

Proposed Church and Community Centre, Queen's Road, Barnsley

Coal Mining Risk Assessment

Introduction

William Saunders are appointed by The Salvation Army in connection with the proposed construction of a Church and Community Centre on land to the rear of 32 Queen's Road, Barnsley.

This report has been requested by The Coal Authority as part of their recently introduced Development Management process, and follows their published requirements.

Stage 1: Obtain Coal Mining Information

A Coal Mining Report was obtained from The Coal Authority on 7th November 2011, ref 00067330-11.

Stage 2: Identify what risks Coal Mining poses to the proposed Development

The Mining Report notes that:-

- There are no known mine entries in, or within 20m of the site, although records may be incomplete and entries may exist that the Coal Authority are not aware of.
- The site is in the likely zone of influence of workings in 3 seams of coal, at 150 to 360m depth, last worked in 1939. Ground movement from these workings should have ceased.
- The site is not in the likely zone of influence of current underground coal workings.
- The Coal Authority believe there is coal at or near the surface which may have been worked historically.
- The Coal Authority have no record of mine gas emissions within the site.
- The Coal Authority has not granted, nor is currently considering, any license to remove coal underground methods. The site is not in an area likely to be affected at the surface from planned future workings although reserves are present that could be worked at some time in the future.
- There are no known faults or lines of weakness due to coal mining at the site.
- The site has not been subject to remedial works by or on behalf of The Coal Authority under its Emergency Surface Hazard call out procedures.

- The site is not within the boundary of an historic opencast site.
- The site is not within 200m of current opencast operations. The site is not within 800m of presently proposed opencast mining.
- The Coal Authority have not received a damage notice or claim for the site since 31st October, 1994.

Stage 3: Identify how Coal Mining issues have influenced the proposed Development and whether any other mitigation measures are required.

Relevant Coal Mining issues noted at Stage 2 are:-

- The site is within the zone of influence of underground workings between 150 and 360m depth, ground movement from which is now expected to have ceased.
- There may be coal at shallow depth which may have been worked historically.

These are addressed as follows:-

- Deep underground workings are not considered to present a hazard to the development as surface movement is expected to have now ceased.
- A Phase I Environmental Assessment was undertaken by Eastwood & Partners in 2008 noting that the Two Foot seam was expected to lie at a minimum 8m below ground level (bgl) below the West of the site and the Abdy seam expected to lie at a minimum 19m bgl.

A Phase II Environmental Assessment was undertaken by Wardell Armstrong in 2008, which included 2no. rotary boreholes to 15m bgl, and 11no. window sample boreholes to a maximum of 4m bgl.

Both rotary boreholes, and nine of the window sample boreholes encountered an intact seam at around 1.4 – 3.8m bgl (ground levels across the site vary considerably) which is considered to correspond to the Two Foot seam. There was no evidence of voids or broken ground which may have indicated the presence of shallow workings.

The Abdy seam was not encountered with 15m of ground level and was therefore considered to be at sufficient depth not to have a physical effect on the surface should shallow workings have taken place. Current proposals however require floor level to be up to 1.75m below existing ground levels, and therefore cover to the Abdy seam will be reduced. It would be prudent to carry out additional rotary drilling to confirm the depth to this seam and verify that it is also intact.

The Two Foot seam is at depths that may be encountered during excavations for foundations, and if encountered it should either be removed or adequately blinded with limestone dust or concrete to reduce the risk of spontaneous combustion.

It is noted that a permit will be required from The Coal Authority for works that are anticipated to intersect coal interests.

The presence of coal at or around founding depth gives rise to the potential for gas evolution, although the Phase II works detected no methane. Elevated carbon dioxide levels and the requirement for basic radon protection are such that the building construction will be protected against the ingress of ground gases.

Residual risks are therefore the potential for encountering shallow coal within excavations and the unknown depth and condition of the Abdy seam. Mitigation measures of removal or blinding of encountered coal, and additional rotary drilling to prove the Abdy seam conditions are considered sufficient to address these residual risks.

Prepared by  A.C. Gibson BEng (Hons) CEng MICE MCHT

William Saunders
Sheppard Lockton House
Cafferata Way
Newark
Nottinghamshire
NG24 2TN

Job No: 10383/12

8th November, 2011

Issued by:

The Coal Authority, Mining Reports Office, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire NG18 4RG
ON-Line Service: www.groundstability.com - Phone: 0845 762 6848 - DX 716176 MANSFIELD 5

CUSTOMER SERVICES,
LANDMARK INFORMATION GROUP LIMITED,
ABBAY COURT UNIT 5/7,
EAGLE WAY,
SOWTON INDUSTRIAL ESTATE,
EXETER,
DEVON,
EX2 7HY

Person dealing with this matter:	Keith Pennington
Our reference:	00067330-11
Your reference:	36587239
Electronic Ref:	EME_00016880780005_005
RRUID:	005.00016880780005
Date of your enquiry:	03 November 2011
Date we received your enquiry:	03 November 2011
Date of issue:	07 November 2011

This report is for the property described in the address below and the attached plan.

