The Coal Authority

Coal Mining Risk Assessment

For development at:

Land off Gilroyd Lane, Dodworth, Barnsley, S75 3EG

For proposal:

Agricultural storage building

Assessment Summary

Assessment Result	LOW RISK
Recommended Further Work	ADVISORY COAL GAS RISK ASSESSMENT

The Coal Authority works to resolve the impacts of mining by growing its expertise, innovation, organisational capability and efficiency.

It manages the effects of past coal mining, including subsidence damage claims which are not the responsibility of licensed coal mine operators and is an executive non-departmental public body, sponsored by the Department of Business, Energy and Industrial Strategy. This report is valid for 90 days.

Any advice provided in this report does not prejudice our position as a statutory consultee.

Version	Compiled	Checked	Date
1.1	HB	PB	22/05/2023

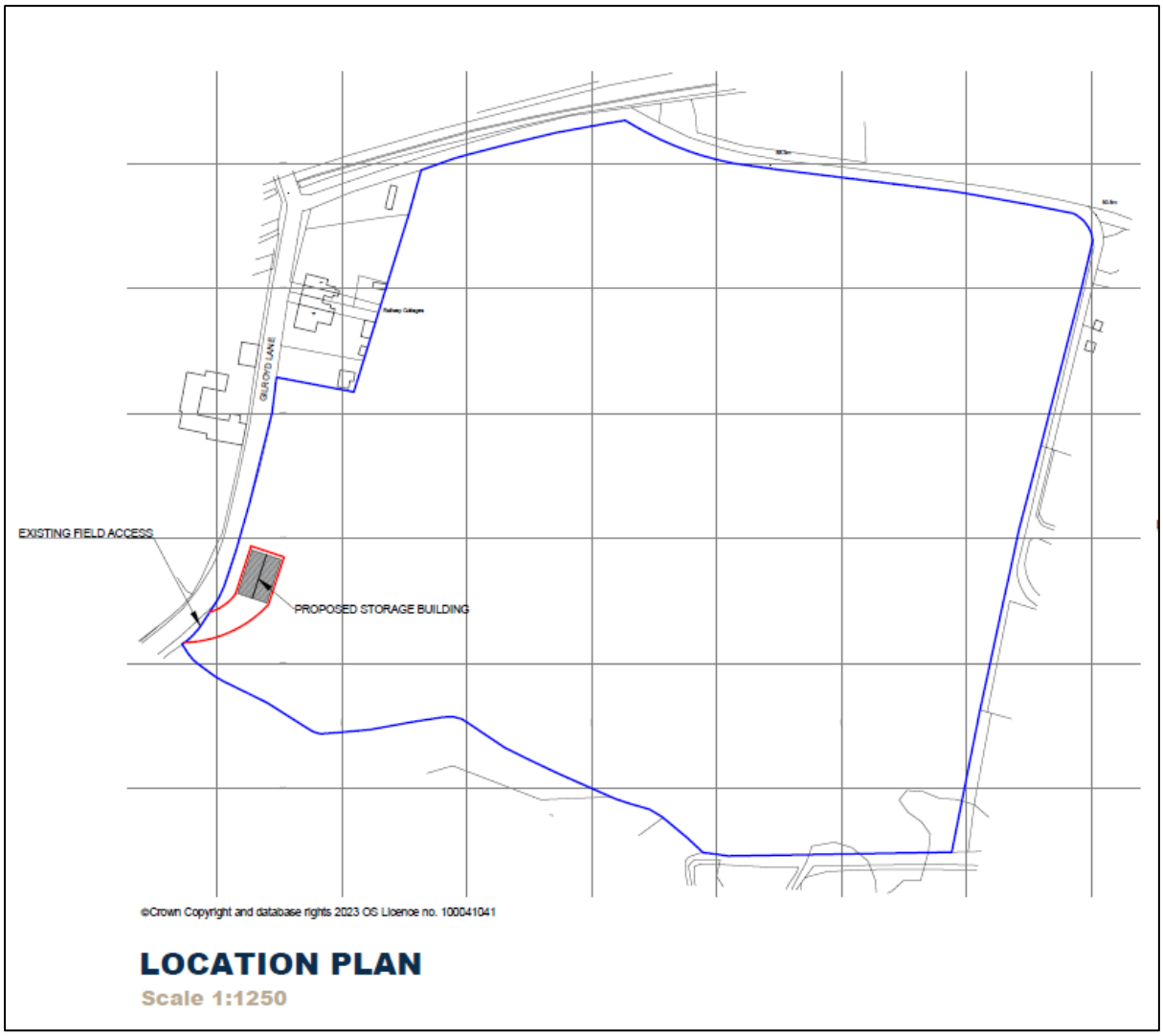
Section 1 – Description of site and proposed development

