



GRM Development Solutions Ltd
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Web: www.grm-uk.com
Ref: GRM/P8897/CMRA1.RevA
Date: 12th August 2019

Mr Michael Jones and Mrs Angela Tamblyn
6 Millfield Street
Woodville
Swadlincote
Derbyshire
DE11 7DB

Coal Mining Risk Assessment for 6 Millfield Street, Woodville

We have, as requested, carried out a Coal Mining Risk Assessment in accordance with guidance provided by the Coal Authority, and as required by the Local Authority as part of the planning process. The result of our assessment is detailed below:

1.0 Introduction

We have been informed that you propose to develop the site with a single detached dwelling along with associated infrastructure and soft landscaping. A Proposed Development Plan is presented in Appendix A.

A previous Coal Mining Risk Assessment has been produced for the site by Geoinvestigate (Title: 6 Millfield Street, Woodville, Report Ref: GI8002, dated January 2018), which GRM Development Solutions Ltd (GRM) have reviewed.

Using GRM archive information supplemented with readily available information from the planning portal for a residential development adjacent to the eastern site boundary, GRM have reassessed the risk posed by coal mining activity within this report.

A site location plan is included within the Coal Authority Consultants Mining Report presented in Appendix B.

2.0 Sources of Information

The following sources of information have been used:

- Coal Authority Consultants Mining Report.
- BGS Geological Mapping at a scale of 1: 10,000.
- BGS Geological Memoirs.
- BGS Borehole Records.
- Historical OS Mapping.
- Coal Authority Interactive Online Mapping.
- Coal Authority Mine Abandonment Plan 635A.
- TLC Shallow Mining Investigation Report for Land adjacent to 59 Ashby Road, Woodville (Planning Ref: 9/2015/0976). Located directly adjacent to the eastern boundary of the site.

A list of the names of the principals is available at the registered office.
GRM Development Solutions Limited, Laurus House, First Avenue,
Centrum 100, Burton upon Trent, Staffordshire, DE14 2WH.
Company No. 3099018 (England), VAT Reg. No. 658 1005 48



3.0 Identification And Assessment Of Site Specific Risks Based On Coal Authority Information

A Coal Authority Consultants Mining Report is presented in Appendix B.

The Coal Authority (CA) Consultant's report confirms that the site is in the likely zone of influence from recorded workings in one seam of fireclay at a depth of 45m begl with an extraction thickness of 0.76m, and the Eureka coal seam at a depth of 51m begl with an extraction thickness of 0.91m. Both seams were last mined in 1900. It is considered likely that there will be in excess of fifty times the thickness of these workings in overlying rock cover, and the risk posed to the ground surface from recorded workings is assessed as **negligible**.

The CA confirms the site lies within an area where they believe there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep). Accordingly the risk posed to the ground surface from any un-recorded workings in shallow coal seams is assessed as **high**.

The CA confirms the site does not lie within 500m of a site from which coal has been removed in the past by opencast methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area. The CA confirms that the property does not lie within 200m of an area where a licence has been issued in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification. The risk from current, future or past opencast workings is therefore assessed as **negligible**.

The CA give details of two recorded coal mine entries within 100m of the enquiry boundary. Shaft 432318-008 is located approximately 95m to the south west and Shaft 432318-020 is located approximately 95m to the north west. Given the distance between the site and mine entries, the risk the risk to surface stability from recorded mine entries is assessed as **negligible**.

The Coal Authority also confirms that their records may be incomplete, consequently, there may exist in the local area mine entries of which the Coal Authority have no knowledge and if shallow un-recorded workings are present beneath the site, the risk of un-recorded mine entries should be increased to **moderate**.

The CA states there is no record of mine gas emissions within 500m of the site requiring action by the CA within the boundary of the property. It seems reasonable to conclude that the risk to the proposed development from mine gas emissions is **negligible**. However, this does not preclude the risk of ground gasses from other sources.

Where coal measures strata lie close to the ground surface excavations could potentially penetrate or encounter coal seams. There is therefore a potential for spontaneous combustion. The risk from spontaneous combustion from near surface coal seams is generally assessed as **low** but some form of precautionary mitigation might be required.

4.0 Further Assessment Including BGS and Readily Available Information

The information in Section 2.0 has been reviewed and suggests the following:

- Historically the site has comprised undeveloped land adjacent to residential properties and Butt Windmill (corn mill). The historical mapping through to the present day suggests the site remains as undeveloped land, with the exception of a small structure in the north eastern corner between 1901 and 1955.
- The BGS geological map records the site to be underlain by a solid geology of Helsby Sandstone Formation (Triassic sandstone commonly reddish brown in colour), which are in turn underlain by Pennine Lower Coal Measures strata (Interbedded grey mudstone, siltstone and pale grey sandstone with subordinate coal seams) by an unconformable boundary. No superficial deposits are recorded at the site.

