

Coal Mining Risk Assessment at Site off Highstone Lane Worsbrough Barnsley S70 6SD For Peter Dimberline

Client:Peter Dimberline
Chartered Architect
2, Tipsey Court
Staincross
Barnsley
S75 6FZ



Mob: 07794 510438 Email: designit.struct@gmail.com Web: www.design-it-solutions.com





Contents

Execu	Executive summary		
1.	Introduction	5	
2.	Site location and description	7	
	Proposed development		
	Site history		
3.	Geological setting and historical mining context	9	
4.	Risk assessment	12	
5.	Discussion	14	
	Shallow mine workings		
	Mine entries		
	Mine gas		
6.	Proposed mitigation strategy	16	
7.	Conclusions	18	
Appen			
Appen	idix A Figures		



Appendix B Coal Authority CON29M Mining Report



Executive Summary

Proposal	Residential development comprising a low rise detached dwelling.				
Current land use	Vacant land at between approximately 131.0m and 125.0m AOD,				
	falling to the south.				
Mining related site	3no. former mine entries recorded on the site and 4no. adjacent				
history	former mine entries.				
	Former opencast mining is recorded approximately 450m northwest.				
	The site lies within an area significantly affected by historic mining				
	activities with several collieries present locally.				
Geology	Directly underlain by undifferentiated Middle Coal Measures strata.				
	The Abdy coal seam outcrops across the site and the Beamshaw coal				
	seams all underlie the site at shallow depth.				
Mining history and	6 seams of worked coal are recorded as potentially influencing the site at				
context	shallow depth to 500m, last worked in 1972.				
	7no. former mine entries are present both on and off site and are within				
	influencing distance of the site and potentially, the proposed				
	development.				
	The site lies within an area of recorded past shallow coal mining and is				
	within a Development High Risk Area, as defined by the Coal Authority.				
Mining related	There is a potential risk from shallow mining beneath the site				
risks	potentially leading to surface instability — High .				
	Recorded former mine entries are present on and off site — High .				
	Mine gases may be present on the site – High .				
Mitigation of risks	Proof drilling is recommended to confirm the status and depth of the				
	underlying Adby and Beamshaw coal seams. If shallow mining is				
	confirmed, drill and grout or removal by excavation may be required.				
	Determination of the positions of all mine entries through intrusive				
	investigation and possibly re-positioning of the proposed development.				
	Vigilance during site enabling works to check for former unrecorded				
	mine entries.				
	Protection from mine gases may be required within new development,				







subject to the results of ground gas monitoring, a ground gas risk assessment and the advice of regulators.





1. Introduction

1.1 Design IT were appointed by Peter Dimberline, on behalf of M Haigh, to undertake a Coal Mining Risk Assessment (CMRA) for a site comprising land off Highstone Lane, Worsbrough, Barnsley S70 6SD, which is proposed for development with a low rise detached dwelling. A planning application is to be submitted to Barnsley Metropolitan Borough Council (BMBC) and the site is identified as lying within a Coal Authority (CA) Coal Mining Development Referral Area, thus necessitating the requirement for a CMRA in order to provide BMBC with information on historic coal mining and an assessment of its potential impact on land stability.

1.2 The purpose of this CMRA is to:

- Present a desk-based review of all available information on the coal mining issues which 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, and
- 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
- 1.3 To this end the study has included an inspection of published historical maps, published geological data, publicly available planning information and a review of a CA mining report, together with other sources as indicated within the report.
- 1.4 This report presents the factual information available during this appraisal, interpretation of the data obtained and recommendations relevant to the scope of works outlined above.
- 1.5 The comments and opinions presented in this report are based on the findings of the available desk study assessment carried out by Design IT. Responsibility cannot be accepted for





any conditions not revealed by this desk study and which have not been taken into account by this assessment.

1.6 This report has been prepared for the sole use of Peter Dimberline and his client M Haigh. No other third party may rely upon or reproduce the contents of this report without written approval of Design IT. If any unauthorised third party comes into possession of this report, they rely on it entirely at their own risk and we do not owe them any Duty of Care or Skill.