a) Site location and Description

The Coal Authority has been commissioned to prepare a Coal Mining Risk Assessment Report for a proposed development at land off Gilroyd Lane, Dodworth, Barnsley, S75 3EG (see Figure 1), in order to provide the Local Planning Authority with information on coal mining and an assessment of its impact on land stability.

The approximate site centre co-ordinates are E432559, N404225. The proposed development area requires access via the existing field access from Gilroyd Lane. The site has an approximate elevation of 80-82m AOD.

Figure 1: Site location plan



b) Description and layout of proposed development

The Coal Authority understands that the developer plans to construct an agricultural storage building (see appendix A).

c) Scope of coal mining risk assessment

The purpose of this Coal Mining Risk Assessment Report 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.
- 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.

Any works that intersect coal mine workings, mine entries or coal seams may have implications for mine gas, spontaneous combustion and surface collapse. Coal Authority permission is required prior to any such works taking place. Further detailed advice can be provided upon request.

The Coal Authority's adopted policies regarding building over or close to mine entries and managing gas risks can be viewed at:

www.gov.uk/government/publications/building-on-or-within-the-influencing-distance-of-mine-entries

www.gov.uk/government/publications/guidance-on-managing-the-risk-of-hazardous-gases

Section 2 – Sources of information used to inform this report

Source reviewed	Yes	No	Remarks
Coal mining report	X		Consultants Coal Mining Report (Appendix B)
Other mining records	X		Abandonment plans – NE362 Opencast Prospecting file Strafford (053748)
Geological plans	X		OS Geological Sheet SE30SW (1981), County Geological Sheet Yorkshire 274SW (1933), BGS 1:50,000 Geological Sheet Barnsley 87 (2008)
BGS Boreholes		X	
Other	X		BGS GeoIndex

The above information sources have been used to provide an assessment of the potential mining risk within the remainder of the report.

Section 3 – Identification and assessment of site specific coal mining related risks

The Coal Authority's search of its detailed coal mining information identifies the following site specific coal mining legacy risks to the site.

Coal mining issue	Reported		Risk assessment	
	Yes	**No**	Rating	Comment
a) Underground coal mining (recorded at shallow depths)		X	Low risk	None likely to influence the proposed development
b) Underground coal mining (probable at shallow depths)	X		Low risk	None considered likely to be present
c) Mine entries (shafts and adits)		X	Low risk	None recorded within 100m
d) Coal mining geology (faults and fissures)		X	Low risk	Faults recorded 160m north and 175m northwest of site
e) Record of past mine gas emissions or potential		X	Medium risk	Silkstone seam known to be liable to spontaneous combustion. All mine workings pose a potential gas risk which should be considered in any future investigations and development
f) Recorded coal mining surface hazard	X		Medium risk	Strafford Mine Water Treatment Scheme located to west of site. Shallow mine water likely across area
g) Surface mining (opencast workings)	X		Low risk	Several opencast sites in locality, closest located 345m ESE of site. None considered likely to influence development

A desk based study of the coal mining information has been used to risk assess the coal mining features above. A summary of the risk posed by these features is summarised

after thorough analysis of the information sources. Comment on each specific coal mining issue follows below:

a) Underground Coal Mining (recorded at shallow depths)

Coal mining at depths shallower than 30m beneath ground level can typically pose challenges to ground stability at the surface. The magnitude of this effect depends upon the exact depth of any workings, the thickness of competent rock cover and the extraction thickness of any coal mine workings.