- The site is located within a Coal Authority Development High Risk Area and Probable shallow coal mine workings are indicated across the entire site, as part of a shaded area which extends approximately 7km by 3km across the majority of the South Derbyshire Coalfield.
- From geological and topography maps, the Helsby Sandstone strata are indicated to dip 3° towards the northwest. The closest recorded dip direction in the Coal Measures strata are indicated to be 6° towards the southwest, matching the dip information in the shallowest recorded mine workings beneath the site.
- The geological map and CA summary of findings plan illustrate the conjectured subcrop of the Stockings coal to run through the centre of the site, located beneath the Helsby Sandstone Formation strata and trending north-west to south-east. With an indicated thickness of between 1.7m and 2.4m.
- The next coal seam beneath the Stockings is the Eureka coal, which is illustrated to subcrop approximately 60m to the north east. The Woodfield coal is the next seam higher in the series than the Stockings coal and illustrated to subcrop approximately 30m to the south-west, given the recorded dip direction it will not underlie the site.
- The memoir suggests that the Eureka Coal was the deepest worked in the Woodville area to the east of the Boothorpe Fault. The Stockings Coal is described as being highly variable in thickness and is unlikely to have been worked.
- Shaft records from Blackforby Pit, located 250m to the south of the site (and the entry location of some recorded workings close to the site) record the Stockings coal to be 1.5m thick, with a vertical separation of 9.5m between the top of the Eureka and top of the Stockings coal seams. The shaft record is summarised below:

Strata	Depth (m)	Thickness (m)
Triassic unconformity over measures	3.0m	24.20m
Woodfield Coal	27.2m	1.50m (total)
Stockings Coal	40.5m	1.50m (total)
Eureka Coal	50.0m	0.91m (worked)
Fireclay	52.0m	0.76m (worked)

- A BGS borehole Record relating to a shaft 50m north-east of the site and sunk in 1897 records approximately 26.0m of Triassic Strata, overlying coal measures with a coal seam 0.90m thick recorded at 26.0m depth, likely to be the Eureka Coal Seam.
- Coal Authority Abandonment Plan 635A (Appendix D) illustrates working in the Eureka coal seam surrounding the site to the west, north, east and south east. The workings are from a 36.5m deep shaft shown 70m to the north west of the site, with the shaft log indicating 35.0m of mixed strata underlain by 0.91m of coal and 0.68m of fireclay at the base of the shaft which have both been worked. The abandonment plan records the workings to dip at approximately 5.5° to the south-south-west.
- The CA Consultants Report states the site is located close to where the Coal Authority has received information relating to past site investigations and the site requires further investigation, relating to a recent residential development directly adjacent to the eastern site boundary. GRM has attained a copy of this information from the planning portal: TLC Shallow Mining Investigation Report for Land adjacent to 59 Ashby Road, Woodville (Planning Ref: 9/2015/0976).
- As part of the TLC investigation, four rotary boreholes were drilled to depths of between 16.0m and 30.0m begl to investigate the presence of any coal seams and potential mine workings

beneath the site. In relation to the site boundary of this development, the closest boreholes are BH1 located 30m south-east and BH3 located 5m to the east. BH1 recorded rock head at 1.2m begl underlain by reddish brown mudstone to a depth of 26.0m begl, in turn underlain by grey sandstone to 28.5m begl and reddish brown mudstone to the base of the borehole at 30.0m begl. BH3 recorded rock head at 1.10m begl underlain by a series of reddish brown mudstones and greenish brown sandstones to the base of the borehole at 16.0m begl.

- The TLC report interpreted the ground conditions to comprise Bromsgrove (Helsby) Sandstone to the base of all boreholes (>30.0m begl). Even if the boundary between reddish brown mudstone and grey sandstone at a depth of 26.0m in BH1 is indicative of the unconformable boundary between Helsby Sandstone and Coal Measures strata, the investigation still proves approximately 25.0m of coal free Helsby Sandstone Formation strata beneath the site, overlying the Pennine Lower Coal Measures.

The CA abandonment plan suggests that the Eureka Coal has been worked along with the underlying fireclay, with a combined thickness of 1.60m. Rock is recorded at shallow depth locally (circa 1.5m begl) and there will be in excess of thirty times the thickness of the recorded workings in competent rock cover. Therefore, the risk posed to the ground surface from recorded workings remains as **negligible**.

The Stockings coal is recorded to subcrop directly beneath the site; and local borehole records suggest at least 25.0m of Helsby Sandstone Formation strata will be present above Coal Measures strata. The information from CA abandonment plan 635A has been used to produce a cross-section for the site, a copy of which is presented in Appendix E. Extrapolation using the depth to workings in the Eureka seam at the mine shaft (35.0m bgl), the difference in ground level (*from LIDAR data*) between the mine shaft (~157m AOD) and the site (~163m AOD), and the recorded dip of the workings (5.5° to the SSW) suggests the Eureka coal will be present at approximately 49.0m begl beneath the site; closely relating to the information within the Coal Authority Consultants Report. The vertical separation between the Eureka and overlying Stockings coals from Blackfordby Pit (9.5m), suggests the Stockings coal will be present at approximately 39.5m begl. The Stockings coal is recorded as 1.50m thick in Blackfordby Pit and even if it had been worked to its full thickness there would be in excess of twenty-five times the worked seam thickness in coal free rock strata above any recorded mine workings.

Even if the Eureka Coal Seam was present at 35.0m begl beneath the site (not accounting for ground levels or dipping strata), the Stockings coal seam would be present at a depth of 25.5m and directly beneath the unconformable boundary. As rock head is anticipated at shallow depth (circa 1.5m begl) at this depth there would be in excess of sixteen times the worked seam thickness in coal free rock strata above any recorded mine workings. Based on the above, it is considered appropriate to reduce the risk from un-recorded workings to **negligible**.

The site is not at risk from current, future or past opencast workings and the level of risk as a result of our assessment will remain as **negligible**.

