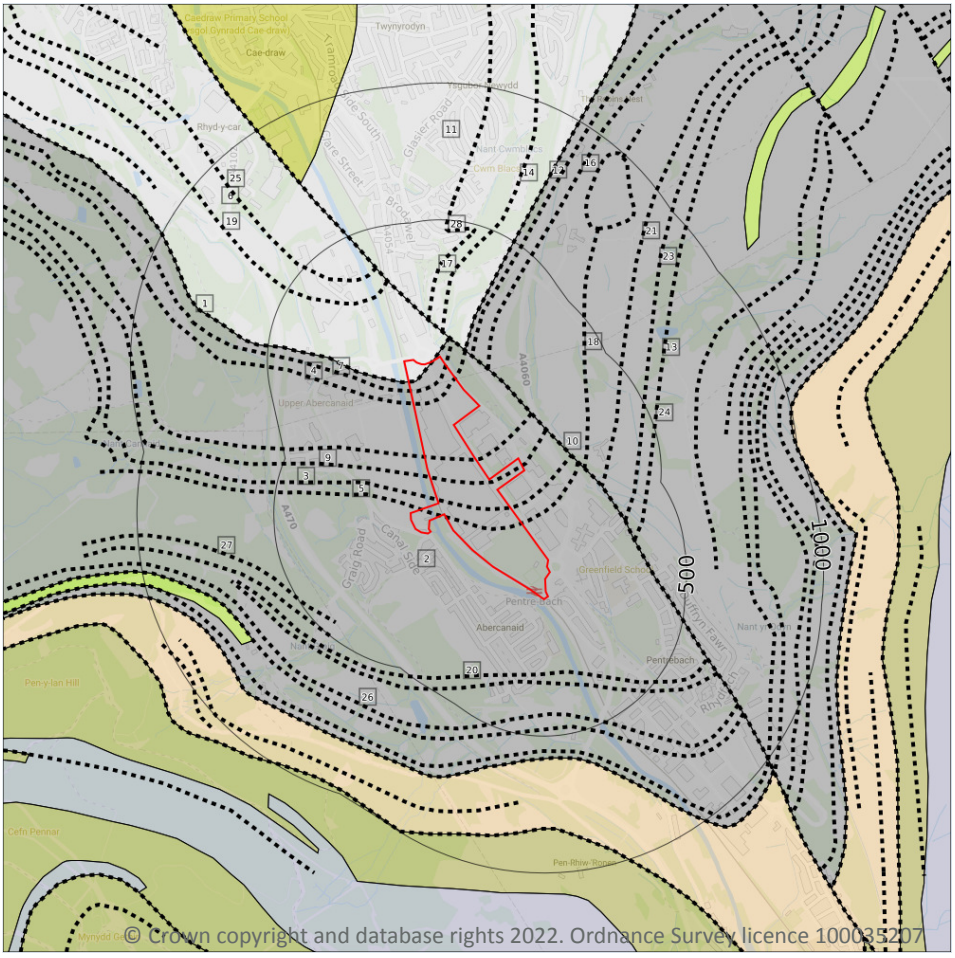
15.7 Landslip permeability (50k)

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	4

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 146**

ID	Location	LEX Code	Description	Rock age
2	**On site**	**SWMCM-MDSS**	**SOUTH WALES MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**
6	**On site**	**SWLCM-MDSS**	**SOUTH WALES LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE**	**WESTPHALIAN**

ID	Location	LEX Code	Description	Rock age
11	76m NE	SWLCM-MDSS	SOUTH WALES LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
13	89m NE	SWMCM-MDSS	SOUTH WALES MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock 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 bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Moderate**	**Low**
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 **25**

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.

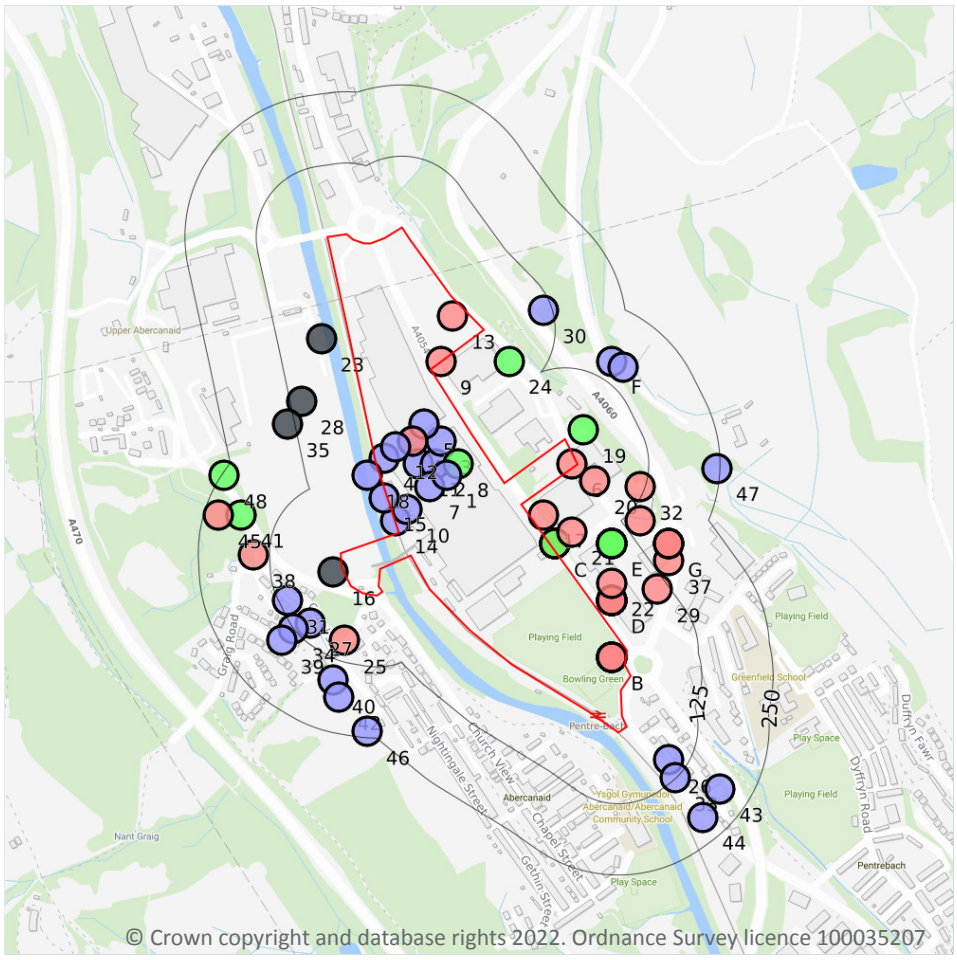
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 146**

ID	Location	Category	Description
1	**On site**	**FOSSIL_HORIZON**	**Marine band**
3	**On site**	**ROCK**	**Coal seam, inferred**
4	**On site**	**ROCK**	**Coal seam, inferred**
5	**On site**	**ROCK**	**Coal seam, inferred**
7	**On site**	**ROCK**	**Coal seam, inferred**
8	**On site**	**ROCK**	**Coal seam, inferred**
9	**On site**	**ROCK**	**Coal seam, inferred**

ID	Location	Category	Description
10	76m NE	FAULT	Fault, inferred, displacement unknown
12	89m NE	FOSSIL_HORIZON	Marine band
14	92m N	ROCK	Coal seam, inferred
15	97m NE	ROCK	Coal seam, inferred
16	117m NE	ROCK	Coal seam, inferred
17	141m N	ROCK	Coal seam, inferred
18	220m E	ROCK	Coal seam, inferred
19	257m NW	ROCK	Coal seam, inferred
20	272m S	ROCK	Coal seam, inferred
21	289m E	ROCK	Coal seam, inferred
22	305m S	FOSSIL_HORIZON	Marine band
23	316m NE	ROCK	Coal seam, inferred
24	324m E	ROCK	Coal seam, inferred
25	338m NW	ROCK	Coal seam, inferred
26	420m S	ROCK	Coal seam, inferred
27	449m SW	ROCK	Coal seam, inferred
28	461m N	ROCK	Coal seam, observed
29	473m S	FOSSIL_HORIZON	Marine band

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m	98

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 149**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	305710 204220	HOOVER LTD - NEW FACTORY AT PENTREBACH 5	6.09	N	15990975
2	On site	305690 204240	HOOVER LTD - NEW FACTORY AT PENTREBACH 10	6.24	N	15991031

ID	Location	Grid reference	Name	Length	Confidential	Web link
3	On site	305700 204280	HOOVER LTD - NEW FACTORY AT PENTREBACH 17	5.79	N	15991034
4	On site	305600 204250	HOOVER LTD - NEW FACTORY AT PENTREBACH 19	8.07	N	15991036
5	On site	305670 204310	HOOVER LTD - NEW FACTORY AT PENTREBACH 22	5.79	N	15991040
6	On site	305930 204240	WDA PENTREBACH MERTHYR. 4A	33.45	N	260787
7	On site	305680 204200	HOOVER LTD - NEW FACTORY AT PENTREBACH 4	6.24	N	15990974
8	On site	305730 204240	HOOVER LTD - NEW FACTORY AT PENTREBACH 6	19.2	N	15990976
9	On site	305700 204420	WDA PENTREBACH MERTHYR. 5A	42.1	N	260788
10	On site	305640 204160	HOOVER LTD - NEW FACTORY AT PENTREBACH 2	8.22	N	15990972
11	On site	305660 204240	HOOVER LTD - NEW FACTORY AT PENTREBACH 15	5.1	N	15991033
12	On site	305620 204270	HOOVER LTD - NEW FACTORY AT PENTREBACH 20	8.83	N	15991037
13	On site	305720 204500	WDA PENTREBACH MERTHYR. 7A	40.1	N	260790
14	On site	305620 204140	HOOVER LTD - NEW FACTORY AT PENTREBACH 1	3.2	N	15990969
A	On site	305650 204280	HOOVER LTD - NEW FACTORY AT PENTREBACH 21	4.11	N	15991038
A	On site	305650 204280	HOOVER LTD - NEW FACTORY AT PENTREBACH 21A	61.11	N	15991039
B	On site	306000 203900	REDEV, PENTREBACH Z 8	40.0	N	260877
B	On site	306000 203900	REDEV, PENTREBACH V 8	42.0	N	260876
B	On site	306000 203900	REDEV, PENTREBACH ZD8	45.0	N	260878
B	On site	306000 203900	REDEV, PENTREBACH Z20	38.0	N	260891
B	On site	306000 203900	REDEV, PENTREBACH ZH20	34.0	N	260893
B	On site	306000 203900	REDEV, PENTREBACH ZH8	46.0	N	260879
B	On site	306000 203900	REDEV, PENTREBACH ZD20	40.0	N	260892
B	On site	306000 203900	REDEV, PENTREBACH ZM20	35.0	N	260894
B	On site	306000 203900	REDEV, PENTREBACH ZM8	47.0	N	260880
15	6m W	305600 204180	HOOVER LTD - NEW FACTORY AT PENTREBACH 12	5.71	N	15991032
C	8m NE	305900 204100	REDEV, PENTREBACH AA8	36.0	N	260871

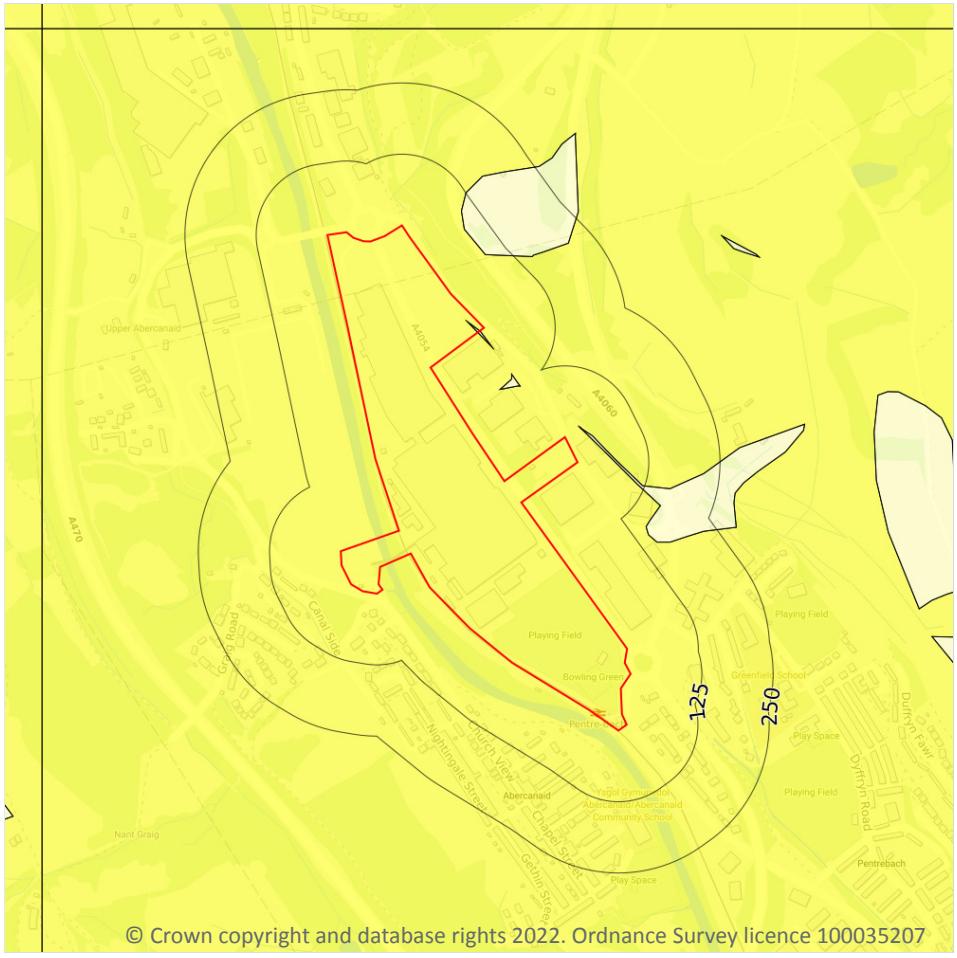
ID	Location	Grid reference	Name	Length	Confidential	Web link
C	8m NE	305900 204100	REDEV, PENTREBACH JJ8	-2.0	N	260869
C	8m NE	305900 204100	REDEV, PENTREBACH H 8	40.0	N	260873
C	8m NE	305900 204100	REDEV, PENTREBACH R 8	40.0	N	260875
C	8m NE	305900 204100	REDEV, PENTREBACH M 8	40.0	N	260874
C	8m NE	305900 204100	REDEV, PENTREBACH EE8	30.0	N	260870
C	8m NE	305900 204100	REDEV, PENTREBACH SS8	30.0	N	260867
C	8m NE	305900 204100	REDEV, PENTREBACH JJ20	25.5	N	260883
C	8m NE	305900 204100	REDEV, PENTREBACH NN20	23.0	N	260882
C	8m NE	305900 204100	REDEV, PENTREBACH NN8	29.0	N	260868
C	8m NE	305900 204100	REDEV, PENTREBACH D 8	39.0	N	260872
C	8m NE	305900 204100	REDEV, PENTREBACH SS20	28.0	N	260881
16	18m SW	305510 204050	WELSH IND. ESTATE. 5A	-	Y	N/A
17	21m NE	305880 204150	WDA PENTREBACH MERTHYR. 3A	42.3	N	260786
18	22m W	305570 204220	HOOVER LTD - NEW FACTORY AT PENTREBACH 18	4.8	N	15991035
D	30m NE	306000 204000	REDEV, PENTREBACH R20	36.0	N	260889
D	30m NE	306000 204000	REDEV, PENTREBACH M20	34.0	N	260888
D	30m NE	306000 204000	REDEV, PENTREBACH EE20	30.0	N	260884
D	30m NE	306000 204000	REDEV, PENTREBACH R32	35.0	N	260903
D	30m NE	306000 204000	REDEV, PENTREBACH AA20	30.0	N	260885
D	30m NE	306000 204000	REDEV, PENTREBACH ZH32	40.0	N	260907
D	30m NE	306000 204000	REDEV, PENTREBACH H 20	33.0	N	260887
D	30m NE	306000 204000	REDEV, PENTREBACH ZD32	40.0	N	260906
D	30m NE	306000 204000	REDEV, PENTREBACH V20	37.5	N	260890
D	30m NE	306000 204000	REDEV, PENTREBACH Z32	38.0	N	260905
D	30m NE	306000 204000	REDEV, PENTREBACH ZM32	40.0	N	260908
D	30m NE	306000 204000	REDEV, PENTREBACH V32	37.0	N	260904
D	30m NE	306000 204000	REDEV, PENTREBACH D 20	39.0	N	260886
19	37m NE	305950 204300	PENTRE BACH, MERTHYR TYDFIL. 6	24.0	N	260762