The Coal Authority Consultants Coal Mining Report in Appendix B states that the development site is not in an area of recorded shallow coal mine workings. The Consultants Report indicates that one seam of coal (the Flockton Thick seam) has been worked beneath the site at 80m bgl and a further four seams of coal have been worked in the local area at depths of 117-259m bgl. Due to the considerable depths of these recorded workings the risk to the proposed development is considered to be low.

b) Underground coal mining (probable at shallow depths)

Areas of probable shallow coal mine workings are identified as part of the Development High Risk Area for which no recorded plan exists, but where it is likely that workable coal at shallow depths has been mined before records were kept. The data has been estimated from available mining records by qualified mining surveyors. Since 1872 there has been a law that requires all coal mine operators to deposit working plans of the mine with the government following the cessation of operations. Prior to this date the plans were often destroyed or kept in private ownership.

Where the extraction of coal has occurred there is the potential for voids to remain long after mining has ceased. The depth of workings generally dictates the length of time that significant voids may remain, but other factors including the size of mine roof supports and the competency of overlying strata can influence the time for natural consolidation to occur. Waste material produced during mining was sometimes used to backfill abandoned sections of mine workings, therefore reducing the volume of open cavities or voids that remain. The method of backfilling workings is typically not recorded and cannot be relied upon as a satisfactory form of remediation.

The Coal Authority Consultants Coal Mining Report in Appendix B states that the development site is in an area of probable shallow coal mine workings. The Consultants Report also indicates that the Top Haigh Moor seam outcrops within the site boundary, orientated approximately northwest-southeast and is indicated to be of workable thickness.

The client has also obtained the historical records from the BGS for the Strafford opencast prospecting site (053748). This file includes records of a number of boreholes drilled locally to the site in 1953.

The BGS 1:50,000 Geological Sheet Barnsley 87 (2008) and the OS Geological Sheet SE30SW (1981) both record an outcrop at the position of the aforementioned Top Haigh Moor seam (referred to as the Haigh Moor on both sources) and also record the Swallow Wood seam outcropping approximately 75m northeast of site and the Lidgett seam outcropping approximately 37-55m southwest of the site. However the County Geological Sheet Yorkshire 274SE (1932) and opencast prospecting file do not record the Haigh Moor/Top Haigh Moor to outcrop locally and only record the Lidgett seam to outcrop in the locality. The position of the Lidgett seam outcrop as detailed on the County Geological Sheet and also the opencast prospecting file corresponds with the position of the Swallow Wood outcrop as detailed on the OS Geological Sheet. The County Geological Sheet records a lithological boundary marked at the approximate location of the site.

It is therefore clear there is some discrepancy between sources as to the likely seam(s) present at shallow depth at the development site.

A summary of the generalised vertical section (GVS) of the OS Geological Sheet is summarised below for reference:

Seam	**Thickness**	**Separation to seam above**
Swallow Wood	0.61-1.60m	N/A
Haigh Moor	1.04-2.15m	15m
Coal (Low Haigh Moor?)	*Thin*	8m
Lidgett	0.48-1.25m	24m
Joan	0.51-0.66m	53m

A note of 'old workings' is made adjacent to the Haigh Moor outcrop on the OS Geological sheet approximately 1.7km SSE of site, however no further notes or indication as to where this conjectured outcrop position has been taken from are made.

A rate of dip of 1 in 8 (7.1°) northeast is recorded at a location 570m south of site on opencast plan NE362 for the Ivas Wood/Menagerie Wood/Wallside sites. Incidentally no old workings were recorded in the Lidgett seam on this plan. Based on the potential for the Lidgett seam to outcrop 37-55m southwest of the site, it could be expected that the seam should be present at approximately 4.6-6.8m below rockhead at the proposed development site and the Haigh Moor seam to be at or close to rockhead in the north of the site.

Whilst the above indicates the potential for up to two seams to be present at shallow depth beneath the site, the local opencast prospecting records did not encounter any evidence of coal mine workings within boreholes drilled locally to the development site. No coal was found to a depth of 10m bgl in boreholes 9c and 10c or to 3m bgl in borehole 7c (all approximately 15-25m east of site). A seam of 0.63m thick was encountered at a depth of 7.64m bgl in borehole 6c, located approximately 45m north of site. The seam is noted as 'black shale and coal' and could be indicative of a seam outcropping within or off-site to the north, however is indicated to be intact.