There are no known coal mining entries within, or within 90 metres of the boundary of the property and rock head is recorded at shallow depth. Therefore the risk to surface stability from recorded mine entries remains as **negligible**.

The Stockings coal subcrops beneath the site, but is overlain by a significant thickness of Triassic sandstone strata, and the presence of an unconformable boundary could have presented onerous mining conditions. On this basis it is considered appropriate to reduce the risk from unrecorded mine entries to **low**.

The site is not at risk from mine gas emissions and the level of risk as a result of our assessment will remain as **negligible**.

The site will be underlain by a significant thickness of coal-free Triassic sandstone strata, and it is considered appropriate to reduce the risk posed to structures from spontaneous combustion to **negligible**.

5.0 Mitigation Measures

It may be possible to reduce the risk from un-recorded mine entries to negligible by stripping the ground surface of the site to natural ground, and carrying out a visual inspection by a competent person to ascertain if there are any anomalous features indicative of mine entries present. The risk could be reduced to very low by a competent person carrying out a visual inspection of any excavations which encounter natural strata (i.e. foundation excavations). If any unrecorded mine entries are identified, remedial works to stabilise the features would be required.

6.0 Conclusion

The risks amended in line with section 4.0 above can be summarised as follows:

Recorded Workings – **Negligible**.

Un-recorded shallow workings – **Negligible**.

Opencast workings – **Negligible**.

Recorded Mine entries – **Negligible**.

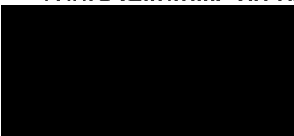
Un-recorded Mine entries – **Low**. The risk could be mitigated by following the recommendations in section 5.0.

Mine gas emissions – **Negligible**.

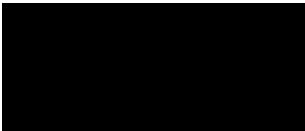
Spontaneous combustion – **Negligible**.

We trust that the information provided is sufficient for your current requirements. if you require any additional information or clarification of the contents of this letter then do not hesitate to contact us.

Yours faithfully, on behalf of GRM Development Solutions Ltd,



Courtney Blockley-Campton, MGeol FGS
Senior Geotechnical Engineer



Chris Jerram, BSc(hons), C.Geol.
Consultant

APPENDICES

Proposed Development Layout

Appendix A

Coal Authority Consultants Mining Report

Appendix B

BGS and Adjacent Site Investigation Borehole Records

Appendix C

Coal Authority Abandonment Plan

Appendix D

Indicative Geological Cross-Section

Appendix E



A P P E N D I X A

GRM Development Solutions provides multi-disciplinary consultancy services, UK-wide:

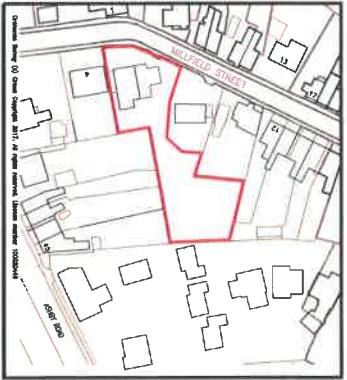
- Geotechnical and Geo-environmental Services
- Civil and Infrastructure Services
- Structural Engineering Services
- Construction Management
- Site Services

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LOCATION PLAN
SCALE 1:1250



Proposed New Build Dwelling
The proposed new build dwelling is a two-story house with a detached garage and rear garden. The plan shows the building footprint, parking area, and garden layout. The site is located on Millfield Street, Woodville.

1. SITE LOCATION	1:1250
2. SITE PLAN	1:1250
3. FLOOR PLANS	1:1250
4. SECTIONAL ELEVATIONS	1:1250
5. LANDSCAPE PLAN	1:1250
6. DRAINAGE PLAN	1:1250
7. LIGHTING PLAN	1:1250
8. FURNITURE PLAN	1:1250
9. OTHER PLANS	1:1250

Proposed New Build Dwelling
The proposed new build dwelling is a two-story house with a detached garage and rear garden. The plan shows the building footprint, parking area, and garden layout. The site is located on Millfield Street, Woodville.

Proposed New Build Dwelling
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A P P E N D I X B

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The Coal
Authority

Consultants Coal Mining Report

Land East Of 6 Millfield Street,
Woodville
6
Millfield Street
Swadlincote
Woodville
Derbyshire
DE11 7DB

Date of enquiry:	18 April 2019
Date enquiry received:	18 April 2019
Issue date:	18 April 2019
Our reference:	51002104718001
Your reference:	P8897



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

GRM DEVELOPMENT SOLUTIONS LIMITED

Enquiry address

Land East Of 6 Millfield Street, Woodville
6
Millfield Street
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NG18 4RG

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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
BLACKFORDBY	FIRECLAY	Fireclay	4RVT	45	East	5.9	South-West	76	1900
unnamed	EUREKA	Coal	4K3M	51	South	5.8	South-West	91	1900

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	432318-008	432305 318775		Coal	
Shaft	432318-020	432310 318980		Coal	

Abandoned mine plan catalogue numbers

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

635A	EM663	9763
------	-------	------

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
STOCKINGS	Coal	Yes	Within	N/A	316

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

Distance to site investigation (m)	Direction
Within	N/A

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.

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.