ID	Location	Grid reference	Name	Length	Confidential	Web link
20	42m SE	305970 204210	PENTRE BACH, MERTHYR TYDFIL. 5	36.3	N	260761
21	44m NE	305930 204120	PENTRE BACH, MERTHYR TYDFIL. 3	45.4	N	260760
22	48m NE	306000 204030	WDA PENTREBACH MERTHYR. 2A	46.7	N	260785
23	49m W	305490 204460	WELSH IND. ESTATE. 2	-	Y	N/A
24	71m SE	305820 204420	WDA PENTREBACH MERTHYR. 6A	30.0	N	260789
E	89m NE	306000 204100	REDEV, PENTREBACH D32	35.0	N	260900
E	89m NE	306000 204100	REDEV, PENTREBACH M32	34.0	N	260902
E	89m NE	306000 204100	REDEV, PENTREBACH EE32	30.0	N	260898
E	89m NE	306000 204100	REDEV, PENTREBACH AA32	31.0	N	260899
E	89m NE	306000 204100	REDEV, PENTREBACH NN32	28.0	N	260896
E	89m NE	306000 204100	REDEV, PENTREBACH H32	33.0	N	260901
E	89m NE	306000 204100	REDEV, PENTREBACH JJ32	30.0	N	260897
E	89m NE	306000 204100	REDEV, PENTREBACH SS32	28.0	N	260895
25	89m S	305530 203930	ABERCANAID SHAFT, 231/40	130.75	N	260693
26	95m SE	306100 203720	TAFF VALE TRUNK ROAD, ABERFAN. TP.198	2.4	N	260653
27	97m SW	305470 203960	TAFF VALE TRUNK ROAD, ABERFAN. 168	6.3	N	260668
28	105m W	305455 204350	MERTHYR 2	-	Y	N/A
29	107m NE	306080 204020	WDA PENTREBACH MERTHYR. 1A	41.12	N	260784
30	110m E	305880 204510	MERTHYR WILLOWS FOCHRIW. TP.2	2.6	N	260712
31	112m SW	305430 204000	TAFF VALE TRUNK ROAD, ABERFAN. TP.509	4.5	N	260671
32	117m E	306050 204200	PENTRE BACH, MERTHYR TYDFIL. 4	33.0	N	260763
33	124m SE	306111 203689	ABERFAN BY-PASS/PENTREBACH LINK. 3027	8.0	N	260711
34	127m SW	305440 203950	TAFF VALE TRUNK ROAD, ABERFAN. TP.627	4.0	N	260669
35	138m W	305430 204310	WELSH IND. ESTATE. 6A	-	Y	N/A
36	148m SE	306050 204140	PENTRE BACH, MERTHYR TYDFIL. 2	42.3	N	260759
37	152m NE	306100 204070	PENTRE BACH, MERTHYR TYDFIL. 1	41.7	N	260758
38	154m W	305370 204080	TAFF VALE TRUNK ROAD, ABERFAN. 169	49.7	N	260672
39	155m SW	305420 203930	TAFF VALE TRUNK ROAD, ABERFAN. TP.626	2.8	N	260670

ID	Location	Grid reference	Name	Length	Confidential	Web link
F	160m NE	306000 204420	MERTHYR WILLOWS FOCHRIW. TP.4A	2.3	N	260714
40	162m S	305510 203860	TAFF VALE TRUNK ROAD, ABERFAN. TP.503	4.65	N	260667
F	163m NE	306020 204410	MERTHYR WILLOWS FOCHRIW. TP.4	1.4	N	260713
G	170m NE	306100 204100	REDEV, PENTREBACH ZD40	34.0	N	260910
G	170m NE	306100 204100	REDEV, PENTREBACH Z40	36.0	N	260909
G	170m NE	306100 204100	REDEV, PENTREBACH ZM40	34.0	N	260912
G	170m NE	306100 204100	REDEV, PENTREBACH ZH40	40.0	N	260911
41	187m W	305350 204150	TAFF VALE TRUNK ROAD, ABERFAN. 170. TP.510,511	30.0	N	260673
42	188m S	305520 203830	TAFF VALE TRUNK ROAD, ABERFAN. 167	8.0	N	260666
43	197m SE	306190 203670	TAFF VALE TRUNK ROAD, ABERFAN. TP.200	3.42	N	260651
44	208m SE	306160 203620	TAFF VALE TRUNK ROAD, ABERFAN. TP.197	3.8	N	260652
45	224m W	305310 204150	TAFF VALE TRUNK ROAD, ABERFAN. 171,171A	33.7	N	260674
46	239m S	305570 203770	TAFF VALE TRUNK ROAD, ABERFAN. 166. TP.507	8.0	N	260665
47	245m E	306184 204232	PENTREBACH, (130 & 498) TP.3	2.29	N	260570
48	246m NW	305320 204220	TAFF VALE TRUNK ROAD, ABERFAN. BH'S & TP'S	25.5	N	260675

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	3

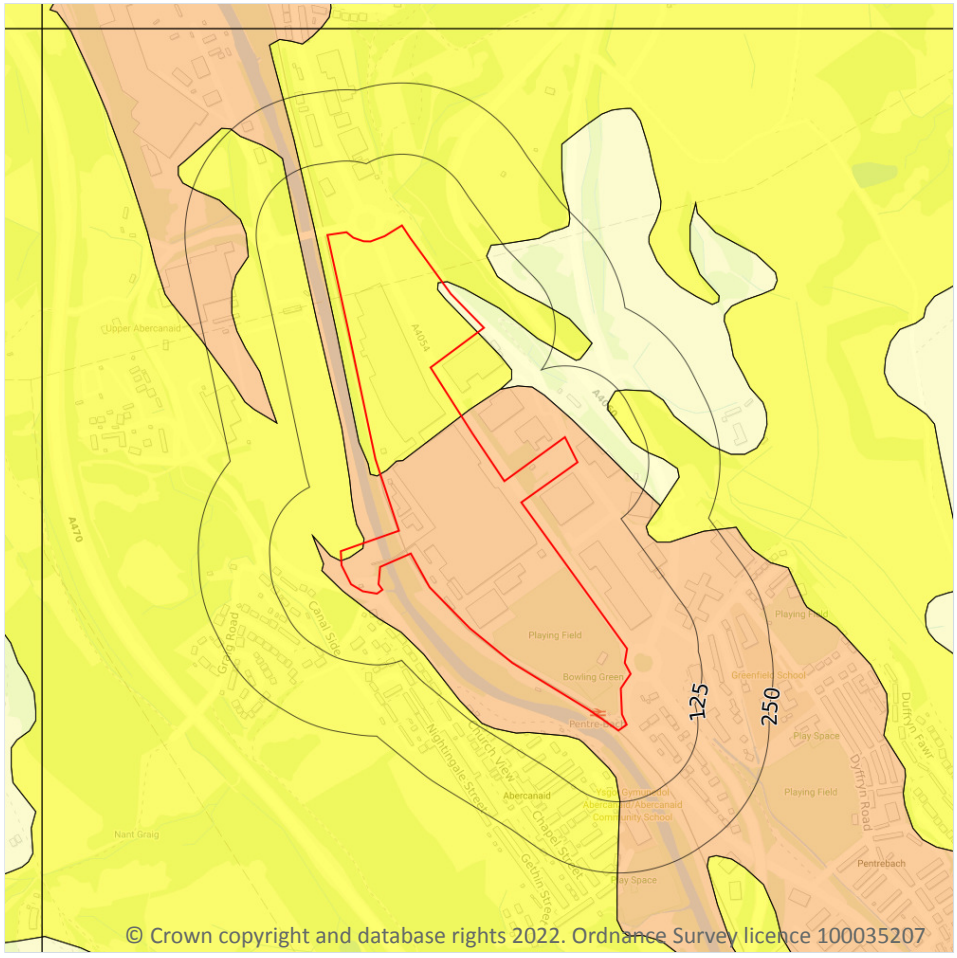
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 154**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**
31m NE	Negligible	Ground conditions predominantly non-plastic.

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.

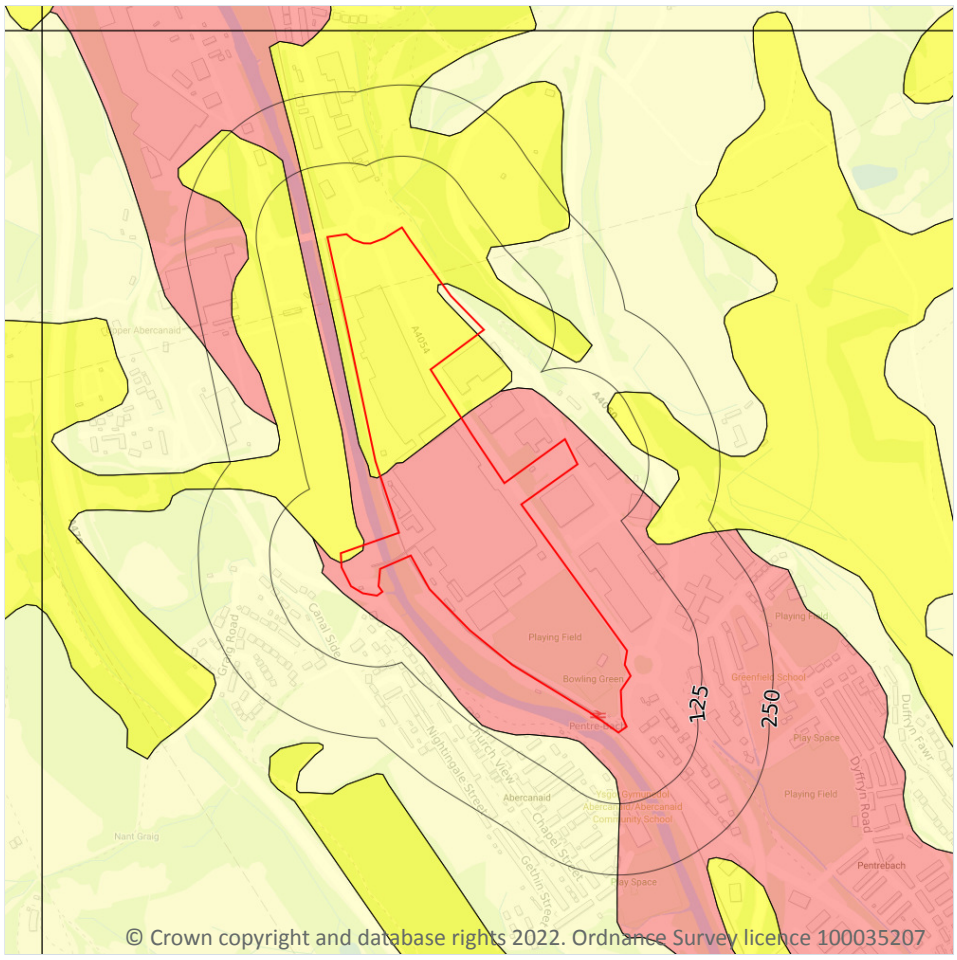
Features are displayed on the Natural ground subsidence - Running sands map on **page 156**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

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.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

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	4

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.

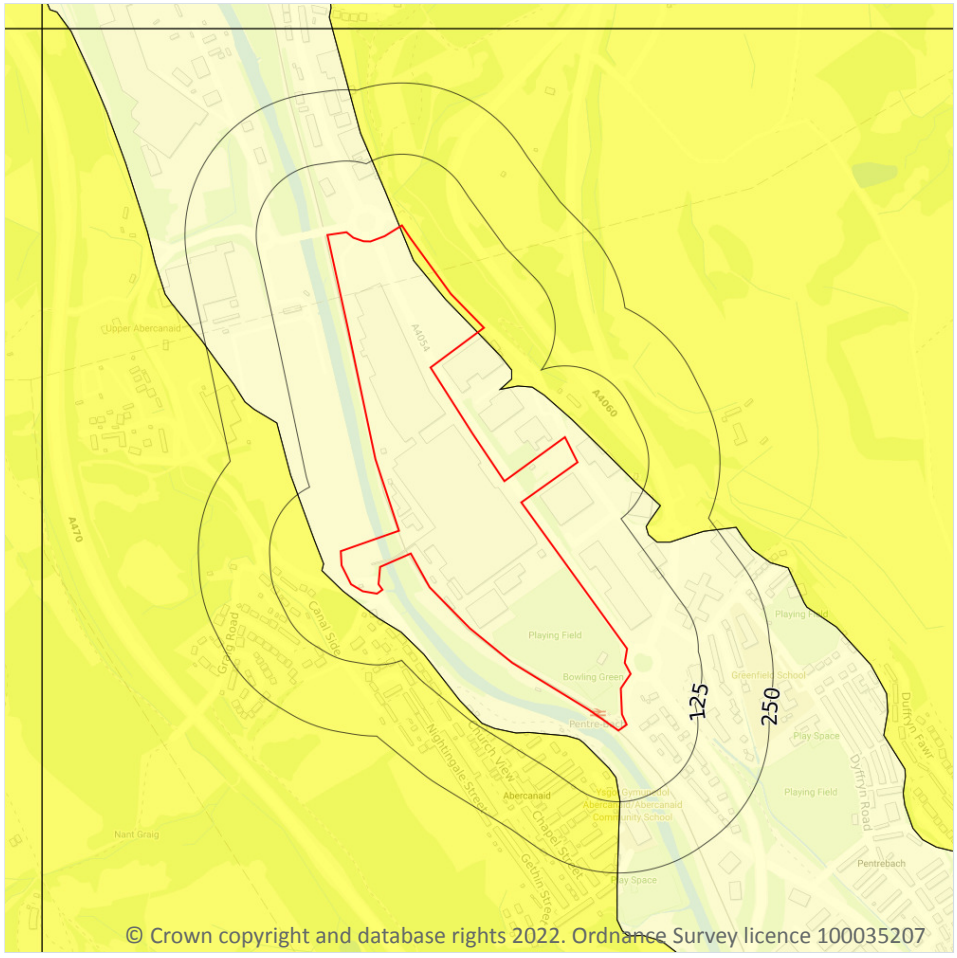
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 158**

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.**

Location	Hazard rating	Details
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**
18m SW	Negligible	Compressible strata are not thought to occur.

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	3

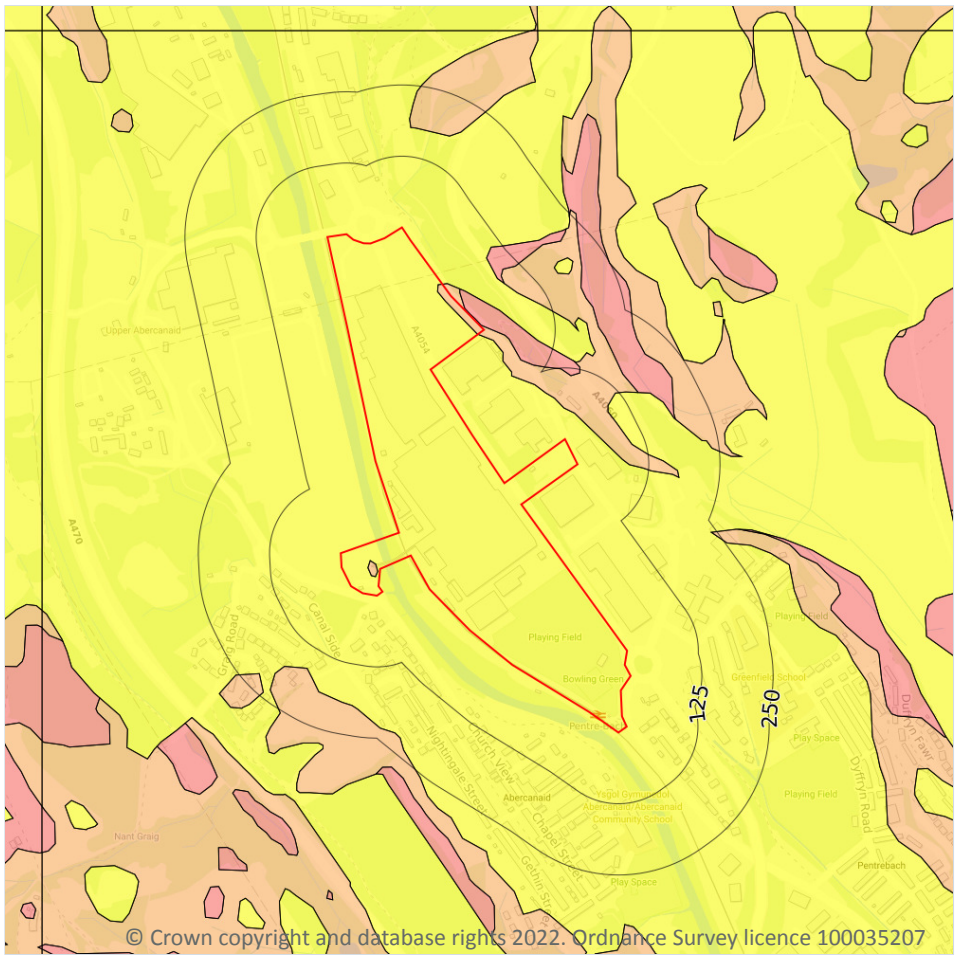
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 160**

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.**
18m SW	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	3

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.