2. Site location and description

2.1 The site is centred on National Grid Reference 434830mE 404545mN, north of the junction of Mount Vernon Road and Highstone Lane within the district of Ward Green and in the southern part of Worsbrough Common. A site location plan is included as **Appendix A**.

2.2 The site is 'L' shaped in plan and is currently undeveloped. An inspection of recent aerial imagery indicates the site to be entirely under grass and coarse vegetation with a mature hedge present along the southwestern boundary and an unmade track present along the northeastern boundary with a hedgerow beyond. Both the northwestern and northeastern boundaries are fenced. Locally, existing levels fall towards the south. The northern part of the site lies at approximately 131.0m AOD with the southern part at approximately 125.0m AOD. There is a pronounced break of slope along the southern/southeastern edge of the site and the southern/southwestern edge occupies an elevated position with respect to the adjacent highway being retained by a stone retaining wall, approximately 1m high. Existing residential properties and gardens bound the site on most boundaries with Ward Green Working Mens Club and associated land present to the southeast. The club building itself is cut into the slope along its northwestern elevation and at its northern corner, being retained by a low brick retaining wall.

Proposed development

2.3 It is proposed to construct a low rise detached dwelling incorporating an access drive, parking provision and gardens/terrace to the rear. The FFL of the dwelling is to be at approximately 127.0m AOD, necessitating retention of the adjacent ground by between 1 and 2m height. Details of the proposal are included as **Appendix A**.

Site history

2.4 Historical maps for the site and its surroundings, available from internet based sources, have been reviewed and a summary of this information, specifically relating to mining related features, is provided below.





Date	On site features	Off site features (coal mining related)
1855 - 1894	Open fields.	Sandstone quarry approximately 215m north.
		Sandstone quarry approximately 330m east.
1894 - 1907	No change.	Bank Top colliery approximately 650m northeast.
		Pinder Oaks colliery approximately 1,350m northeast.
1907 – 1965	No change.	Sandstone quarry approximately 500m northwest.
		Old Oaks (Barnsley Main post 1932) colliery approximately 2km northeast.
1965 – present	No change.	Ward Green club adjacent to southeastern site boundary.
		Residential properties adjacent to remaining boundaries.



3. Geological setting and historical mining context

3.1 Information obtained from various sources pertaining to the site's geology and historical mining perspective is summarised in the table below with information sources identified as appropriate.

Information sources	British Geological Survey (BGS) 1:10 000 scale, sheet SE30SW; 1:10 560 scale, sheet 274SE County Series and BGS 1:50 000 scale, sheet 87 Solid & Drift.
	BGS online Borehole Database.
	BGS Internal Report IR/06/135 'The Pennine Lower and Middle Coal Measures formations of the Barnsley district', 2006.
	Geological Survey Memoir, Sheet 87 'Geology of the Country Around Barnsley', 1948.
	'Sections of Strata of the Coal Measures of Yorkshire', W H Wilcockson, 1950 $3^{\rm rd}$ Edition.
	BMBC online Planning Applications Search.
	CA online Interactive Viewer.
	CA mining report, Ref. 51003373922001, 22 August 2023 (included as $\bf Appendix\ B$).
Made ground	None shown.
Drift	None present.
Solid	Undifferentiated strata (mudstone, siltstone, sandstone and coal seams) of the Middle Coal Measures.
Dip of strata	Assumed 5° to the northeast.
Faults	A fault shown immediately to the south striking west to east and downthrowing to the north. However, none are indicated as on or within close proximity to the site.
Coal seams	The Abdy or Winter coal seam is shown as outcropping within the central and northern parts of the site and is considered to underlie the northern part of the site at shallow depth. The Top Beamshaw and Low Beamshaw coal seams outcrop southwest of the site and are likely to be present beneath the site at shallow depth. Locally, BGS stratigraphical section thicknesses for these coal seams are; Abdy (0.69m to 0.84m), Top Beamshaw (thin to 1.8m) and Lower Beamshaw (0.46m to 0.61m), the Abdy and the Top Beamshaw seams both containing significant dirt partings. The separation of the Beamshaw seams is approximately 10m.