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

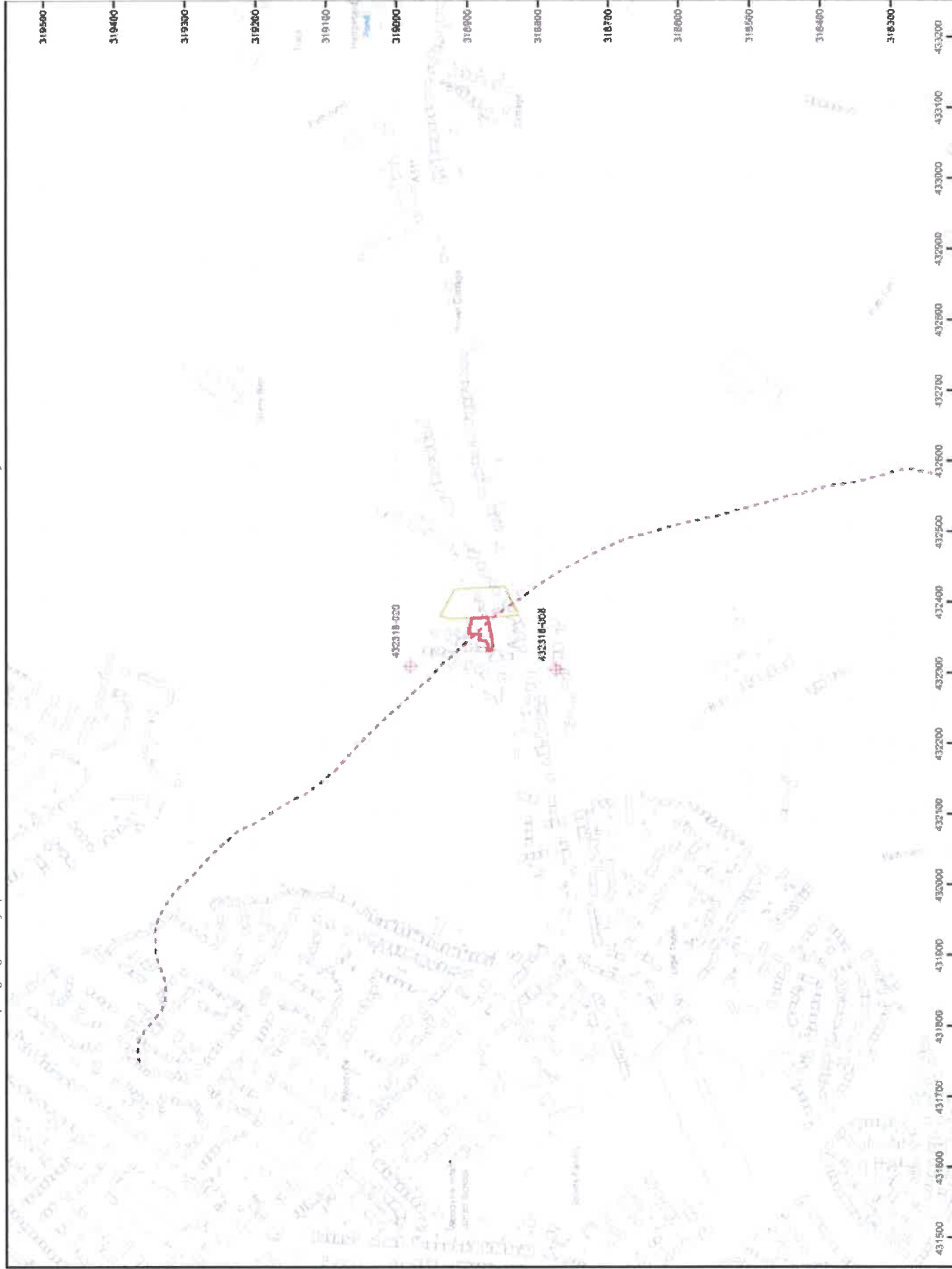
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.



Key

- Approximate position of the enquiry boundary shown
- Disused mine shaft
- Outcrop (Conjectured)
- Site investigations

The map highlights any specific surface or subsurface features within or near to the boundary of the site.



How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com



A P P E N D I X C

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- Civil and Infrastructure Services
- Structural Engineering Services
- Construction Management
- Site Services

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NOTES:
DO NOT SCALE



GRM Development Solutions Ltd
Laurus House, Centrum 100
Burton-on-Trent, Staffs, DE14 2WH
Tel: 01283 551249 Fax: 01283 211968

CLIENT:
**Mr Michael Jones and Mrs
Angela Tambllyn**

PROJECT:
**Land east of 6 Millfield
Street, Woodville**

TITLE:
Borehole Plan

SCALE@SIZE:	NTS	ISSUE:	FINAL
DESIGN/DRAWN:	CBC	DATE:	April 2019
PROJECT No:	P8897	DRAWING No:	1

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THE LAND CONSULTANCY LIMITED

The Land Consultancy Limited
Tel: 01772 610609
Fax: 01772 716669
email: sfknot@thelandconsultancy.co.uk
www.thelandconsultancy.co.uk

Borehole No

BH1

Sheet 1 of 4

Project Name
Land Adjacent to 59 Ashby Road

Project No.
TLC673

Co-ords: -

Hole Type
RO

Location: Woodville

Level: -

Scale
1:50

Client: Tim Eyley

Dates: 10/07/2014

Logged By
KE

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30			Red GRAVEL. Gravel is angular tabular of burnt shale. (MADE GROUND)	
								Soft to firm CLAY. (Probable MADE GROUND)	
					0.80			Stiff red brown sandy CLAY grading to a weathered mudstone at 1.20m.	1
									2
									3
									4
					4.00			Reddish brown MUDSTONE with bands of yellowish brown sandstone.	5
									6
									7
									8

