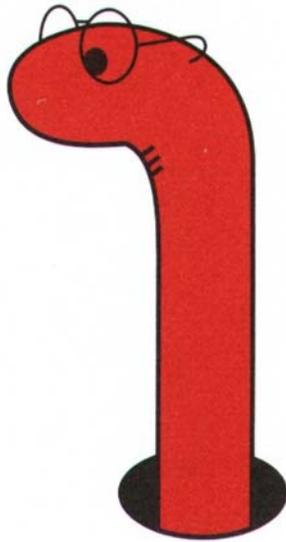


# **Electronic Report**



## **WORMS EYE**

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Our Ref: Muffit Lane/BD19 4QD/2023  
Date: 30 November 2023

Emily Clay  
Knabbs Ash Barn Ltd  
Knabbs Ash  
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ecquarters@gmail.com

**POPELEY FARM, MUFFIT LANE, GOMERSAL, CLECKHEATON, BD19 4QS**  
**COAL MINING RISK ASSESSMENT**

**INTRODUCTION**

A development is proposed at Popeley Farm. Worms Eye have been commissioned to prepare a Desk Top Coal Mining Risk Assessment in order to assess the impact of coal mining on the site.

**SITE LOCATION**

Popeley Farm, about 90 by 95m, is located to the southwest of Muffit Lane in Gomersal and at OS Grid Reference 421550, 425585. The farm comprises a collection of agricultural barns and a workshop, with grass surfaced areas, yards and access roads.

The area slopes down to the northeast.

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**PROPOSED DEVELOPMENT**

Various proposals are being considered across the farm, details have not been finalised.

## **SCOPE OF COAL MINING RISK ASSESMENT**

The purpose of this Coal Mining Risk Assessment Report is to:

- Present a desk study of available information on coal mining issues relevant to the site.
- Identify and assess risks to the development from coal mining legacy.
- Set out appropriate mitigation measures to address coal mining issues, including necessary remedial works and/or demonstrate how coal mining issues have influenced the development.
- Demonstrate to the Local Planning Authorities the application site is, or can be made, safe and stable to meet national planning policy with regard to development on unstable land.

## **SOURCES OF INFORMATION USED TO INFORM THIS REPORT**

The following data sources have been reviewed in preparing this risk assessment.

- British Geological Survey map, Solid and Drift edition, 1:50000 scale.
- A Coal Mining Consultants Report dated 24/11/23.
- A site history based on historic Ordnance Survey mapping of the area.
- Memoirs of the Geological Survey.

## **GEOLOGY OF SITE**

The geological map indicates that the underlying solid rocks are Thornhill Rock Sandstone, in the Pennine Middle Coal Measures, lying almost horizontal passing beneath the hillside.

The site is shown to be free of surface drift deposits.

## **NEARBY BOREHOLES/PREVIOUS INVESTIGATION**

The following information contains British Geological Survey materials © NERC (2023). There are no borehole records in the immediate vicinity of the site. Those closest to the site show rock to be very shallow between about 0.5m to 3.0m below ground level.

## **SITE HISTORY**

Historical maps show the site was developed since at least the 1800s, with numerous buildings on site. A disused colliery is shown about 130m east in the 1880s, with a quarry shown about 10m northeast.

## **MINING REPORT**

A Coal Authority mining report has been obtained, and a copy is enclosed with this report. The salient points are as follows:

- Workings are present below the site in the following seams of coal:
  - Low Fenton, 75m deep, 1.82m extracted in 1890.
  - Middleton Main, 80m deep, 0.66m extracted in 1907.
  - Silkstone, 165m deep, 0.76m extracted in 1941.
  - Whinmoor, 218m deep, 0.69m extracted in 1926.
  - Black Bed, 296m deep, 0.66m extracted in 1915.
- A range of dips from horizontal to 3° southeast are shown.
- No spine roadway recorded at shallow depth.
- No nearby coal seam outcrops.
- The site is underlain by probable unrecorded shallow workings.
- No, present or future planned underground mining.
- No known mine entries within 100 metres.
- No opencast mining within 500m.
- No record of mine gas emissions within 500m.
- No subsidence claims, since 1994, or remediated sites, within 50m.
- No site investigations recorded within 50m.