	The Abdy coal seam is recorded locally as being between 0.61m and 0.76m thickness, of good quality and having been historically worked extensively at crop and by way of shallow shafts. The Beamshaw coal seams within the locality of Barnsley are recorded as thin and mixed with shale and of little value.
Shafts and Collieries	The CA Interactive Viewer indicates numerous former mine entries (adits and a shaft) as present both on and in the immediate vicinity of the site. These are likely to be associated with exploitation of the Abdy coal seam at or near its outcrop.
	The shaft record relating to the former Barnsley Main (formerly Old Oaks) colliery, approximately 2km northeast, records the Abdy coal seam at 1.65m thick (including a dirt parting) and the underlying Top Beamshaw coal seam at 1.3m thick (including a dirt parting) and Low Beamshaw coal seam at 0.66m. The separation of the Abdy and the Top Beamshaw coal seams is approximately 9m and that of the Top and Low Beamshaw coal seams is approximately 10m.
Nearby intrusive information	Ground investigation records at a site approximately 120m northwest proved a coal seam at shallow depths of between 7.1 and 7.7m bgl, at thicknesses of between 0.7 and 0.8m. In all instances the coal seam was intact. Competent rockhead was proved at around 1 to 2m depth. The site is coincident with the mapped outcrop of the Abdy coal seam, which is considered to be the seam encountered.
Coal Authority CON29M coal mining report	6 seams of worked coal are recorded at shallow depth to 500m depth and as potentially influencing the surface of the site, last worked in 1972.
	There are 7no. former mine entries (a shaft and adits) recorded as within 20m of the site. A total of 3no. adits are recorded as present on the site with 3no. adits adjacent to the site and a shaft also adjacent to the site. There is no record of what actions, if any, have been undertaken to treat these mine entries. There may be additional unrecorded mine entries present in the locality.
	No present or future underground mining is recorded beneath the site.
	The site is unaffected by any past, present or future opencast coal mining.
	There are no records of mining related subsidence damage notices or claims on the site or within 50m of the site.
	There are no records of any mine gas emissions requiring action within influencing distance of the site.
Shallow mining	Published geological mapping indicates several past mine entries (adits) as present on the site and further to the northwest, all associated with exploitation of the outcropping Adby coal seam.
	The CA Interactive Viewer indicates the site to lie within an area of recorded past shallow coal mining and within a Development High Risk





	Area (DHRA). Recorded historic mining is recorded within the Abdy coal seam. Areas of probable past shallow mining are indicated on the site.
Surface mining	The CA Interactive Viewer records former opencast coal workings as present approximately 450m northwest of the site.





4. Risk assessment

4.1 The potential risks to the redevelopment of the site associated with the coal mining legacy of the locality are summarised in the following table.

Coal mining issue	Risk Yes No		Risk assessment (Risk rating)	
Cour mining issue			- Kisk dssessment (Kisk ruting)	
Underground coal mining (recorded at shallow depths)	Yes	-	CA information definitively states past shallow coal mining beneath the site, associated with the Abdy coal seam - High	
Underground coal mining (probable at shallow depths)	Yes	-	Shallow depth to the underlying Abdy coal seam. Nearby intrusive investigations have proved the presence of the Abdy coal seam near its outcrop at a minable thickness. Evidence of widespread historical mining in the locality would suggest potential shallow mining of this coal seam - Moderate to High	
Mine entries (shafts and adits)	Yes	-	3no. former mine entries (adits) are recorded on site, 4no. mine entries (3no. adits and 1no. shaft) are indicated close to the site boundaries. Both these on and off site mine entries are potentially within influencing distance of any proposed development – High	
Coal mining geology (fissures)	-	No	CA information and published geology does not indicate any geological weaknesses on site as a consequence of mining related activities — Low	
Record of past mine gas emissions	Yes	-	CA information states no mine gas related issues in the locality. However, given the presence of the on site outcropping Abdy coal seam, recorded shallow mining beneath the site and the presence of multiple former on and off site mine entries, generation of mine gases is considered likely - High	
Recorded coal mining surface hazard	-	No	CA information does not record the presence of any surface mining hazards on or close to the site — Low	
Surface mining (opencast workings including sandstone	-	No	CA information states the site to be unaffected by any past, current or future	