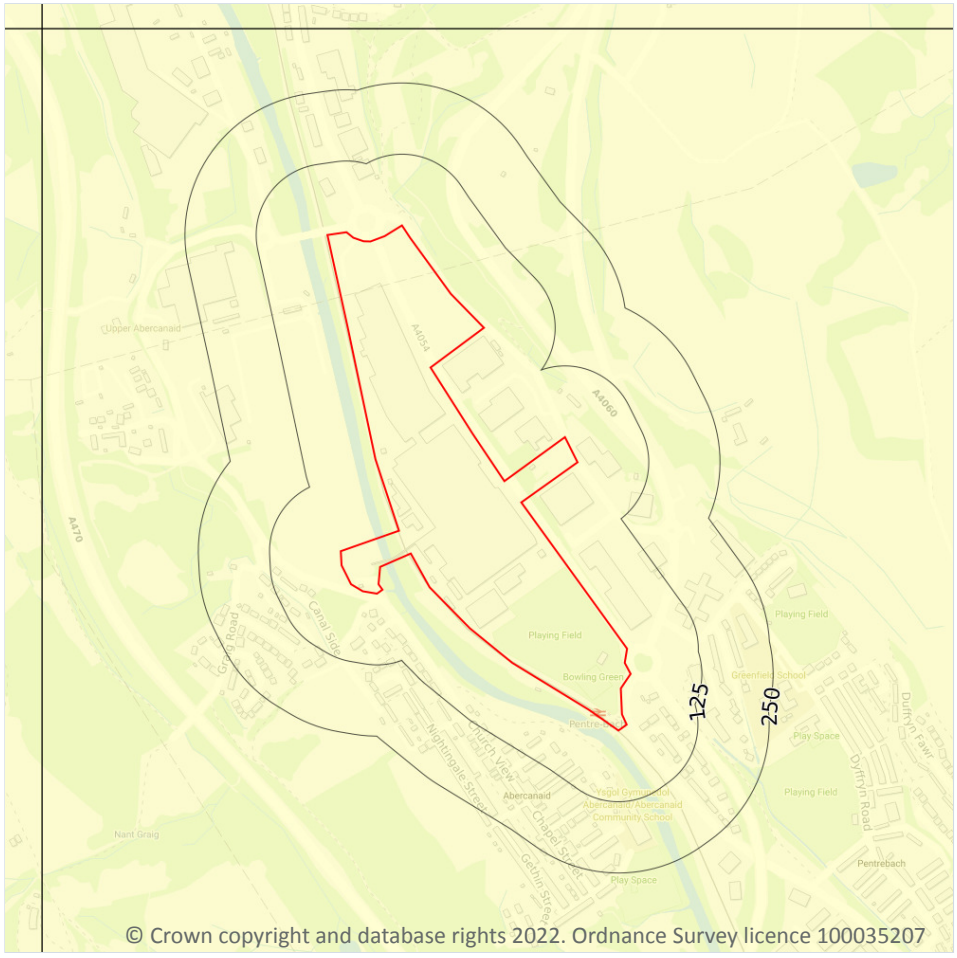
Features are displayed on the Natural ground subsidence - Landslides map on **page 162**

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.**
2m NE	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



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

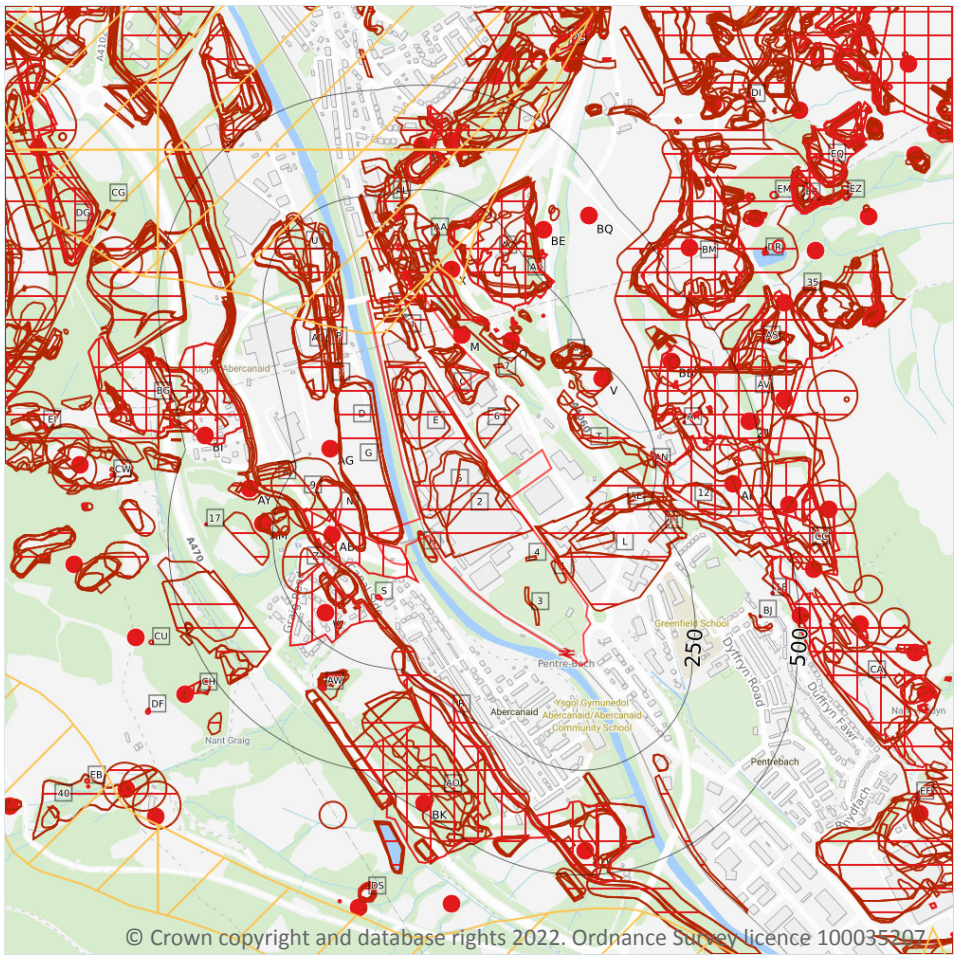
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 164**

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, 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	22

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 166**

ID	Location	Details	Description
M	21m NE	Name: Pen-cae-bach Pits Address: 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
X	91m NE	Name: Penyard Level Address: Pentrebach, 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
Q	96m NE	Name: Pen-cae-bach Cottage Address: 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
AB	109m W	Name: Upper Aber-canaid Pit Address: Pentrebach, 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

ID	Location	Details	Description
AG	161m W	Name: Upper Aber-canaid Address: Pentrebach, 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
W	194m SW	Name: Graig Pit Address: Pentrebach, 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
V	222m NE	Name: Ellis Pit (Disused) Address: Pentrebach, MERTHYR TYDFIL, Mid Glamorgan 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
AM	275m W	Name: Upper Aber-canaid Address: Pentrebach, MERTHYR TYDFIL, Mid Glamorgan 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
AY	322m W	Name: Lucy No 4 Level Address: 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

ID	Location	Details	Description
BE	325m NE	Name: Clyn-mil Pit No 1 Address: Pentrebach, 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
BE	325m NE	Name: Clyn-mil Pit No 1 Address: Pentrebach, 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
AY	342m W	Name: Upper Aber-canaid Address: Pentrebach, 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
AQ	355m N	Name: Clyn-mil Drift Address: Pentrebach, 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
AQ	357m N	Name: Clyn-mil Drift Address: Pentrebach, 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

ID	Location	Details	Description
AQ	373m N	Name: Prospect House Pit Address: 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
BB	373m NE	Name: Ellis Pit Address: Pentrebach, 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
BQ	433m NE	Name: Pen-yard House Address: 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
AI	436m E	Name: Graig Pit Address: Pentrebach, 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
BD	442m S	Name: Gethin No. 1 Pit Address: Abercanaid, 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

ID	Location	Details	Description
BI	447m W	Name: Upper Aber-canaid Address: Pentrebach, 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
BK	480m SW	Name: Gethin No. 2 Pit Address: Abercanaid, 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
21	484m E	Name: Wern-las Level Address: Pentrebach, 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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m **202**

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 166**

ID	Location	Land Use	Year of mapping	Mapping scale
2	**On site**	**Unspecified Heap**	**1875**	**1:10560**
3	**On site**	**Unspecified Pit**	**1875**	**1:10560**
4	**On site**	**Unspecified Pit**	**1875**	**1:10560**
5	**On site**	**Unspecified Heap**	**1901**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Unspecified Pit	1901	1:10560
A	On site	Unspecified Ground Workings	1901	1:10560
A	On site	Unspecified Ground Workings	1968	1:10560
A	On site	Unspecified Ground Workings	1964	1:10560
A	On site	Unspecified Ground Workings	1938	1:10560
A	On site	Unspecified Ground Workings	1938	1:10560
A	On site	Unspecified Ground Workings	1948	1:10560
A	On site	Unspecified Pit	1903	1:10560
A	On site	Unspecified Ground Workings	1903	1:10560
A	On site	Unspecified Ground Workings	1921	1:10560
A	On site	Unspecified Ground Workings	1915	1:10560
A	On site	Unspecified Ground Workings	1922	1:10560
A	On site	Unspecified Ground Workings	1922	1:10560
A	On site	Unspecified Ground Workings	1922	1:10560
A	On site	Unspecified Ground Workings	1922	1:10560
B	On site	Unspecified Ground Workings	1901	1:10560
B	On site	Unspecified Pit	1938	1:10560
B	On site	Unspecified Pit	1938	1:10560
B	On site	Unspecified Pit	1948	1:10560
B	On site	Unspecified Ground Workings	1921	1:10560
B	On site	Unspecified Pit	1915	1:10560
B	On site	Unspecified Pit	1922	1:10560
B	On site	Unspecified Pit	1922	1:10560
C	On site	Unspecified Ground Workings	1901	1:10560
C	On site	Unspecified Heap	1964	1:10560
C	On site	Unspecified Heap	1922	1:10560
C	On site	Unspecified Heap	1922	1:10560
C	On site	Unspecified Heap	1948	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
D	**On site**	**Unspecified Heaps**	**1968**	**1:10560**
D	**On site**	**Unspecified Heaps**	**1964**	**1:10560**
E	**On site**	**Refuse Heap**	**1968**	**1:10560**
E	**On site**	**Refuse Heap**	**1964**	**1:10560**
E	**On site**	**Unspecified Heap**	**1901**	**1:10560**
F	**On site**	**Unspecified Ground Workings**	**1922**	**1:10560**
F	**On site**	**Unspecified Ground Workings**	**1922**	**1:10560**
F	**On site**	**Unspecified Heap**	**1948**	**1:10560**
G	**On site**	**Unspecified Heaps**	**1922**	**1:10560**
G	**On site**	**Unspecified Heaps**	**1922**	**1:10560**
G	**On site**	**Unspecified Heap**	**1948**	**1:10560**
H	**On site**	**Unspecified Heap**	**1922**	**1:10560**
H	**On site**	**Unspecified Heap**	**1922**	**1:10560**
H	**On site**	**Unspecified Pit**	**1948**	**1:10560**
I	**On site**	**Unspecified Heaps**	**1938**	**1:10560**
I	**On site**	**Unspecified Heaps**	**1938**	**1:10560**
I	**On site**	**Unspecified Heap**	**1948**	**1:10560**
I	**On site**	**Unspecified Ground Workings**	**1915**	**1:10560**
J	**On site**	**Pond**	**1922**	**1:10560**
J	5m NE	Refuse Heap	1875	1:10560
L	7m NE	Brick Works	1901	1:10560
A	11m N	Cuttings	1948	1:10560
L	12m NE	Brick Works	1922	1:10560
L	12m NE	Brick Works	1922	1:10560
A	15m NW	Old Coal Level	1948	1:10560
6	19m NE	Unspecified Pit	1964	1:10560
N	30m W	Unspecified Disused Pit	1948	1:10560
7	30m E	Unspecified Ground Workings	1948	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
N	32m W	Unspecified Disused Pit	1922	1:10560
N	32m W	Unspecified Disused Pit	1922	1:10560
N	35m W	Unspecified Heap	1968	1:10560
N	35m W	Unspecified Heap	1964	1:10560
A	42m NW	Old Coal Level	1922	1:10560
A	42m NW	Old Coal Level	1922	1:10560
A	47m NW	Unspecified Ground Workings	1921	1:10560
O	51m NE	Coal Level	1901	1:10560
L	55m NE	Refuse Heap	1922	1:10560
L	55m NE	Refuse Heap	1922	1:10560
O	55m NE	Unspecified Ground Workings	1948	1:10560
P	63m W	Unspecified Ground Workings	1901	1:10560
A	65m N	Cuttings	1903	1:10560
P	66m W	Unspecified Ground Workings	1903	1:10560
A	68m N	Old Coal Level	1921	1:10560
Q	68m NE	Unspecified Ground Workings	1922	1:10560
Q	68m NE	Unspecified Ground Workings	1922	1:10560
Q	70m NE	Coal Level	1921	1:10560
Q	71m NE	Coal Level	1938	1:10560
Q	71m NE	Coal Level	1938	1:10560
Q	73m NE	Coal Level	1922	1:10560
Q	73m NE	Coal Level	1922	1:10560
Q	74m NE	Coal Level	1915	1:10560
A	76m N	Cuttings	1903	1:10560
R	77m SW	Disused Canal	1922	1:10560
R	81m SW	Canal	1901	1:10560
R	81m SW	Disused Canal	1948	1:10560
T	85m NE	Unspecified Ground Workings	1968	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
T	85m NE	Unspecified Ground Workings	1964	1:10560
A	85m N	Old Coal Level	1915	1:10560
Q	86m NE	Unspecified Ground Workings	1948	1:10560
Q	86m NE	Coal Level	1948	1:10560
Q	87m NE	Unspecified Ground Workings	1915	1:10560
U	88m W	Unspecified Ground Workings	1875	1:10560
V	89m NE	Unspecified Ground Workings	1901	1:10560
W	90m SW	Unspecified Heaps	1922	1:10560
W	90m SW	Unspecified Heaps	1922	1:10560
X	91m NE	Old Coal Level	1938	1:10560
X	91m NE	Old Coal Level	1938	1:10560
A	92m NW	Unspecified Heap	1948	1:10560
T	92m NE	Unspecified Heap	1948	1:10560
W	92m SW	Refuse Heap	1968	1:10560
W	92m SW	Refuse Heap	1964	1:10560
W	93m SW	Unspecified Heap	1948	1:10560
Y	97m W	Unspecified Heap	1901	1:10560
Y	97m W	Unspecified Heap	1948	1:10560
Z	98m W	Burial Ground	1988	1:10000
AA	99m N	Unspecified Ground Workings	1915	1:10560
P	101m W	Cuttings	1948	1:10560
P	102m W	Cuttings	1938	1:10560
AA	102m N	Unspecified Heaps	1948	1:10560
8	103m W	Cuttings	1948	1:10560
AB	106m W	Pond	1901	1:10560
A	112m N	Unspecified Heap	1948	1:10560
Q	115m NE	Coal Level	1938	1:10560
Q	115m NE	Coal Level	1938	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AC	116m NE	Coal and Ironstone Pit	1875	1:10560
Q	116m NE	Unspecified Heap	1948	1:10560
AD	116m W	Unspecified Ground Workings	1922	1:10560
AD	116m W	Unspecified Ground Workings	1922	1:10560
9	117m NW	Dock	1875	1:10560
Q	117m NE	Unspecified Heap	1915	1:10560
V	119m NE	Unspecified Heap	1948	1:10560
AC	119m NE	Unspecified Disused Pit	1922	1:10560
AC	119m NE	Unspecified Disused Pit	1922	1:10560
AC	120m NE	Unspecified Ground Workings	1921	1:10560
AD	120m W	Unspecified Ground Workings	1938	1:10560
AD	120m W	Unspecified Ground Workings	1938	1:10560
AC	121m NE	Unspecified Disused Pit	1948	1:10560
AC	123m NE	Unspecified Disused Pit	1938	1:10560
AC	123m NE	Unspecified Disused Pit	1938	1:10560
AC	123m NE	Unspecified Ground Workings	1915	1:10560
U	125m NW	Cuttings	1948	1:10560
U	128m NW	Cuttings	1938	1:10560
L	128m NE	Unspecified Heap	1968	1:10560
L	128m NE	Unspecified Heap	1964	1:10560
Y	128m W	Unspecified Heaps	1948	1:10560
W	129m SW	Saw Pit	1875	1:10560
AD	130m W	Unspecified Heap	1968	1:10560
AD	130m W	Unspecified Heap	1964	1:10560
AC	131m NE	Unspecified Disused Pit	1901	1:10560
AC	132m NE	Unspecified Pit	1903	1:10560
W	132m SW	Unspecified Disused Pit	1948	1:10560
AE	134m NE	Refuse Heap	1948	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
W	137m SW	Unspecified Disused Pit	1901	1:10560
W	137m SW	Refuse Heap	1875	1:10560
U	147m NW	Unspecified Heap	1901	1:10560
AC	149m NE	Coal Level	1903	1:10560
Z	150m W	Burial Ground	1875	1:10560
V	152m NE	Unspecified Heap	1948	1:10560
K	153m NW	Unspecified Heap	1901	1:10560
AF	153m NW	Unspecified Heap	1903	1:10560
Q	153m NE	Unspecified Ground Workings	1915	1:10560
Q	154m NE	Unspecified Pit	1948	1:10560
Q	154m NE	Unspecified Pit	1922	1:10560
Q	154m NE	Unspecified Pit	1922	1:10560
W	156m SW	Unspecified Disused Pit	1922	1:10560
W	156m SW	Unspecified Disused Pit	1922	1:10560
K	160m NW	Unspecified Ground Workings	1903	1:10560
V	163m NE	Pond	1901	1:10560
AH	166m E	Unspecified Ground Workings	1901	1:10560
V	166m NE	Unspecified Old Quarry	1901	1:10560
V	166m NE	Unspecified Old Quarry	1948	1:10560
AH	167m E	Unspecified Ground Workings	1903	1:10560
AH	167m E	Unspecified Ground Workings	1921	1:10560
AI	168m E	Unspecified Pit	1922	1:10560
AI	168m E	Unspecified Pit	1922	1:10560
Y	168m W	Unspecified Heap	1922	1:10560
Y	168m W	Unspecified Heap	1922	1:10560
AJ	168m NW	Old Dock	1948	1:10560
AK	170m NE	Unspecified Ground Workings	1968	1:10560
AK	170m NE	Unspecified Ground Workings	1964	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AF	171m NW	Unspecified Ground Workings	1901	1:10560
AH	172m E	Unspecified Ground Workings	1938	1:10560
AH	172m E	Unspecified Ground Workings	1938	1:10560
AH	172m E	Unspecified Ground Workings	1968	1:10560
AH	172m E	Unspecified Ground Workings	1964	1:10560
AH	172m E	Unspecified Ground Workings	1948	1:10560
AH	174m E	Unspecified Ground Workings	1915	1:10560
V	174m NE	Unspecified Old Quarry	1922	1:10560
AL	176m N	Unspecified Ground Workings	1968	1:10560
AL	176m N	Unspecified Ground Workings	1964	1:10560
AH	177m E	Unspecified Ground Workings	1922	1:10560
AH	177m E	Unspecified Ground Workings	1922	1:10560
AL	184m N	Unspecified Ground Workings	1901	1:10560
W	184m SW	Pond	1875	1:10560
10	192m S	Disused Canal	1988	1:10000
AL	193m N	Unspecified Heaps	1948	1:10560
AL	195m N	Unspecified Heap	1903	1:10560
AE	199m E	Unspecified Heap	1968	1:10560
AE	199m E	Unspecified Heap	1964	1:10560
11	209m NE	Pond	1922	1:10560
AM	211m W	Unspecified Old Quarry	1922	1:10560
12	211m E	Unspecified Disused Pit	1901	1:10560
AM	213m W	Unspecified Heap	1948	1:10560
AM	220m W	Unspecified Ground Workings	1875	1:10560
AM	221m W	Unspecified Ground Workings	1948	1:10560
AM	226m W	Unspecified Pit	1901	1:10560
AF	230m NW	Unspecified Heap	1901	1:10560
AN	232m E	Unspecified Heap	1968	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AN	232m E	Unspecified Heap	1964	1:10560
AM	234m W	Unspecified Pit	1948	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**205**