It remains questionable which seam(s) were represented in these boreholes where coal was proven, however it is anticipated that any seam outcropping within the development site and any seam outcropping close to the south of the site would have been proven within these holes.

Based on the range of sources reviewed, and irrespective of the discrepancies between these, it would appear that no coal seams are present within approximately 10m of ground level in the area of the development site, with seams of workable thickness (albeit not locally found worked) encountered to the north (down dip) of the development. It is therefore considered likely that any of the seams indicated on sources to outcrop at or close to the south of the development site may in fact be locally absent or outcrop to the north of their inferred positions.

Consequently the risk to the proposed development from unrecorded shallow workings is considered to be low.

c) Mine entries (shafts and adits)

The Coal Authority Consultants Coal Mining Report in Appendix B shows no mine entries are recorded within 100m of the development site.

The development site sits within a historical mining area and therefore there is a residual risk of unrecorded mine entries to be present on site. All site operatives should be made aware of this potential risk and a watching brief should be maintained during site works.

d) Coal mining geology (Faults and fissures)

The development site sits upon the Pennine Middle Coal Measures Formation. The closest boreholes to the development site in the opencast prospecting file for the Strafford site record superficial deposits ranging from 1ft (0.3m) soil (borehole 9c) to 6ft 3in (1.90m) soil and clay (10c), both located approximately 15m east of site. It is noted that superficial deposits were recorded as ‘wet’ in borehole 3c (200m southeast of site).

Two faults are recorded to exist locally to the site, one located approximately 160m north of the site, orientated WNW-ESE and downthrown to the south, and the second located 175m northeast of the site (truncated by the first fault), orientated northwest-southeast and downthrown to the northeast. Further in-seam faulting in the Silkstone seam (at depth) is recorded locally to the site. The Strafford opencast prospecting file conjects the possibility of further local near-surface faulting to the south of the site.

Faults can act as pathways for gas and water, cause surface instability and result in dissimilar coal conditions/hazards due to their relative displacement of strata.

e) Record of past mine gas emissions or potential

There are no recorded past gas emissions recorded in the surrounding area, however, coal seams and coal mine workings pose a potential gas risk which should be considered in any future investigations and development. At development sites with shallow coal workings, probable shallow coal mine workings, or pathway features such as mine entries and geological disturbances on or nearby the site, the Coal Authority recommends that a more detailed gas risk assessment to be undertaken in accordance with relevant guidance.

The Silkstone seam is known to be liable to spontaneous combustion. Although this seam is likely to be at depth beneath the site, all seams can be subject to spontaneous combustion and precautions should be taken in case of such an incident during all site works.

f) Recorded coal mining surface hazard

There are no coal mining surface hazards recorded in proximity to the site, however the proposed development site is located approximately 275m east of the boundary of the Strafford Mine Water Treatment Scheme. The mine water level at Strafford is approximately 70m AOD (approximately 10-12m below the surface level of the proposed development site). The development site is also in an area that is topographically lower than much of the wider area, therefore any perched mine water has the potential to be artesian.

It is also of note that a rejected subsidence claim, dated February 2016, exists on land approximately 150m northwest of the proposed development site. The details of this claim are reported as 'Break out of ochreous water in field at number of locations leading to iron rich residues and waterlogged areas. Drainage changed since mine workings to north west treated'.

Due to the above, any ground works, investigation or consolidation should give due consideration to and be prepared to plan to manage potentially ochreous water. It may be prudent to consult the Coal Authority's Environment team for further advice where required.

g) Surface mining (opencast workings)

The Consultants Coal Mining Report in Appendix B indicates three areas of opencast operations in the local area, the closest located 345m ESE of site. Due to the distance between these opencast sites and the proposed development, the risk to the development is considered to be low.

Section 4 – Proposed mitigation strategy

a) Site investigation and/or remediation

After a thorough desk based review of the available evidence, it is probable that the development site has not been subject to the influence of coal mining legacy features which will influence the stability of the proposed development. Accordingly, an intrusive site investigation will not be required.

However, in the event that any ground works are required at the site in future, due consideration should be given to the proximity of Strafford Mine Water Treatment Scheme and the likelihood of mine water being present at shallow depth across the area. Should consolidation of any workings be required, due consideration should be given to local mine water being relatively shallow. Even if any workings encountered are isolated from the deeper mine workings connect to Strafford Mine Water Treatment Scheme, there remains the potential for perched mine water, which may also be shallow, however the likely water level in this scenario is unknown.

