

COAL MINING RISK ASSESSMENT

AT

LAND AT COAL PIT LANE
LOWER CUMBERWORTH

FOR

R THORNER

REPORT REF: THB 3616

Engineering Geologists and Environmental Scientists



Ashton Bennett



North: Bridge Mills, Huddersfield Road,
West Yorkshire, Holmfirth HD9 3TW

South: 22c Lambourn Road,
Clapham, London SW4 0LY

Tel: 0845 8687488

email: geoenviro@ashton-bennett.co.uk
www.ashton-bennett.com

COAL MINING RISK ASSESSMENT

AT

LAND AT COAL PIT LANE
LOWER CUMBERWORTH

FOR

R THORNER

REPORT REF: THB 3616

ASHTON BENNETT CONSULTANCY

Engineering Geologists & Environmental Scientists

JUNE 2025

Ashton Bennett Limited Co Reg No: 3318828 is a member of the Ashton Bennett Consultancy group of companies

CONTENTS

1	INTRODUCTION
2	THE SITE
3	REPORT OBJECTIVE AND REPORT SCOPE
4	SITE GEOLOGY
4.1	Geology
4.2	Engineering Geology
4.3	Geological Faults
4.4	Previous Ground Investigation Data
4.4.1	Introduction
4.4.2	Potential Quarry
4.4.3	New Warehouse
4.4.4	Wind Turbine
4.4.5	Common Side Coal Pit Lane
5	MINING
5.1	The Coal Mining Report
5.2	Surface Coal Mining
5.3	Deep Coal Mining
5.4	Shallow Coal Mining
5.5	Mine Shafts
5.6	Mine Gas
6	RISK ASSESSMENT
7	CONCLUSIONS AND RECOMMENDATIONS
8	GENERAL REMARKS

APPENDIX

APPENDIX A	Coal Mining Report
------------	--------------------



1. INTRODUCTION

This report describes the results of a Coal Mining Risk Assessment undertaken on a site known as Land at Coal Pit Lane, Lower Cumberworth, Huddersfield, HD8 8PL. The work was undertaken for the client Mr R Thornber. The assessment was carried out by Ashton Bennett Ltd.

The purpose of this Coal Mining Risk Assessment was to assess the risk of past shallow underground coal mining being present beneath the site where it is proposed to construct a residential house. The mining risk assessment involved the collation and assessment of available information on the site including geological maps, topographical maps, available borehole records and a Mining Remediation Authority (MRA) Coal Mining Report.

This report describes the research work carried out, presents the results of the Coal Mining Risk Assessment and assesses any risk to the site from deep and shallow underground coal mining and mine shafts.

2. THE SITE

The site is located on the south east side of Shelley village, between Shelley, Lower Cumberworth and Skelmanthorpe south east of Huddersfield. The site lies to the immediate south west of Skelmanthorpe south of Coal Pit Lane and between Coal Pit Lane and the railway line.

The site lies as open land at the present time and it is proposed to construct a residential house on the site. The site is bounded to the south west by fields and a railway line and is bounded to the north east by Coal Pit Lane and fields beyond. The site is bounded to the north west by fields and

farms. The site is bounded to the south east by Blackthorn Recycling Works with open land and Lower Cumberworth village beyond.

The site is centered at National Grid Reference 421750^E 409750^N at a height of approximately 195m above Ordnance Datum.

Ordnance Survey maps researched from 1850 to date indicated the site has lain as open land. To the immediate east of the site Cumberworth Brick Yard existed from 1891 to 1951, and a Works from 1951 to date.

A Site Location Plan is presented as Figure 1, a Site Plan is presented as Figure 2 and a Detailed Site Plan is presented as Figure 3. A Geology Map and Coal Seams is presented as Figure 4. Figure 5 shows the location of Boreholes sunk by Acer for a proposed quarry (1989). Figure 6 shows the location of Boreholes sunk by RGS for a new warehouse (2017) and Figure 7 shows the location of Boreholes sunk by RGS for a proposed wind turbine (2018). Figure 8 shows Boreholes sunk by RGS for a new building at Common Side (2019). Figure 9 presents Surface Coal Mining and Figure 10 presents Past Shallow Coal Mine Workings. Probable Shallow Coal Mine Workings are presented on Figure 11. A Plan of Mine Entries is shown on Figure 12 and Mine Entries are also shown on Figure 13. Figure 14 presents Mine Entry Potential Zone of Influence and Figure 15 presents a Development High Risk Area.

A Coal Mining Report for the site is presented in Appendix A.



Figure 1 Site Location Plan



Figure 2 Site Plan

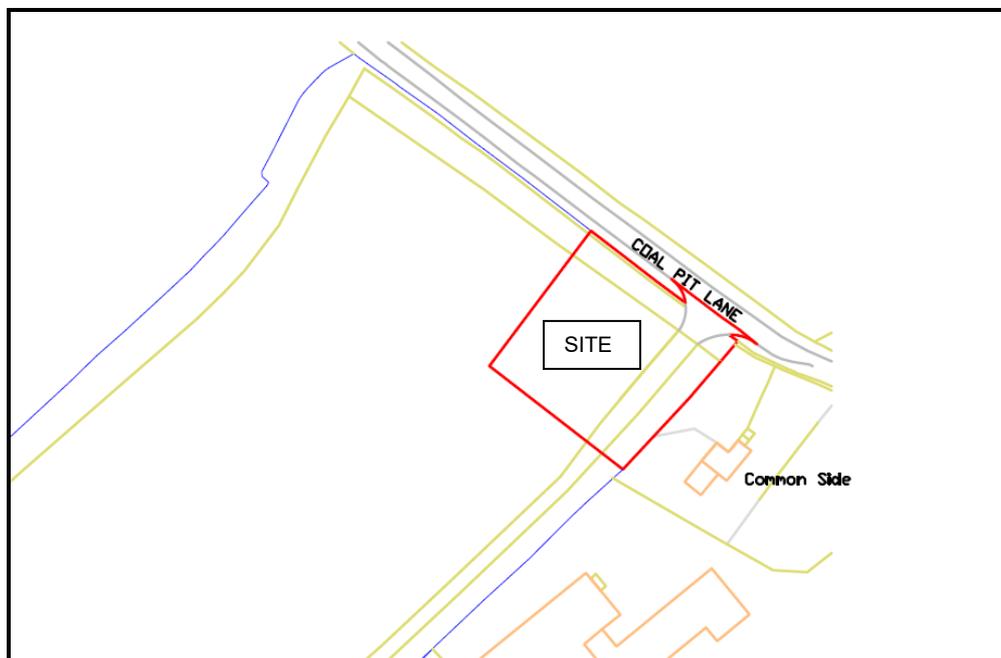


Figure 3 Detailed Site Plan

3. REPORT OBJECTIVE AND REPORT SCOPE

The objective of this desk study is to examine the topographical, geological and mining data available for the site and determine any risk to the proposed residential development from past deep and shallow underground coal mining and mine shafts.