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, ground workings and natural cavities map on **page 166**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Coal Pit**	**1875**	**1:10560**
M	9m NE	Unspecified Old Shafts	1901	1:10560
M	10m NE	Unspecified Old Shafts	1948	1:10560
M	12m NE	Unspecified Old Shafts	1901	1:10560
M	14m NE	Unspecified Old Shafts	1903	1:10560
A	28m NW	Unspecified Disused Shafts	1968	1:10560
A	28m NW	Unspecified Disused Shafts	1964	1:10560
A	29m NW	Air Shafts	1948	1:10560
A	34m NW	Air Shaft	1901	1:10560
A	41m NW	Air Shafts	1903	1:10560
A	50m NW	Air Shafts	1948	1:10560
A	50m NW	Air Shaft	1875	1:10560
A	51m NW	Unspecified Disused Shafts	1968	1:10560
A	51m NW	Unspecified Disused Shafts	1964	1:10560
O	51m NE	Coal Level	1901	1:10560
A	56m NW	Air Shaft	1901	1:10560
A	64m NW	Air Shafts	1903	1:10560
S	84m SW	Unspecified Disused Shaft	1988	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
S	84m SW	Unspecified Disused Shaft	1968	1:10560
S	84m SW	Unspecified Disused Shaft	1964	1:10560
Q	86m NE	Coal Level	1948	1:10560
S	87m S	Air Shaft	1875	1:10560
A	101m NW	Air Shaft	1875	1:10560
AB	102m W	Air Shaft	1875	1:10560
AB	112m W	Unspecified Old Shafts	1915	1:10560
AB	112m W	Unspecified Old Shafts	1915	1:10560
AC	116m NE	Coal and Ironstone Pit	1875	1:10560
W	118m SW	Coal Pit	1875	1:10560
A	120m NW	Air Shaft	1901	1:10560
Q	125m NE	Unspecified Disused Shaft	1988	1:10000
Q	125m NE	Unspecified Disused Shaft	1968	1:10560
Q	125m NE	Unspecified Disused Shaft	1964	1:10560
Q	127m NE	Air Shaft	1875	1:10560
A	128m NW	Air Shafts	1903	1:10560
Q	129m NE	Air Shaft	1901	1:10560
Q	132m NE	Air Shaft	1948	1:10560
Q	133m NE	Air Shaft	1903	1:10560
AC	149m NE	Coal Level	1903	1:10560
AG	160m W	Unspecified Old Shaft	1915	1:10560
AL	188m N	Air Shaft	1875	1:10560
AL	190m N	Unspecified Disused Shaft	1988	1:10000
AL	190m N	Unspecified Disused Shaft	1968	1:10560
AL	190m N	Unspecified Disused Shaft	1964	1:10560
Q	191m NE	Air Shaft	1875	1:10560
AL	193m N	Air Shaft	1948	1:10560
AL	197m N	Air Shaft	1901	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AL	207m N	Air Shafts	1903	1:10560
AI	240m E	Coal Pit	1875	1:10560
AO	241m SW	Coal Pit	1875	1:10560
AM	268m W	Old Coal Shaft	1915	1:10560
AQ	270m N	Old Coal Level	1948	1:10560
AV	277m NE	Ironstone Level	1875	1:10560
AX	282m NE	Unspecified Disused Shaft	1988	1:10000
AX	282m NE	Unspecified Disused Shaft	1968	1:10560
AX	282m NE	Unspecified Disused Shaft	1964	1:10560
AX	287m NE	Air Shaft	1901	1:10560
AX	291m NE	Air Shaft	1948	1:10560
AX	291m NE	Air Shaft	1903	1:10560
BD	324m S	Coal Pit	1875	1:10560
AR	333m E	Air Shafts	1875	1:10560
AW	334m SW	Old Air Shaft	1915	1:10560
AW	338m SW	Unspecified Disused Shaft	1968	1:10560
AW	338m SW	Unspecified Disused Shaft	1964	1:10560
AW	339m SW	Air Shaft	1875	1:10560
AQ	344m N	Disused Drift	1948	1:10560
BB	347m NE	Unspecified Disused Shaft	1968	1:10560
BB	347m NE	Unspecified Disused Shaft	1964	1:10560
BB	347m NE	Air Shaft	1901	1:10560
BG	349m W	Ironstone Level	1875	1:10560
BB	352m NE	Air Shaft	1875	1:10560
AQ	355m N	Coal Level	1901	1:10560
BB	356m NE	Old Air Shaft	1915	1:10560
AQ	361m N	Unspecified Old Shaft	1948	1:10560
AR	361m E	Air Shafts	1901	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
AQ	364m N	Coal Level	1903	1:10560
AR	365m E	Unspecified Disused Shafts	1968	1:10560
AR	365m E	Unspecified Disused Shafts	1964	1:10560
AR	366m E	Air Shafts	1875	1:10560
AQ	368m N	Unspecified Old Shaft	1901	1:10560
AI	368m E	Air Shaft	1901	1:10560
AI	369m E	Unspecified Disused Shafts	1968	1:10560
AI	369m E	Unspecified Disused Shafts	1964	1:10560
AI	375m E	Air Shafts	1875	1:10560
AQ	378m N	Unspecified Old Shaft	1903	1:10560
BB	385m NE	Unspecified Old Shaft	1903	1:10560
BB	388m NE	Unspecified Old Shaft	1901	1:10560
BB	390m NE	Unspecified Old Shaft	1903	1:10560
AQ	395m N	Coal Level	1875	1:10560
AR	399m E	Unspecified Level	1915	1:10560
BJ	404m E	Air Shaft	1875	1:10560
17	408m W	Air Shaft	1875	1:10560
AI	409m E	Air Shafts	1875	1:10560
BI	409m W	Air Shaft	1875	1:10560
BQ	430m NE	Coal Pit	1948	1:10560
18	438m E	Air Shaft	1901	1:10560
BM	441m NE	Coal and Ironstone Pit	1875	1:10560
BS	441m E	Old Coal Level	1915	1:10560
BU	457m NE	Unspecified Old Level	1901	1:10560
CA	488m E	Coal Pit	1875	1:10560
CC	490m E	Ironstone Level	1875	1:10560
CH	514m SW	Old Coal Level	1915	1:10560
BV	541m NE	Unspecified Old Level	1901	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
CT	568m E	Air Shaft	1901	1:10560
CT	569m E	Unspecified Disused Shaft	1968	1:10560
CT	569m E	Unspecified Disused Shaft	1964	1:10560
BM	571m NE	Unspecified Shaft	1875	1:10560
BM	572m NE	Unspecified Old Shaft	1901	1:10560
CT	573m E	Air Shaft	1875	1:10560
BM	574m NE	Unspecified Old Shaft	1903	1:10560
CT	575m E	Old Air Shaft	1915	1:10560
BM	575m NE	Air Shaft	1948	1:10560
AS	583m NE	Air Shaft	1948	1:10560
CU	585m SW	Unspecified Disused Shaft	1979	1:10000
CS	611m E	Unspecified Disused Level	1988	1:10000
CS	611m E	Unspecified Disused Level	1968	1:10560
CS	611m E	Unspecified Disused Level	1964	1:10560
CS	627m E	Air Shaft	1875	1:10560
BL	645m E	Unspecified Disused Level	1968	1:10560
BL	645m E	Unspecified Disused Level	1964	1:10560
CW	646m W	Old Coal Shaft	1901	1:10560
DC	651m NE	Old Coal Level	1901	1:10560
DE	667m NE	Unspecified Disused Shaft	1988	1:10000
DF	667m SW	Old Air Shaft	1915	1:10560
DE	670m NE	Old Trial Shaft	1901	1:10560
DF	670m SW	Disused Air Shaft	1979	1:10000
DF	670m SW	Disused Air Shaft	1969	1:10560
DC	672m NE	Old Coal Level	1903	1:10560
DE	672m NE	Old Trial Shaft	1903	1:10560
DG	686m W	Old Ironstone Level	1901	1:10560
DG	691m W	Old Ironstone Level	1903	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
CW	694m W	Air Shaft	1875	1:10560
CW	696m W	Unspecified Disused Shaft	1969	1:10560
CW	696m W	Unspecified Disused Shaft	1964	1:10560
CW	699m W	Unspecified Disused Shaft	1988	1:10000
CW	699m W	Unspecified Disused Shaft	1979	1:10000
CW	701m W	Air Shaft	1901	1:10560
CW	702m W	Air Shaft	1915	1:10560
DR	705m NE	Unspecified Disused Level	1968	1:10560
DR	705m NE	Unspecified Disused Level	1964	1:10560
DC	706m NE	Old Coal Level	1903	1:10560
DS	707m SW	Old Coal Level	1915	1:10560
DR	711m NE	Old Coal Level	1948	1:10560
DR	711m NE	Old Coal Level	1903	1:10560
CL	720m NE	Old Coal Level	1948	1:10560
DR	731m NE	Old Coal Level	1901	1:10560
35	732m NE	Old Trial Shaft	1948	1:10560
DX	736m E	Unspecified Disused Level	1968	1:10560
DX	736m E	Unspecified Disused Level	1964	1:10560
CL	751m NE	Unspecified Disused Levels	1968	1:10560
CL	751m NE	Unspecified Disused Levels	1964	1:10560
DL	751m E	Old Coal Level	1915	1:10560
CL	752m NE	Old Coal Level	1903	1:10560
CL	762m NE	Unspecified Disused Levels	1968	1:10560
CL	762m NE	Unspecified Disused Levels	1964	1:10560
DX	770m E	Unspecified Disused Level	1988	1:10000
DX	775m E	Old Coal Level	1915	1:10560
DS	782m SW	Air Shaft	1875	1:10560
DL	796m E	Old Coal Drift	1915	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
EM	802m NE	Unspecified Disused Level	1901	1:10560
DX	807m E	Air Shaft	1875	1:10560
EI	812m W	Air Shaft	1915	1:10560
EI	813m W	Air Shaft	1875	1:10560
-	815m S	Unspecified Old Level	1901	1:10560
EI	818m W	Air Shaft	1901	1:10560
EP	820m NE	Old Ironstone Level	1901	1:10560
-	820m S	Unspecified Old Level	1915	1:10560
DL	827m E	Disused Drift	1968	1:10560
DL	827m E	Disused Drift	1964	1:10560
EP	827m NE	Old Ironstone Level	1903	1:10560
39	830m W	Coal Pit	1875	1:10560
EQ	838m NE	Coal Level	1875	1:10560
ER	838m NE	Old Coal Level	1901	1:10560
ER	839m NE	Unspecified Disused Level	1903	1:10560
ER	841m NE	Unspecified Disused Level	1948	1:10560
EF	844m E	Air Shaft	1875	1:10560
EP	854m NE	Unspecified Disused Level	1968	1:10560
EP	854m NE	Unspecified Disused Level	1964	1:10560
DL	855m E	Unspecified Disused Level	1988	1:10000
DL	855m E	Unspecified Disused Level	1968	1:10560
DL	855m E	Unspecified Disused Level	1964	1:10560
EP	860m NE	Old Ironstone Level	1948	1:10560
-	863m S	Old Trial Shaft	1964	1:10560
-	863m S	Disused Trial Shaft	1968	1:10560
-	865m S	Unspecified Disused Level	1988	1:10000
-	865m S	Trial Shaft	1915	1:10560
EF	868m E	Old Coal Drifts	1915	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
-	871m S	Trial Shaft	1875	1:10560
EB	883m SW	Disused Air Shaft	1988	1:10000
EB	883m SW	Disused Air Shaft	1979	1:10000
EB	891m SW	Air Shaft	1915	1:10560
DI	897m NE	Old Coal Level	1948	1:10560
EQ	916m NE	Old Ironstone Level	1901	1:10560
EQ	921m NE	Old Ironstone Levels	1903	1:10560
EF	922m E	Coal Shaft	1875	1:10560
EF	930m E	Air Shaft	1915	1:10560
EZ	937m NE	Old Ironstone Level	1948	1:10560
-	941m S	Unspecified Disused Level	1968	1:10560
-	941m S	Unspecified Disused Level	1964	1:10560
-	943m S	Coal Level	1915	1:10560
-	948m NE	Ironstone Level	1875	1:10560
-	975m SW	Old Coal Level	1915	1:10560
-	975m E	Old Coal Level	1915	1:10560
-	975m E	Old Coal Level	1915	1:10560
FH	997m NE	Old Coal Level	1901	1:10560
-	999m W	Coal Level	1915	1:10560

This is data is sourced from Ordnance Survey/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	7

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 166**

ID	Location	Name	Commodity	Class	Likelihood
K	**On site**	**Not available**	**Iron Ore (Bedded)**	**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**
15	345m N	Not available	Iron Ore (Bedded)	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
CG	504m W	Not available	Iron Ore (Bedded)	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
25	580m S	Not available	Iron Ore (Bedded)	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
27	618m NW	Not available	Iron Ore (Bedded)	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
36	787m NE	Not available	Ironstone (bedded)	D	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
40	834m SW	Not available	Iron Ore (Bedded)	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

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.

