

WHS
1-7 White Holdings
Station Road
Halfway,
Sheffield
S20 3GS

PR/AJK/MM/39077-001

BY EMAIL ONLY

13 October 2015

For the attention of Mr J. White

Dear Mr White,

1-7 White Holdings and 1-3 White Park, Station road, Halfway
Coal Mining Risk Assessment

We write to provide a risk assessment against the possibility of shallow coal mining affecting the above site. The risk assessment is based on a review and our interpretation of geological maps, memoirs and Ordnance Survey maps, as well as a Coal Authority Mining Report specific to this site. We have not visited the site.

The site is located to the south of the junction between New Road with Station Road in Halfway, Sheffield. The site is centred around Ordnance Survey national grid reference 444150, 381350 and is currently occupied by workshops and car sales facilities/display areas. We have not seen any layout of any proposed redevelopment at the time of writing.

Geological Review

The geological map for the area, Sheet SK 48 SW (1:10,560 scale) shows the geology beneath the site to comprise undifferentiated mudstones of the Middle Coal Measures across the majority of the site, with mudstones of the Lower Coal Measures beneath the south western corner. Superficial Head deposits comprising clay, silt with sand and gravel are indicated to cover the south eastern corner of the site, but the remainder of the site is indicated to be free of any such deposits. The strata are generally indicated to dip towards the north east at an angle of around 4°. No faults or other lines of weakness are shown to cross the site.

The Lidget Coal seam is conjectured to outcrop in the north eastern corner of the site. According to the geological memoir for the area, the Lidget Coal is a variable seam and was found to be of no economic value in most places. The seam frequently appears as two beds,

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separated by dirt. The seam is not expected to influence the majority of the site, as the natural dip of the strata will mean that the seam crops towards the north east, away from the site. In the upper layers, the coal is likely to be weathered and thus of not of any interest to miners in the past. Underground workings are therefore not expected, and any attempts at working this coal are likely to have been via surface excavation.

The next shallowest named coal seam is anticipated to be the Chavery Coal, although the maps do not identify the seam with certainty due to a limited length of outcrop which is intersected by a fault to the north west of the site. This seam is conjectured to outcrop about 105 m south west of the site. The seam is anticipated to be at a depth of around 8 m bgl, but due to local washing out of the strata in this horizon, the seam is hard to identify, and is thought to be represented by thin, localised bands of coal, which the geological memoirs record to be about 3 inches (<100 mm) thick. This seam is therefore very unlikely to have been worked in this area.

The Sitwell Coal is also conjectured to outcrop around 140 m south west of the site, and thus may be present at around 10m bgl. The seam is recorded to be approximately 1.3 m thick within the shafts at Holbrook Colliery (around 180 m east of the site). The Sitwell seam has been widely worked in the local area, and there are recorded workings in the area north east of Holbrook to the east of the site.

The next seam below this is the Parkgate Coal, which is widely worked and is around 1.5 m thick in this area, and is expected at a depth of around 80 m bgl below the site.

Coal Authority Mining Report

A Coal Authority mining report has been obtained for the site and a copy of this is appended to this letter. The Coal Authority states that according to their records, the property is within the zone of likely physical influence on the surface from past underground workings in three seams of coal, from depths of between 120 m bgl and 270 m bgl, last worked in 1963. The report states that any ground movements associated with these workings should have stopped by now.

The report also states that the site is within an area where the Coal Authority believe there to be coal at, or close to, the surface which may have undergone unrecorded working at some time in the past. This is believed to be referring to the Lidget Coal seam, and probably also the Sitwell coal.

There are no recorded mine entries on the site or within 20 m of the boundary. The property is not within the zone of likely influence of any workings currently being undertaken or proposed underground workings, and it is not within the boundary of an opencast site from which coal has been removed by opencast methods. The property is not within 800 m of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal, or from where coal is currently being removed.

There is no record of any mine gas emission requiring action by the Coal Authority within the boundary of the property. No claims for alleged mining related subsidence have been made within 50 m of the site boundary.

The report states that coal reserves remain in the ground beneath the site, which could be worked at some point in the future.

Risk Assessment

The Lidget Coal seam is expected to outcrop in the north eastern corner of the site, dipping towards the north east. The seam is generally considered to be of no economic value in this area, and it is expected to be weathered in the upper layers on the site. It is therefore unlikely to have been worked, and any extraction will most probably have been via surface extraction rather than underground mining at such shallow depths. This seam is therefore not expected to present a significant risk to any proposed redevelopment of the site, although deeper made ground could be present if the coal has been dug out.

