The Coal Authority

Coal Mining Risk Assessment

For development at: Land Adjacent to 137 Belfield Lane, Rochdale, OL16 2XS

For proposal: Construction of 2 storey residential dwelling with associated car parking

Assessment Summary

Assessment Result	HIGH RISK
Recommended Further Work	INTRUSIVE SITE INVESTIGATION BEFORE FINALISING LAYOUT

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.

Limit of liability

This report is provided for the applicant and is in respect of the property identified on its face. Any conclusions or recommendations made are those based on information obtained for the report and our current knowledge and practices. The information and data set out in this report is based on information provided by or obtained from third parties which is held by the Coal Authority. Any limitations of the data are identified within the report. The Coal Authority does not accept liability for the accuracy of third party data. Should new data or information become available these results, conclusions and recommendations may require amending. The Authority is not and cannot be liable for any harm, loss or damage of whatever nature, including consequential loss, occasioned to any third party by the inaccuracy of the information set out in this report and any person seeking to rely upon it should if necessary undertake their own investigations and professional advice. The report should only be used in the stated context.

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

Version	Compiled	Checked	Date
1.1	FC	PB	02/09/19

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 Adjacent to 137 Belfield Lane, Rochdale, OL16 2XS (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 E391233, N413599. The proposed development area requires access via Belfield Lane. The site has an approximate elevation of 136m AOD.

Figure 1: Site location plan



b) Description and layout of proposed development

The Coal Authority understands that the developer plans to construct a 2 storey residential dwelling with adjacent car parking (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: 631/1, 631/2, NW114, NW1267/1A, NW1267/1B, NW1267/2
Geological sheets	X		Lancashire 89NW - 1910
County sheets	X		Lancashire 89.1 - 1930
BGS Boreholes	X		Borehole scan refs: SD91SW8, SD91SW136, SD91SW137, SD91SW138
CA Mine Entry Data	X		Mine entry refs: 391413-005 391419-006
Other	X		BGS GeoIndex CA Interactive viewer OS Mastermap

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 recorded at shallow depths.
b) Underground coal mining (probable at shallow depths)		X	Low risk	Unrecorded workings suspected at shallow depths but not considered to pose a risk to the development.
c) Mine entries (shafts and adits)	X		High risk	Two recorded mine entries that are considered a potential risk to the development.
d) Coal mining geology (faults and fissures)		X	Low risk	None recorded.
e) Record of past mine gas emissions or potential	X		Medium risk	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	Low risk	None recorded.
g) Surface mining (opencast workings)		X	Low risk	None recorded.

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. Comments 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 shows that the development site is not in an area of recorded shallow coal mine workings with Coal Authority records showing that the property is underlain by historic workings within the Arley Seam as shown on Ab plans: NW1267/1A, NW1267/1B and 631/2. This seam is recorded to be last worked in 1877 at approximately 87m below the surface with a recorded extraction thickness of 1.3m. County Geological Sheet Lancashire 89NW correlates with this stating that the mapped thickness of this seam (Arley or Royley Mine) at the surface is approximately 1m. All movement or subsidence associated with these workings should have ceased.

It is normally considered that seam workings with an overlying cover of competent rock at least 10x the thickness of the recorded extraction is sufficient in terms of mitigating the subsidence risk to the surface from any potential collapse of workings. Due to the depth of the recorded workings in the Arley seam, it is thought that there is sufficient competent rock cover for any coal mining subsidence to be accommodated within this section of strata. Hence the risk posed to the site due to recorded underground workings is 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 shows that the development site is not in an area of probable shallow coal mine workings.

The County Geological sheet ‘Lancashire 89NW’ indicates that there are mapped coal outcrops at the surface 135m and 162m north of the property site. The closer outcrop, referred to as the Top Neddy or Bone Coal, is described as ‘inferior coal’ with a thickness of 0.51m from borehole scan SD91SW8 and 0.46m on the geological sheet. Although this seam is considered of workable thickness, due to its quality description, it is unlikely that this seam has been worked in the past.