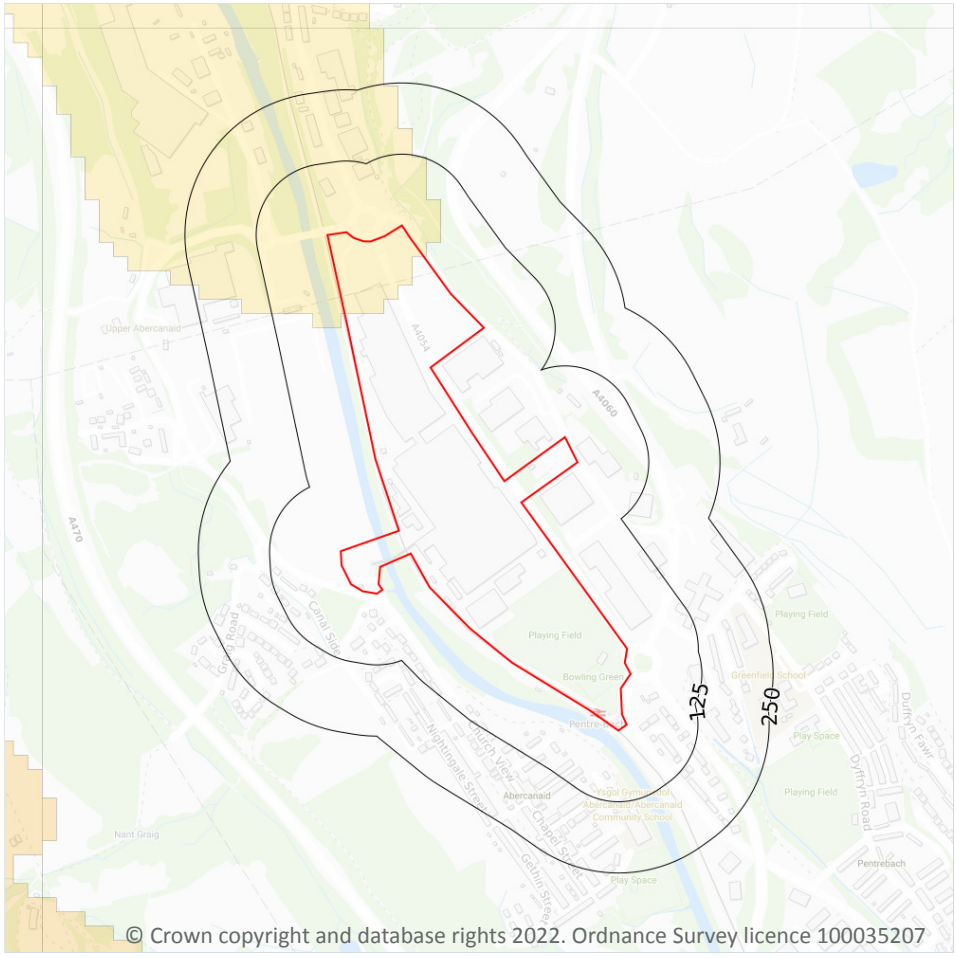
18.13 Clay mining

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



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	2

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 190**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 1% and 3%**	**None**
On site	**Less than 1%**	**None****

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	**23**

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 - 25 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 - 25 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 - 25 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 - 25 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 - 25 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 - 25 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 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**35 - 45 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
1m NW	35 - 45 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
12m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
15m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
17m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
18m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
20m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
20m S	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
22m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
24m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
31m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
46m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
49m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
49m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 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.

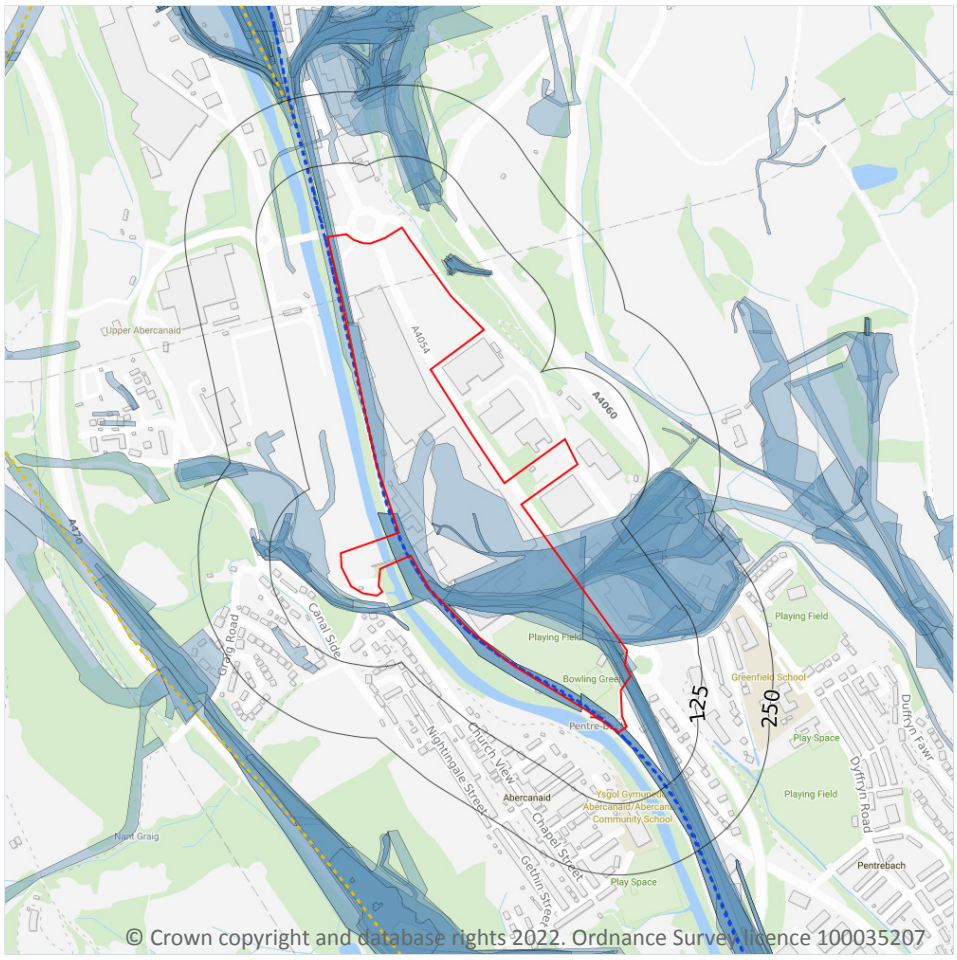
20.3 BGS Measured Urban Soil Chemistry

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 1 Worksites
- 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	42

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 195**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1900**	**2500**
On site	**Tramway Sidings**	**1875**	**2500**
On site	**Railway**	**1875**	**-**
On site	**Railways**	**1875**	**-**
On site	**Railways**	**1900**	**-**
On site	**Railways**	**1919**	**-**
On site	**Mineral Railway Sidings**	**1900**	**2500**
On site	**Mineral Railway Sidings**	**1901**	**10560**
On site	**Mineral Railway Sidings**	**1922**	**10560**
On site	**Railway Sidings**	**1938**	**10560**
On site	**Railway Sidings**	**1948**	**10560**
On site	**Railway Sidings**	**1875**	**10560**
7m NE	Railways	1919	-
12m S	Railway Sidings	1875	10560
12m SW	Railway	1875	-
13m NE	Railway Sidings	1919	2500
17m NE	Railway Sidings	1919	2500

Location	Land Use	Year of mapping	Mapping scale
20m SW	Mineral Railway Sidings	1901	10560
20m NE	Railway Sidings	1938	10560
21m NE	Railway Sidings	1922	10560
22m NE	Railway Sidings	1915	10560
47m NE	Tramway Sidings	1901	10560
49m NE	Tramway Sidings	1903	10560
52m NE	Railway Sidings	1900	2500
61m N	Railway Sidings	1875	10560
67m W	Railway Sidings	1875	2500
76m NE	Railway Sidings	1875	2500
98m E	Railway Sidings	1875	2500
105m NE	Railway Sidings	1948	10560
132m SW	Railway Sidings	1875	10560
140m E	Railway Sidings	1900	2500
163m N	Railway	1875	-
184m E	Railway Sidings	1919	2500
194m E	Tramway Sidings	1900	2500
205m N	Railway Sidings	1948	10560
213m NW	Railway Sidings	1875	10560
214m N	Mineral Railway Sidings	1921	10560
233m N	Mineral Railway Sidings	1915	10560
234m N	Mineral Railway Sidings	1919	2500
238m N	Tramway Sidings	1900	2500
247m N	Railway Sidings	1901	10560
248m N	Railway Sidings	1900	2500

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	1

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

Features are displayed on the Railway infrastructure and projects map on **page 195**

Location	Description
212m N	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	17

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 195**

Location	Name	Type
On site		**rail**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**
On site	**Not given**	**Single Track**

Location	Name	Type
4m W	Not given	Single Track
4m W	Not given	Single Track
4m W	Not given	Single Track
16m NW	Not given	Single Track
20m SE	Not given	Single Track
84m N	Not given	Single Track
132m N	Not given	Single Track
181m N	Not given	Single Track
246m N	Not given	Single 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.

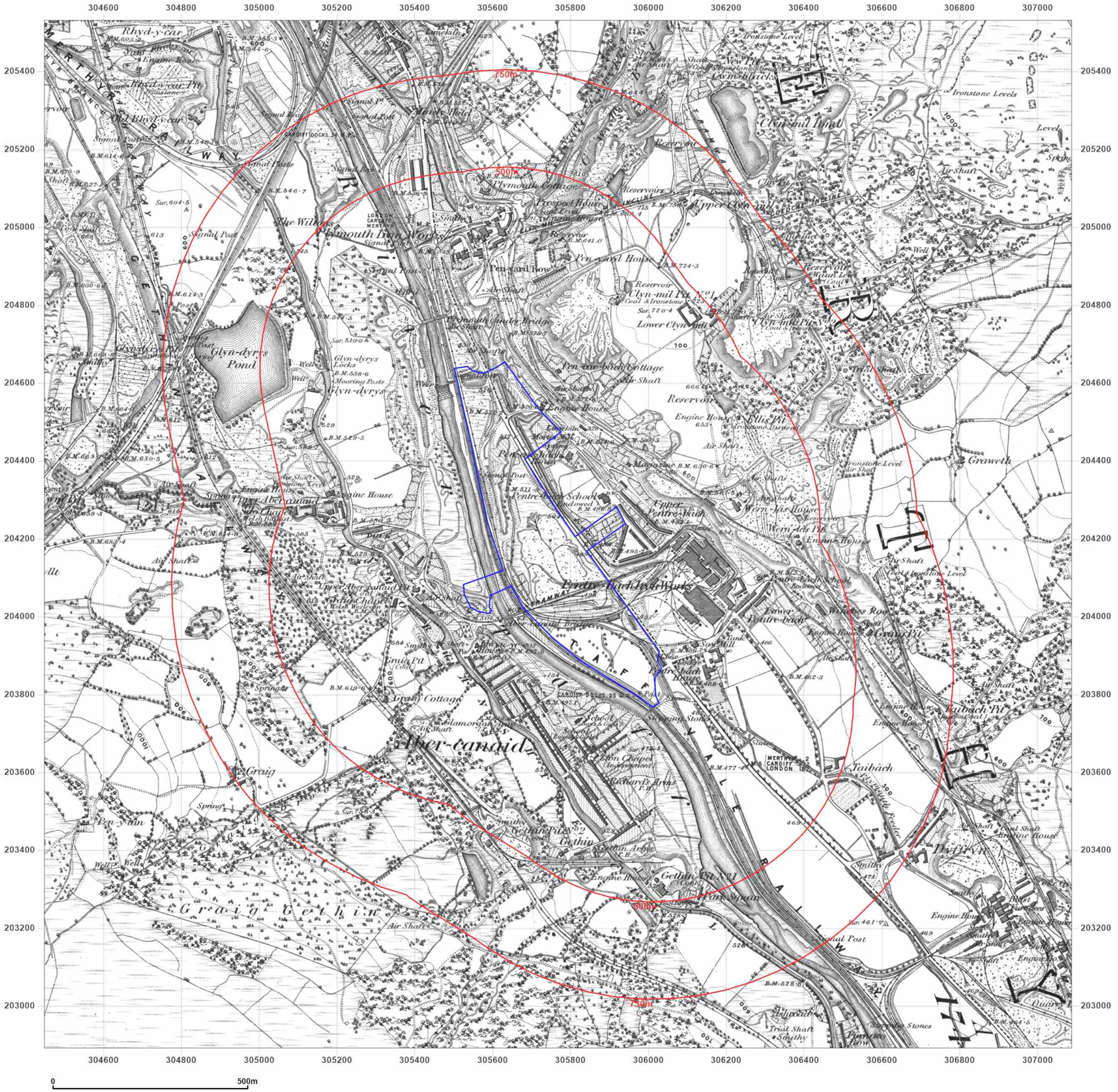
This data is sourced from HS2 ltd.

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.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.



Groundsure
INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref:	PO_4800510468_Hoover_Factory
Report Ref:	HMD-191-8496647
Grid Ref:	305767, 204211
Map Name:	County Series
Map date:	**1875**
Scale:	1:10,560
Printed at:	1:10,560

N
W E
S

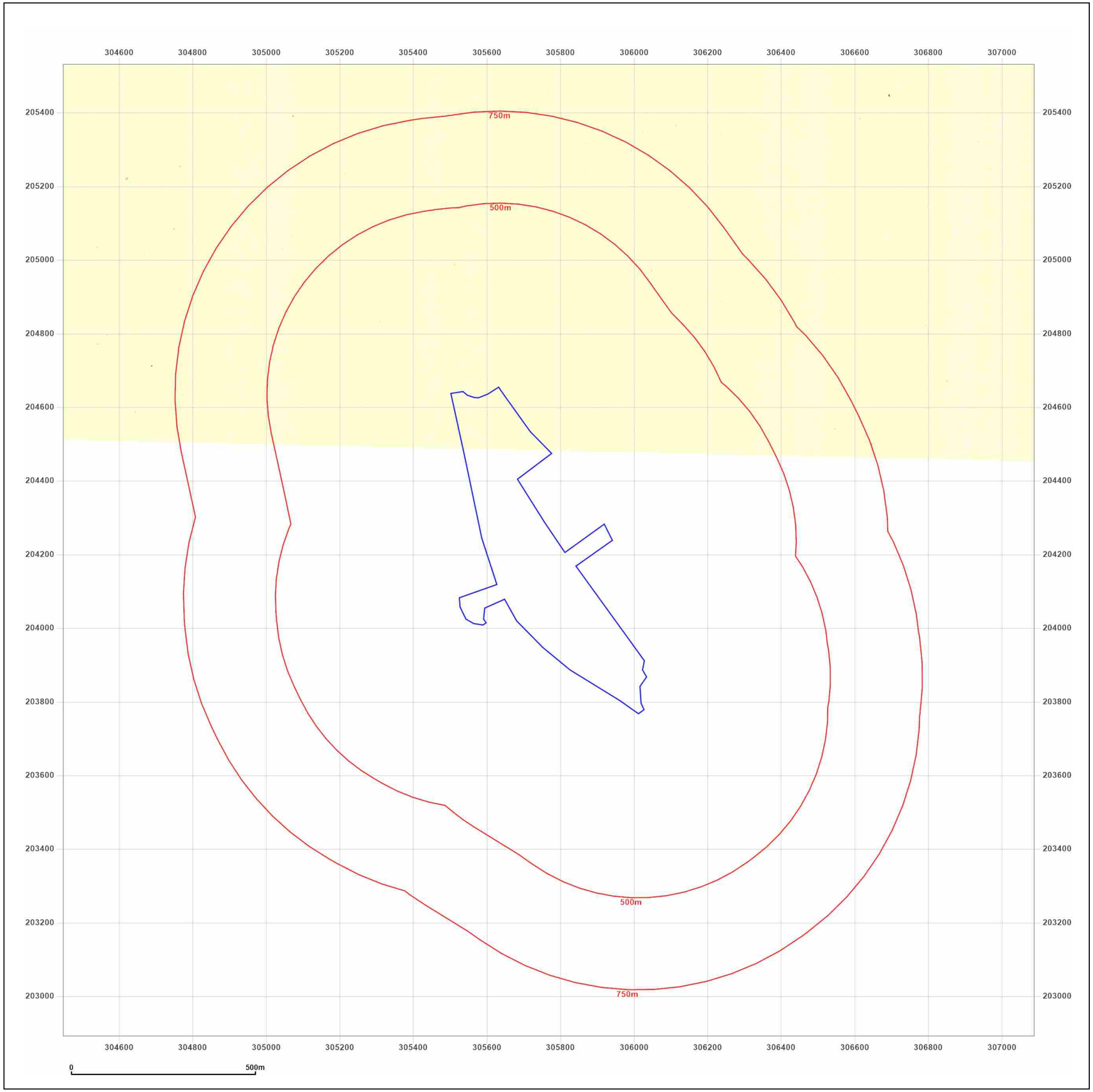
Surveyed 1875
Revised 1875
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