## **SHALLOW COAL SEAMS**

The Joan coal seam outcrops about 105m northeast and 130m AOD, roughly following the 130m contour around the hillside to the northeast. This is underlain by the Flockton Thick seam, about 15m below the Joan, and the Flockton Thin seam, about 30m below the Joan.

With the site at about 150 AOD this suggests the Joan seam is present at about 18 to 20m below rock below the site, with the Flockton Thick seam at about 35m and the Flockton Thin seam at about 50m below rock head.

## **IDENTIFICATION AND ASSESSMENT OF SITE SPECIFIC COAL MINING RISKS**

The table below initially summarises the potential risks associated with coal mining for the site.

<b>Coal Mining Issue</b>	<b>Yes</b>	<b>No</b>	<b>Risk Assessment</b>
Recorded underground coal mining		X	
Underground coal mining (recorded at shallow depths)		X	
Underground coal mining (possible at shallow depths)	X		Seam <30m, possible risk
Future underground coal mining		X	
Mine entries (shafts and adits)		X	
Record of past mine gas emissions		X	
Unrecorded mine gas emissions	X		Shallow coal seam, possible risk
Recorded coal mining surface hazards		X	
Surface mining (opencast workings)		X	
Nearby subsidence claims		X	
Mine Workings Found in Previous Investigations		X	

For those coal mining issues identified as “yes” a more detailed discussion is made below.

### **Shallow Underground Mining – unrecorded/probable/possible**

The geology map suggests the Joan coal seam is the shallowest seam, the next seam in the sequence being the Flockton Thick. These need to be considered further and the Geological Memoir for this area has been reviewed. To achieve a minimal thickness of rock cover over a worked coal seam, 10 times the seam thickness is widely accepted.

The next seam in the sequence is the Flockton Thin, but at about 50m below rock this is neither shallow nor a risk to the site.

#### Joan Coal Seam

The seam is reported as a thin, persistent, not generally worked seam, but up to 1.5m thick in places with dirt partings. In the unlikely event the seam was at its thickest and worked below the site this would allow about 18 to 20m of rock cover, about 13 to 14 times the seam thickness. This is sufficient rock cover, in the event of a collapse of the workings, to minimise risks to the development.

#### Flockton Thick Coal Seam

The coal seam is reported as being up to about 1.5m thick and a workable seam. This would allow about 15m of cover (10 times the seam thickness) between the seams, in the unlikely event the Joan is worked, or 35m of cover (23 times the seam thickness) if the Joan is intact. This is sufficient rock cover, in the event of a collapse of the workings, to minimise risks to the development.

### **Mine Gas**

The shallowest seam has about 20m of rock cover, and the findings suggest it is unlikely to be worked. Bearing in mind the thickness of rock cover (sandstone and mudstone), and that the seam was not generally worked, it is considered that the seam does not pose a gas risk.

The next seam is at about 35m below rock and, although possibly worked, the overlying rock would impede the passage of gases and it is considered that the deeper seams do not pose a gas risk.

## DISCUSSION

### Shallow Mining

The findings of this desk study indicate that there is one shallow coal seam, the Joan seam, which is unlikely to be worked. However, in the unlikely event the seam is at its thickest, and worked, below the site the findings suggest there is sufficient rock cover to minimise damage to the site in event of a collapse of mine workings.

It is considered that the Coal Authority Report, geology map and memoirs suggest workings are unlikely and that there is sufficient rock cover.

The findings suggest no risk from shallow mine workings and no further action is required.

### Mine Gas

The findings suggest the shallowest coal seam was not worked, and therefore does not pose a gas risk. Furthermore, there is sufficient rock cover over deeper seams to impede gases migrating to the surface.

It is considered that there is no mine gas risk and no further action is required.