Due to the above, any ground works should give due consideration to and be prepared to plan to manage potentially ochreous water.

Guidance on drilling or piling through coal can be found at:

www.gov.uk/government/publications/guidance-on-managing-the-risk-of-hazardous-gases

Due to the difficulties in identifying coal related gas hazards, it may be prudent to consider completing a gas risk assessment for the development site. This may recommend basic gas protection measures within the foundation design, which are resistant to permanent gases (carbon dioxide, methane, carbon monoxide) and comparable to that suggested in BR211, as commonly used to protect against radon in residential properties.

Where development is proposed over areas of coal or past coal workings at shallow depth, developers should consider wherever possible removing any remnant shallow coal. This will enable the ground to be stabilised and remove a hazard prior to construction of any foundations associated with the development. Prior extraction of surface coal requires an Incidental Coal Agreement from the Coal Authority. Further information can be found at:

www.gov.uk/get-a-licence-for-coal-mining

The occurrence of unrecorded mine entries across the whole of the site cannot be discounted and consequently in areas of new build development a watching brief should be maintained throughout the site works to identify this risk. As a result all site operatives should be made aware of this potential risk. Where mine entries exist close to the

boundary the developer should be aware that this could complicate treatment if they straddle the boundary or works needed to treat them require access to land owned by third parties.

Should coal seams be found, at or near the depth of the development's foundations, they may pose a risk of spontaneous combustion if exposed to air or may act as pathways for ground gases to reach the development. A competent engineer should be consulted if coal is encountered in, or adjacent to, the foundations of the proposed development.

Concrete, cements and renders may be susceptible to attack from elevated levels of sulfates in the ground. The Building Research Establishment reports that most cases of sulfate attack occur in and adjacent to coal field areas and related industrial centres. It would be prudent for the issue of sulfate attack to be considered during the foundation design to ensure they comply with the Building Regulations 2010.

You may also wish to refer to the Construction Industry Research and Information Association (CIRIA) publication C758 "Abandoned Mine Workings Manual".

b) Coal Authority permit

Any intrusive activities, including initial site investigation boreholes and any subsequent treatment of coal mine workings/coal mine entries for ground stability purposes require the prior written permission of the Coal Authority. Application forms for Coal Authority permission and further guidance on this matter can be obtained from the Coal Authority's website at:

www.gov.uk/get-a-permit-to-deal-with-a-coal-mine-on-your-property

Follow on services can be requested using the details in the contacts section.

Section 5 – Conclusions

This report has identified that the proposed development site is not known to have been subject to past coal mining activity that is likely to influence the stability of the site. The risk to the site from legacy mining features is low.

The Coal Authority advises the developer undertake a detailed Gas Risk Assessment where proposed development occurs over shallow coal reserves as is the case here.

Section 6 – Contacts

Planning and Local Authority Liaison Service

Tel: 01623 637 119

Email: planningconsultation@coal.gov.uk

Website: www.gov.uk/planning-applications-coal-mining-risk-assessments

Surface Hazards Emergency Service

Tel: 0800 288 4242 (open 24 hours a day, 7 days a week)

24-hour number for reporting public safety hazards and incidents associated with coal mining

Mining Reports Service

To purchase site specific coal mining information go to our website;