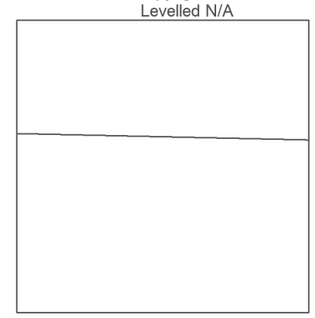
Map date: **1884**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1884
Revised 1884
Edition N/A
Copyright N/A
Levelled N/A

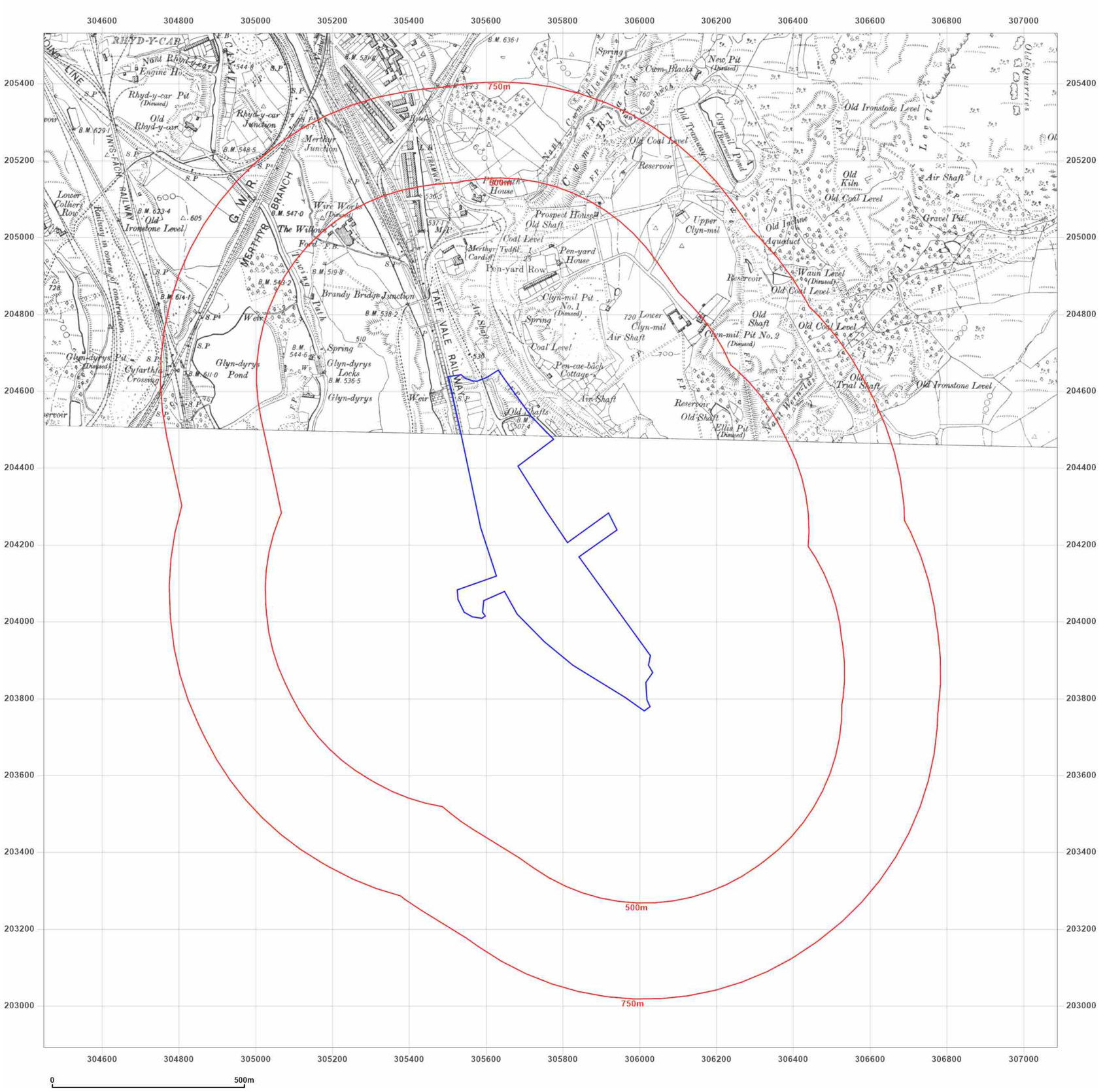


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

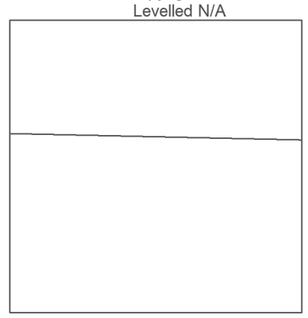
Map date: **1901**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1884
Revised 1901
Edition N/A
Copyright N/A
Levelled N/A

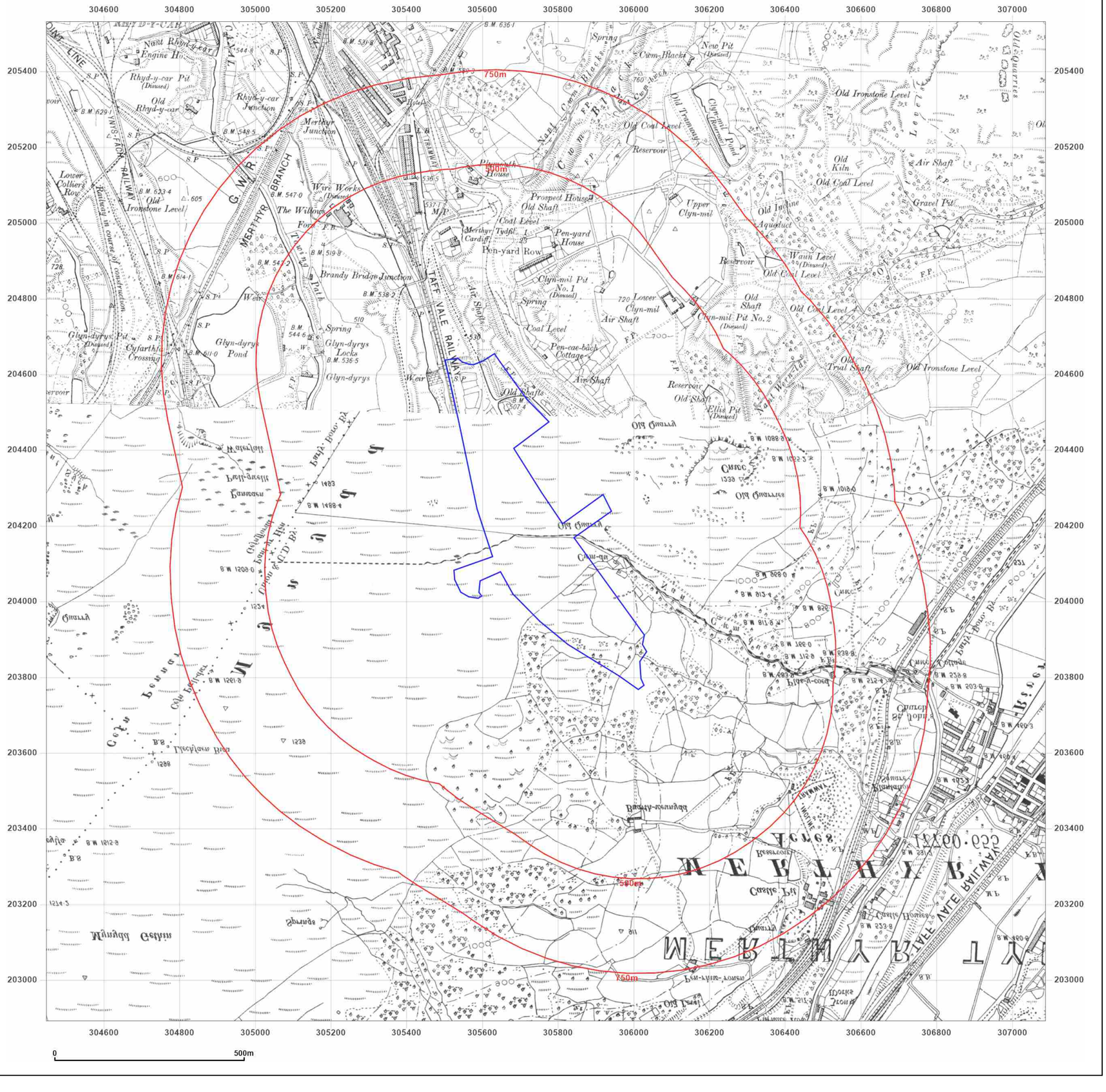


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure
INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

Map date: **1901-1903**

Scale: 1:10,560

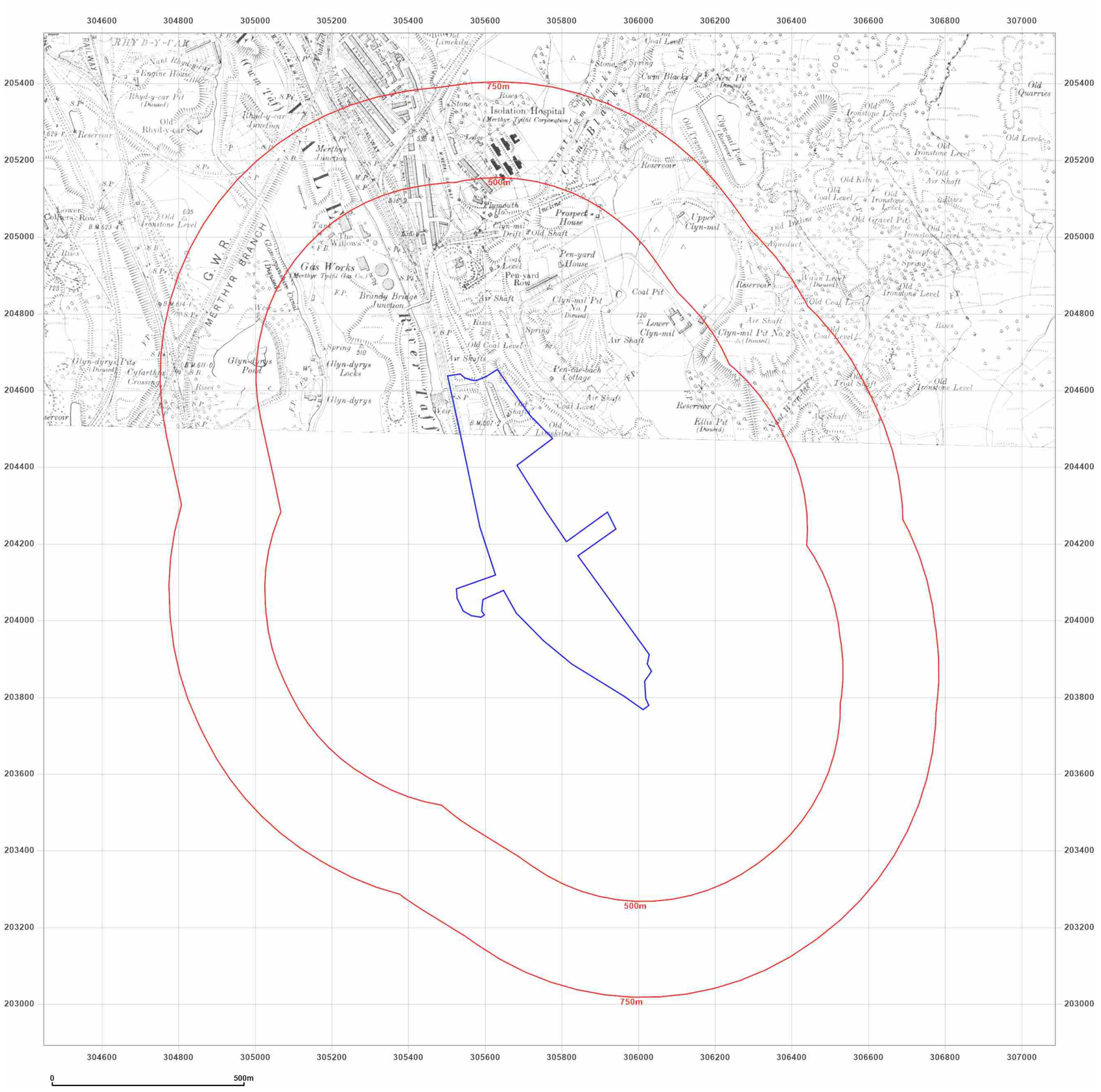
Printed at: 1:10,560

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

Map date: **1915**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

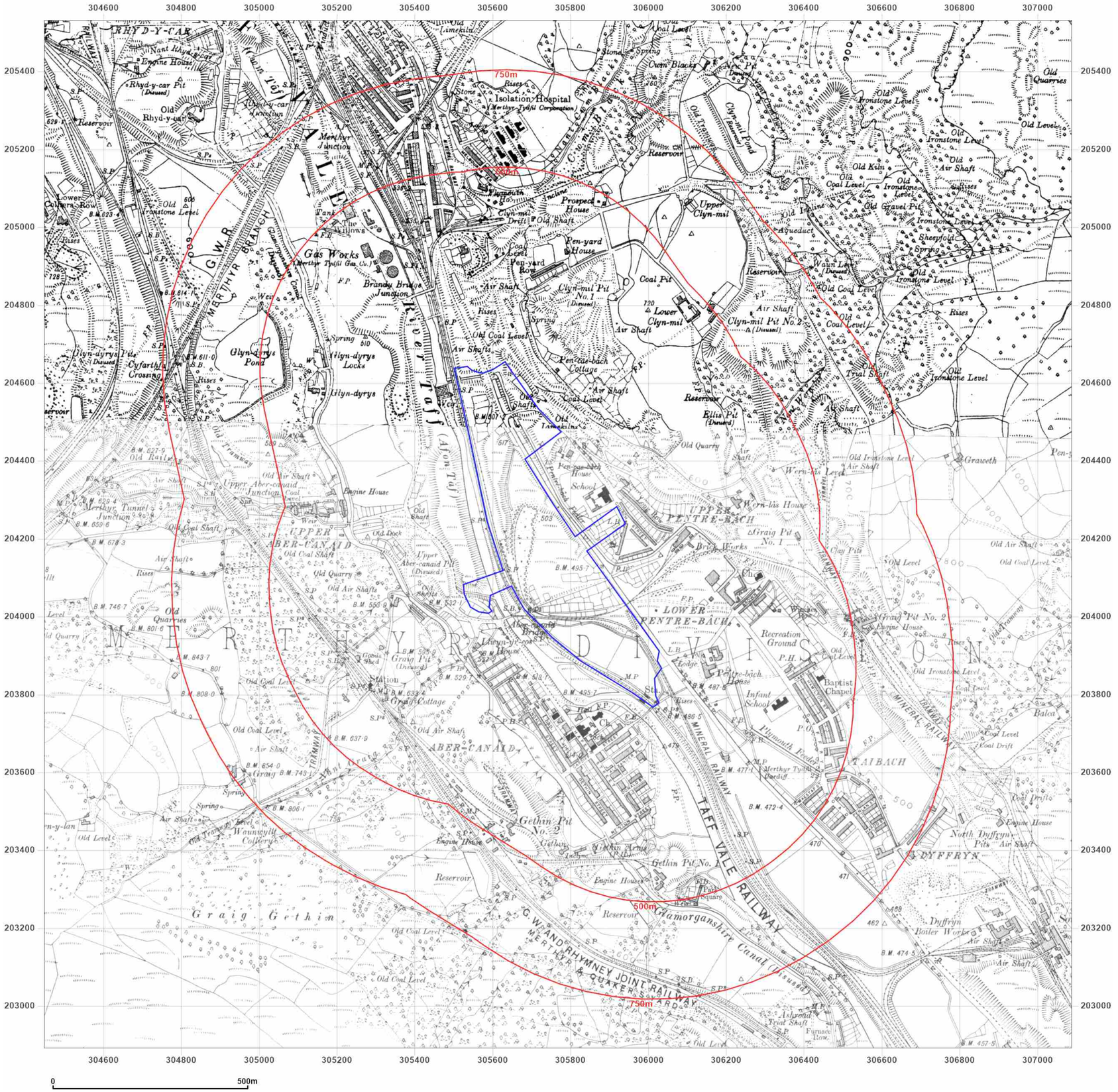
Surveyed 1884
Revised 1915
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