In addition to the above this study has used the extensive knowledge and experience of the staff of Ashton Bennett Consultancy to assess the data and to interpret the data findings.

4. SITE GEOLOGY

4.1 Geology

The published British Geological Survey (BGS) maps at a scale of 1:10,000 show the site area to be underlain by the sandstones, mudstones and interbedded coal seams of the Lower Coal Measures. The strata beneath the site are shown to be interbedded sandstones and mudstones dipping to the north east at around 5 degrees to the horizontal. The geological maps indicate no presence of drift over the bedrock although a thickness of weathered strata is expected to be present.

The site is immediately underlain by mudstone a thin sandstone and further mudstone interbedded with coal seams of the Black Band and Whinmoor Coal and underlying Cumberland Thin Coal and Fireclay with further deeper mudstones, coal seams and sandstones.

The Black Band Coal, Whinmoor Coal and the Cumberworth Thin Coal all lie at shallow depth (<30m bgl) beneath the site.

Coal seams and possible mining is discussed further in Section 5.

4.2 Engineering Geology

The mudstone and sandstone beds where unweathered are suitable strata for supporting light bearing pressures. Geotechnical investigation and rock strength testing should be undertaken to assess the depth to unweathered strata and the allowable bearing capacity of the strata. Foundation design must take into account the mining risks.

4.3 Geological Faults

The geological maps indicate the presence of several recorded geological faults trending WSW to ENE to the north and south of the site. A further geological fault trends NNW to SSE to the west of the site cutting across the NNW to SSE faults. The geological strata beneath the site has been downthrown relative to older strata to the north and south of the faults.

The Coal Measures strata are heavily faulted from past tectonic activity and small unrecorded faults may also be present on the site. Faults are unlikely to detrimentally affect the stability of the site unless shallow mined ground is present beneath the site.

4.4 Previous Site Investigation Data

4.4.1 Introduction

Four sites, adjacent to the site proposed for a residential house, have been investigated by rotary openhole boreholes by others, in order to assess the geology and particularly whether shallow coal seams or mined ground are present. The geology and mining detected is detailed below to further assist in understanding the geology, depth to coal seams and depth to any mined ground on the site pertaining to this report.

4.4.2 Potential Quarry

Acer Consultants reported on the drilling of nine boreholes by AMCO, adjacent to the site as shown in Figure 5. The boreholes were sunk in order to establish the water levels and depth to the Whinmoor Coal for design of a potential quarry for shale for Hepworth Building Products Ltd.

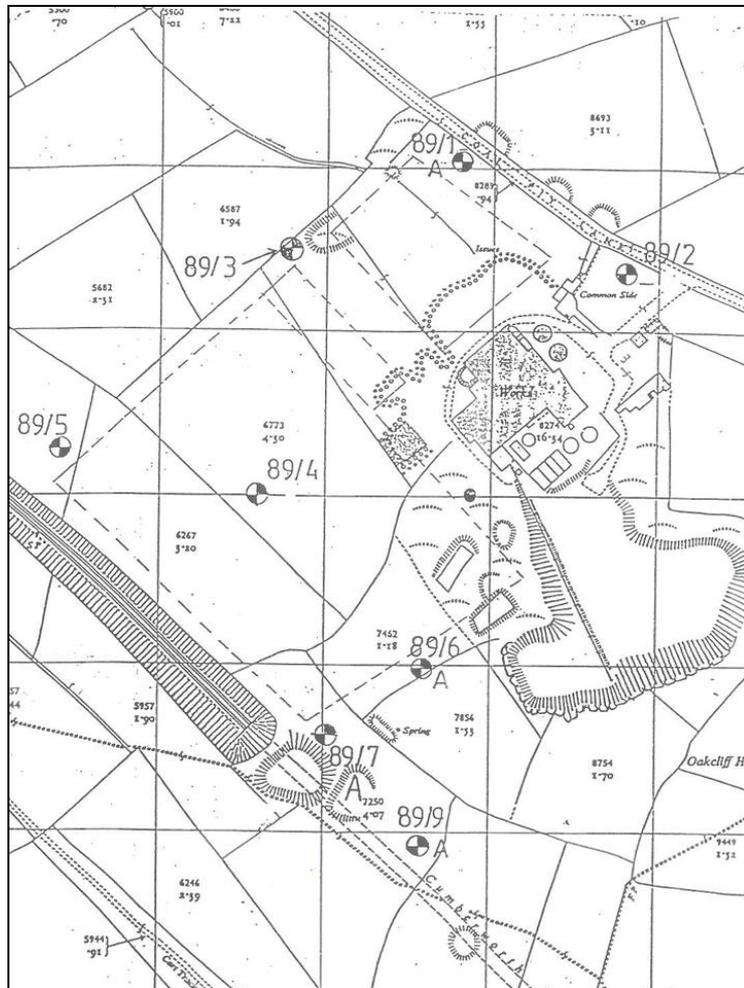


Figure 5 Location of Boreholes sunk by Acer for new quarry (1989)

TABLE 1
Geology according to Acer boreholes (1989)