www.groundstability.com

Licensing and Permitting Service

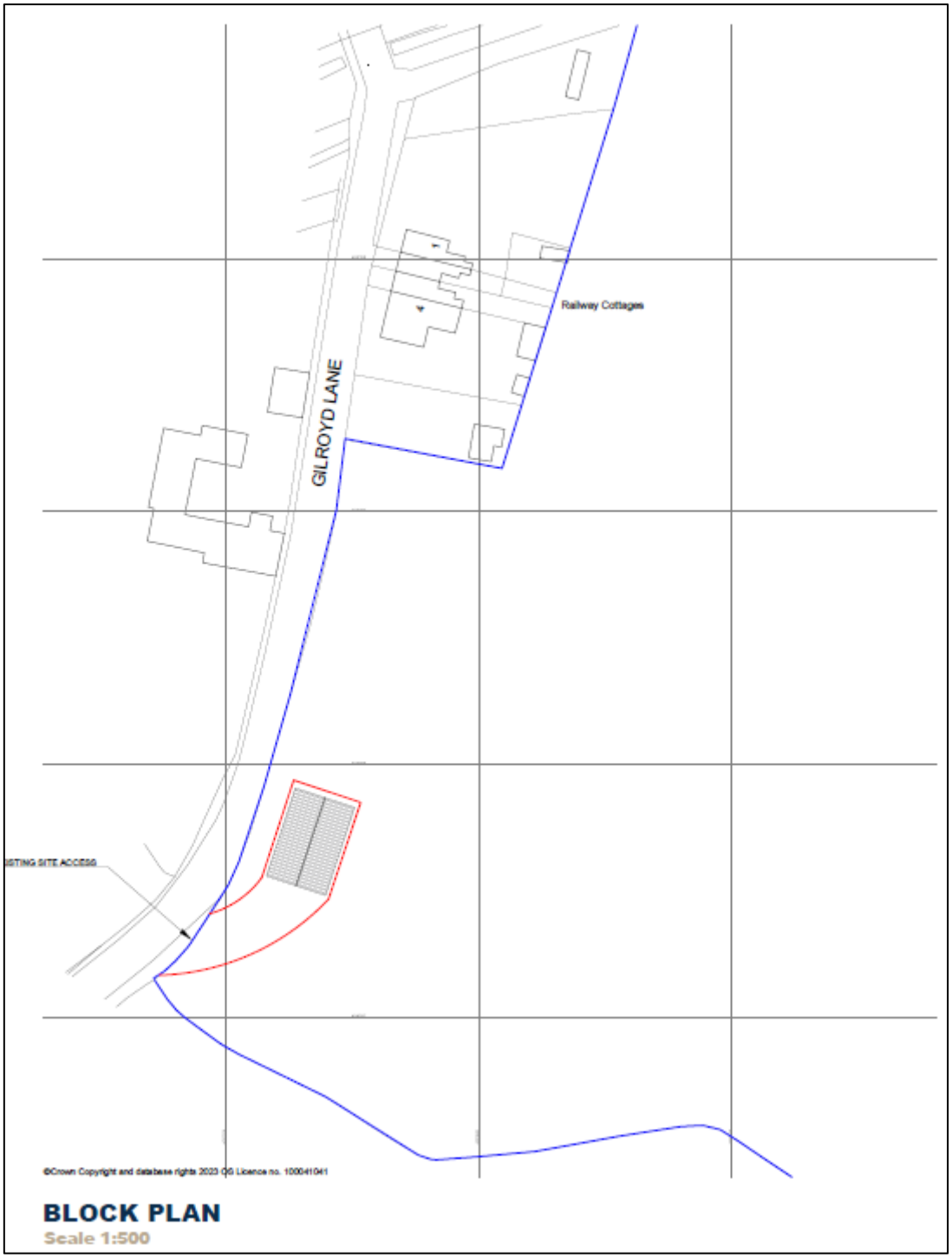
Email: permissions@coal.gov.uk

Tel: 01623 637 320

For permission to enter or disturb coal mine entries and coal seams.