Hoover Factory, Merthyr Tydfil

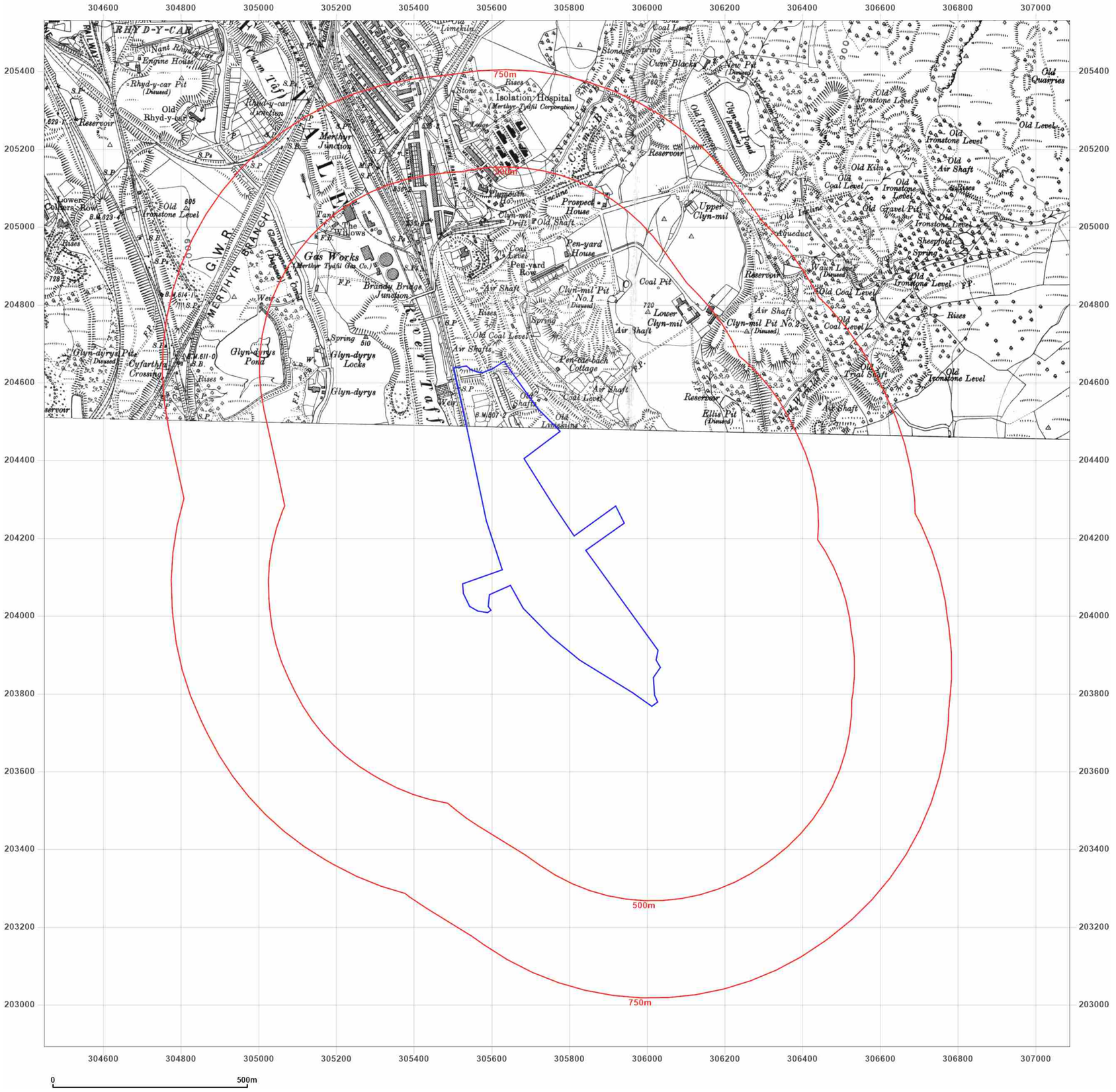
Client Ref:	PO_4800510468_Hoover_Factory
Report Ref:	HMD-191-8496647
Grid Ref:	305767, 204211

Map Name:	County Series
Map date:	**1921-1922**
Scale:	1:10,560
Printed at:	1:10,560

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

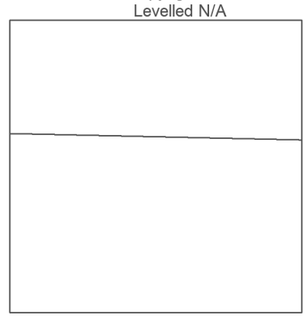
Map date: **1922**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1922
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

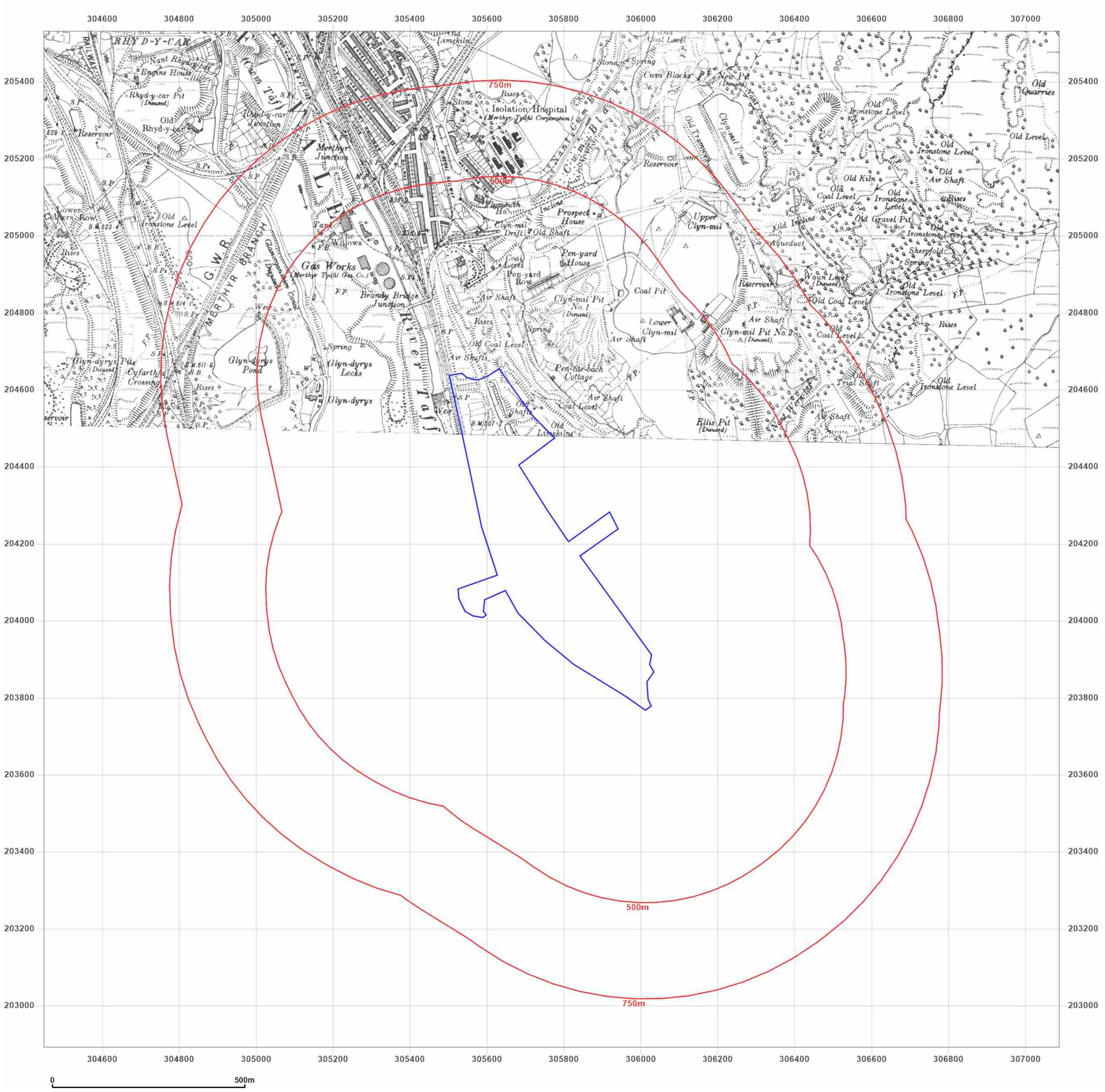


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

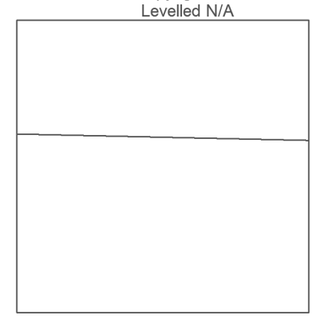
Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1884
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

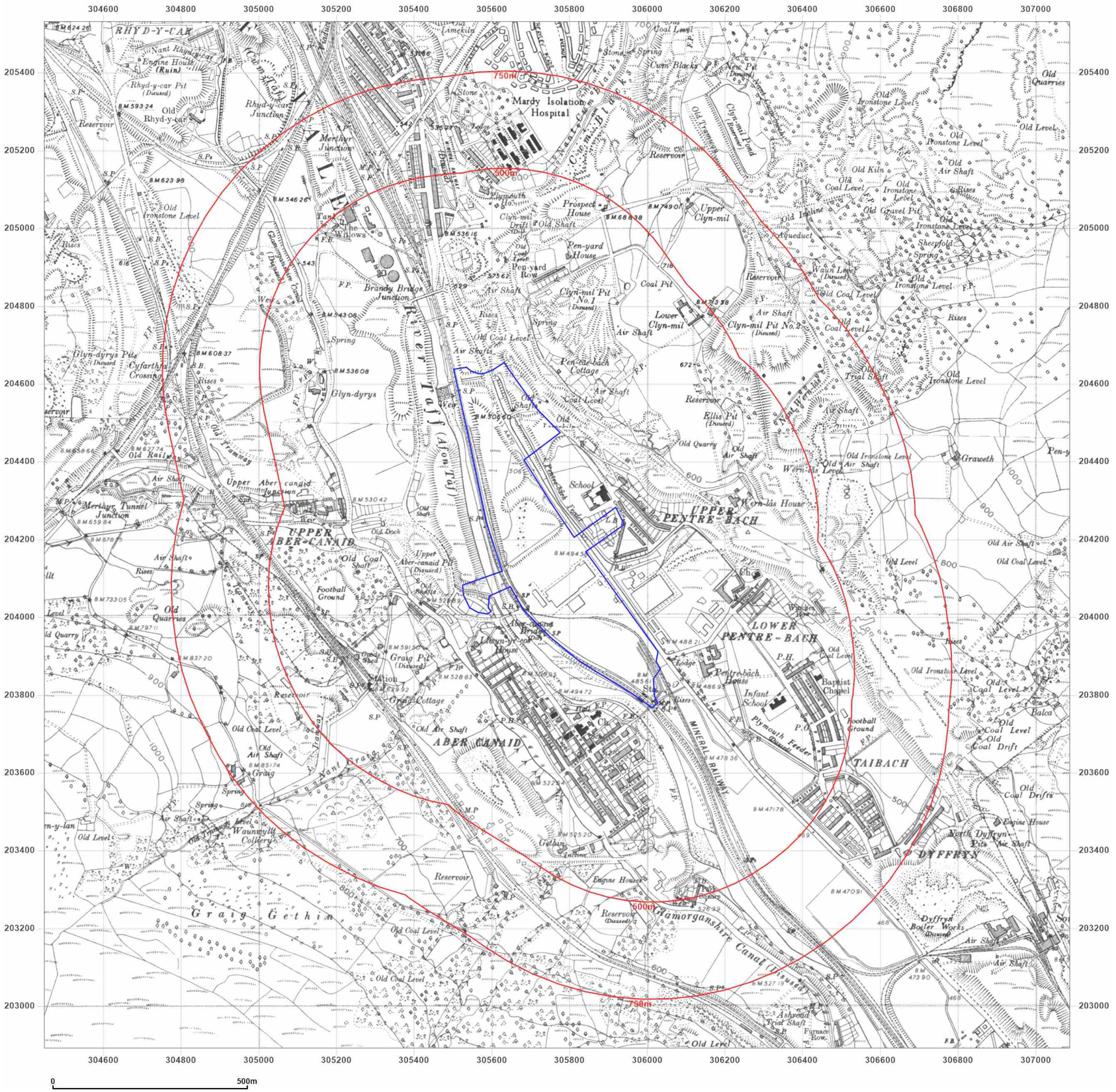


Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure

INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: County Series

Map date: **1948**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1884
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

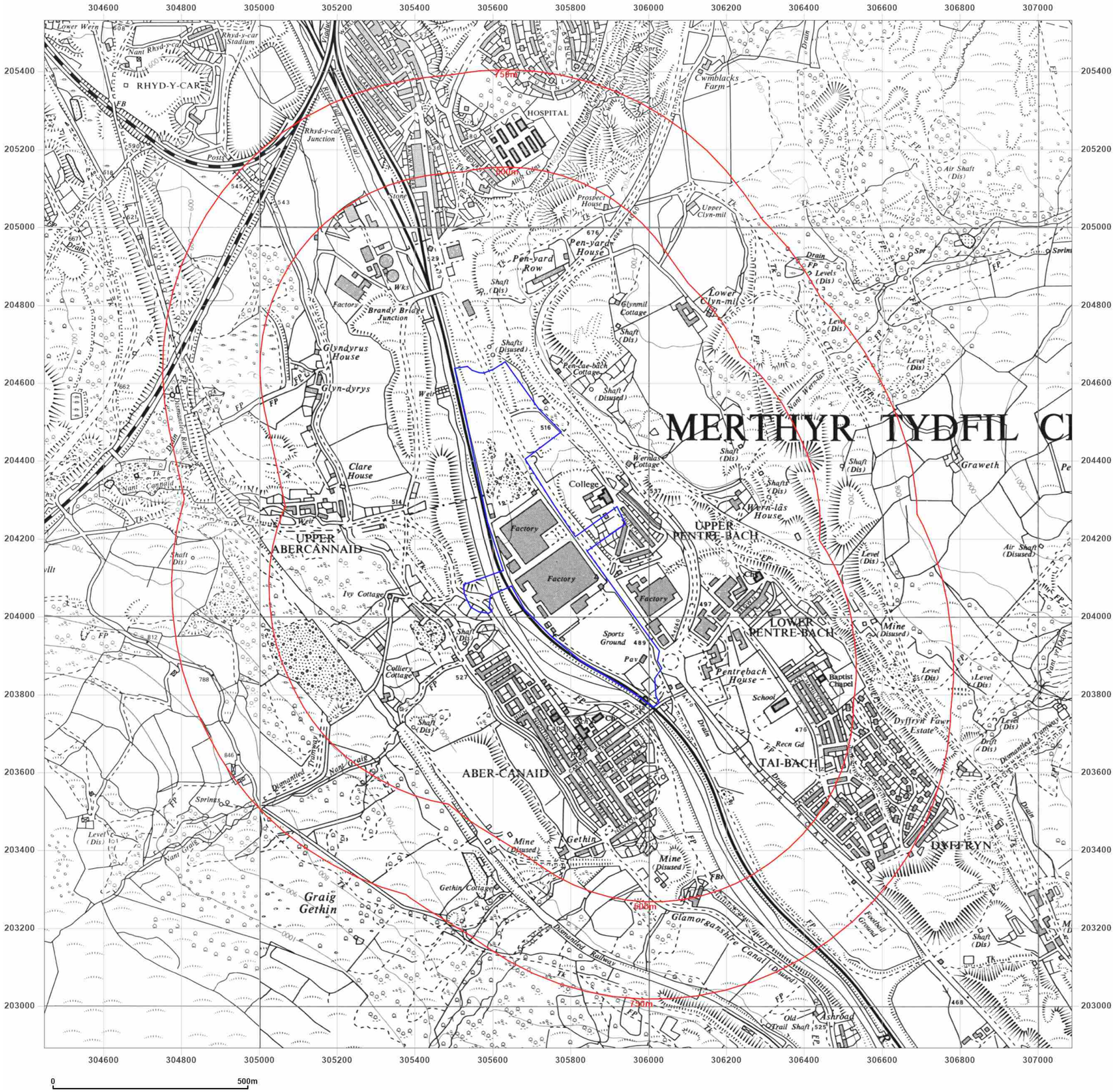
Surveyed 1874
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: Provisional