The Chavery Coal is also expected to have been too thin to have been economically viable for mining, and is also therefore not considered to present a significant risk to the site.

The Sitwell Coal may be present at a depth of around 10 m bgl, and is recorded as being up to about 1.3 m thick in the local area. There are no recorded workings in this seam, but there is the potential that unrecorded workings have been undertaken in the past. Any workings in this seam would have the potential to influence foundations on the site, and there may not be a sufficient thickness of competent ground between voids left by mine workings and the underside of foundations of any proposed redevelopment.

An intrusive investigation is considered prudent, which will include boreholes to investigate the presence and condition of the Sitwell seam beneath the site. If any workings are found, a drilling and grouting program may be required to stabilise the ground.

The Coal Authority warns that reserves of coal remaining in the area could be worked in the future. We consider the risk of this to be low, due to the demise of the coal mining industry in

this area and the sites location within a highly developed area. Any damage arising from future mining activities would be for the Coal Authority to make right.

Conclusion

The conclusion is the site may be at risk from shallow mining within the Sitwell Seam. It is recommended that an intrusive ground investigation, including boreholes, is undertaken prior to development of the site in order to confirm the presence and depth of the Sitwell seam, as well as any overlying thin coal seams, and to prove whether mine workings have been undertaken beneath the site.

We trust that the above is satisfactory. This risk assessment should be submitted to the regulators for their review.

Yours sincerely



P Richardson

Enc. Coal Authority Mining Report



The Coal Authority

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Our reference: **51001010981001**
Your reference: **73325769_1|**
Date of your enquiry: **05 October 2015**
Date we received your enquiry: **05 October 2015**
Date of issue: **05 October 2015**

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

Non-Residential Coal Authority Mining Report

WHITE HOLDINGS, STATION ROAD, HALFWAY, SHEFFIELD, WEST 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	See comments below
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 120m to 270m depth, and last worked in 1963.

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. The potential presence of coal workings at or close to the surface should be considered prior to any site works or future development activity. Your attention is drawn to the Comments on Coal Authority Information section of the report.

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 or otherwise work 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.

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 subject property, or any property within 50 metres, since 31st 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 not in an area for which a notice of entitlement to withdraw support has been published.

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.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional Remarks

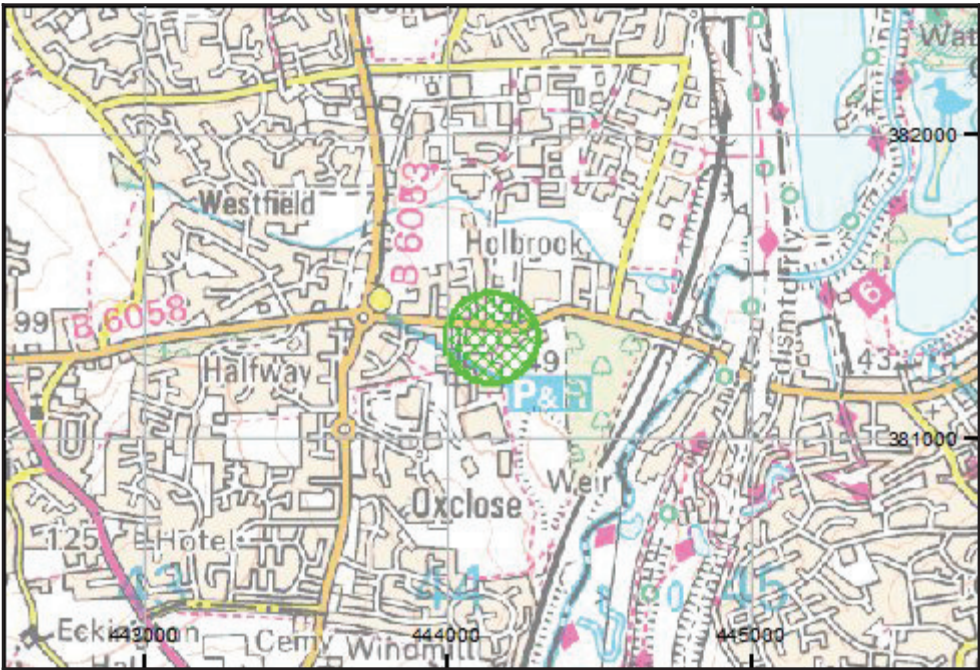
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Location map



Approximate position of property



Enquiry boundary

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Key

Approximate position of enquiry boundary shown