Type Results

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Depth (m)	Casing Depth (m)	SWL (m)	Remarks	From (m)	To (m)	Hours	
Date	Time	WS (m)	Mins	Inflow	SWL (m)	Casing Depth (m) at WS	Depth (m) Sealed		
10/07/2014		4.00	-		-	-	-		Inspection pit excavated to 1.20m depth to check for services. Possible electric cable encountered and drill hole was moved slightly to avoid it. Drilling utilised a water flushing medium. Water flush masked groundwater strikes. However, tentative strikes were noted at 4.00m bgl and 19.00m bgl. Gas monitoring was undertaken around the drill hole mouth and around the drilling rig at 1.50m intervals using a GA2000. No elevated concentrations of CH ₄ , CO ₂ , CO or H ₂ S were detected and no oxygen depletions were recorded. Drill hole was backfilled with bentonite on completion.
10/07/2014		19.00	-		-	-	-		

Drilling Contractor / Drillers
Dynamic Sampling UK Ltd

Method / Plant Used
Rotary drilling rig / water flush

Weather / Ground Conditions

THE LAND CONSULTANCY LIMITED

The Land Consultancy Limited
Tel: 01772 610609
Fax: 01772 716669
email: sfknott@thelandconsultancy.co.uk
www.thelandconsultancy.co.uk

Borehole No

BH1

Sheet 2 of 4

Project Name
Land Adjacent to 59 Ashby Road

Project No.
TLC673

Co-ords: -

Hole Type
RO

Location: Woodville

Level: -

Scale
1:50

Client: Tim Eyley

Dates: 10/07/2014

Logged By
KE

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					12.50			Reddish brown sandy MUDSTONE. Locally fractured with partial loss of flush.	10 11 12 13 14 15 16 17

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Depth (m)	Casing Depth (m)	SWL (m)	Remarks	From (m)	To (m)	Hours	
10/07/2014		4.00		-					
10/07/2014		19.00		-					

Drilling Contractor / Drillers
Dynamic Sampling UK Ltd

Method / Plant Used
Rotary drilling rig / water flush

Weather / Ground Conditions

Inspection pit excavated to 1.20m depth to check for services. Possible electric cable encountered and drill hole was moved slightly to avoid it.
Drilling utilised a water flushing medium.
Water flush masked groundwater strikes. However, tentative strikes were noted at 4.00m bgl and 19.00m bgl.
Gas monitoring was undertaken around the drill hole mouth and around the drilling rig at 1.50m intervals using a GA2000. No elevated concentrations of CH4, CO2, CO or H2S were detected and no oxygen depletions were recorded.
Drill hole was backfilled with bentonite on completion.

Weather / Ground Conditions

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Borehole No

BH1

Sheet 4 of 4

Project Name
Land Adjacent to 59 Ashby Road

Project No.
TLC673

Co-ords: -

Hole Type
RO

Location: Woodville

Level: -

Scale
1:50

Client: Tim Eyley

Dates: 10/07/2014

Logged By
KE

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					28.50			Reddish brown MUDSTONE.	28
					30.00			End of Borehole at 30.00 m	29
									30
									31
									32
									33
									34
									35

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Depth (m)	Casing Depth (m)	SWL (m)	Remarks	From (m)	To (m)	Hours	
									Inspection pit excavated to 1.20m depth to check for services. Possible electric cable encountered and drill hole was moved slightly to avoid it. Drilling utilised a water flushing medium. Water flush masked groundwater strikes. However, tentative strikes were noted at 4.00m bgl and 19.00m bgl. Gas monitoring was undertaken around the drill hole mouth and around the drilling rig at 1.50m intervals using a GA2000. No elevated concentrations of CH4, CO2, CO or H2S were detected and no oxygen depletions were recorded. Drill hole was backfilled with bentonite on completion.
Date	Time	WS (m)	Mins	Inflow	SWL (m)	Casing Depth (m) at WS			
10/07/2014		4.00	-		-	-			
10/07/2014		19.00	-		-	-			

Drilling Contractor / Drillers
Dynamic Sampling UK Ltd

Method / Plant Used
Rotary drilling rig / water flush

Weather / Ground Conditions

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www.thelandconsultancy.co.uk

Borehole No

BH3

Sheet 1 of 2

Project Name
Land Adjacent to 59 Ashby Road

Project No.
TLC673

Co-ords: -

Hole Type
RO

Location: Woodville

Level: -

Scale
1:50

Client: Tim Eyley

Dates: 11/07/2014

Logged By
KE

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.40			TOPSOIL	
								Firm reddish brown CLAY with mudstone lithorelicts grading to a mudstone at 1.10m. (Completely Weathered Mudstone)	1
									2
									3
					3.30			Greenish brown fine grained SANDSTONE.	4
									5
									6
					6.60			Reddish brown MUDSTONE.	7
									8

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Depth (m)	Casing Depth (m)	SWL (m)	Remarks	From (m)	To (m)	Hours	
Date	Time	WS (m)	Mins	Inflow	SWL (m)	Casing Depth (m) at WS	Casing Depth (m) Sealed		
Drilling Contractor / Drillers Dynamic Sampling UK Ltd						Method / Plant Used Rotary drilling rig / water flush			Weather / Ground Conditions

Inspection pit excavated to 1.20m depth to check for services.
Drilling utilised a water flushing medium.
Water flush will have masked groundwater strikes.
Gas monitoring was undertaken around the drill hole mouth and around the drilling rig at 1.50m intervals using a GA2000. No elevated concentrations of CH₄, CO₂, CO or H₂S were detected and no oxygen depletions were recorded.
Drill hole was backfilled with bentonite on completion.