### Mine Shafts

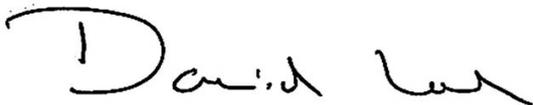
There are no nearby mine shafts and, therefore, no risk to the site from collapsing shafts. No further action is required.

### Intensive Mining History

It should be borne in mind that there are 5 worked seams below the site, with about 4.6m of coal removed. Future difficulties due to deep coal mining cannot be ruled out.

Yours faithfully

on behalf of Worms Eye Ltd

A handwritten signature in black ink that reads "David Lord". The signature is written in a cursive, slightly slanted style.

David Lord  
BSc (Hons)  
FGS MEnvSc AIEMA

**POPELEY FARM, MUFFIT LANE, GOMERSAL, CLECKHEATON, BD19 4QS**

**List of Appendices – COAL MINING RISK ASSESSMENT**

**Existing Site Plan**

**Coal Mining Report**

**Coal Authority Summary Map**

**Extract From Geology Map**

**Geology Map With Contours**

## ABBREVIATIONS

<u>Chemical</u>	BAP	Benzo(a)pyrene	
	BTEX	Benzene, toluene, ethylbenzene, xylene	
	DAHA	Dibenzo(ah)anthracene	
	MTBE	Methyl tertiary-butyl ether (additive to petrol)	
	EPH	Extractable Petroleum Hydrocarbons (formerly Diesel Range Organics – DRO)	
	NFD	No fibres detected (asbestos test)	
	PAH	Polycyclic aromatic hydrocarbons	
	PCB	Polychlorinated biphenyls	
	PID	Photo ionisation detector	
	PRO/GRO	Petrol range organics/gasoline range organics	
	SVOC	Semi-volatile organic compounds	
	TCE	Trichloroethylene	
	TPH	Total petroleum hydrocarbons	
	VOC	Volatile organic compounds	
	<u>Other</u>	AGS	Association of Geotechnical Specialists
		BGS	British Geological Survey
		BRE	Building Research Establishment
CBR		California Bearing Ratio	
CIEH		Chartered Institute of Environmental Health	
CIRIA		Construction Industry Research and Information Association	
CLEA		Contaminated Land Exposure Assessment (Environment Agency)	
CLR 8		Contaminated Land Research Report 8 (Environment Agency)	
DWQ		Drinking water quality	
EA		Environment Agency	
EQS		Environmental quality standards	
ICRCL		Inter-departmental Commission for the Reclamation of Contaminated Land	
LQM		Land Quality Management Ltd (Land and Environmental Consultancy)	
NHBC		National House Builders Council	
SGV		Soil Guideline Values	
SPT		Standard penetration test	
TPHWG		TPH Working Group	

1. This report should be considered in relation to the objectives agreed between Worms Eye and the Client, outlined in the introduction.
2. For the work, reliance has been placed on publicly available data, obtained from the sources identified in the report. The information is not exhaustive and further information may be available from other sources. When using the information it has been assumed it is correct, and no attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and guidelines, for land and groundwater contamination, enforced by the Local Authority and the Environment Agency.
4. During the site walkover, reasonable effort was made to obtain an overview of the site. However, no attempt was made to enter areas that are unsafe, a risk to health and safety, locked, barricaded, overgrown, or areas not made accessible.
5. Access, the presence of services and activities on the site, limited locations where sampling could be carried out and the techniques that could be used.
6. Assessments are based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. The conclusions and recommendations provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
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# Popeley Farm, Gomersall – Structural inspection for planning

**Version:** 1.1

**Description:** For client and planning approval, v1.1 – updated watermark.

## Summary

An inspection of two steel portal frame barns, one traditional masonry field barn and one masonry workshop structure at Popeley Farm was performed by Richard Lines C.Eng, MIStructE on the 16<sup>th</sup> of February 2023.



Figure 1: Satellite image of Popeley Farm, with the four structures inspected highlighted red (base image credit: Google Earth Pro.)

Regardless of planning outcomes, it is recommended that:

- The water damage in Barn 3 underneath the valley gutter on the south-western elevation is repaired.