Site off Highstone Lane, Worsbrough, Barnsley S70 6SD

quarries)		opencast workings. CA information and historical mapping records former surface workings within the vicinity of the site – Low





5. Discussion

5.1 The risk assessment above highlights several potential risks posed to the site during redevelopment, namely recorded shallow coal workings beneath the site, on site and nearby recorded former mine entries and associated mine gas emissions, cumulatively assessed as **high**. These risks are discussed in turn more fully below.

Shallow mine workings

5.2 The Abdy coal seam is recorded as outcropping across the site and as having been mined beneath the site at shallow depth. It is estimated that the Abdy coal seam is likely to be present beneath the site at approximately surface to <5m below competent rockhead, rockhead is at approximately 1 to 2m depth. Local intrusive information indicates a maximum thickness of 0.8m for the Abdy coal seam (including dirt partings). Additionally, the underlying Top and Low Beamshaw coal seams are considered to be present approximately 10 to 15m and 20 to 25m beneath the site, both at shallow depth and potentially historically mined. There is considered to be *insufficient* competent rock cover above the worked Abdy coal seam to maintain surface stability and potentially *insufficient* competent rock above the Top and Low Beamshaw coal seams in the event of these seam shaving been worked beneath the site. This assumption is based upon having a minimum of 10 times intact coal seam thickness of competent rock strata present above the coal seam. Intrusive investigation is considered necessary and potentially consolidation of mine workings by drilling and grouting may be necessary.

Mine entries

5.3 Due to the recorded outcrop of the Abdy coal seam on the site and associated on site and nearby recorded abandoned mine entries (adits and shafts), there is potential for these features to influence the surface stability of the site.

The on site recorded mine entries (adits) are CA ref. 434404-014 (departure of 10m), 434404-016 and 434404-017 (both departures of 8m). Off site recorded mine entries (adits) include CA ref. 434404-005, 434404-013 and 434404-018 (all departures of 8m) and shaft CA ref. 434404-019





(departure of 8m). The departure is the degree of uncertainty allocated to the CA recorded mine entry position, allowing for errors during transposing of historical mapping information. All the adits have an assumed diameter of 2m and the shaft has an assumed diameter of 2.5m. No information is known of the condition or subsequent treatment, if any, of these features.

Untreated former mine entries may potentially present a risk to development by way of surface instability and collapse. In addition, there is a zone of influence (ZOI) associated with all mine entries within which there is a risk to surface stability. This is particularly relevant when such mine entries are within close proximity to existing or proposed development.

Drawing 23/020/ZOI-001, included as **Appendix A**, shows the maximum extent of the ZOI of all on site and off site mine entries, allowing for their departure distances and in the absence of any detailed site specific information on their actual locations. Such ZOI extents are a function of the sum of the mine entry radius (r=1.0m or 1.25m re. assumed 2.0m or 2.5m diameter adit/shaft), the distance from the outer edge of the mine entry created when a 45° line is subtended to the surface from rockhead (which is assumed to be 2.0mbgl) and the departure distance assigned to the mine entry. It is evident that all recorded former adits and the shaft could potentially influence the surface stability beneath the site in the event of a collapse of these features, several of which impact the footprint of the proposed new dwelling.

Mine gas

5.4 Given the recorded on and off site nearby former mine entries together with the on site outcropping Abdy coal seam, the potential for upward migration of mine gases beneath the site cannot be discounted. All the above features may potentially present preferential pathways and allow the movement of mine gases to the surface.





