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Hudroyd House

Coal Mining Risk Assessment

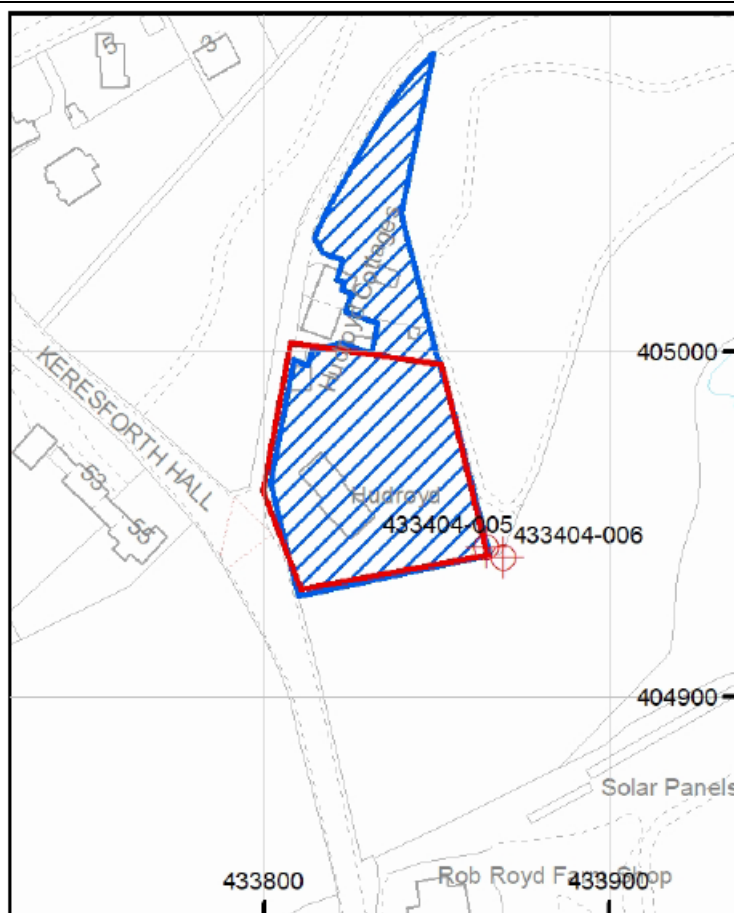
January 2023

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Report Title	Hudroyd House Coal Mining Risk Assessment	Site Address	Hudroyd House, Genn Lane, Ward Green, Barnsley, S75 6NW
Author	RB Geotechnical	Contamination / Geotechnical	Geotechnical
Work Stage	Coal Mining Risk Assessment	Report Date	January 2023
Brief Description of the Report Contents	A desk-based assessment on the risks posed by coal mining to the site and the proposed new development		

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Document Control

Project: Hudroyd House Coal Mining Risk Assessment

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Appendix A - Coal Authority Mining Report

Appendix B - Geological Map Extract

Appendix C - Proposed Development Plan

Disclaimer

This report was produced by **RB Geotechnical** for Mr Mike Thornhill (The Client), for the specific purpose of a Coal Mining Risk Assessment for the planning application related to the proposed garage extension at Hudroyd House in Ward Green, Barnsley, South Yorkshire. This report may not be used by anyone else other than the client without their express permission. In any event, **RB Geotechnical** accepts no liability for any costs, liabilities or losses arising from the use of reliance upon the contents of this report by anyone other than the client.

1.0 INTRODUCTION

RB Geotechnical was commissioned by the client to carry out a Coal Mining Risk Assessment of the proposed site, in order to assess the risk of possible unrecorded mining activities.

Terms and Conditions

Although every effort has been made to ensure the accuracy of the information contained herein, no checks have been carried out to ensure the accuracy of information obtained from third parties and no liability can be accepted for any errors or misinterpretation of the third-party information where it has been incorporated into this report.

This assessment is compliant with the 2017 Coal Authority Guidance '*Risk Based Approach to Development Management. Guidance for Developers. Version 4*', with this report structured as advised by this guidance. This report is concerned only with precautions related to potential mining issues.