Weather / Ground Conditions

141 / SK 3118
86

Woodville.

SHAFT NEAR BUTT WINDMILL.

530 feet above Ordnance Datum.

From J. B. Brakesby, 1897.

		Thickness.	Depth.
		Ft. Ins.	Ft. Ins.
<i>probably Taken with local measure</i>	Sandstone -	-	-
	Bind -	-	-
	Grouse	-	-
	Sandstone	-	-
<i>probably all C.M.</i>	Bind -	85 6	85 0
	COAL -	3 0	8 08
	Pot clay -	2 6	91 0
	Clunch and bind	12 0	103 0
	Stone -	2 0	105 0

*Sets, probable
(from old ship)
Duly, 60 N.E. - W*

R. 21

SK 3239 1890

Published in
'Leics. & S. Derby
Coalfield',



A P P E N D I X D

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PLAN OF ABANDONED COAL & CLAY MINE

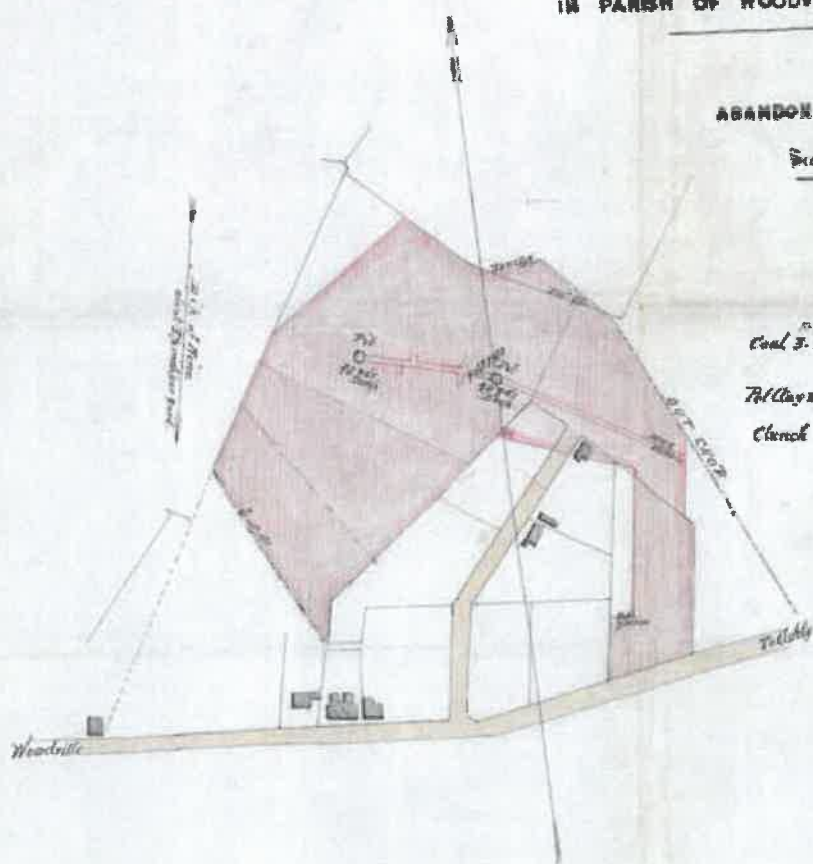
WORKED BY MR C B BLAKESLEY

SITUATE

IN PARISH OF WOODVILLE COUNTY OF DERBY

ABANDONED FEBRUARY 1900

Scale 2 Chains to an Inch.



Coal & Clay
not shown here

Coal 3.0

Clay 2.5

Clench

I hereby certify this plan is a true
copy of the working plan of the mine
at the time of abandonment and
that it is an accurate plan of the mine
as worked to the date of abandonment

22 June 1900

635A/1

2 July 1900.



The Coal
Authority

Catalogue No.. 635A Sheet Info: 1 OF 2

Date: 29/07/2019

Scale: 2 CHAINS TO 1 INCH (1 TO 1584)