Section 7 – Appendices

Appendix A – Plan showing proposed development layout



Appendix B – Non-Residential Coal Mining Consultants Report

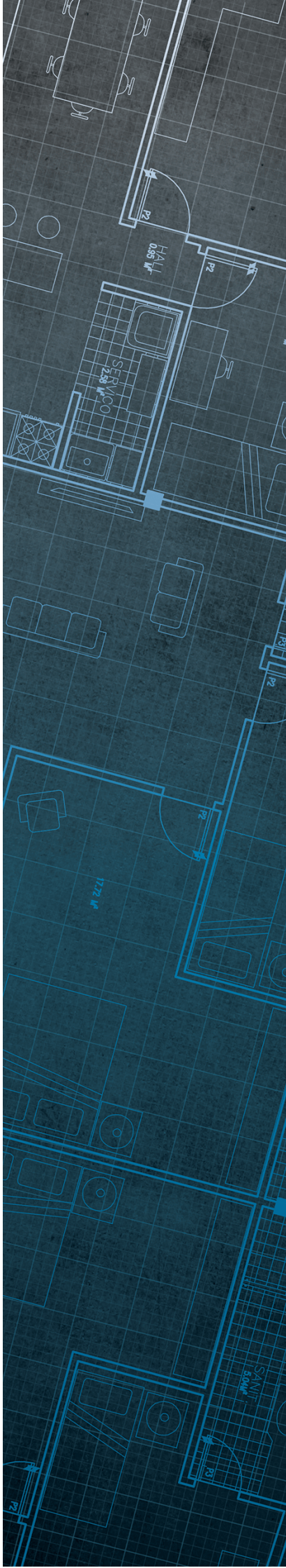
The Coal Authority

Consultants

Coal Mining Report

Land Off
Gilroyd Lane
Dodworth
Barnsley
S75 3EG

Date of enquiry:	**23 May 2023**
Date enquiry received:	**23 May 2023**
Issue date:	**23 May 2023**
Our reference:	**71009530775001**
Your reference:	



Consultants

Coal Mining Report

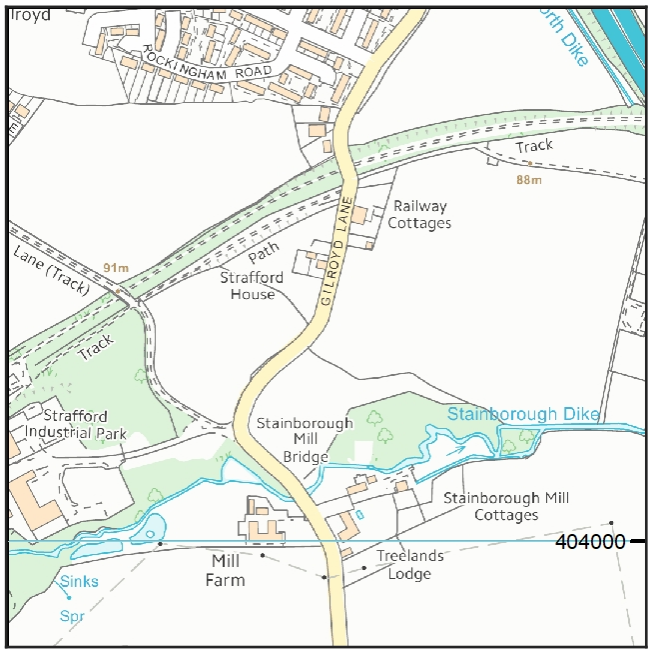
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

CMRA THE COAL AUTHORITY

Enquiry address

Land Off
Gilroyd Lane
Dodworth
Barnsley
S75 3EG



Approximate position of property

Map data

How to contact us

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Mansfield
Nottinghamshire
NG18 4RG

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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
WENTWORTH / SILKSTONE	FLOCKTON THICK	Coal	64F2	80	Beneath Property	4.6	North-East	84	1951
STAFFORD	TOP FENTON	Coal	64F9	117	South-West	4.1	East	84	1956
STAFFORD	PARKGATE	Coal	64FD	145	Beneath Property	4.5	North-East	160	1894
ROB ROYD	SILKSTONE	Coal	64FL	179	North-East	5.5	East	167	1929
STAFFORD	SILKSTONE	Coal	64FM	234	South-West	9.1	North-East	167	1926
WENTWORTH / SILKSTONE	WHINMOOR	Coal	64FO	259	South-West	6.2	North-East	71	1971

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

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

12461	NE565	NE469
6066	NE602	NE584
SY113	NE601	SY95

Our records show we have more plans than those shown above which could affect the enquiry boundary.

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
TOP HAIGH MOOR	Coal	Yes	Within	N/A	138

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

Please refer to the “Summary of findings” map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations
None recorded within 50 metres of the enquiry boundary.

Remediated sites
None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence
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

Distance to scheme (m)	Direction
268.9	West

See Section 4 for further information.

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

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

Withdrawal of support notices
The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

Mine water treatment schemes

The enquiry boundary is within 500 metres of where the Coal Authority has previously investigated and where necessary remediated the effects of mine water flooding or mitigated potential contamination.