The second outcrop, referred to as the Bottom Neddy or Smith Coal, is described as 'good coal' at a thickness of 0.56m (SD91SW8), which means it is possible it may have been worked in the past, and therefore may be associated with unrecorded workings. However due to the dip of the seam, stated as 1 in 3.7 (15.1°) on the geological sheet, it is estimated that this coal seam could be present at 45m below the surface of the development site. Due to the thickness of competent overlying strata (estimated at 23m based on a superficial thickness of 22m), should this seam have been worked, it is considered that there is sufficient rock cover to mitigate any potential subsidence from affecting the surface development. Therefore the risk posed to the development site due to unrecorded workings is low.

c) Mine entries (shafts and adits)

The Coal Authority Consultants Coal Mining Report in Appendix B shows there are seven mine entries are recorded within 100m of the development site boundary. As part of this coal mining risk assessment, the positions of those mine entries (that have not been physically located in the field) have been reviewed using the original source plans and any other relevant geological or abandonment plans available. The results of this process are summarised in the table below:

Reference	Easting	Northing	Primary Sources	Revised Easting	Revised Northing	Distance from site
391413-002	391214	413498	OS Mastermap 631/2 NW114 NW1267/1A NW1267/1B	n/a	n/a	96m
391413-003	391223	413502	OS Mastermap 631/2 NW114 NW1267/1A NW1267/1B	n/a	n/a	90m
391413-004	391235	413533	631/2 NW1267/1A NW1267/1B	391233	413530	57m
391413-005	391222	413595	NW114 NW1267/1A NW1267/1B	391220	413594	9m
391413-006	391229	413590	Located on site NW114 NW1267/1A NW1267/1B	n/a	n/a	7m
391413-008	391226	413656	631/2 NW1267/1A NW1267/1B	391224	413560	51m
391413-009	391247	413677	631/2 NW1267/1A NW1267/1B	391247	413676	70m

The Coal Authority seeks to ensure that development is avoided above, or within the zone of influence of, all mine entries where possible. The zone of influence can be calculated as the sum of the departure value (up to 10m to account for discrepancies in source material), plus the local depth to rockhead (discussed in 3d below as likely to be up to 22m), plus the entry radius (nominally assumed to be 1.25m unless proven otherwise). On the basis of the above the zone of influence for these entries can be assumed to be a distance of 33.25m from the recorded positions detailed above. None of these mine entries lie within the property boundary itself, however, the site lies within the likely zone of influence (ZOI) of two of these entries; specifically, mine entry reference: 391413-005 and 391413-006.

The Coal Authority Consultants Coal Mining report shows that mine entry 391413-005 was searched for and not found in 1976. It also states that mine entry 391413-006 was capped in 1977, and that it was re-inspected in 2007 by The Coal Authority where it was found in its recorded position. The Consultants Coal Mining Report records shaft 391413-003 to have been "Capped in 1977 by the National Coal Board for security purposes only. The cap was fitted with a central marker pyramid" with no further comment on the treatment of the shaft. It is therefore considered that this shaft may be potentially void.

As the shafts are located on land not owned by the developer, an intrusive investigation to determine the location and condition of the shafts may not be possible, however at this time the risk to the proposed development from this entry is high. Ground investigations can be undertaken to confirm the depth to rockhead, however if the zone of influence for this – and potentially other recorded mine entries in the area – is likely to fall across the entire site, a structural engineer should be consulted to determine if the risk from these mine entries can be accommodated within a foundation solution.

In addition, 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 Lower Coal Measures Formation, consisting of interbedded grey mudstone, siltstone, pale grey sandstone and commonly coal seams, with more numerous and thicker coal seams in the upper sections (BSG GeoIndex). This formation has previously been referred to as the Lower Coal Measures Formation and the Grey Measures of Yorkshire and Nottingham.

The table below shows the positions of nearby boreholes which contains information regarding the depth and nature of superficial deposits in the area. The estimated depth of superficial deposits (i.e. the depth of incompetent cover above rock head) is approximately 22m (taken from BGS borehole data). However, due to a low coverage of accessible boreholes of sufficient depth in the vicinity, the points at which the depth of superficial deposits have been measured are sparse close to the development site.

Therefore it must be considered that the values in the table below may not reflect the true depth of superficial deposits at the site.

BGS borehole /mine entry reference	Location	Distance and direction from site	Recorded depth to rock head	Nature of superficial deposits (taken from borehole log scans)
SD91SW8	E 391226 N 413503	88m S	21.9m	Sand and gravel.
SD91SW136	E 391130 N 413834	244m NNW	32.5m	Made ground followed by boulder clay, stony clay, gravel and sand with traces of coal.
SD91SW137	E 391172 N 413901	296m NNW	36.8m	Made ground followed by boulder clay, sandy clay with stone inclusions, gravel and traces of coal.
SD91SW138	E 391140 N 413937	339m NNW	39.8m	Brown sand, stony clay, boulder clay, sand with gravel and cobbles.

In addition, no faults, fissures or break lines are known to affect the development site. However, there is presence of large scale geological faults within a kilometre of the development site which have been proven due to the local displacement of underground coal seams.