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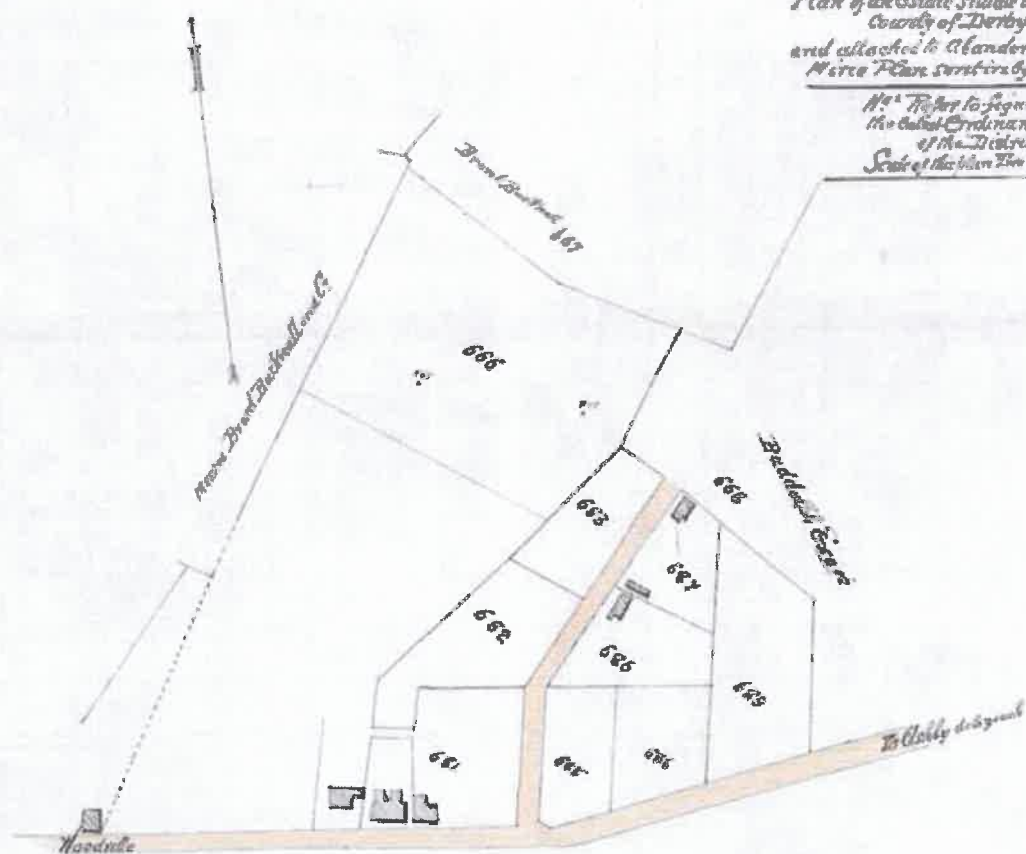
Jackie Harcourt - The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RS Great Britain

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Plan of an Estate situate at Woodville
County of Derby
and attached to a Landreod's Will
New Plan Surveyed by W. B. B. B. B. B.

As to the figures on
the said Ordinance Plan
of the District
Scale of the Plan 10 Chains per Inch.

W. B. B. B. B.



635A/2



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Catalogue No. 635A Sheet Info: 2 OF 2

Date: 29/07/2019

Scale: 2 CHAINS TO 1 INCH (1 TO 1584)

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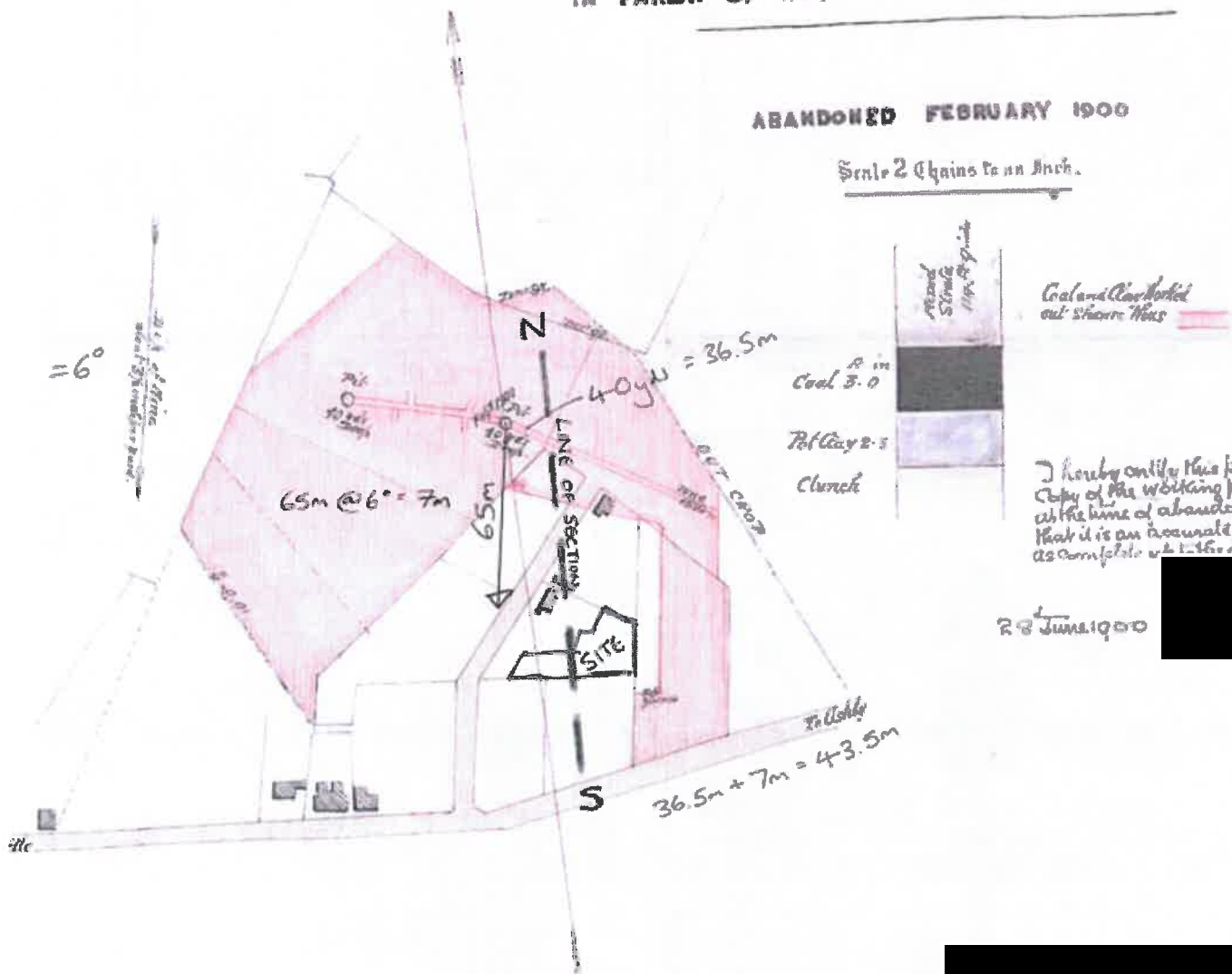
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PLAN OF ABANDONED COAL & CLAY MINE
WORKED BY MR C B BLAKESLEY
SITUATE
IN PARISH OF WOODVILLE COUNTY OF DERBY