Site Location and Description

The site is situated at Hudroyd House off Genn Lane in Ward Green, Barnsley, South Yorkshire. The site can be accessed off Genn Lane and Racecommon Lane, through large gates. It is currently occupied by a large brick-built house and a detached garage in the North West corner. It is this garage that is to be redeveloped.

Proposed Development

The proposed development is to comprise the construction of an extension onto the currently existing garage building. Proposed Development plan is shown in Appendix C.

Scope of the Coal Mining Risk Assessment

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

2.0 SOURCES OF INFORMATION USED

The following information has been reviewed in this Risk Assessment, extracts from which are appended:

- A Coal Authority Coal Mining Report Dated 9th January 2023 – Appendix A; and
- Site Geological information obtained from the British Geological Survey Website (www.bgs.ac.uk). Map extract in Appendix B.

3.0 IDENTIFICATION AND ASSESSMENT OF SITE-SPECIFIC COAL MINING RISKS

The table below summarises the potential risks associated with coal mining legacy for the proposed development site, identified from the listed sources above.

Coal Mining Issue	YES	NO	Comment
Underground Coal Mining (Recorded at shallow depths)		X	
Underground Coal Mining (probable at shallow depths)	X		Intrusive Investigation Recommended
Mine entries (shafts and adits)	X		Mapped mine entries are away from proposed development area
Coal mining geology (fissures)		X	
Record of past mine gas emissions		X	
Recorded coal mining surface hazard		X	
Surface mining (opencast workings)		X	

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Coal at or Close to Surface which could have been mined in past		X	
Coal Seam Directly Beneath Site	X		Intrusive Investigation Recommended

- The Coal Authority Interactive Viewer indicates that proposed development site is located within what the coal authority deems to be a 'Development High Risk Area' in addition to being in an area of Probable Shallow Coal Mining with a coal seam outcropping directly beneath it (shown as the hashed area below):



- The Coal Authority (CA) report (included as Appendix A) indicates that the site is in an area where coal is at or close to the surface and could have been mined in the past. Additionally, the site is in a surface area that could be affected by underground mining in 6 seams of coal. There are two entries mapped on the site, but not within the vicinity of the proposed development area. Additionally, a Coal mining

subsidence claim was made for Hudroyd House in 1998, but was rejected. The site is not within an area of past opencast coal mining.

- The BGS GeoIndex and geological maps shows the site to be underlain by bedrock of the Kent's Rock Sandstone Formation. A Coal Seam (Kent's Thin Coal Seam) is mapped running adjacent beneath the site in a North to South direction. This coal seam is noted as having a thickness of between 0m and 1.90m. The nearest fault is mapped from approximately 230m to the East of the site, trending in a North East to South West direction. The geological map extract is shown in Appendix B.
- Upon viewing the document 'Geology of the Barnsley District: a brief explanation of the geological map sheet 87, Barnsley. 2007, it is evident that the Kent's Thin coal seam was widely worked using opencast methods and the Kent's Thick which is also nearby was also widely worked using mining and opencast methods.

4.0 CONCLUSIONS AND MITIGATION STRATEGY PROPOSED

The Coal Authority have identified the site as being located within a 'Development High Risk Area' and being in an area of probable shallow mine workings, with a coal seam mapped directly beneath the site that is known to have been widely worked. The presence of mine entries mapped close to the site, indicates that mining activity has taken place very close to the proposed development area. A historic claim for subsidence was made for Hudroyd House, which although was rejected, may be associated with underground mine workings.

RB Geotechnical are therefore of the opinion that an intrusive investigation will be required in the area of the proposed new building footprint in order to fully assess for potential unrecorded mine workings.

- 2 -3 Rotary Open Hole Boreholes to maximum depth of 30.0m, in and around proposed new building footprint.

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The Coal Authority Permission

Prior written permission from The Coal Authority is required for intrusive activities which will disturb or enter any coal seams, coal mine workings, or coal mine entries (shafts and adits). Further information on The Coal Authority's permissions process can be found at:

www.coal.gov.uk/services/permissions/index.cfm