

COAL MINING RISK ASSESSMENT.
Springbank Luxury Boarding,
Birch Hill Lane, Wardle, Rochdale.

Client:	Mr Bennett.
Date:	August 2018.
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1. INTRODUCTION.

Springbank Luxury Boarding is an existing business specialising in boarding kennels & cattery. The Site comprises the existing kennels & cattery building to the NW corner and separate pigeon loft to the E side.

The proposal is for a detached residential dwelling to the approximately in the location of the current pigeon loft, which will be demolished.

The proposal is currently part of a Town & Country planning application, ref No. 18/00674/FUL.

The Local Planning Authority had indicated that a Coal Mining Risk Assessment is required to support the planning application due to the Site being part of 'Development High Risk Area'.

TJ Booth Associates have been employed by Mr Bennett (Owner/Developer) to assess the potential mining legacy to proposed development, and provide recommendations for remedial measures should they be required.

2. DATA SEARCH.

2.1. Historic Maps

Historic mapping data (digital, online & paper format) was reviewed at nominally 1:1250, 1:2500 and 1:10000 scales of the site and the surrounding area.

The closest coal mining feature was a coal shaft noted approximately 35-40 WSW of the Site boundary c1850s. By the c1890s the shaft was no longer shown. No further coal mining features were noted in the 1890s or later maps, and most of the shafts noted on these or later maps were indicated as old.

2.2. BGS Geological Map Review.

The local geology was accessed via the BGS digital online mapping data service, and paper copies of Manchester Sheet 85, 1:50000 Series (solid & superficial) & local Lancashire Sheet LXXXI SW, 1:2500 Series maps were obtained, refer to appendix for Geological Maps, and Google Earth/BGS geology overlay.

GEOLOGY DATA SUMMARY	
Bedrock Geology:	Site is underlain by Carboniferous Coal Measures. Strata dips approx. 8deg SSW.
Superficial Geology:	The N part of the Site is underlain by Polymict deposits due to hillwash/solifluction. The S part of the Site is not covered by glacials.

Coal Seams/Faults.	The Upper Foot Mine coal seam underlies the NW part of the Site in the approximate position of the proposed dwelling. The Inch Mine coal seam underlies the Site striking approx 100deg through the centre of the Site. The Upper Mountain Mine coal seam striking approx 100deg cuts the SW corner of Site.
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2.3. BGS Borehole Data.

No borehole records within relevant distance of the site.

2.4. Coal Authority.

A Coal Authority Coal Mining Consultants Report was obtained for the Site. Additional information was obtained from the Coal Authority interactive digital online mapping service. Refer to appendix for report; data tabulated below.

COAL AUTHORITY DATA SUMMARY	
Mine Shafts, Pits, Adits/Entries:	The report indicated that a shaft was noted approx 35m WSW. An adit was also noted approximately 5-10m S of the SW corner of the Site. A shaft was also noted approx 45m NE of the Site.
Past Recorded Underground Mining.	The report indicated the Site is not underlain by past recorded mining.
Unrecorded Probable/Potential Shallow Underground Workings:	The report indicated there is the potential for shallow unrecorded workings beneath the Site.
Outcrops:	The report indicated that the Upper Foot, Inch & Upper Mountain coal seams all underlie the Site at shallow depth and are workable.
Past/Present Surface Mining:	None noted locally.
Mining Geology and Subsidence:	No issues noted locally.
Hazards and Mine Gas:	No issues noted.

2.5. Coal Authority Abandonment Plan Data.

Abandonment data not required – no recorded workings beneath the Site.

2.6. Local Planning Authority Data.

No relevant dated found.

3. IDENTIFICATION & ASSESSMENT OF SITE SPECIFIC RISKS.

RISK SUMMARY	
Recorded Workings:	NO RISK – The coal authority has no records of workings beneath the Site.
Probable/potential Shallow Workings:	MOD/HIGH RISK – There are shallow seams beneath the Site but only one of these, (the Upper Foot coal seam), underlies the development building at shallow depth. In the wider area the Upper Foot coal seam is known to be around a foot in thickness, and is indicated in the CA Consultants Report as a workable seam. With no evidence against the working of the seam, it can only be assumed that because of the shallow depth involved, and the relatively close proximity of shafts and adits; that the seam could have been worked historically, and voids potentially remain below the proposed building footprint.
Coal Pits/Shafts/Adits:	NO RISK – Superficial cover is thought to be minimal locally, and the proposed dwelling is approx 60m distant to the closest shaft so is out of any potential zone of influence.
Mine Gas:	LOW RISK – No evidence of workings.

4. MITIGATION STRATEGY PROPOSED.

The Proposed Development is underlain at shallow depth by the Upper Foot coal seam which may have been worked historically.

The seam is estimated to sub-crop beneath the proposed building at relatively shallow depth, although the exact glacial cover thickness is not known.

A massive sandstone unit is understood to form the base to the seam and would therefore provide a barrier to roof spalling of lower seams (should they have been worked), and thus it is unlikely that there is any further risk coal seams lower than the Upper Foot.

However, to prove the above, it is recommended that 2 rotary drilled boreholes will be required to characterise the geology below the Site. The boreholes should be drilled to a depth to identify and determine whether or not the Upper Foot coal seam has been worked. In addition, one of the boreholes should also be drilled to prove the depth and thickness of the massive sandstone unit below.

Should no sandstone unit be noted below then the boreholes may need to be extended to the generally accepted 30m depth to characterise lower seams.

5. CONCLUSIONS & RECOMMENDATIONS.

This report should be included with the planning application for development, and issued to the Coal Authority Planning Liaison Dept. as the statutory consultee for approval.

Should the Coal Authority approve the recommendations in principal; the amount, depth and layout of rotary boreholes will need to be formally agreed with the Coal Authority Permitting Department prior to undertaking. In addition, a 'Permit To Disturb Coal Workings' licence will also need to be obtained.

It is recommended that the proposed borehole/site investigation works can be conditioned on a planning approval for the Site, should it be granted. Foundation design can be tailored and engineered to suit the findings of the site investigations, and ensure safe development in line with the National Planning Policy Guidance and B.Reg's requirements.

Signed.....

D.S. Slattery BSc (Hons).

T J Booth Associates.

Authorised.....

T J Booth BSc (Hons), C. Eng. C. Env. MICE.

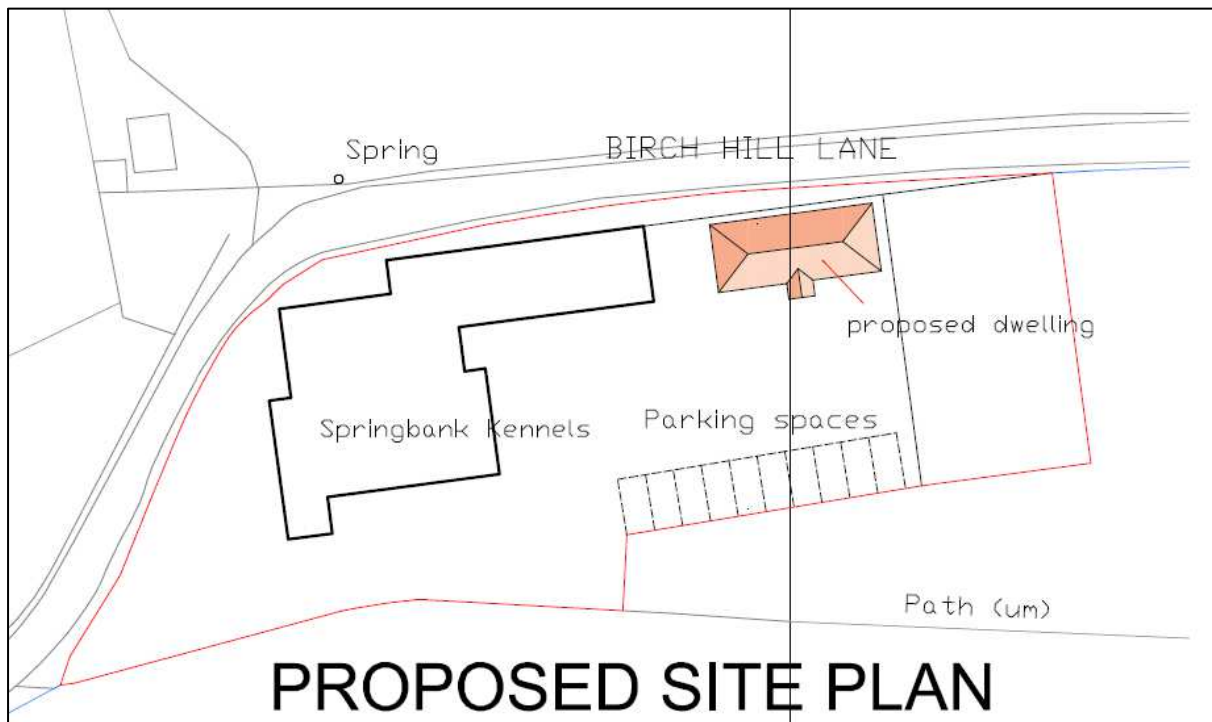
T J Booth Associates.

6. REFERENCES.

- Coal Authority.
- (CIRIA) Special Publication 32 "Construction over Abandoned Mine Workings".
- British Geological Survey.
- BSI. 2013. BS 10175:2011+A1:2013. Investigation of Potentially Contaminated Sites – Code of Practice.
- Environment Agency. 2005. Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination. R&D Technical Report P5-066/TR
- CL:AIRE. 2012. Research Bulletin-RB17-A Pragmatic Approach to Ground Gas Risk Assessment.
- CIRIA. Report C665.
- NHBC. 2007. Guidance on Evaluation of Development Proposals on Sites Where Methane and Carbon Dioxide are Present.
- CIRIA. Report 130.
- BRE 414. 2001. Protective Measures for Housing on Gas Contaminated Land.

7. APPENDIX.

7.1. Proposed Site Plan



7.2. Historic Map c1850.

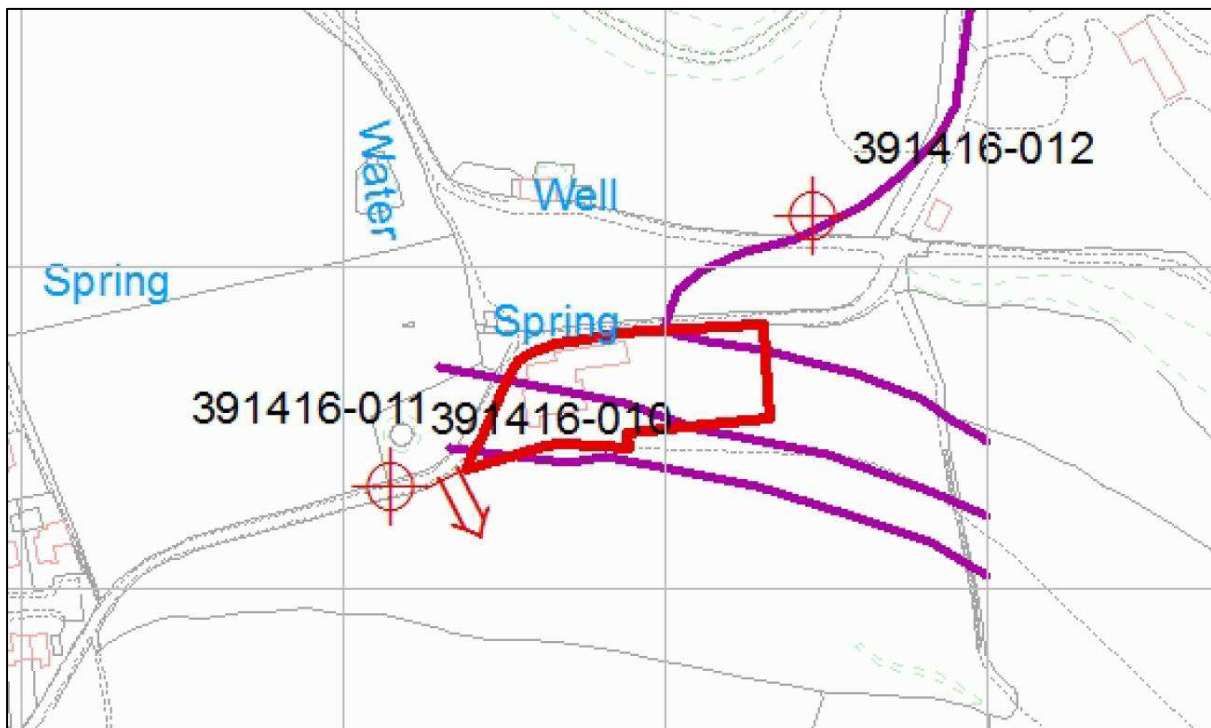


7.3. Geological Maps

7.3.1. Solid & Superficial Geology



7.4. Coal Authority Consultants Report Plan



7.5. Coal Authority Consultants Report

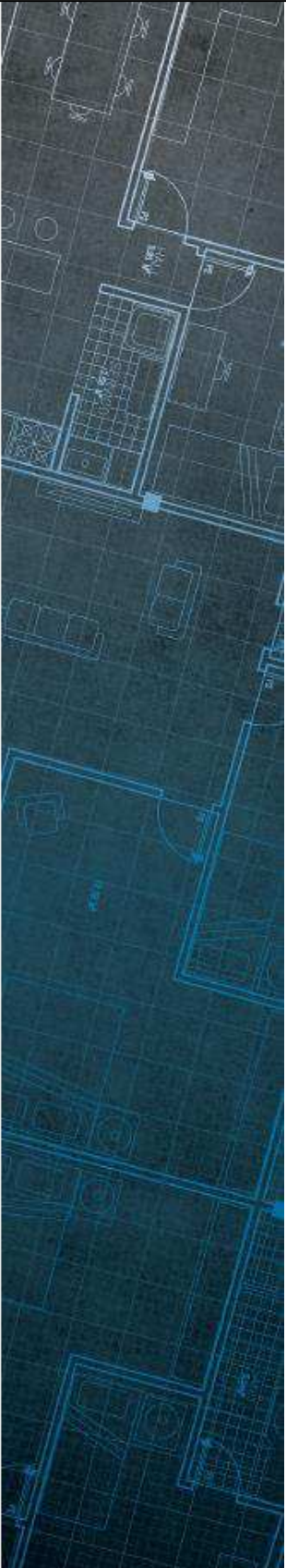


The Coal
Authority

Consultants Coal Mining Report

Springbank Kennels
Birch Hill Lane
Wardle
Rochdale
OL12 9LZ

Date of enquiry:	13 August 2018
Date enquiry received:	13 August 2018
Issue date:	13 August 2018
Our reference:	51001916166001
Your reference:	tjba-springbank-CA-130818



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.

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TJ Booth Associates

Enquiry address

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Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

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	391416-010	391815 416732		Coal	
Adit	391416-011	391834 416735		Coal	
Shaft	391416-012	391946 416816		Coal	

Abandoned mine plan catalogue numbers

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

NW117	4312	2322
4217	6636	0
16820	PO0	

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
INCH	Coal	Yes	Within	N/A	100
UPPER FOOT	Coal	Yes	Within	N/A	126
UPPER MOUNTAIN	Coal	Yes	Within	N/A	97

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 31st 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

Based on the responses in this report, no further information has been highlighted.

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.

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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VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	13 August 2018
Issued to	T J B O O T H A S S O C I A T E S 20A EAST GATE STREET ROCHDALE LANCASHIRE OL16 1DH
Property search for	SPRINGBANK KENNELS BIRCH HILL LANE WARDLE ROCHDALE OL12 9LZ
Reference number	51001916166001
Date of issue	13 August 2018
Cost	£106.79
VAT @ 20%	£21.36
Total received	£128.15
VAT registration	598 5850 68