RGS BH	Topsoil / Made Ground in mbgl	Sandstone In mbgl	Mudstone In mbgl	Coal In mbgl Coal remnants from possible mining	Voids vd / Broken Ground bk in mbgl
89/1			GL-7.60 18.20-21.00	7.60-7.70 traces 17.30-18.20	18.20-19.20 vd
89/1A			GL-10.40 10.60-17.30 19.30-20.00	10.40-10.60 17.30-19.30	
89/2	GL-2.00	2.00-6.50	6.50-7.50 7.60-17.30 19.10-27.00 28.00-28.50	7.50-7.60 traces 17.30-19.10 27.00-28.00	
89/3	GL-2.00	2.00-7.20	7.90-16.20 17.30-18.00	7.20-7.90 16.20-17.30	
89/4			GL-8.20 8.50-16.20 17.70-19.00	8.20-8.50 soft 16.20-17.70	
89/5		15.20-15.80	GL-3.30 5.00-14.00	14.00-15.20	3.30-5.00 vd
89/6			GL-19.00 19.20-19.60 19.70-20.20 20.40-23.80 25.50-26.00	19.00-19.20 traces 19.60-19.70 traces 20.20-20.40 traces 23.80-25.50	
89/6A		15.70-17.40	GL-15.70 17.40-18.80	18.80-19.40	19.40-19.70 vd
89/7		12.60-14.40	GL-8.00 8.10-12.60 14.40-15.60 15.80-16.20 16.40-16.80 17.00-17.60	8.00-8.10 trace 15.60-15.80 16.20-16.40 16.80-17.00	
89/7A		21.60-22.60	GL-17.30 17.40-17.70 17.80-20.00	17.30-17.40 17.70-17.80 20.00-21.60	
89/9			GL-2.10 2.50-4.20 4.50-20.80 22.20-25.30 26.50-27.00	2.10-2.50 4.20-4.50 20.80-22.20 25.30-26.50	
89/9A			GL-19.60 20.70-21.00	1.50-1.60 coal dust 19.60-20.70	

The boreholes indicate mining of the Black Band Coal and voids created which have been infilled by subsidence of overlying strata. There is also evidence of mining in the Whinmoor Coal at depths in excess of 15mbgl. Boreholes 89/1 and 89/2 lie close to the boundary with the site for the proposed development. BH89/2 indicates mining in the Black Band Coal with the underlying Whinmoor Coal intact at 17.30 to 19.30mbgl.

4.4.3 New Warehouse

In 2017 Rogers Geotechnical Services Ltd (RGS) undertook a ground investigation for the construction of a new warehouse on land to the south east of the site. Rotary openhole boreholes RO1, RO2 and RO3 were sunk on the site as shown in Figure 6.

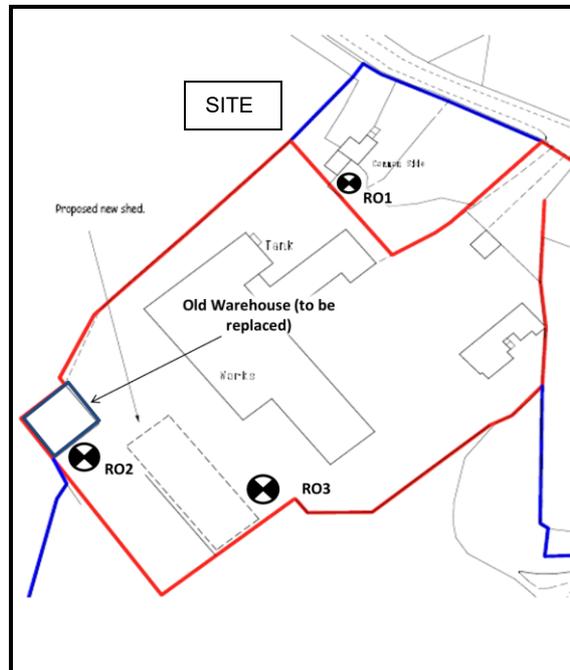


Figure 6 Location of Boreholes sunk by RGS for new warehouse (2017)

The ground conditions detected in the three boreholes are shown in Table 2 below. The strata encountered was generally mudstone with a sandstone band at <10m bgl. Coal was encountered intact at depths of 9.50-10.00m, 11.00-11.50m, 13.30-13.70m, 17.10-17.50m, 17.10-19.40m and 17.80-19.00m bgl. These were thought to represent the Black Band and the Whinmoor Coal seams. No voids or broken ground was encountered in the boreholes.

TABLE 2
Geology according to RGS boreholes (2017)

RGS BH	Topsoil / Made Ground	Sandstone	Mudstone	Coal	Voids vd / Broken Ground bk
R01	GL-1.30	8.00-9.00	1.60-8.00 9.00-9.50 1.00-17.80 19.00-30.00	1.30-1.60 (poss made ground) 9.50-10.00 17.80-19.00	
R02	GL-1.00	6.00-6.50	1.00-2.60 2.80-6.00 6.50-13.30 13.70-17.10 19.40-21.00	2.60-2.80 13.30-13.70 17.10-19.40	
R03	GL-1.00		1.00-11.00 11.50-17.10 17.50-21.00	11.00-11.50 17.10-17.50	

4.4.4 Wind Turbine

In August 2018 Rogers Geotechnical Services Ltd (RGS) undertook three openhole boreholes for construction of a wind turbine, 188m to the south west of the site. Borehole R1, closest to the proposed site, encountered made ground and mudstone underlain by coal at 7.50m to 7.90m and at 16.50m to 17.20m bgl, and with voids encountered at 14.80m to 15.00m bgl.



Figure 6 Location of RGS Boreholes for Wind Turbine

TABLE 3
Geology according to RGS boreholes (2018)

RGS BH	Topsoil / Made Ground	Sandstone	Mudstone	Coal	Voids vd / Broken Ground bk
R1	GL-3.20		3.20-7.50 7.90-14.80 15.00-16.50 17.20-30.00	7.50-7.90 16.50-17.20	14.80-15.00 vd
R2		GL-4.20	8.00-15.30 15.90-18.00	15.30-15.90	4.20-5.30 vd 5.30-8.00 bk
R3	GL-0.50	0.50-2.00	2.00-5.20 5.70-15.70 16.30-18.00	15.70-16.30	5.20-5.70 vd

Boreholes R2 and R3 were drilled within a pit 1.50m depth compared to R1. The geology is based on the drillers logs according to RGS.

In R2 and R3 RGS concluded that the voids / broken ground at 4.20m to 5.30m (adjusted to 5.70m to 6.80mbgl), 5.20m to 5.70m (adjusted 6.70m to 7.20mbgl) represented mining of the Black Band Coal seam and the coal encountered at circa 15m to 17m represented the Whinmoor Coal seam and was encountered intact in the boreholes.

4.4.5 Common Side Coal Pit Lane

In 2019 RGS undertook a ground investigation for the construction of new buildings on land immediately adjacent to the south east of the site at Common Side Coal Pit Lane. Rotary openhole boreholes RO1, RO A and RO B were sunk on the site.