Barn 1 is suited to conversion, subject to the following recommendations:

- The roof covering being specified with a sufficiently lightweight build-up to manage the spreading effect at the eaves and stresses / deflections in the purlins,
- Lateral and longitudinal stiffening / bracing of the portal frames may be required to manage wind deflections, notably on the open side. This may most conveniently be achieved by provision of masonry or timber infill panels between the frames to form the building envelope.

NOTES

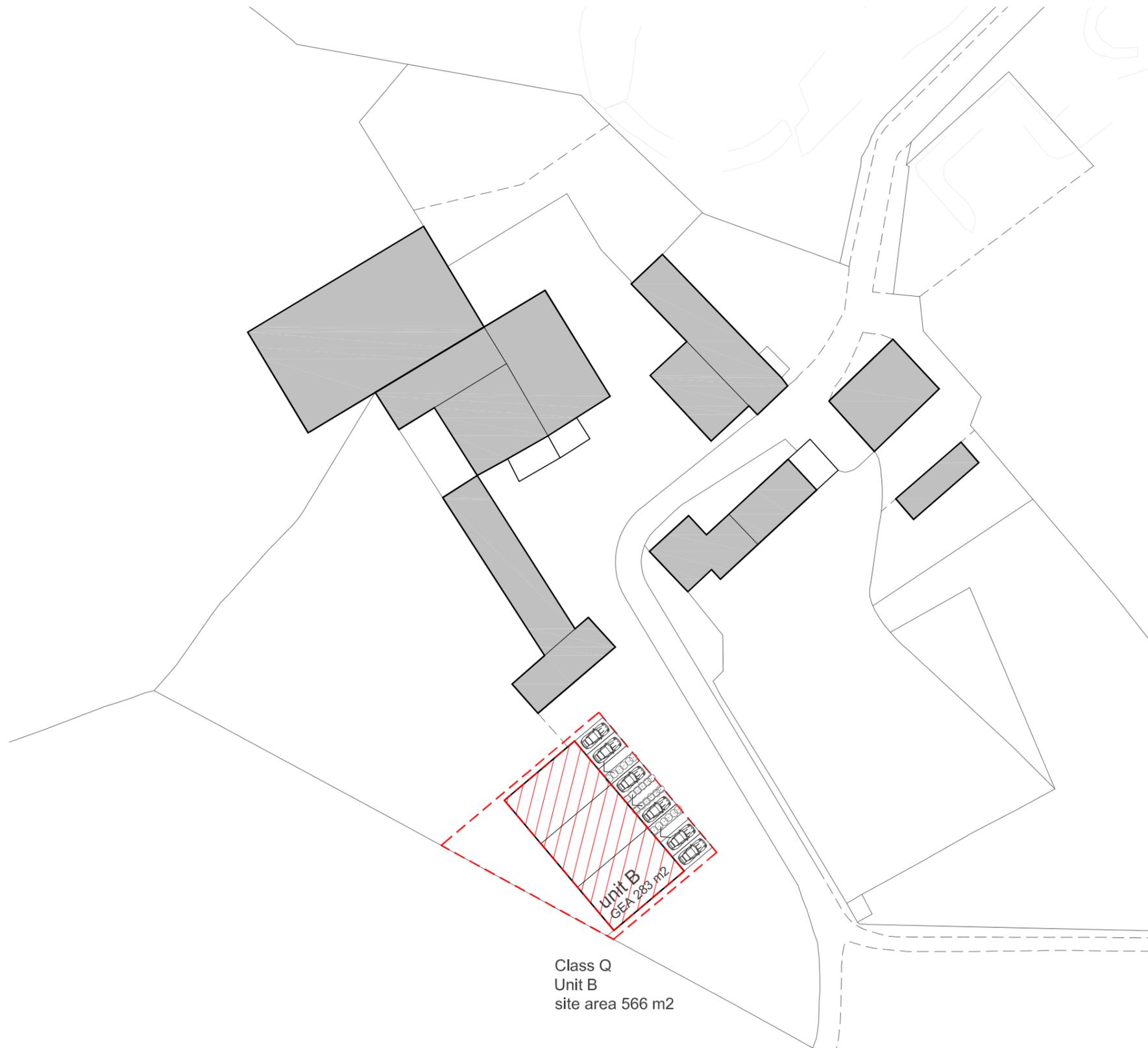
Do not scale from this drawing.