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.

No seam mentioned in this report is recorded as being prone to spontaneous combustion.

f) Recorded coal mining surface hazard

None recorded.

g) Surface mining (opencast workings)

None recorded.

Section 4 – Proposed mitigation strategy

a) Site investigation and/or remediation

Due to the presence of two recorded mine entries within a close proximity to the development site, the risk to the proposed development from coal mining features is high. Ground investigations will need to be undertaken at the proposed development site to confirm the local depth to rockhead and determine the likely zone of influence for each mine entry.

Any site investigations at the site will need to be carried out by a competent contractor, taking into account the findings of this report. The results should be interpreted by a qualified and competent person so that an appropriate remedial strategy can be developed.

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.

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.

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

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 Special Publication 32 "Construction over Abandoned Mine Workings".

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.

c) Implications for development layout

The coal mining legacy issues outlined in this report, particularly the presence of mine entries 391413-005 and 391413-003, will have implications for layout in the proposed development layout outlined in Appendix A. Ground investigations will need to be undertaken at the proposed development site to confirm the local depth to rockhead and determine the likely zone of influence for the mine entry. The zone of influence should be avoided as part of the development layout, however if this cannot be avoided then a structural engineer should be consulted to determine whether the risk from the recorded mine entry can be accommodated within a foundation solution.

Section 5 – Conclusions

This report has identified that the proposed development site has been subject to past coal mining activity, namely the presence of two mine entries within a close proximity to the property boundary: shaft references 391413-005 and 391413-006. The risk to the site from legacy mining features is therefore high.

The intrusive investigations as recommended in Section 4a of this report should be undertaken prior to the layout of the development being confirmed.

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: 01623 646 333 (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