Figure 8 Location of Boreholes sunk by RGS for new buildings (2019)

TABLE 3
Geology according to RGS boreholes (2019)

RGS BH	Topsoil / Made Ground	Sandstone	Mudstone	Coal	Voids vd / Broken Ground bk
RO1	GL-1.30	8.00-9.00	1.60-8.00 9.00-9.50 1.00-17.80 19.00-30.00	1.30-1.60 (poss made ground) 9.50-10.00 17.80-19.00	
R OA	GL-0.50		0.50-8.00 8.60-19.20 20.50-22.00	8.00-8.60	19.20-20.50 vd
R OB	GL-0.50		0.50-8.00 8.55-20.00 21.25-30.00	8.00-8.55 20.00-21.25	

The Black Band Coal was detected in tact at depths varying from 8.00m to 9.50m and extending to between 8.55m and 10.00m bgl. Workings were detected in R OA at 19.20-20.50m bgl which was considered to be the Whinmoor Coal seam. This seam was found to be intact in Boreholes R O1 and R OB as shown in Table 3.

Due to the significant variation in the thickness and depth of coal seams due to the way they were formed on an undulating landscape, it is not always possible to assign the name allocated by the miners correctly to each coal encountered.

5. MINING

5.1 The Coal Mining Report

The Coal Mining Report obtained from The Coal Authority (now the Mining Remediation Authority) for the site states that according to their records the property has been undermined by the Whinmoor Coal at a depth of 12m bgl. The seam extracted was 1.83m in thickness and was last mined in 1862.

The site lies in an area of probable shallow (<30m bgl) mining although no spine roads are recorded at shallow depth. There are no faults or fissures recorded and the Coal Authority (CA) have no records of any CA managed tips within 50m of the enquiry boundary.

The CA have not received a damage notice or claim for the subject property, or any property within 50metres from the enquiry boundary, since October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property. The CA is nor aware of any request having been made to carry out preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

There is no mine gas recorded within 500metres of the enquiry boundary and no mine water treatment schemes within 500m of the enquiry boundary.

There is no future mining recorded and no coal mining licensing within 200m of the enquiry boundary. There are no court orders and no notices have been given, under Section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

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

The Coal Mining Report states that within, or within 20m of the site boundary there are 11 mine entries and there is no record of what steps, if any, have been taken to treat the mine shafts and adit. Records of mine entries may be incomplete.

The Coal Mining Report is presented in Appendix A and should be read in full.



Figure 9 Surface Coal Mining

5.2 Surface Coal Mining

The entire area of the site has, according to the coal mining report, been subject to surface mining. It is possible therefore that made ground may be encountered on the site.

5.3 Deep Coal Mining

Workable coal seams exist at depth (>30m bgl) beneath the site. Records held by the Coal Authority of deep mining are available on the Abandonment Plans.

It is a **low risk** that any deep mining will detrimentally affect the stability of the site due to the substantial cover of competent strata above any workings to prevent any voids migrating to the ground surface.

5.4 Shallow Coal Mining

The Coal Mining Report states that coal has been worked at shallow depth beneath the site. It is recommended that the mining plans are obtained for these workings to assess the depth and extent of the workings. The coal seams present at shallow (<30m bgl) depth beneath the site are shown in Table 4 with the recorded coal workings and probable coal workings.

There are no local boreholes recorded by the BGS near the site to assess the exact depth of coal seams. Shaft records indicate the Black Band Coal to lie at 7m to 8m bgl and the Whinmoor Coal to lie at 11m bgl. This coal was often worked in the vicinity for the coal and underlying fireclay.

It is recorded by four site investigations adjacent to the site that both the Black Band Coal and Whinmoor Coal seams have been worked and therefore may also have been worked beneath the site.

It is recorded that several coal seams are mined adjacent to the site, and voids may remain in these mined seams and as insufficient competent strata lies above the shallow mined seams, then the voids may migrate by successive roof collapse over the years producing subsidence at ground level.

As there are coal seams and fireclay known to have been worked in the area of the site and known to lie within the upper 30m bgl beneath the site there is a **high risk** that the site for the new development is unstable ground. Based on the thickness and depths of the worked coal seams there is insufficient cover of competent strata to prevent voids reaching the surface and ground stabilisation may be required for construction. The extent of this will depend on a site specific ground investigation on the development site.