Layout and levels are taken from topographical survey any discrepancies are to be reported to the Architect.

This drawing is solely for the use of obtaining Planning Permission.

This drawing is to be read in conjunction with all related drawings. All dimensions must be checked and verified on site before commencing any work or producing shop drawings. The originator should be notified immediately of any discrepancy.

-  Retained buildings
-  Converted building
-  Amenity Space ( area as building footprint)



visual scale 1 : 500 @ A3

## Unit B (B8) site plan as proposed

NOTES

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 Work and materials must comply with the current building regulations and codes of practice.  
 All materials are to be installed in strict accordance with the recommendations of the manufacturers and comply with current british standards.  
 Read in conjunction with all other consultants/specialists information.

rev:	date:	drawn:	checked:	description:
status:		PL	planning submission	

client:	Knabbs Ash Barn Ltd		
project:	Class Q Planning Application		
location:	Popely Farm, Muffit Lane, Gomersal BD19 4QS		
drawing title:	Site Plan Unit B As Proposed		
date:	31/07/23	drawn: jszn	scale @ A3: 1:500
			Job no: 23.111
drawing no:	1206	revision:	-

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 W: www.nj-architects.co.uk

**RIBA** Chartered Practice

Note: Do not Scale from this drawing. All dimensions to be checked on site



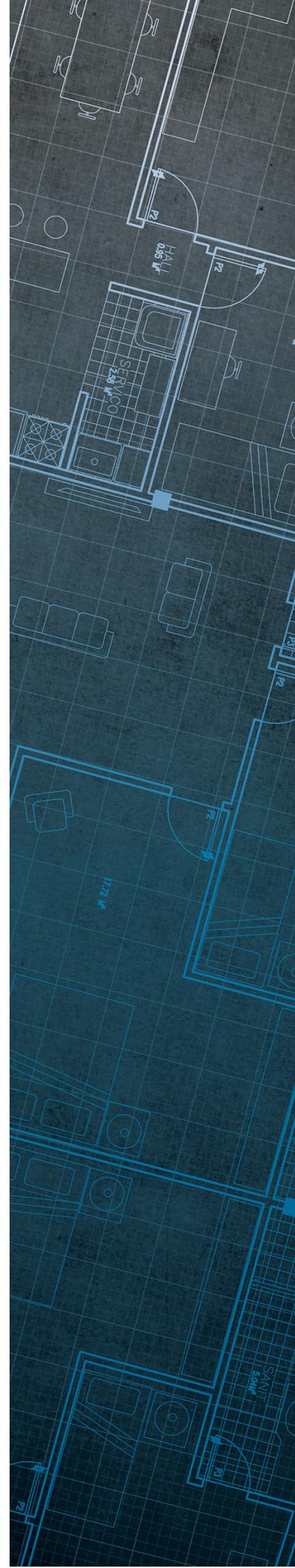
The Coal  
Authority

# Consultants Coal Mining Report

Popeley Farm  
Muffit Lane  
Gomersal  
Cleckheaton  
Kirklees  
BD19 4QS

Date of enquiry: 24 November 2023  
Date enquiry received: 24 November 2023  
Issue date: 24 November 2023