6. Proposed Mitigation Strategy

6.1 A review of geological and historical mining information at the site has shown that there is a potential **high** risk presented to surface stability from shallow mine workings recorded as being present within the Abdy coal seam and numerous recorded on and off site nearby former mine entries (adits and a shaft) associated with exploitation of the Abdy coal seam. In addition, a **high** risk exists for the site to be affected by potential mine gas emissions.

Shallow mine workings

6.2 CA records and BGS mapping demonstrate there to be a definite risk presented by recorded shallow mine workings within the Abdy coal seam present beneath the site and a potential risk from possible shallow mine workings within the deeper Beamshaw coal seams. It would be prudent, therefore, to undertake proof drilling across the site to confirm the depth to rockhead and depth to/nature of the underlying coal seams. Boreholes should be put down to a maximum depth of 30m below existing ground levels with appropriate permission and licences obtained from the Coal Authority prior to commencing any such works. Trial trenching is recommended in order to determine the position of the outcropping Abdy coal seam across the site. If shallow mining is proved as presenting a risk to the surface stability of the site, then drilling and grouting works may be required to consolidate the workings or possibly removal by excavation, subject to findings of an intrusive investigation. Alternatively, the use of piled foundations may be feasible in lieu of treatment of mine workings, subject to findings of an intrusive investigation and local authority building control approval.

Mine entries

6.3 The proposed development footprint is assessed as being within the ZOI of the recorded on and off site mine entries and, as such, there is a potential significant risk to surface stability in the event of collapse of these features. However, at this stage, this assessment is based upon the theoretical maximum extent of the ZOI of these former adits and a shaft with respect to the proposed development, which cannot be adjusted or refined until the actual position of these features is positively determined. Intrusive investigation and establishment of the exact position of





these on site mine entries will be necessary with their ZOI re-calculated to assess their respective impact on the proposed development layout. Additionally, unrecorded mine entries may also be present on the site. The possibly of re-locating the proposed layout should be considered in order to mitigate any such risk.

Any design of mitigation measures with respect to mine entries would need to be undertaken in consultation with the Coal Authority.

During site enabling works and a site strip, there may still be the potential for encountering anomalous ground due to mining legacy features. As such, the exposed subsoils should be checked for the presence of disturbed and potentially unstable ground associated with backfilling of such features. Vigilance should be taken during such works with respect to any anomalous findings. If mine entries are identified on the site, then these may require treatment by grouting and capping at the surface or possibly excavation and removal. Building directly over any such features should be avoided where possible and consultation with the Coal Authority is recommended.

Mine Gas

6.4 It is recommended that robust gas protection measures are incorporated during construction, subject to discussions and approval by the local authority. However, such measures are inherently incorporated within the construction of new buildings by way of use of a well-constructed ground or suspended floor slab offering a passively vented underfloor void, incorporation of a radon protection membrane (if appropriate) and a damp proof membrane together with the sealing of service entries.

A gas monitoring programme is considered warranted with subsequent completion of a ground gas risk assessment. It is recommended that advice and approval is sought from regulators at an early stage with regard to the scope and specification of appropriate gas protection measures within the proposed new development.





7. Conclusions

- 7.1 There is a potential risk posed to the redevelopment of the site from shallow mine workings present in the underlying Abdy coal seam and potentially present within the deeper Beamshaw coal seams. Such risks comprise surface instability from collapse of past mine workings and former mine entries. Proof drilling and excavation is recommended to better understand these risks.
- 7.2 It is considered that the development proposals are affected by the Zone of Influence of recorded on and off site former mine entries. As such, intrusive investigation to locate these mine entries and possibly re-location of the proposed layout may be undertaken in order to mitigate any risk. In addition, vigilance should be practised during the site strip and enabling works to determine the presence of any mining legacy features.
- 7.3 Following ground gas monitoring and a ground gas risk assessment, advice should be sought from regulators as to adoption of appropriate measures to protect against ground (mine) gases within the new development.