Non-Residential Coal and Brine Report

Land To Rear Of, 32 Queens Road, Barnsley, South Yorkshire

This report is based on and limited to the records held by, the Coal Authority, and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Coal mining	Yes
Brine Compensation District	No

Information from the Coal Authority

Underground Coal Mining

Past

The property is in the likely zone of influence from workings in 3 seams of coal at 150m to 360m depth, and last worked in 1939.

Any ground movement from these coal workings should have stopped by now.

In addition the property is in an area where the Coal Authority believe there is coal at or close to the surface. This coal may have been worked at some time in the past.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

The property is not in an area for which a licence has been granted to remove coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

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

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

Records may be incomplete. Consequently, there may exist in the local area mine entries of which the Coal Authority has no knowledge.

Coal-mining geology

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

Opencast Coal Mining

Past

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

Present

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

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

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.

Coal-mining subsidence

The Coal Authority has not received a damage notice or claim for the property since 31 October 1994. There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The 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

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

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

Withdrawal of Support

The property is in an area for which a notice of entitlement to withdraw support was published in 1947.

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

Working Facilities Orders

The property is not in an area for which 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.

Payments to Owners of Former Copyhold Land

The property is not in an area for which a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Comments on Coal Authority information

In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore 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 good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/ former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

A site investigation was carried out in 2008 by Wardell Armstrong Unit 4, Newton Business Centre, Newton Chambers, Thorncliffe Park Chapeltown, Sheffield, S35 2PH on behalf of Graham Irving, 8 Laburnham Avenue, Robin Hoods Bay.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

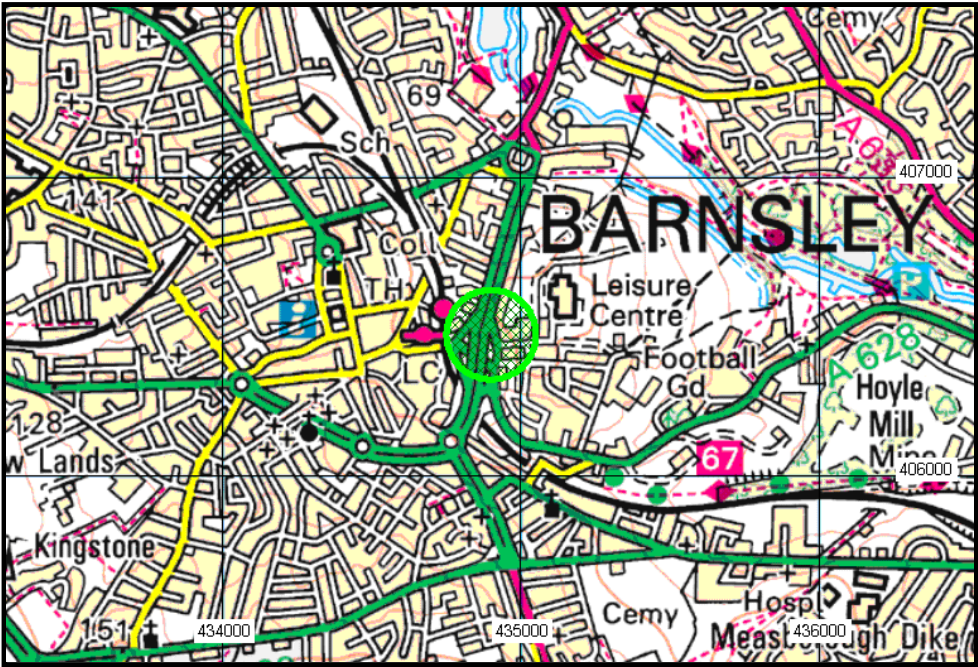
Additional remarks

This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions 2006. The report is compliant with Home Information Pack requirements.

The Coal Authority owns the copyright in this report. The information we have used to write this report is protected by our database right. 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.

Location map

 Approximate position of property



Enquiry boundary

These maps are reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. The Coal Authority. Licence number: 100020315. [2006]

Key

Approximate position of enquiry boundary shown