Our reference: 51003391309002  
Your reference: Muffit Lane



# Consultants

# Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

## Client name

David Lord

## Enquiry address

Popeley Farm  
Muffit Lane  
Gomersal  
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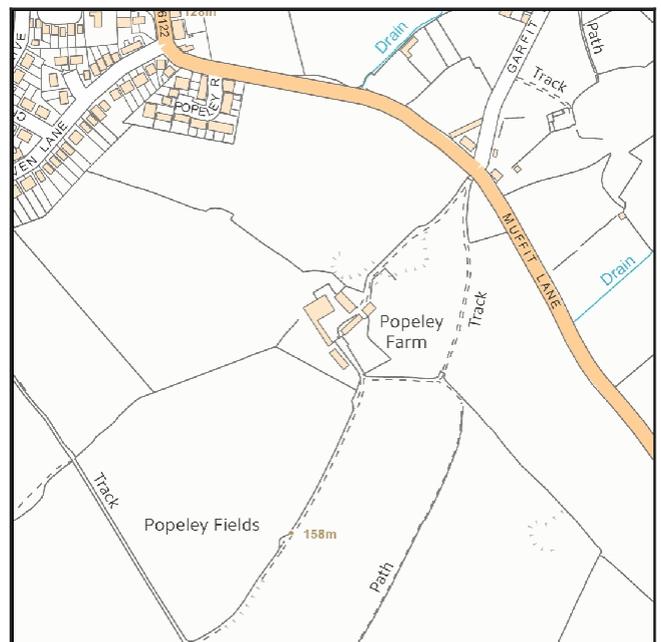
[www.groundstability.com](http://www.groundstability.com)

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 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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# Section 1 – Mining activity and geology

## Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
unnamed	LOW FENTON	Coal	6Z15	75	Beneath Property	1.4	North-East	182	1890
unnamed	MIDDLETON MAIN	Coal	6Z19	80	Beneath Property	2.9	South-East	66	1907
unnamed	SILKSTONE	Coal	6Z1X	105	North-West	1.5	North	81	1941
unnamed	MIDDLETON MAIN	Coal	6Z1B	117	Beneath Property	0.0	East	76	1899
unnamed	SILKSTONE	Coal	6Z1Y	165	Beneath Property	1.5	North	76	1941
unnamed	WHINMOOR	Coal	6Z20	218	Beneath Property	1.6	South-East	69	1926
unnamed	BLACK BED	Coal	6Z23	296	Beneath Property	2.4	South-East	66	1915

## Probable unrecorded shallow workings

Yes.

## Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

## Mine entries

None recorded within 100 metres of the enquiry boundary.

## Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

GCR113	GCR110	M49
5409	PO0	GCR114
GCR108	2487	11942

Our records show we have more plans than those shown above which could affect the enquiry boundary.

**Please contact us on 0345 762 6848** to determine the exact abandoned mine plans you require based on your needs.

**Outcrops**

No outcrops recorded.

**Geological faults, fissures and breaklines**

No faults, fissures or breaklines recorded.

**Opencast mines**

None recorded within 500 metres of the enquiry boundary.

**Coal Authority managed tips**

None recorded within 500 metres of the enquiry boundary.

## Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

### Site investigations

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

### Mine gas

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

### Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

## Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

### Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

**MINE GAS:** Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

### Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

**For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk).**

## Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at [groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk)**.

### Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

### Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

### Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

### Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

### Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

### Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

### Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

### **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

### **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

### **Site investigations**

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

### **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

### **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

### **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

### **Mine water treatment schemes**

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

### **Future underground mining**

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

### **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

### **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

### **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

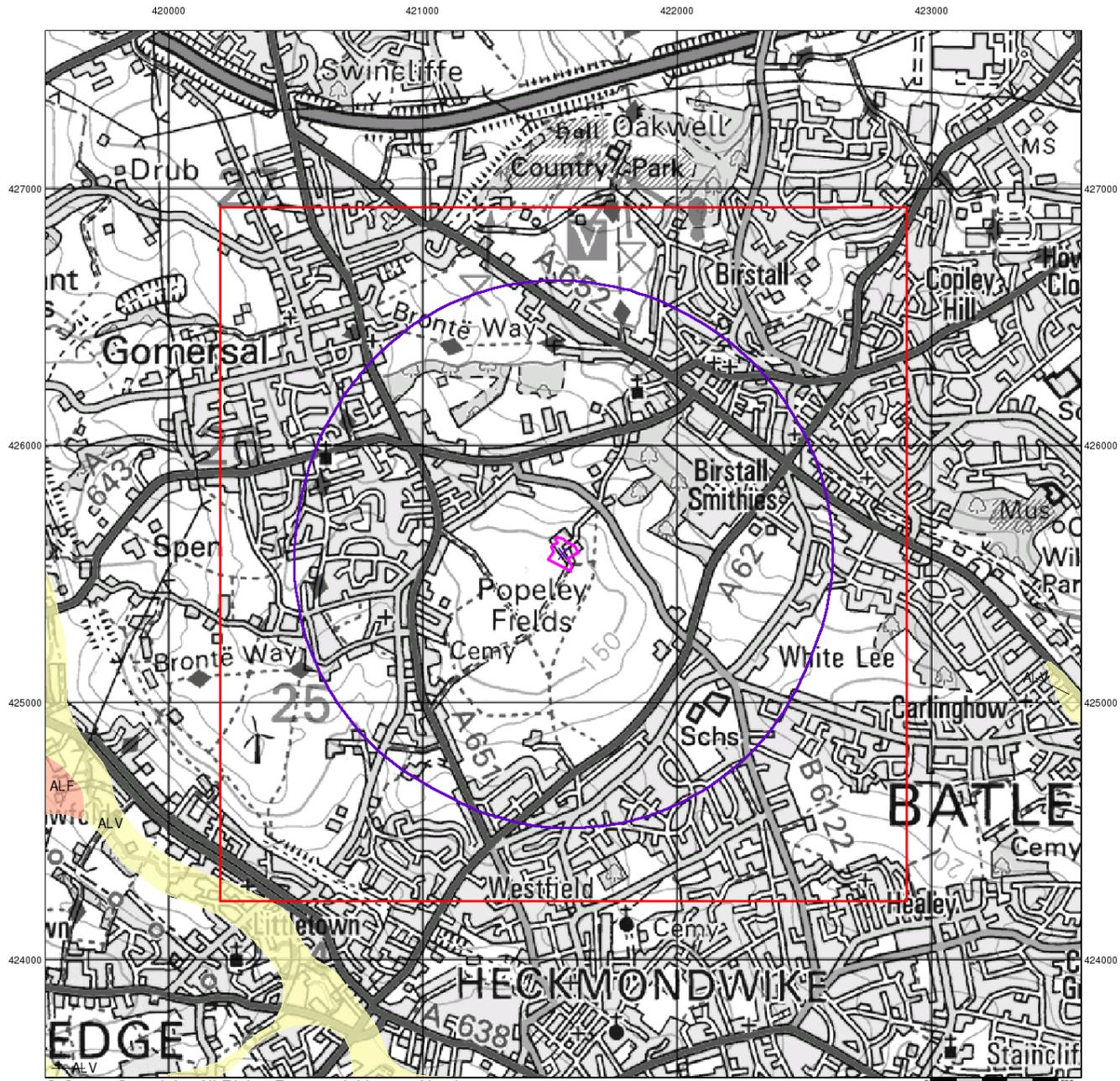
### **Withdrawal of support notices**

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

### **Payment to owners of former copyhold land**

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.





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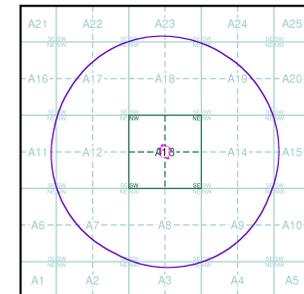
## Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