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

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.**

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines
Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips
Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations
Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites
Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence
Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes
Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining
Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing
Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders
Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices
Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

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

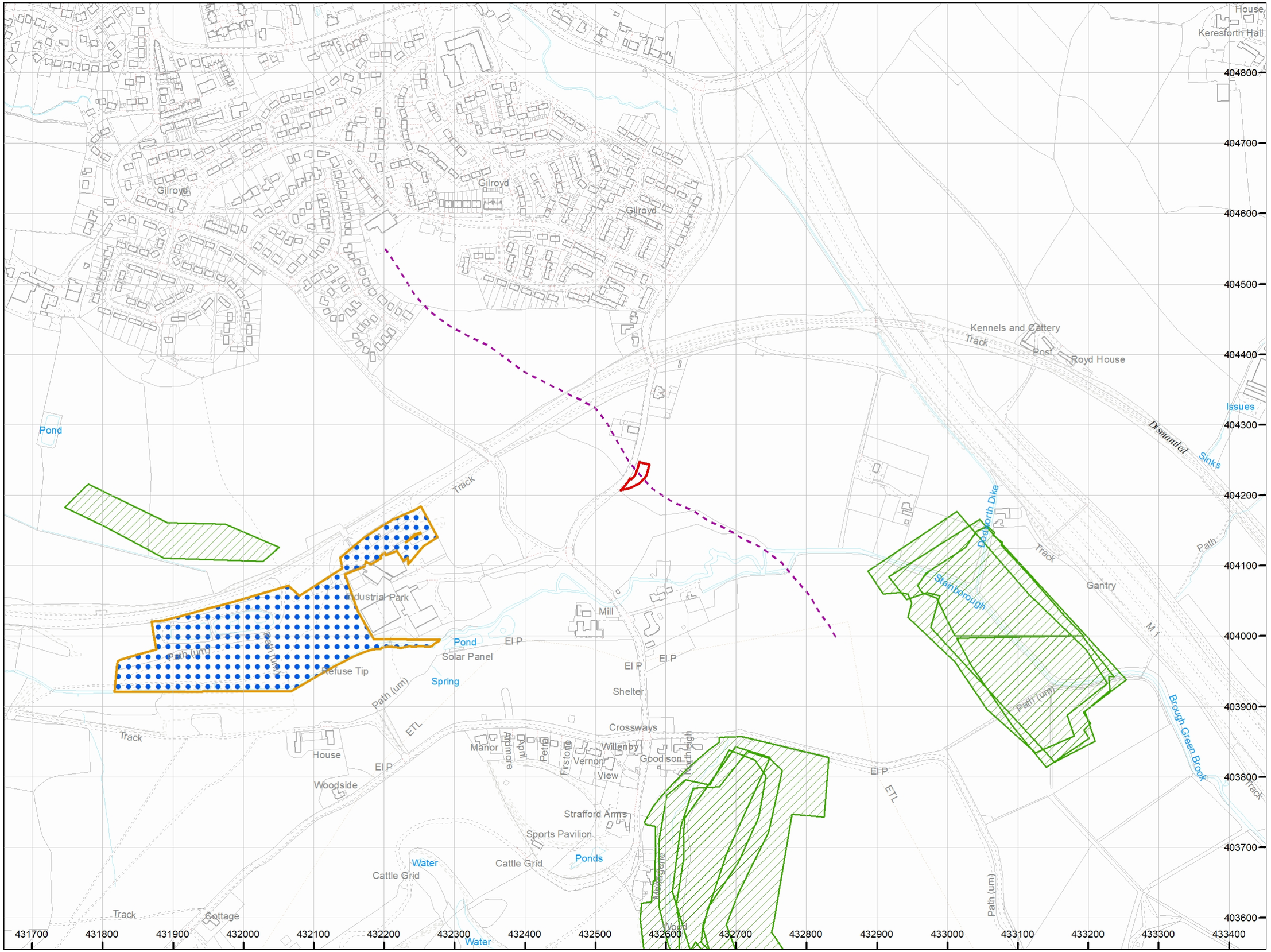
The Coal Authority

Summary of findings

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

Key

- Approximate position of the enquiry boundary shown
- Outcrop (Conjectured)
- Unlicensed opencast site
- Mine water treatment scheme



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