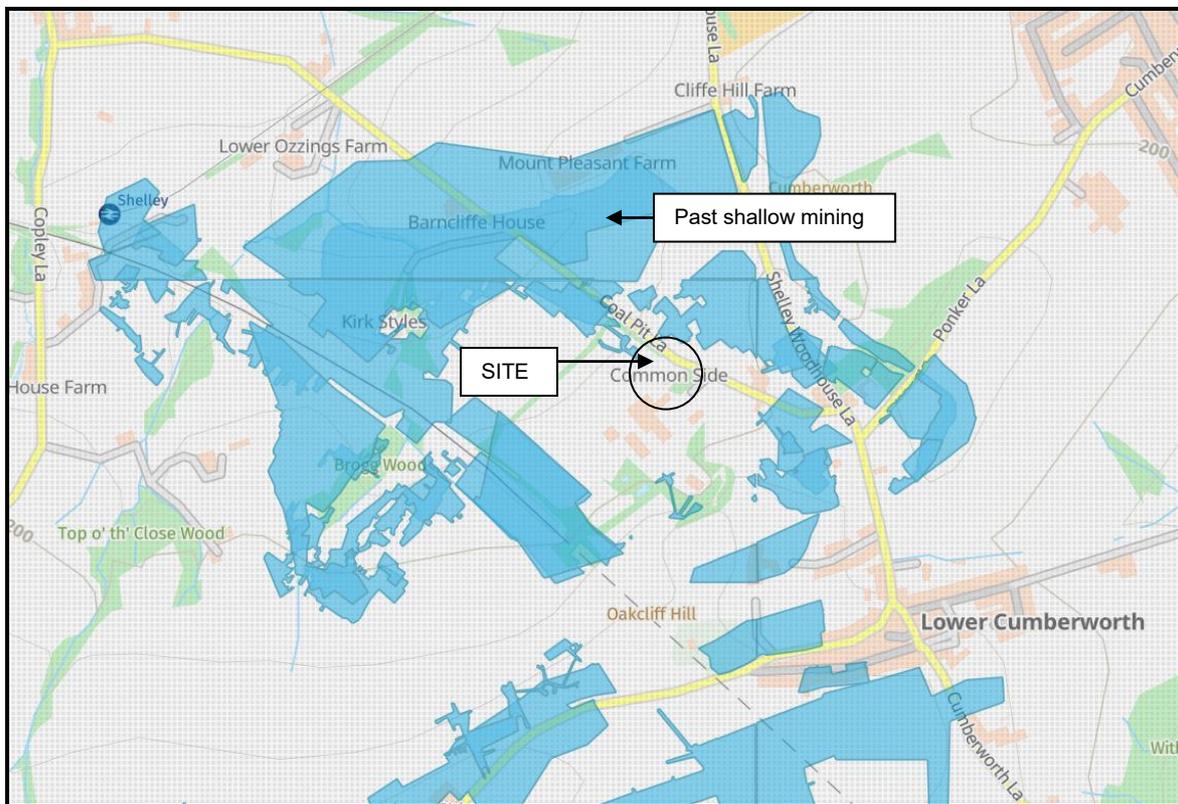


Figure 10 Past Shallow Coal Mine Workings

TABLE 4
Estimated Shallow Coal Seams beneath Site

Strata	Thickness in m	Depth bgl in m	Worked On Site	Worked in vicinity of Site
Mudstone				
Black Band Coal	0.60	7 to 8	Yes	Yes
Mudstone				
Top Whinmoor Coal	1.00	11	Yes	Yes
Mudstone				
Sandstone				
Mudstone				
Cumberworth Thin Coal	0.30	20 to 30	Possible	Yes
Cumberworth Fireclay	1.20	20 to 30	Possible	Yes
Clifton Sandstone				
Upper Penistone Coal	thin		Unlikely	Unknown
Sandstone				
Crow Coal	0.30		Unlikely	Yes
Grenoside Sandstone				
Black Bed Coal	0.60		Possible	Yes
Elland Flags				

Note. There are additional mudstone and sandstone sequences not shown. The representation in the table does not denote relative thicknesses of strata.

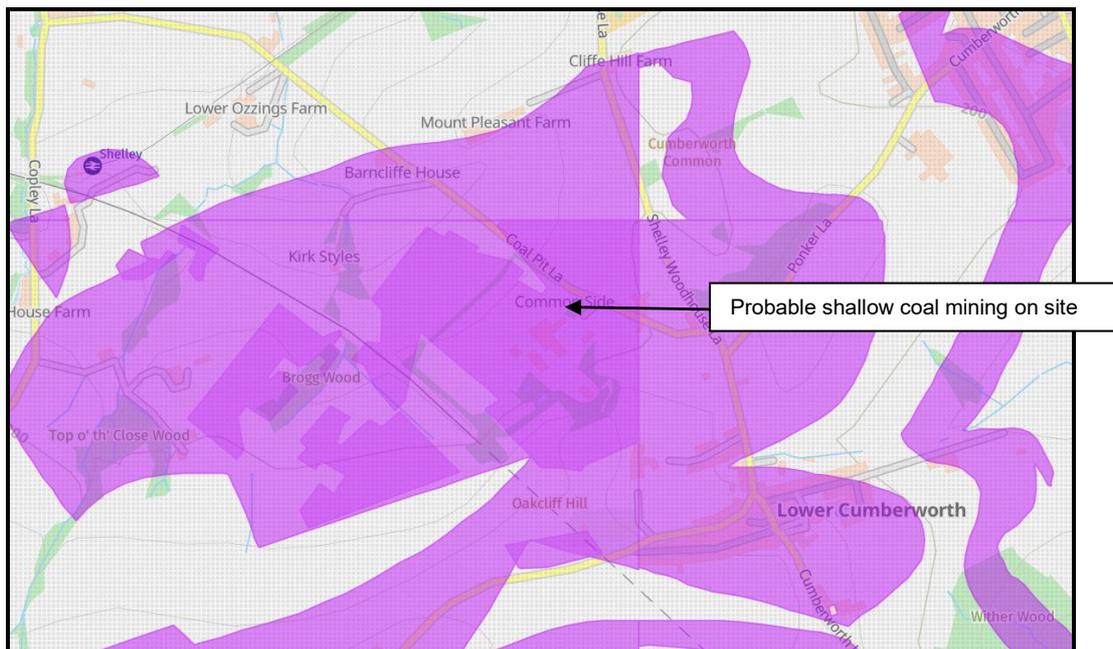


Figure 11 Probable Shallow Coal Mine Workings

It was not required by law to deposit Abandonment Plans of mining with the government before 1872 and large areas of earlier mining are unrecorded. Probable shallow mining refers to areas where coal is at shallow <30m bgl depth, and likely to have been mined before abandonment records.

5.5 Mine Shafts

The Coal Mining Report states that The Coal Authority have records of 11 mine shafts within or within 20m of the site boundary. There are no records of what steps if any have been taken to treat the mine entries. The shafts are expected to have been sunk to mine the Black Band, Low Whinmoor and Cumberworth Thin Coal and Fireclay.

The Coal Authority records however are incomplete and circular features should always be assessed by an engineer in case they represent an unstable mine shaft or adit.