## Superficial Geology Map - Slice A



### Order Details:

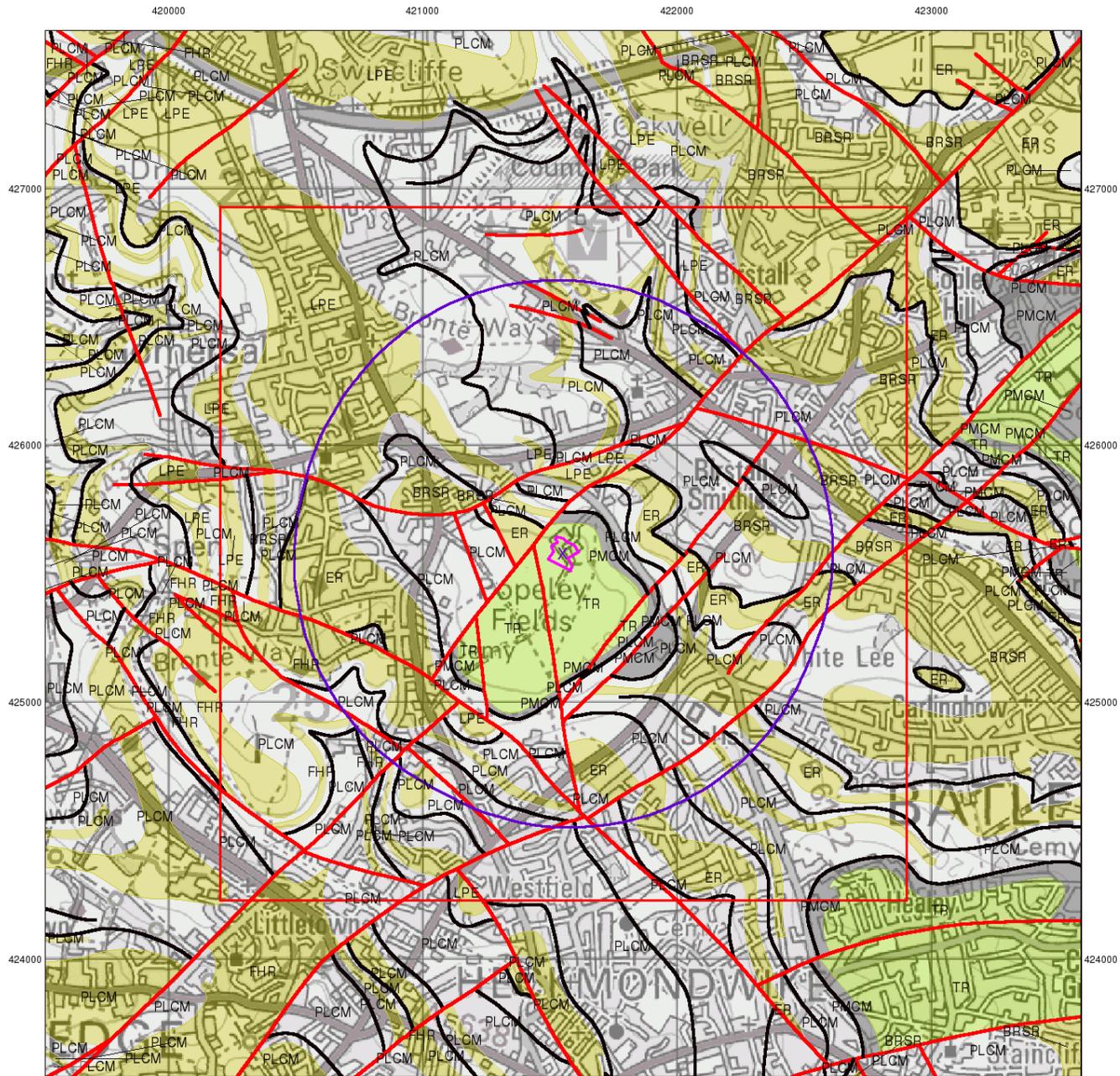
Order Number: 326132199\_1\_1  
 Customer Reference: Popeley Farm  
 National Grid Reference: 421550, 425580  
 Slice: A  
 Site Area (Ha): 0.82  
 Search Buffer (m): 1000

### Site Details:

Popeley Farm, Muffit Lane, Gomersal, CLECKHEATON, BD19 4QS

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## Bedrock and Faults

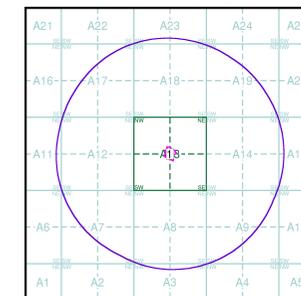
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

## Bedrock and Faults Map - Slice A



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Plan Showing Contours in Metres AOD  
Not to Scale