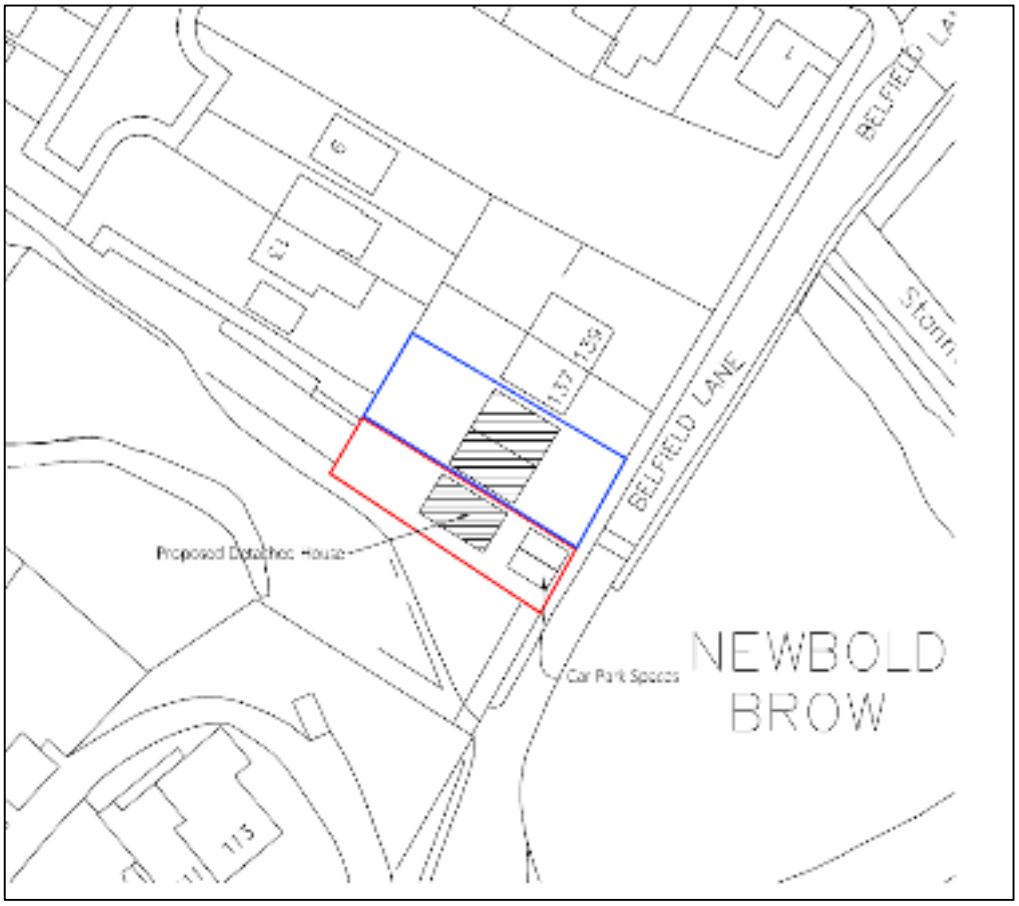
Email: permissions@coal.gov.uk

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

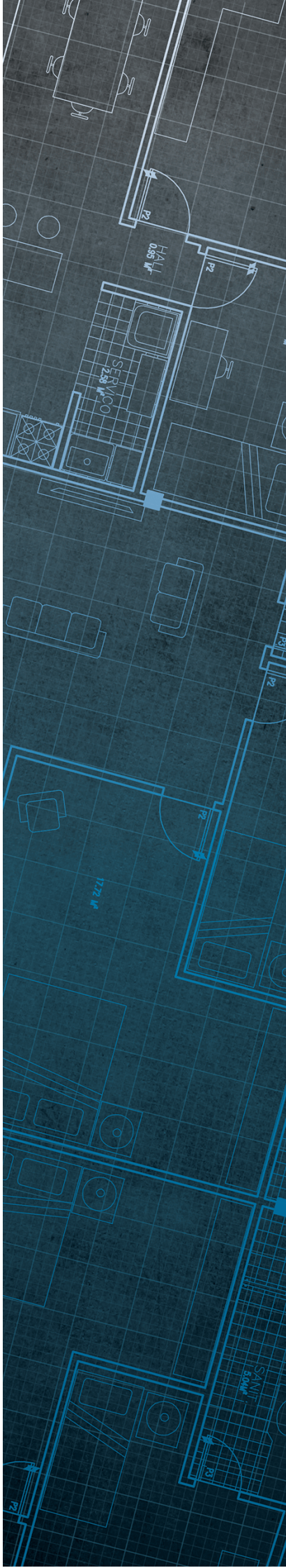
The Coal Authority

Consultants

Coal Mining Report

Land Adjacent To 137 Belfield Lane
Rochdale
OL16 2XS

Date of enquiry:	**4 September 2019**
Date enquiry received:	**4 September 2019**
Issue date:	**4 September 2019**
Our reference:	**71004640641001**
Your reference:	



Consultants

Coal Mining Report

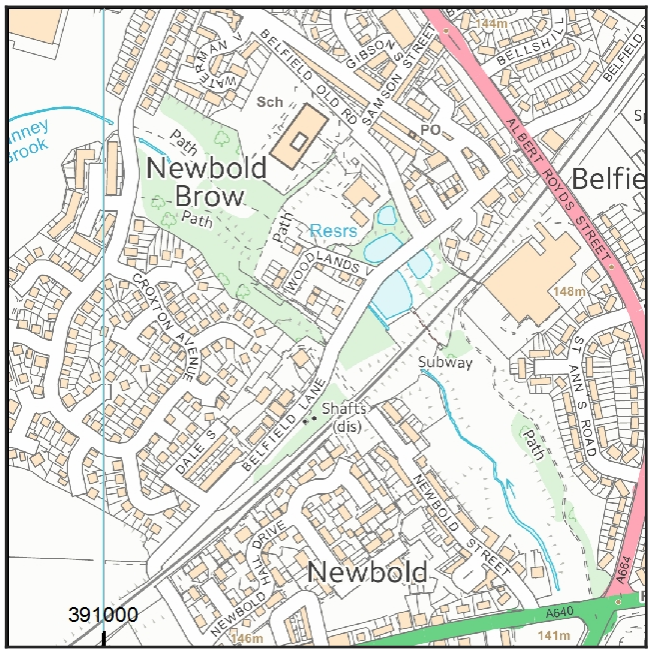
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

THE COAL AUTHORITY

Enquiry address

Land Adjacent To 137 Belfield Lane
Rochdale
OL16 2XS



Approximate position of property

Map data

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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
unnamed	ARLEY	Coal	3X4N	87	Beneath Property	12.5	South	130	1877

Probable unrecorded shallow workings

None.

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	391413-002	391214 413498		Coal	Disposals (Northern) Ltd 21/10/1957
Shaft	391413-003	391223 413502		Coal	Disposals (Northern) Ltd 21/10/1957
Shaft	391413-004	391235 413533		Coal	
Shaft	391413-005	391220 413594	This shaft was searched for in 1976 but was not found in its plotted position.	Coal	
Shaft	391413-006	391229 413590	This shaft was capped in 1977 by the National Coal Board for security purposes only. The cap was fitted with a central pyramid marker.	Coal	
Shaft	391413-008	391224 413660		Coal	
Shaft	391413-009	391247 413676		Coal	

Abandoned mine plan catalogue numbers

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

NW1267	NW114	PO0
631		

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

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Outcrops
No outcrops recorded.