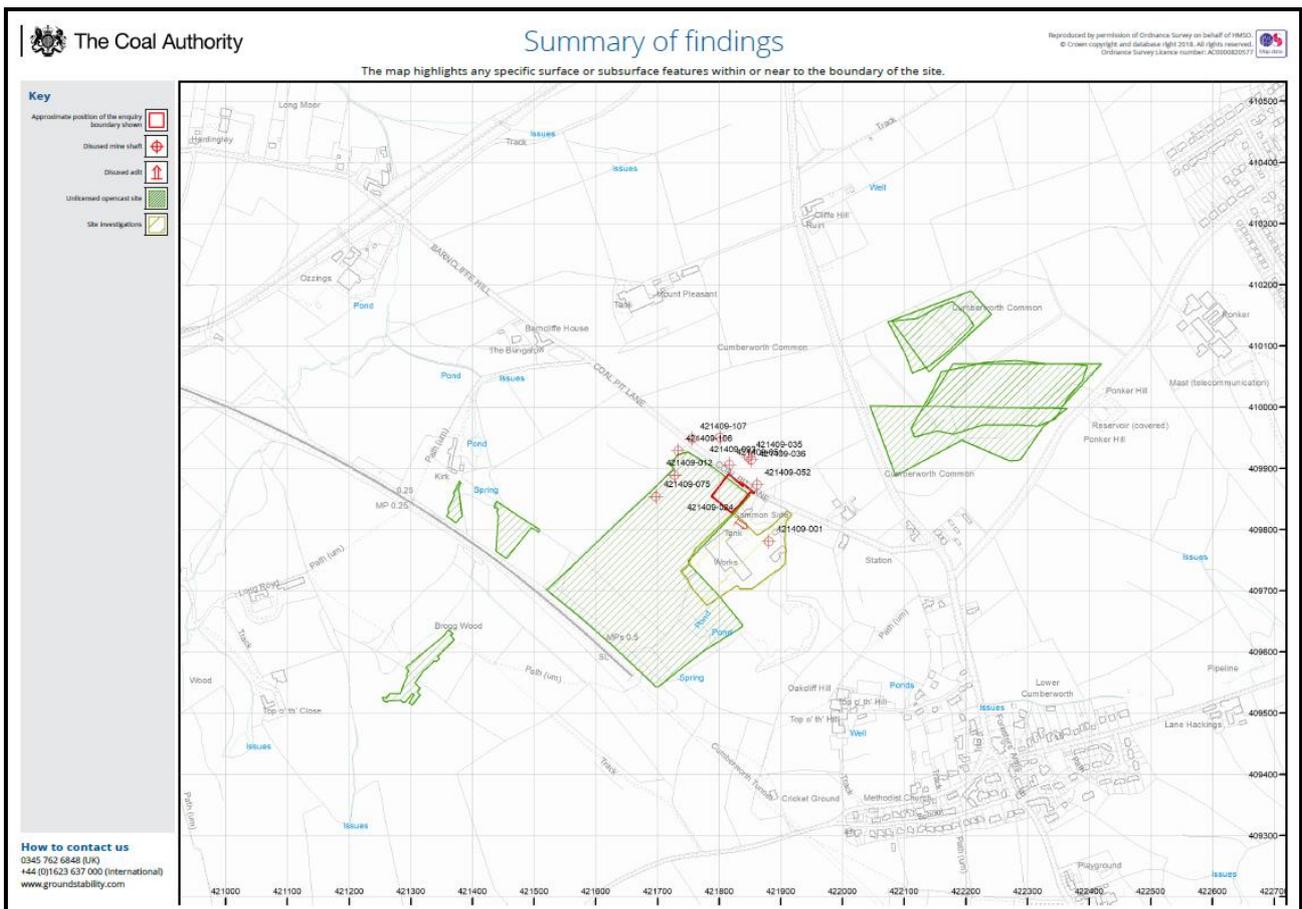


Figure 12 Mine Entry Plan

Mine Shafts 421409-051 and 421409-052 lie to the north of the site north of Coal Pit Lane. The locations of shafts are not precise, and it is recommended that a search is undertaken for the shafts, by the use of a mechanical excavator, along the north boundary of the site, to ensure the shafts do not lie on the site.

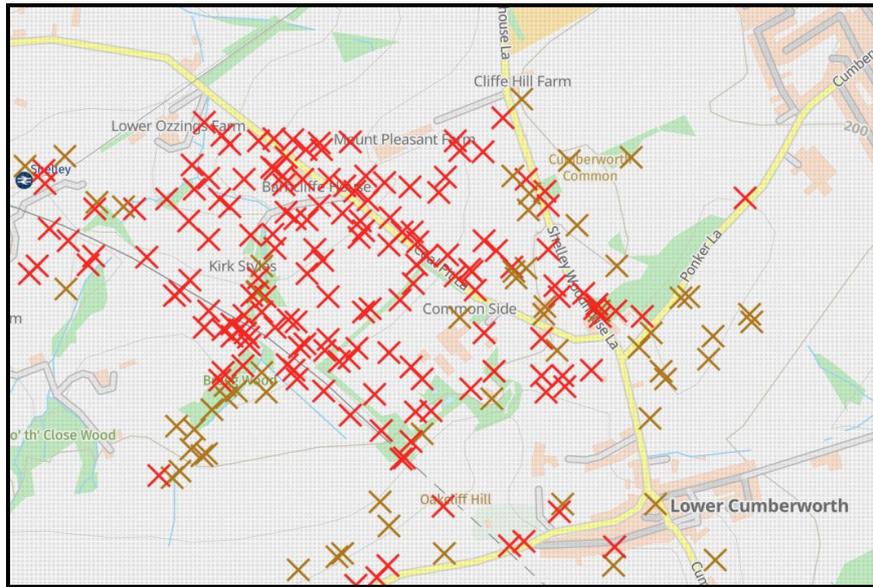


Figure 13 Mine Entries

The presence of a mine shaft reduces support for the ground laterally and if one collapsed in the future it could destabilise ground for a wide area around the shaft.

Shafts and adits are more likely to collapse as time passes as they were generally only infilled near the surface on a bridge of timber which eventually rots.

5.6 Mine Gas

The Coal Authority have no record of any mine gases in the site area. However, mine gas should be considered during any drilling, and monitoring should be undertaken in standpipes before construction on the site, in order to assess any mitigating measures for safe development.

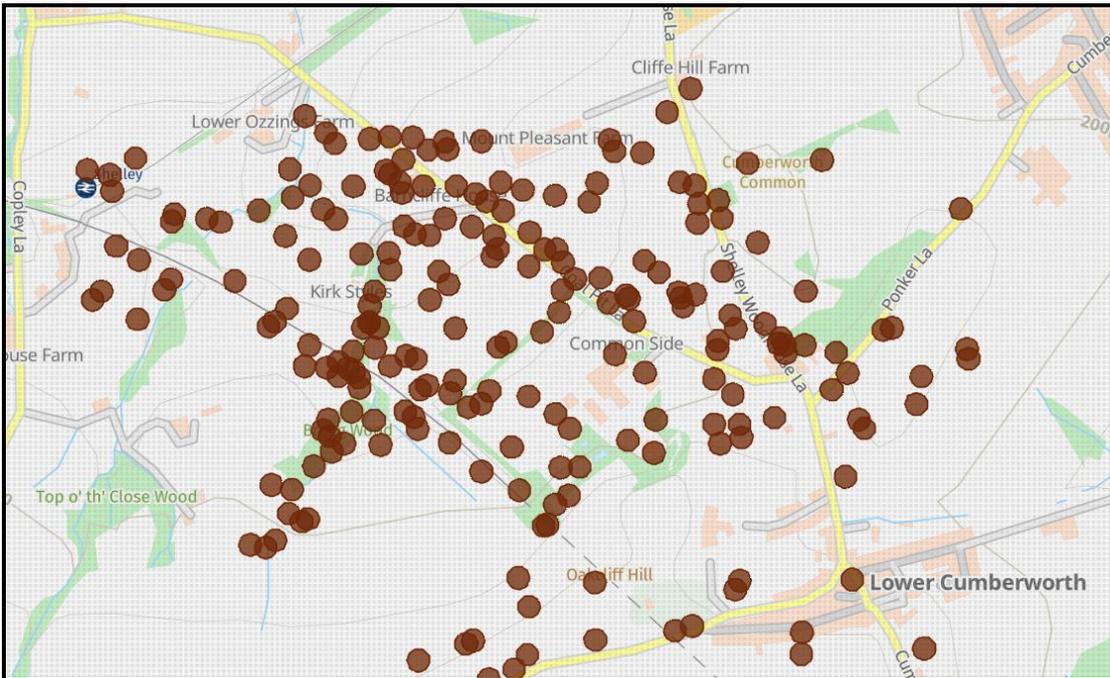


Figure 14 Mine Entry Potential Zone of Influence

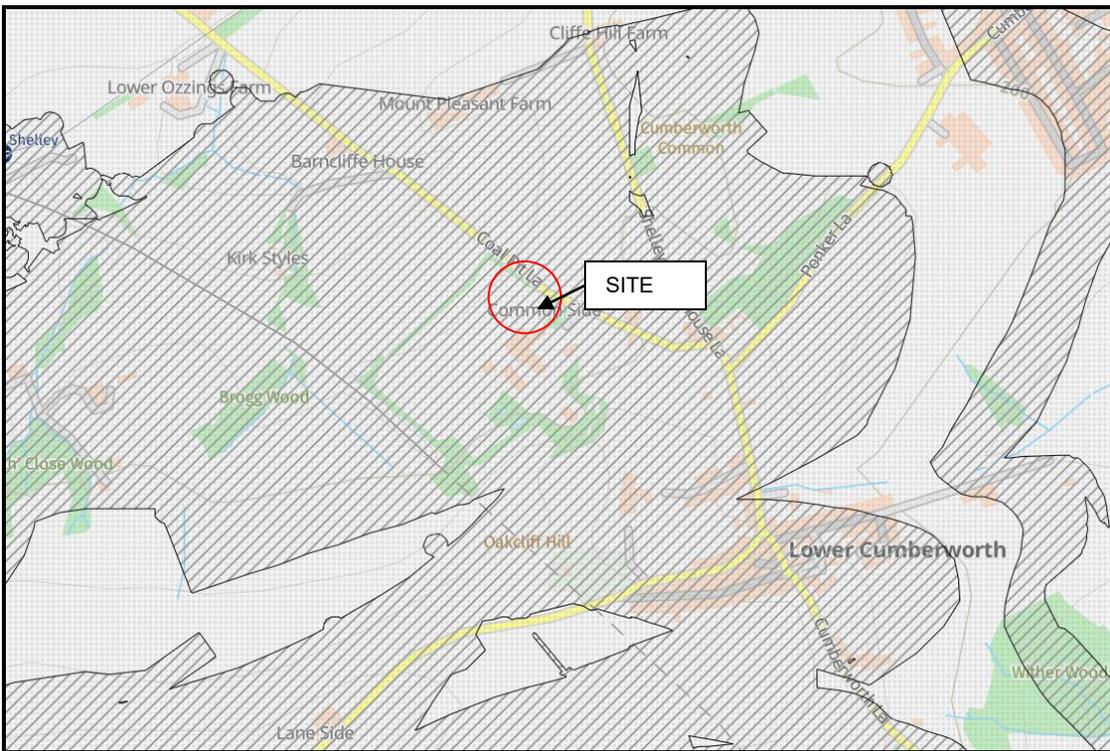


Figure 15 Development High Risk Area

6. RISK ASSESSMENT

The Coal Mining Risk Assessment undertaken has indicated that the site is underlain by the Lower Coal Measures comprising mudstones, sandstones and interbedded coal seams. Based on the BGS geological maps and records of boreholes drilled in the area, the site is expected to be underlain by mudstones with three shallow (<30m bgl) interbedded coal and fireclay seams in turn underlain by sandstones and deeper coal seams.

The shallowest mined coal seams are the Black Band Coal and the Whinmoor Coal. The underlying Cumberworth Thin Coal and Fireclay may also have been worked as it is recorded as mined from shafts in the area and opencast to the south west of Skelmanthorpe. It is possible that it may also have been mined beneath the site before mine abandonment records.

Where mined, the mined ground is likely to contain voids. If there is insufficient competent strata overlying the seams then voids may migrate by successive roof collapse and cause ground settlement and structural damage to overlying structures in the future. The **shallow coals and fireclay** therefore pose a **high risk** to the development.

If any of the deeper coal seams have been worked in the past, they are likely to have sufficient competent strata overlying any remaining voids to prevent migration to the ground surface and ground settlement. The risk of the site being detrimentally affected by workings in **coal at depth** (>30m bgl) depth is a **low risk**.

The risk that collapse of underground workings could cause subsidence at the ground surface above is normally empirically assessed using the T10 rule (developed by the National Coal Board in the 1970's and based on experience) whereby if a thickness of 10 times the worked seam thickness of competent cover (i.e. rock) is present over the worked seam then it is deemed sufficient to be able to choke the voided ground without giving rise to surface settlement.

Given the upper bound expected thickness of the coal seams and their projected depth of <10m, 11m and 20m to 30m bgl, it is considered a **high risk** that the proposed development could be affected by past underground shallow coal mining and mine shafts.

7. CONCLUSIONS AND RECOMMENDATIONS

The evidence gathered in this coal mining risk assessment report suggests that there is a risk to the proposed development from shallow coal mining and mine shafts causing ground subsidence in the future. It is thus recommended that the footprint of the proposed development is proof drilled to investigate the ground sequence down to a depth of 30m, It is recommended that the proposed investigation follows the following course:

- Initially, three boreholes taken down to prove at least 30m of competent strata bedrock to confirm the ground conditions and assess the presence and depth of any voids in the ground and the thickness of any competent cover above the voids. Monitoring for toxic gases in all boreholes.
- If underground workings are proven and there is insufficient competent cover then ground treatment is likely to be required, prior to proceeding with construction, to stabilise the ground, and further consideration will be required for foundation design.

- Trial Pits should extend along the northern site boundary to identify the presence of any mine shafts on the site. If the shaft lies within influencing distance from the development, then shaft stabilisation will be required or relocation of the development.
- Mining plans and a Coal Authority Permit should be obtained before drilling is designed.

Ashton Bennett would be able to design, procure and supervise the proposed drilling works together with any follow-on ground treatment work that may be necessary and provide an updated risk assessment report for issue to the regulatory authorities as required. Coal Authority Permits will be required to drill through the coal.

Due to the possible presence of worked ground at the site, it will be necessary to confirm a suitable founding stratum for the proposed structure. Any investigations for mining risk assessment purposes could be designed to provide the necessary information for foundation design.

8. GENERAL REMARKS

This report truly reflects the conditions found during the coal mining risk assessment study. Whilst the mining risk assessment was undertaken in a professional manner taking due regard of additional information which became available as a result of ongoing research, the results portrayed only pertain to the information attained and the ground and mining conditions expected. It is possible that other undetected information, undetected ground conditions and undetected mining conditions may exist. The mining risk assessment was only undertaken within the site boundaries and should not be used for interpretation purposes elsewhere. The conclusions are only a brief summary of the report, and it is recommended that the report is read in full to ensure that all recommendations have been understood.

This report is provided for the sole use of the client (Mr R Thornber) and no responsibility will be accepted by this Consultancy to any other parties who rely on this report entirely at their own risk. The copyright for this report is held by Ashton Bennett Consultancy and no reproduction of any part or all of the report can be undertaken or any other reproduction undertaken without the written approval of this Consultancy.

Frances A Bennett
BSc, CGeol, FGS, FIMMM, C.WEM, MCIWEM, MIEEnvSci.

Appendix A





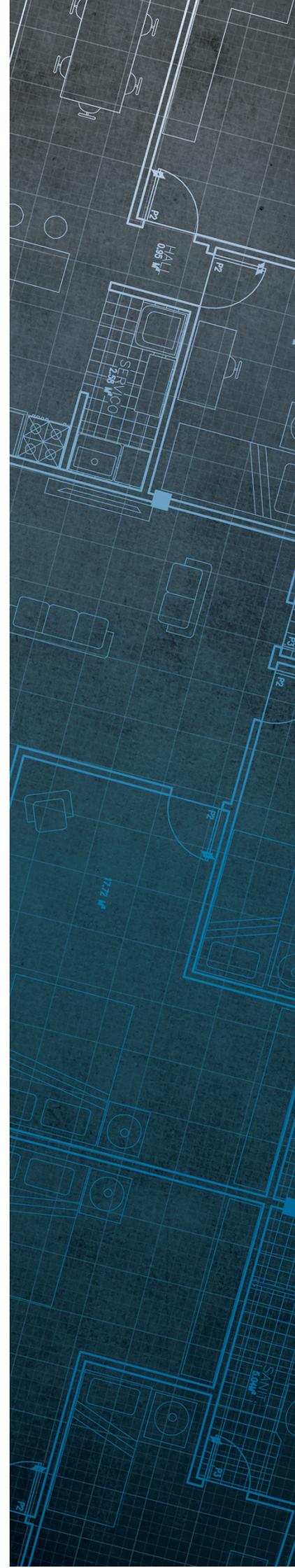
The Coal
Authority

Consultants Coal Mining Report

Proposed Dwelling Coal Pit Lane

Date of enquiry: 30 May 2025
Date enquiry received: 30 May 2025
Issue date: 2 June 2025

Our reference: 71009822684001
Your reference:



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

ASHTON BENNETT CONSULTANCY

Enquiry address

Proposed Dwelling Coal Pit Lane

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

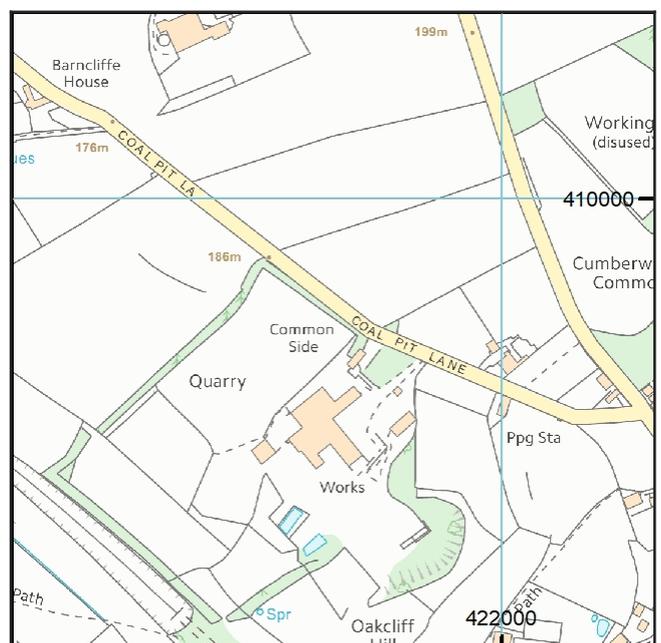
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.

Ordnance Survey Licence number: AC0000820577

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	WHINMOOR	Coal	6NC4	12	Beneath Property	5.0	North	183	1862

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	421409-001	421881 409781	Treatment details unknown.*	Coal	
Shaft	421409-012	421728 409889	Treatment details unknown.*	Coal	
Adit	421409-024	421828 409814	Treatment details unknown.*	Coal	
Shaft	421409-035	421848 409919	Treatment details unknown.*	Coal	
Shaft	421409-036	421853 409914	Treatment details unknown.*	Coal	
Shaft	421409-051	421817 409906	Treatment details unknown.*	Coal	
Shaft	421409-052	421862 409873	Treatment details unknown.*	Coal	
Shaft	421409-075	421698 409854	Treatment details unknown.*	Coal	
Shaft	421409-093	421802 409951	Treatment details unknown.*	Coal	
Shaft	421409-106	421734 409929	Treatment details unknown.*	Coal	
Shaft	421409-107	421757 409949	Treatment details unknown.*	Coal	

*For your information, before the coal industry was nationalised in 1947, there was no requirement for a mine operator to record mine entry treatment details when a mine was abandoned. Therefore, it is not unusual for us to have no treatment details for many of the 176,000 recorded mine entries on our database. Despite this lack of information, please be assured that the fact we have no treatment recorded does not necessarily mean that the mine entries were left untreated when abandoned.

Abandoned mine plan catalogue numbers

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

BE25	SY218	BE31
BE27	SY234	SY233
16583	144	R2

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

Please refer to the "Summary of findings" map (on separate sheet) for details of any opencast areas 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

Distance to site investigation (m)	Direction
2.0	South-East

See Section 4 for further information.

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.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

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.

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**.

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.