ABANDONED FEBRUARY 1900

Scale 2 Chains to an Inch.



28 June 1900

3 July 1900.

Catalogue No.: 635A Sheet Info: 1 OF 2

Date: 29/07/2019

Scale: 2 CHAINS TO 1 INCH (1 TO 1584)

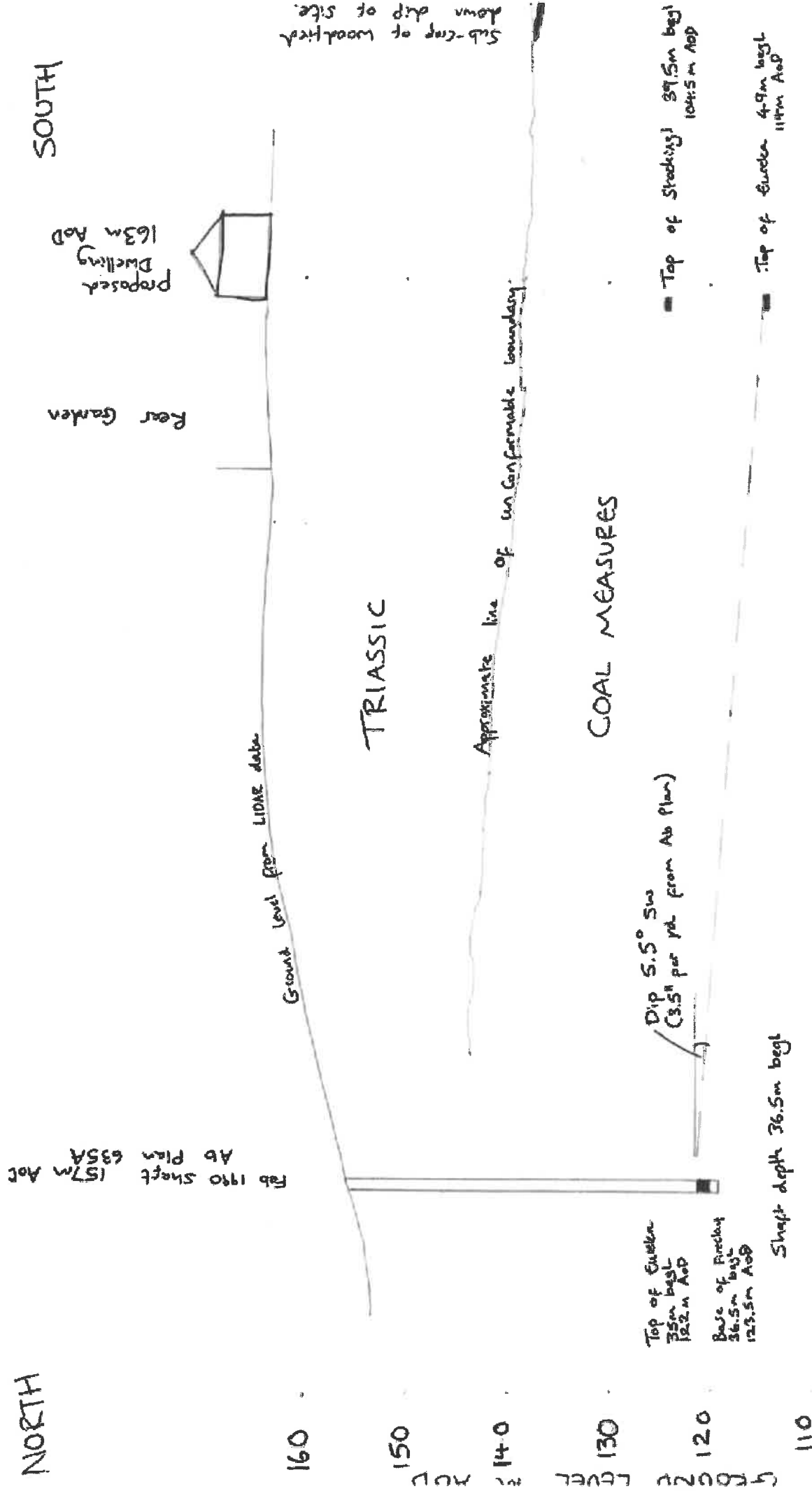
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NORTH



NORTH

6 Millfield Street, Woodville

Drawn: C. BLOCKLEY-CAMPTON

SCALE 1:500

SOUTH