Appendix A

Figures:-

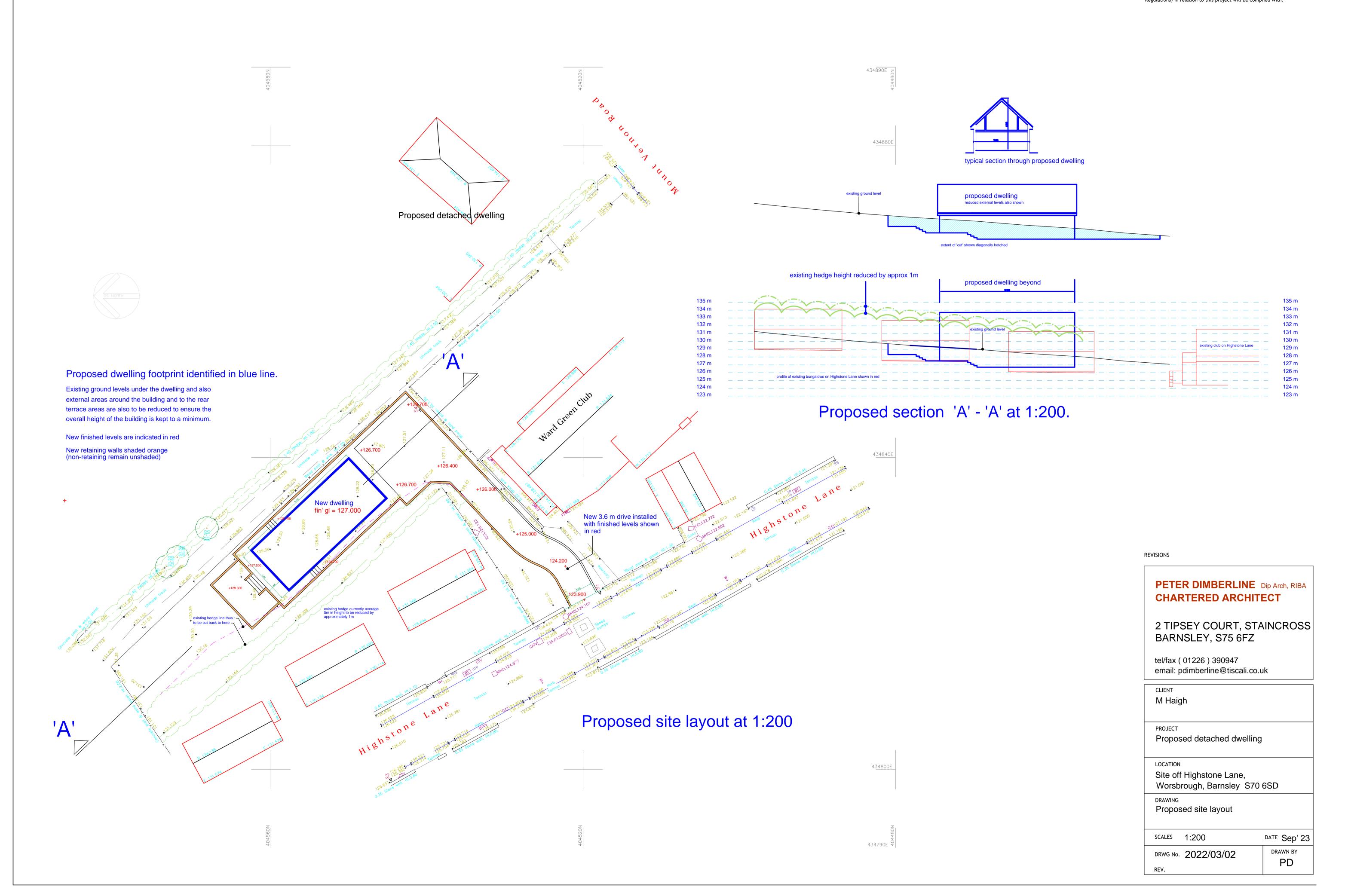
- 1 Site Location Plan
- 2 Proposed Site Layout
- 3 Drawing 23/020/ZOI 001