Geological faults, fissures and breaklines
No faults, fissures or breaklines recorded.

Opencast mines
None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips
None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

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

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

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

Coal mining subsidence
The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 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.

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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.

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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.

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.

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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.

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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.

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

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

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

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

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

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

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

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

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

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Summary of findings

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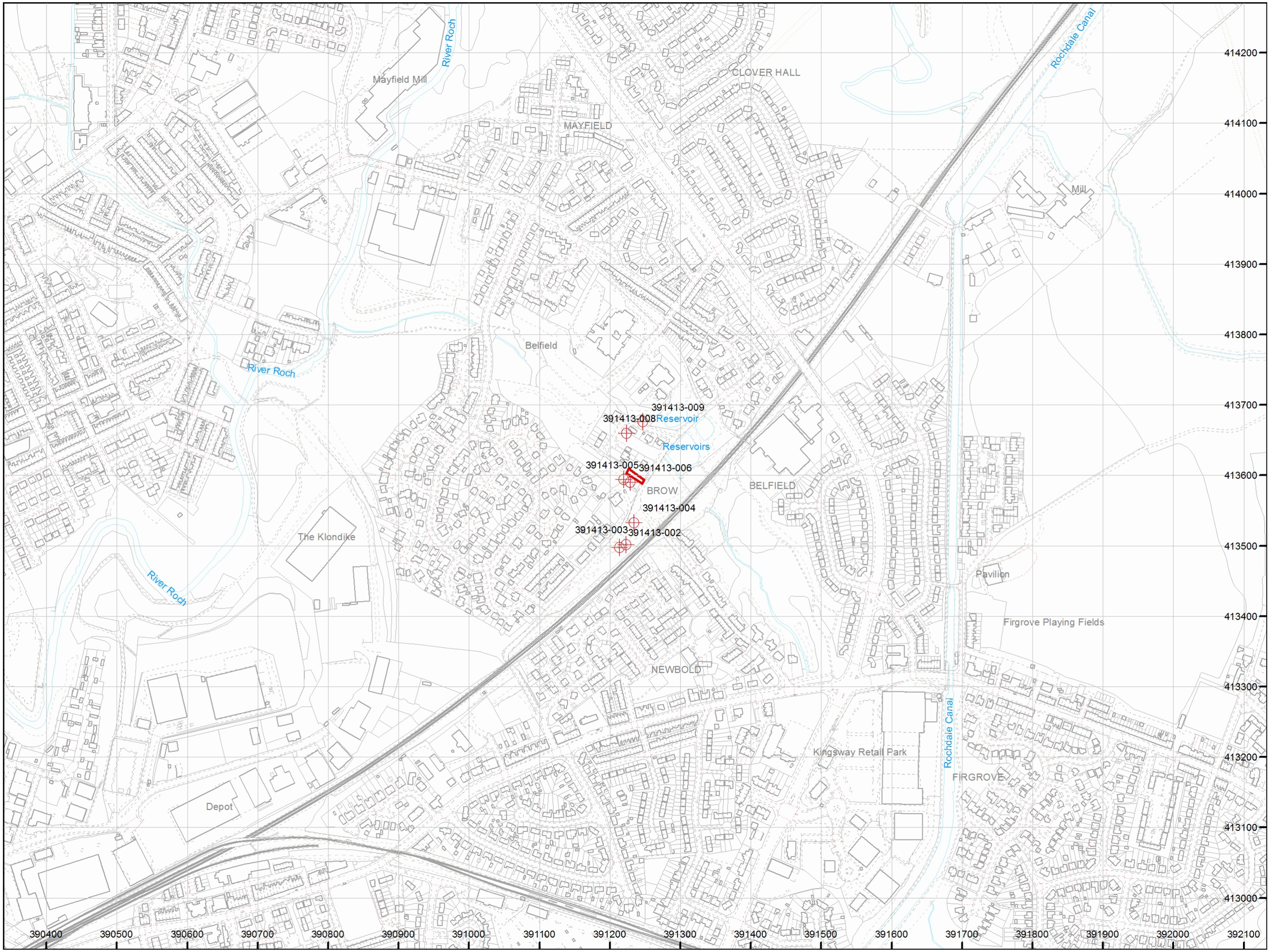
The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown

Disused mine shaft



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