Map date: **1964-1965**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1965
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1965
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1964
Revised 1964
Edition N/A
Copyright N/A
Levelled N/A

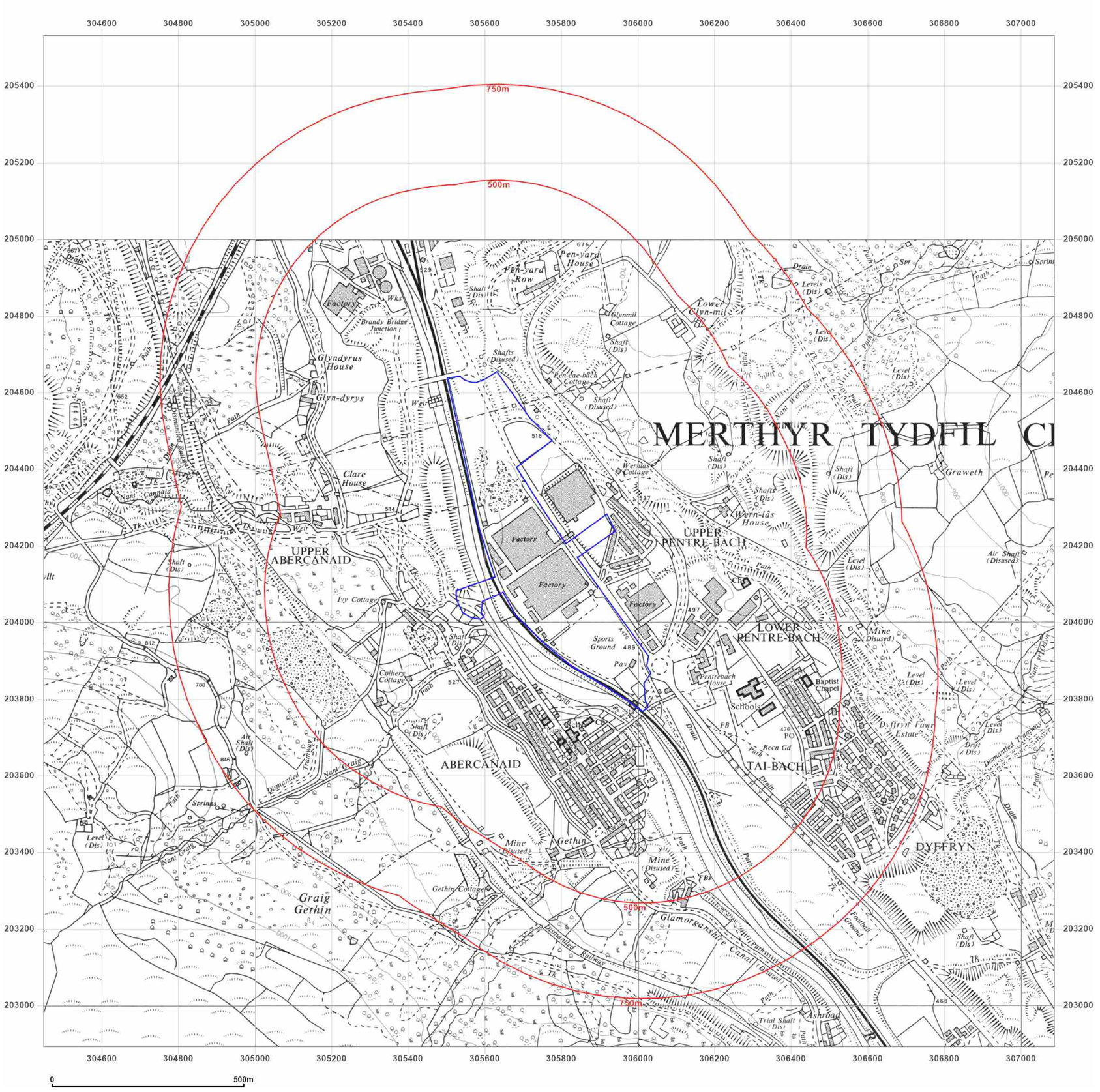
Surveyed 1964
Revised 1964
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: Provisional

Map date: **1968-1969**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1968
Revised 1969
Edition N/A
Copyright N/A
Levelled N/A

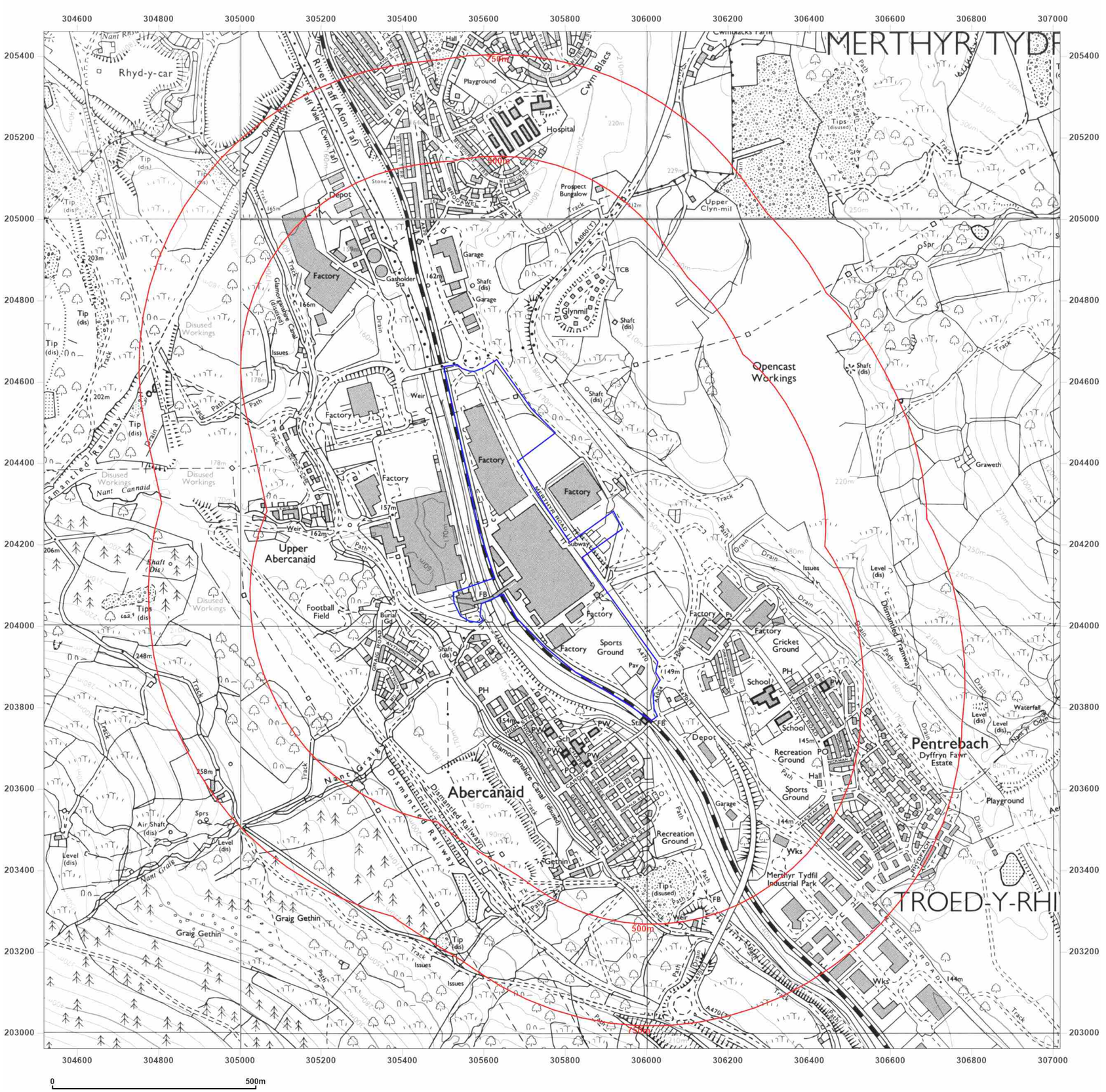
Surveyed 1968
Revised 1968
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1990
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1989
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1986
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1984
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: National Grid
Map date: **2001**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

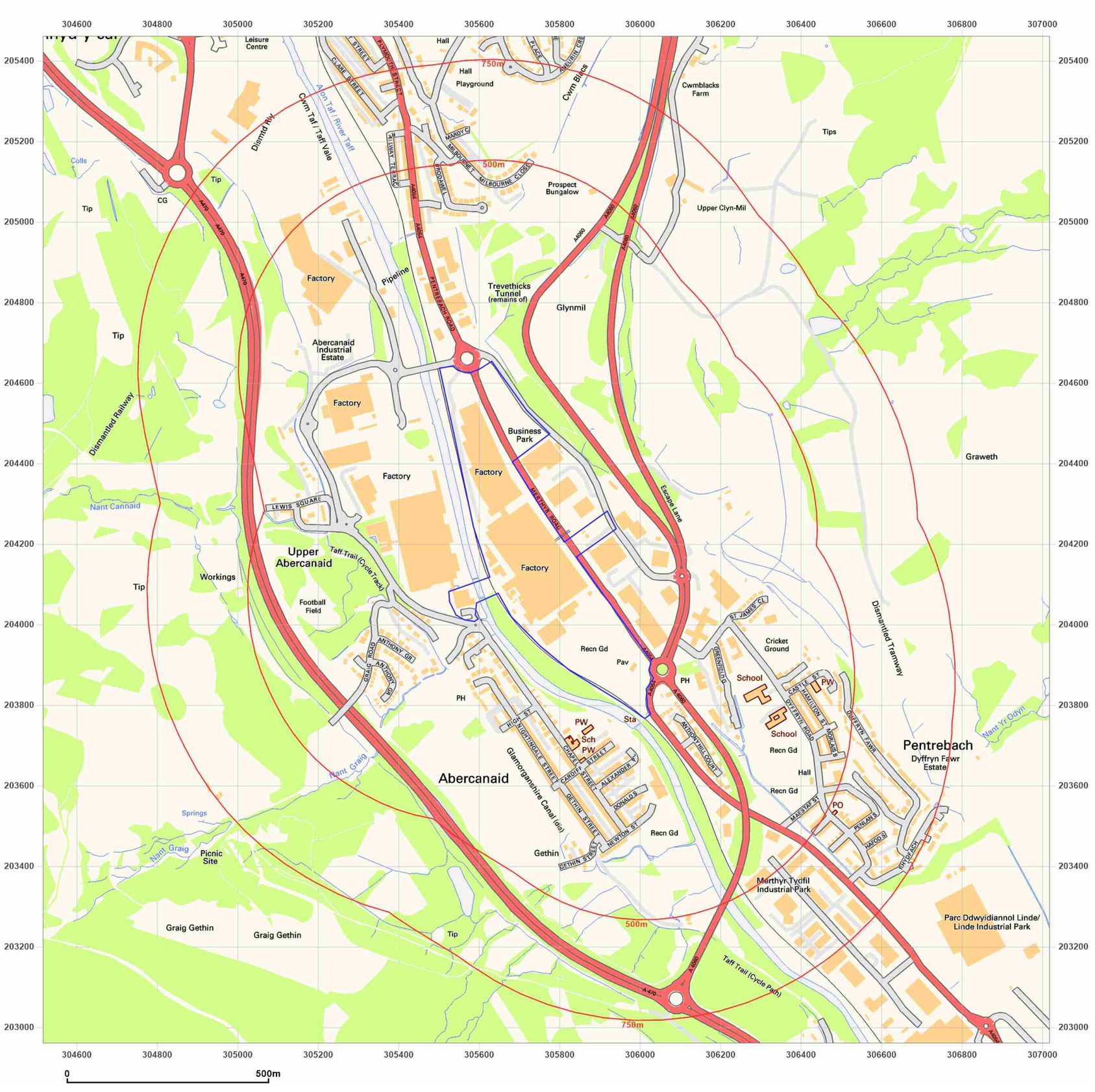
2001

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

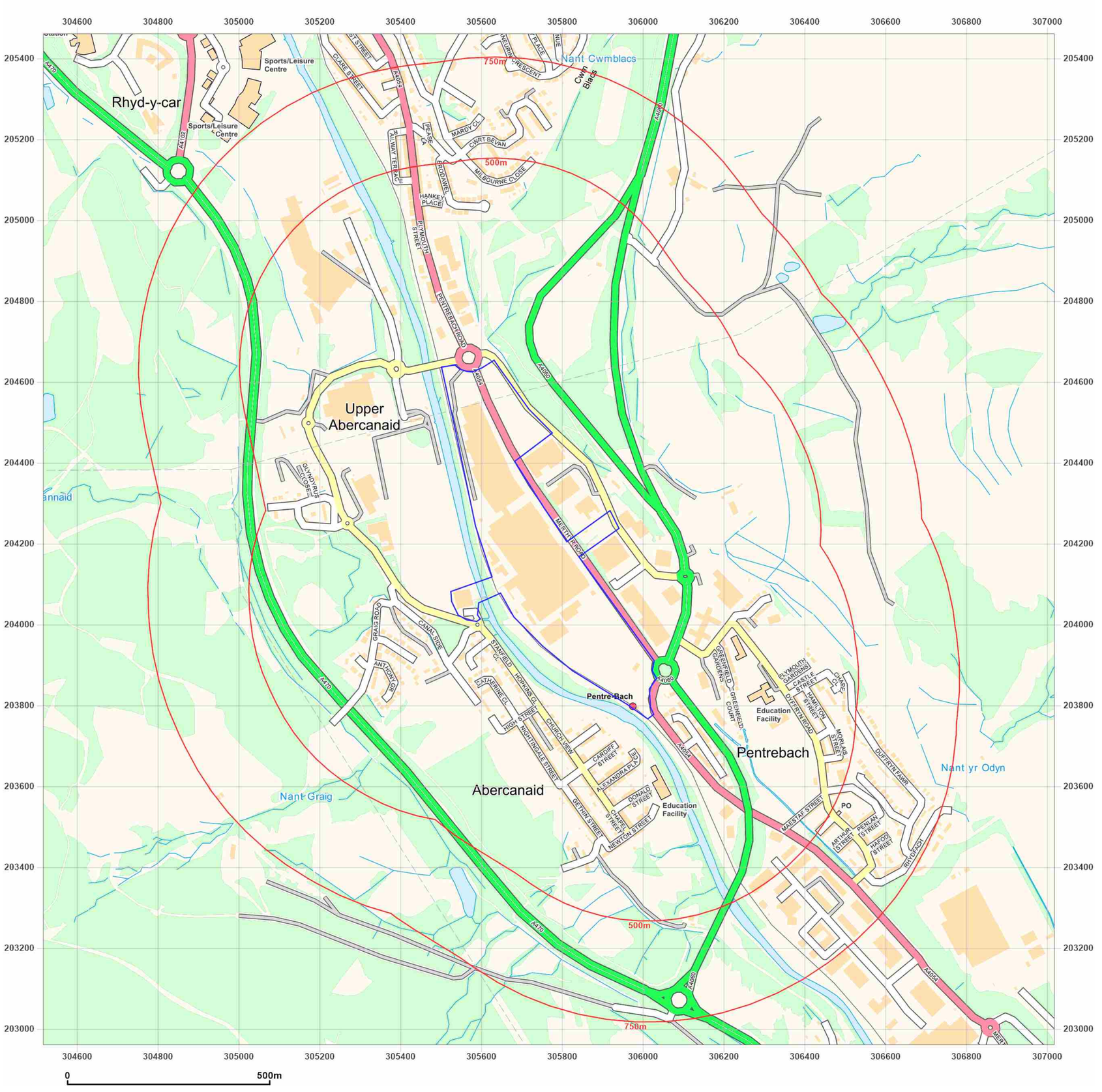
2010

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

Hoover Factory, Merthyr Tydfil

Client Ref: PO_4800510468_Hoover_Factory
Report Ref: HMD-191-8496647
Grid Ref: 305767, 204211

Map Name: National Grid

Map date: **2022**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2022

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 04 February 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf