

19.11.2025



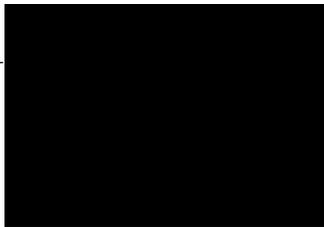
LAND ADJACENT TO 82A LOWER BAGTHORPE,  
BAGTHORPE

COAL MINING RISK ASSESSMENT  
FOR  
HEATHER HALL

**Project Ref:**  
EAL.281.25

**Date:**  
November 2025

**Prepared for:**  
Heather Hall  
81 Lower Bagthorpe  
Bagthorpe  
Nottingham  
NG16 5HF

Prepared and Authorised by:		Phil Devitt MRICS <i>Director</i>
Date:	November 2025	
Version:	1.0	



## CONTENTS

1.0	INTRODUCTION.....	3
2.0	SITE LOCATION & DESCRIPTION .....	3
3.0	SOURCES OF INFORMATION .....	3
4.0	FACTUAL INFORMATION .....	4
5.0	INTERPRETATION.....	6
6.0	RISK ASSESSMENT .....	7
7.0	MITIGATION STRATEGY .....	7
8.0	CONCLUSION .....	8

## APPENDICES

Appendix A  
Appendix B

Site Plans  
Coal Authority Consultants Coal Mining Report

## 1.0 INTRODUCTION

This Desk Based Coal Mining Risk Assessment (CMRA) relates to a potential re-development at the site known as *land adjacent to 82a Lower Bagthorpe, Bagthorpe* – see **Figure 1** in **Appendix A**.

The CMRA has been prepared to provide information on the following:

- Present a desk-based review of all available information on the coal mining issues that are relevant to the application site.
- Use that information to identify and assess the risks to the proposed development from coal mining legacy, including the cumulative impact of issues.
- Set out appropriate mitigation measures to address the coal mining legacy issues affecting the site, including any necessary remedial works and/or demonstrate how coal mining issues have influenced the proposed development.
- Demonstrate to the Local Planning Authority that the application site is, or can be made, safe and stable to meet the requirements of national planning policy with regard to development on unstable land.

Erda Associates Ltd., were requested by Heather Hall (hereafter referred to as 'The Client') to undertake a CMRA for the site in order to understand its potential for redevelopment. It is understood that the client proposes to redevelop the site with a single residential dwelling with associated private gardens and driveway. A proposed development plan is included in **Appendix A**.

## 2.0 SITE LOCATION AND DESCRIPTION

The site is located approximately 0.76km to the east of Bagthorpe Village centre, and situated within a semi-rural/semi-residential area. The site is roughly centred at national grid reference SK 4710 5161. The site presently comprises an rectangular shaped parcel of land that is part of a larger private residential garden associated with an adjacent dwelling (82a). Plans showing the site location and site boundary are included in **Appendix A**.

## 3.0 SOURCES OF INFORMATION

Information from the following sources has been used to undertake this CMRA;

- Coal Authority Interactive Mapping Website;
- Coal Authority Consultants Coal Mining Report (Ref: 51003535801001, November 2025) – **Appendix B**;
- BGS Bedrock and Superficial Map 1:10,000 scale Sheet SK 45 SE;
- BGS Digital Geological Mapping.

## 4.0 FACTUAL INFORMATION

### 4.1 Coal Authority Interactive Mapping Website

Reference to the Coal Authority Interactive Mapping Web Site (accessed 4<sup>th</sup> November 2025) shows:

- The site is located within an area designated “High Development Risk”, and therefore requires a CMRA to be formed.
- Historic underground extraction is recorded directly beneath the site.
- The site is **not** recorded to be within an area at risk from ‘probable unrecorded shallow coal mine workings’.
- The site is **not** recorded to be within an area of past or current surface extraction.
- No coal outcrops are recorded on site. However, a coal outcrop is recorded immediately to the west of the site.
- No mine entries are recorded to be present on site or in its immediate vicinity.

### 4.2 Coal Authority Consultants Coal Mining Report

The Coal Authority Consultants Coal Mining Report obtained for the site is contained in **Appendix B**. The salient findings are detailed below:

**Past Underground Coal Mining** – Past underground mining is recorded in three coal seams directly beneath/within influencing distance of the site. The shallowest recorded workings were targeted at the Top Hard seam situated some 84.00m beneath the site. The Top Hard seam was last worked in 1870 with an extraction thickness of 1.40m.

**Probable Unrecorded Shallow Workings** – The site is **not** within an area where the coal authority believes that shallow workings (less than 30.00m depth) may underlie the site.

**Spine Roadways at Shallow Depth** – There are no recorded spine roadways either within, or within 10 metres of the site boundary at shallow depth.

**Mine Entries** – There are no recorded mine entries located within 100m of the site.

**Abandoned Mine Catalogue** – There are at least nine abandoned mine catalogue numbers that are recorded to intersect with some or all of the enquiry boundary. However, the Coal Authority states that this does not infer that the workings shown on the abandonment plans will be relevant to the subject site. These most likely relate to the recorded underground mine workings beneath/within influencing distance of the site.

**Outcrops** – The Brinsley Thin seam is recorded to outcrop approximately 6.00m to the south-west of the site. The Coal Authority have indicated that this seam is ‘workable’.

**Geological Faults, Fissures and Breaklines** – No faults, fissures or breaklines are recorded beneath the property.

**Opencast Extraction** – The site is not recorded to be within a former opencast extraction. However, opencast extraction is recorded in the wider area.

**Coal Authority Managed Tips** – There are no Coal Authority Managed Tips within 500m of the site boundary.

**Site Investigations and Remediated Sites** – There are no records relating to previously investigated or remediated sites within 50m of the site boundary.

**Subsidence** – There is a subsidence claim located approximately 40.00m to the south-east.

No requests have been made to execute preventative works under Section 33 of the Coal Mining Subsidence Act 1991.

**Mine Gas** – There are no mine gas emission sites recorded within 500m of the site boundary.

**Mine Water Treatment Schemes** – There are no mine water treatment schemes within 500m of the site boundary.

**Future** – The site is not within a geographical area, for which a licence to extract coal by underground methods is awaiting determination or has been granted by the CA.

The site is not within an area where notice under Section 46 has been given, stating that the land is at risk of subsidence.

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

#### **4.3 BGS 1:10,000 Scale Sheet SK 45 SE and Digital Online Mapping**

Geological information obtained from the British Geological Survey indicates that:

- Made Ground and superficial deposits are not recorded to underlie the site.
- The bedrock geology underlying the site comprises the Pennine Middle Coal Measures Formation, which is of Carboniferous age.
- Based on the information contained in the Coal Authority Consultants Report, the solid geology is estimated to dip approximately 4° to the south-east.
- The Brinsley Thin seam is recorded to outcrop approximately 28.00m to the north-west of the site. The Brinsley Thin seam is recorded to be up to 0.61m in thickness.
- The High Hazels seam is recorded to outcrop approximately 105.00m to the north-west of the site. The High Hazels seam is recorded to be up to 0.46m in thickness.
- Based on the BGS generalised vertical scale, no other significant coal seams are anticipated to underlie the site at shallow depth (<30.00mbgl).

## 5.0 INTERPRETATION

Based on all of the above information, the following conclusions have been formed:

- The Brinsley Thin seam is estimated to underlie the site between 2.00m and 3.50mbgl.
- The High Hazels seam is anticipated to underlie the site between 7.50m and 9.00mbgl.
- There are no other significant seams in the stratigraphic sequence that are anticipated to underlie the site at less than 30.00mbgl.

Based on the above, there may be insufficient rock cover above the Brinsley Thin and High Hazels seams to ensure future surface stability of the site should these have been historically extracted beneath the site. However, it is noted that both of these seams are recorded to be relatively thin and do not appear to have been extracted in the wider area. Furthermore, due to the estimated shallow depth, it is considered most likely that these seams would have been extracted by opencast methods, if at all. It is noted that the Coal Authority Consultants Report also confirms that they do not believe the site is in an area where shallow unrecorded mining may have taken place. As such the risk of unrecorded underground mine workings is considered to be very low to low.

The recorded mine workings are considered to be at a sufficient depth to not pose a risk of future surface instability.

There are no recorded mine entries recorded in close proximity to the site. However, this does not preclude a low risk of unrecorded bell pits/mine entries being present.

No mine gas emission sites are recorded within 500m. In addition, shallow underground mine workings are not anticipated beneath the site. As such the risk of mine gas emissions is considered to be very low, at this stage.

The Brinsley Thin seam is anticipated to be present at typical foundation depths. The Brinsley Thin is not recorded by the Coal Authority to have a history of spontaneous combustion. However, it is recommended that a low risk is assumed and a precautionary approach is adopted.

## 6.0 RISK ASSESSMENT

The table below summarises the potential risks associated with mining legacy for the proposed development site, identified from the sources identified above.

Coal Mining Issue	Yes / No	Risk Assessment
Underground mining (recorded at shallow depths)	No	Very low risk.
Underground mining (unrecorded probable at shallow depths)	No	Very low to low risk – underground mining not anticipated.
Recorded Mine entries (shafts and adits)	No	Very low risk.
Unrecorded Mine entries (shafts and adits)	Yes	Low risk – may be reduced further by following the recommendations in Section 7.0.
Mine gas emissions	No	Very low risk.
Surface mining (opencast workings)	Yes	Low risk of potential unrecorded opportunistic extraction - may be reduced further by following the recommendations in Section 7.0.
Spontaneous Combustion in shallow seams	Yes	Low risk – may be reduced further by following the recommendations in Section 7.0.

## 7.0 MITIGATION STRATEGY

This assessment has not identified a significant risk of instability from unrecorded or recorded underground mining beneath the site. As such further investigation in this regard is not considered to be required.

However, due to the anticipated shallow depths of the Brinsley Thin and High Hazels seams beneath the site,, there may be a low risk of potential unrecorded opportunistic opencast extraction or bell pits on the site. At this stage, it is recommended that an assessment of this risk can be made during routine ground investigation/groundworks required for the future development. It is recommended that trial pits are undertaken in order to confirm that deep made ground associated with unrecorded opencast extraction does not exist beneath the site.

In addition, it is recommended that a watching brief for anomalous features that may be indicative of unrecorded mine entries or bell pits is undertaken during the required site strip and groundworks. Should any suspected mine entries be encountered, further assessment will be required.

A precautionary approach is recommended with regard to the potential risk of spontaneous combustion within the Brinsley Thin seam. At this stage it is recommended that a minimum 0.50m clay/rock cover is maintained between the base of foundations and top of the coal seam. Where this is not possible, foundations should be deepened through the coal seam to bear on the underlying strata.

## **8.0 CONCLUSION**

This risk assessment has shown that there is a low risk of opportunistic opencast extraction and mine entries at the site. It is recommended that a trial pit investigation is undertaken in order to further assess the risk of potential made ground associated with this potential activity.

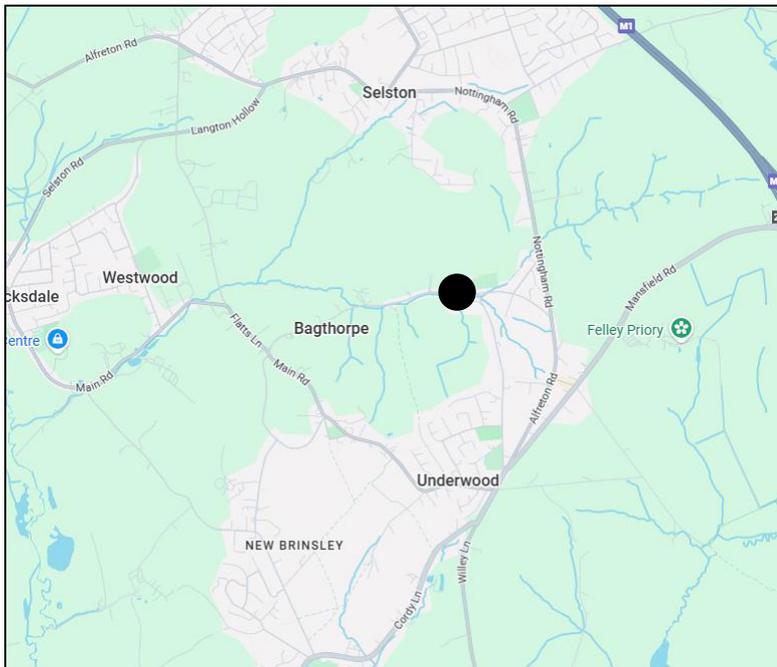
In addition, it is recommended that a watching brief for anomalous features that may be indicative of unrecorded mine entries/bell pits is undertaken during the required site strip and groundworks as a precaution. In the unlikely event that a suspected mine entry is encountered, further assessment will be required.

A precautionary approach with regard to the potential risk of spontaneous combustion within the Brinsley Thin seam is recommended.

Providing the above recommendations are adhered to, it is considered that the site can potentially be suitable for redevelopment. The above recommendations with regard further investigation can be secured by the imposition of an appropriate condition when full planning permission is granted for the subject property. The above recommendations should not supersede the granting of permission in principle or similar.

# Appendix A

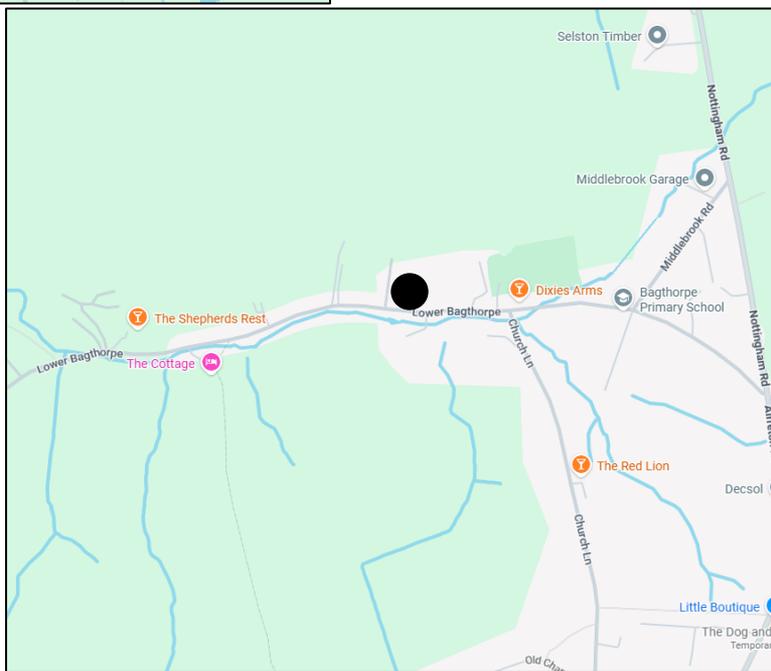




KEY:

● Approximate Site Location

DO NOT SCALE



TITLE:

Site Location Plan

PROJECT:

Land Adjacent 82a Lower Bagthorpe

PROJECT No:

EAL.281.25

DATE:

11/2025

SCALE :

NTS

DRAWN :

PD

DWG No:

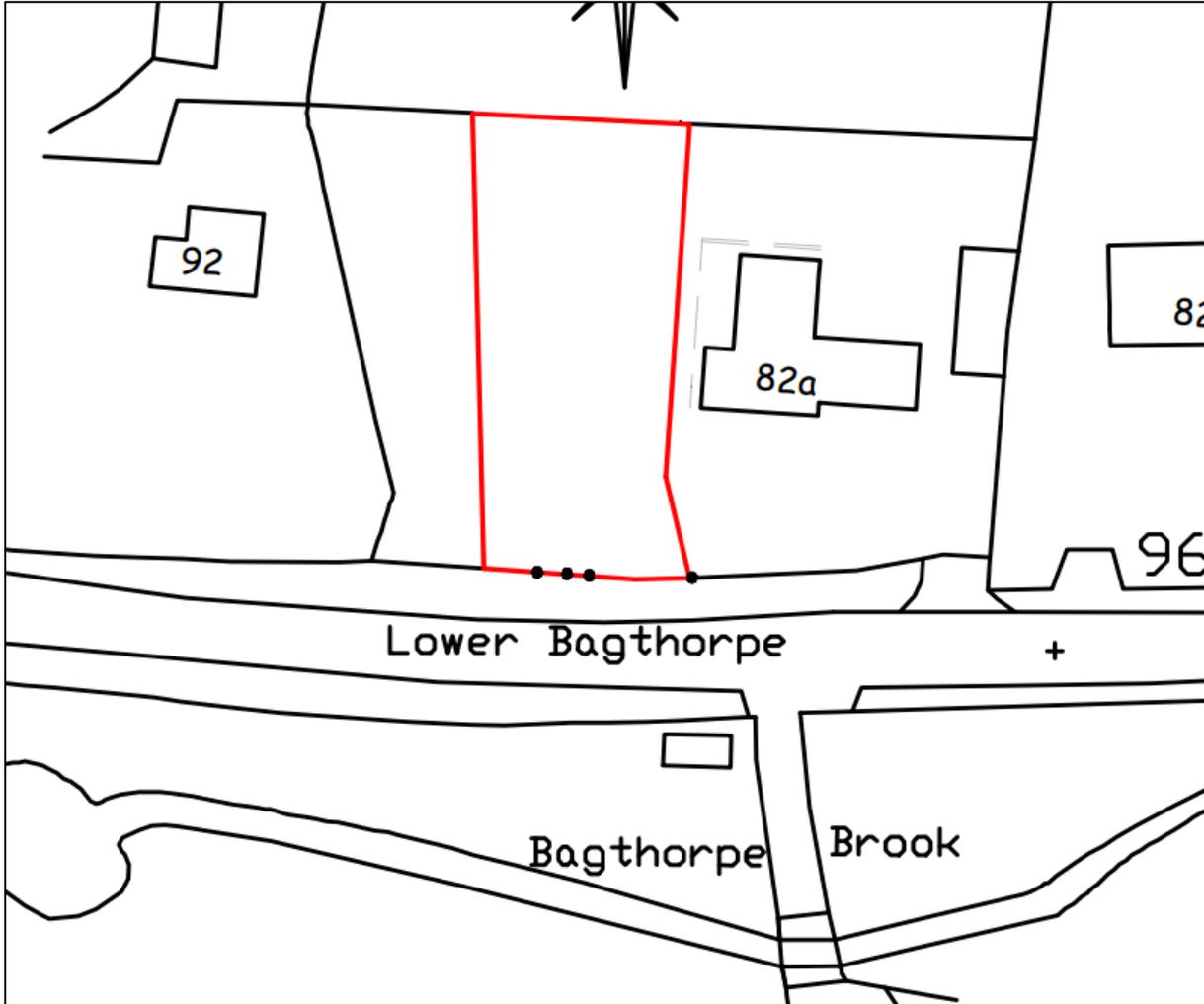
Figure 1



KEY:



Site Boundary



DO NOT SCALE



TITLE:

Site Layout

PROJECT:

Land Adjacent 82a Lower Bagthorpe

PROJECT No:

EAL.281.25

DATE:

11/2025

SCALE :

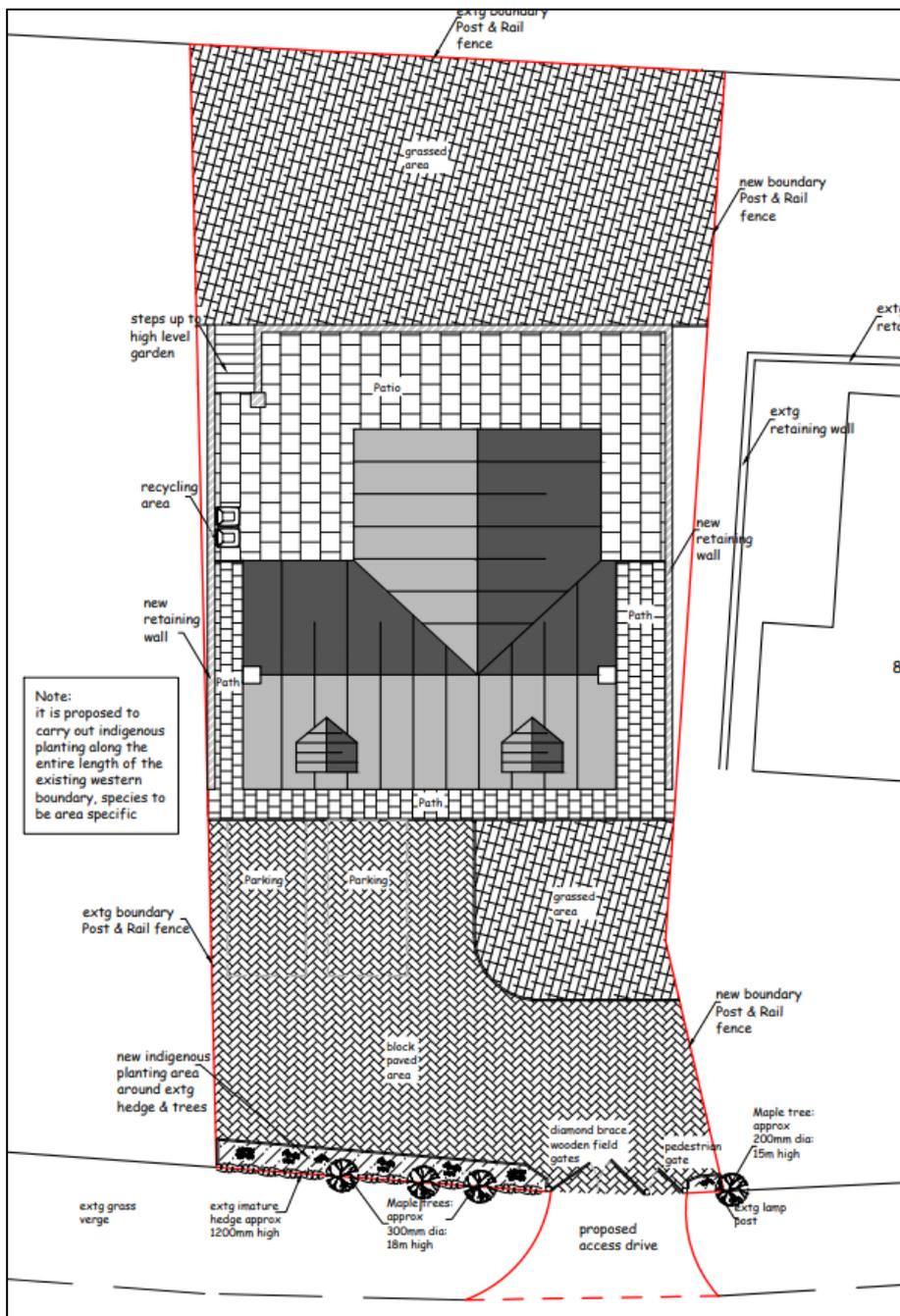
NTS

DRAWN :

PD

DWG No:

Figure 2



KEY:

DO NOT SCALE



TITLE: <b>Development Proposal</b>		
PROJECT: <b>Land Adjacent 82a Lower Bagthorpe</b>		
PROJECT No: <b>EAL.281.25</b>	DATE: <b>11/2025</b>	
SCALE: <b>NTS</b>	DRAWN: <b>PD</b>	DWG No: <b>Figure 3</b>

## Appendix B





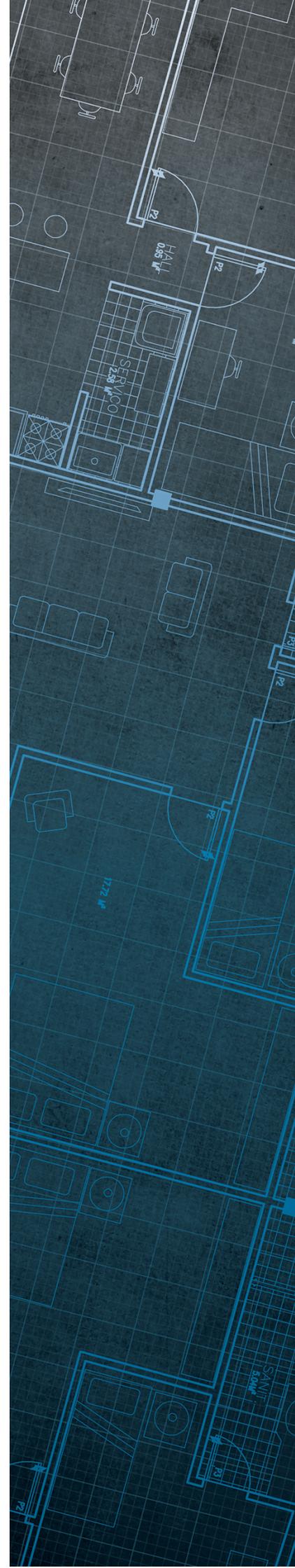
The Coal  
Authority

# Consultants Coal Mining Report

Land Adjacent To  
82A Lower Bagthorpe  
Bagthorpe  
Nottinghamshire  
NG16 5HF

Date of enquiry: 4 November 2025  
Date enquiry received: 4 November 2025  
Issue date: 4 November 2025

Our reference: 51003535801001  
Your reference: EAL.281.25



# 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

Philip Devitt

## Enquiry address

Land Adjacent To  
82A Lower Bagthorpe  
Bagthorpe  
Nottinghamshire  
NG16 5HF

## How to contact us

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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
SELSTON DISTRICT	TOP HARD	Coal	4OJD	84	Beneath Property	4.3	South-East	140	1870
SELSTON	DEEP SOFT	Coal	4OJN	237	Beneath Property	5.5	South-East	110	1920
SELSTON	DEEP SOFT	Coal	4OJP	250	North-West	7.1	South-East	110	1921
PYE HILL	BLACKSHAL E	Coal	4OJF	344	North-East	4.6	South-East	140	1969

## Probable unrecorded shallow workings

None.

## 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:

11218	17475	500
EM318	EM701	PO0
EM1236	EM166	OC196

For assistance in identifying the specific abandoned mine plans relevant to your requirements, **please contact us at [InformationManagers@MiningRemediation.gov.uk](mailto:InformationManagers@MiningRemediation.gov.uk)**.

## Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
BRINSLEY THIN	Coal	Yes	5.7	South-West	140

### **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

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

There is a claim within 50 metres of the property boundary that does not match the property address. This is shown on the enquiry boundary plot.

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.

If further subsidence damage claims information is required, please visit [www.miningremediation.co.uk](http://www.miningremediation.co.uk).

See Section 4 for further information.

### 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.

### Coal mining subsidence

The site is within an area of previous interest. It is close to where the Coal Authority or licensed mine operator has investigated and where necessary remediated issues relating to coal mining subsidence.

The site requires further investigation and may influence your risk assessment. We recommend that you order the appropriate **Coal Authority Subsidence Claims Report**, which will include more information about the hazard.

**For further information on specific site or ground investigations in relation to any issues raised in Section 4, please email us at [reports@miningremediation.gov.uk](mailto:reports@miningremediation.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 **email us at [reports@miningremediation.gov.uk](mailto:reports@miningremediation.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.