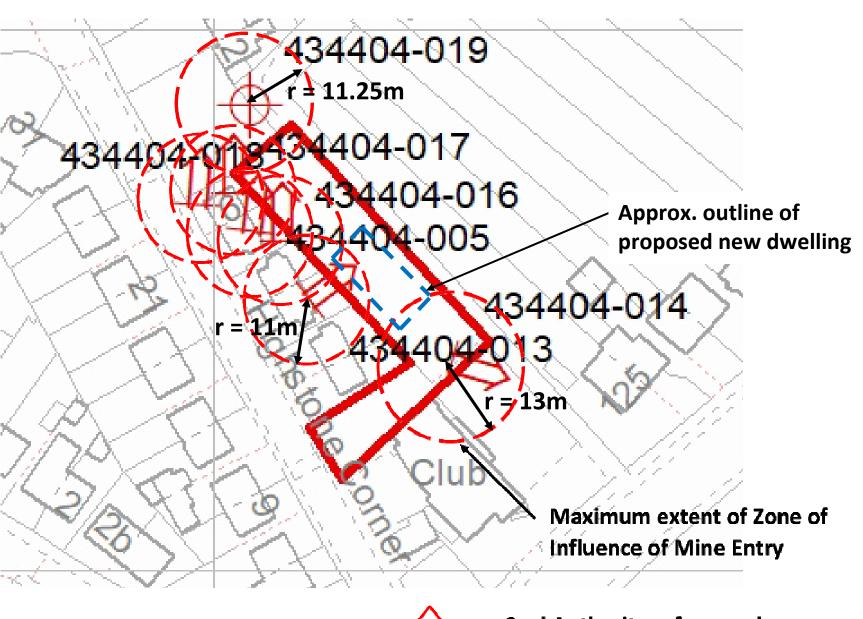




0 5 10 15 20 25 30 35 40 45 50







Scale approx. 1:100 @ A4

Design — it
Structural Solutions Ltd

Design - it Structural Solutions Ltd 37 Hall Bank, Barnsley, S75 1EX Tel: 01226 291367 Mob: 07794 510438

Email: designit.struct@gmail.com

Title:

Plan Showing the Maximum
Extent of the Zone of Influence
of Recorded Mine Entries (adits
and shaft) Allowing for their
Departure Distance

Site off Highstone Lane, Worsbrough, Barnsley S70 6SD

Client:	Peter Dimberline
Job No:	Dit/23/020
Date:	August 2023
Drawn by	JR
Drawing Ref:	23/020/ZOI-001

Coal Authority referenced mine entry (adit)

Coal Authority referenced mine entry (shaft)



Appendix B Coal Authority CON29M Mining Report



CON29M coal mining report

WARD GREEN WORKING MENS CLUB, MOUNT VERNON ROAD, WORSBROUGH COMMON, BARNSLEY, BARNSLEY, S70 4HH



Known or potential coal mining risks

Past underground coal mining	Page 5
Future underground coal mining	Page 5
Mine entries	Page 6



Further action

These additional reports can give further detail on the risks identified:

- Mine entry interpretive report
- Mine entry plan and data sheets

For more information please see our Further action reports on page 11



Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. In view of the coal mining circumstances we would recommend that any planned or future development should follow detailed technical advice before beginning work on site. Please see page 3 for further details on Future development.

Our reference: 51003373922001 22 August 2023

Your reference: Land on Highstone Lane Client name: Ian Thorpe

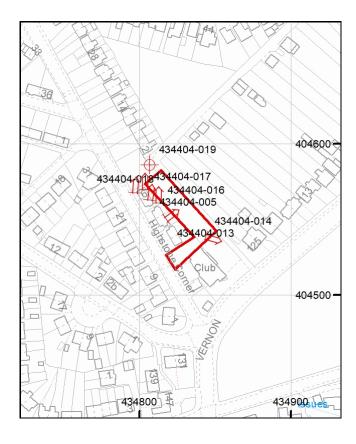
If you require any further assistance please contact our experts on:





Enquiry boundary

Key Approximate position of enquiry boundary shown Disused adit Disused mineshaft



We can confirm that the location is on the coalfield



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved. Ordnance Survey Licence number: 100020315.

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Professional opinion



Mine entries

The enquiry boundary shows the approximate location of the disused mine entry/entries referred to in this report. Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage caused by disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting www.coal.gov.uk. Please note this Act is not valid where coal was worked or extracted by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wishes to examine the source plans from which the information has been taken, these are available to view, at our Coal Authority head office in Mansfield. To book an appointment please call **01623 637 225**. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission must be sought from the owner. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency, 24 hour call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries). To report an emergency you can call 0800 288 4242.



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 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.

Your reference: Land on Highstone Lane Client name:
Our reference: 51003373922001 lan Thorpe
Date: 22 August 2023

If you require any further assistance please contact our experts on:

Page 3 of 11

0345 762 6848

If you are looking to develop, or undertake works, within a coal mining development high risk area your Local Authority planning department may require a Coal Mining Risk Assessment to be undertaken by a qualified mining geologist or engineer. Should you require any additional information then please contact the Coal Authority on 0345 762 6848 or email cmra@coal.gov.uk.

Your reference: Land on Highstone Lane Client name: Our reference: 51003373922001 lan Thorpe

Date: 22 August 2023

If you require any further assistance please contact our experts on:

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

Past underground coal mining

The property is in a surface area that could be affected by underground mining in 6 seams of coal at shallow to 500m depth, and last worked in 1972.

2

Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3

Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4

Mine entries

Within, or within 20 metres of, the boundary of the property there are 7 mine entries, the approximate positions of which are shown on the enquiry boundary plot. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

There is no record of what steps, if any, have been taken to treat the mine entries.

This information is based on the information that the Coal Authority has at the time of this enquiry.

Based on the Coal Authority's knowledge of the mining circumstances at the time of this enquiry, there may be unrecorded mine entries in the local area that do not appear on Coal Authority records.

For an additional fee, the Coal Authority can provide a Mine Entry Interpretive Report. The report will provide a separate assessment for the mine entry/entries referred to in this report. It gives an opinion on the likelihood of mining subsidence damage caused from ground movement as a consequence of the mine entry/entries. It also gives details of the remedies available for subsidence damage where the mine entry was sunk in connection with coal mining.

Please note that it may not be possible to produce a report if the main building to the property cannot be identified from Coal Authority plans (ie for development sites and new build).

For further advice on how to order this additional information please visit www.groundstability.com.

5

Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6

Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

0345 762 6848

groundstability@coal.gov.uk

8

Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9

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.

10

Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11

Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of support

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.

13

Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Your reference: Land on Highstone Lane Client name: Our reference: 51003373922001 Ian Thorpe 22 August 2023

If you require any further assistance please

contact our experts on:

0345 762 6848 groundstability@coal.gov.uk



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.

Your reference: Land on Highstone Lane Client name: Our reference: **51003373922001** Ian Thorpe 22 August 2023

If you require any further assistance please contact our experts on:

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call 0800 288 4242. Further information can be found on our website: www.gov.uk/coalauthority.

Our reference: 51003373922001

Your reference: Land on Highstone Lane Client name: Ian Thorpe 22 August 2023

Glossary



adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

mine gas - reports of alleged mine gas emissions received by the Coal Authority within 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

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings



Further action reports

Mine entry interpretive report - assesses the risk of ground movement from mine entries in, or within 20 metres of, the property boundary. To order this report, use the same boundary as the CON29M report, then draw the building on the additional map screen.

For more information and to order this report please visit:

https://www2.groundstability.com/interpretive-report

Mine entry plan and data sheets - give additional information on mine entries recorded on a piece of land. To order this report use the same boundary as the CON29M report and a member of our team will contact you to confirm the mine entries to include in this bespoke report.

For more information and to order this report please visit:

https://www2.groundstability.com/plan-and-data-sheets

Our reference: 51003373922001

Your reference: Land on Highstone Lane Client name: Ian Thorpe 22 August 2023