



COAL MINING RISK ASSESSMENT

Joseph Norton SEMH School (Former Deighton Centre),
Deighton Road, Huddersfield, HD2 1JP
March 2023 – (C4164 – REV A)

1. INTRODUCTION

HSP Consulting Engineers Ltd were commissioned by Frank Shaw Associates to prepare a Coal Mining Risk Assessment for the proposed redevelopment of the Former Deighton Centre, which includes a new SEMH School. The assessment is to provide the Local Planning Authority with information on coal mining and an assessment of its impact on land stability.

Site Location and Description

The site is located off Deighton Road, on land formerly occupied by the Deighton Centre. The approximate National Grid Reference for the centre of the site is (NGR) 415904, 419561. The site is currently vacant following demolition of the Deighton Centre in 2013.

Description and Layout of Proposed Development

The indicative development plans show a new school in the north / centre of the site, with a range of external uses including parking / drop off, farm area, forest school, habitat area and Multi-Use Games Area (MUGA). It is not known whether development plans have been finalised at this stage.

Scope of the 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; and
- 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.

Geology

The bedrock geology of the site is indicated to comprise the Pennine Lower Coal Measures Formation consisting of Sandstone, Mudstone and Siltstone. Described as '*Interbedded grey mudstone, siltstone and pale grey sandstone, commonly with mudstones containing marine fossils in the lower part, and more numerous and thicker coal seams in the upper part.*' No superficial deposits are expected on the site. An outcrop of coal is shown approximately 200m north of the site. Made Ground is expected on site associated with demolition of the former school.

2. SOURCES OF INFORMATION USED TO INFORM THIS REPORT

The sources of information obtained upon which the risk assessment of coal mining issues have been based are listed below; (The reports / extracts are appended as applicable).

- Ref 1. British Geological Survey (BGS) Geology of Britain Viewer.
Ref 2. Coal Authority Consultants Coal Mining Report, date 4th November 2022; Ref: 51003322894001 and Summary of Finding Map

- Ref 3. BGS 1:50,000 Series Geological Mapping, Sheet 77 Huddersfield, Solid and Drift Edition.
- Ref 4. BGS Borehole Record Viewer.
- Ref 5. Coal Authority Interactive Map Viewer.
- Ref 6. Memoirs of the Geological Survey - Geology of the Yorkshire Coalfield. A. H. Green and R. Russell, 1878. Taken from BGS Publications Hub.

3. 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 *list sources of information*.

| Coal Mining Issue | Yes | No | Risk Assessment |
|--|-----|----|--|
| Underground coal mining (recorded at shallow depths) | | N | No past underground mining recorded. |
| Probable unrecorded shallow workings | Y | | Probable unrecorded shallow workings may be present beneath the site (Ref 2). |
| Mine entries (shafts and adits) | | N | No mine entries are recorded within a 100m radius of the site boundary. |
| Coal mining geology (fissures) | | N | The CA is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining. |
| Recorded coal mining surface hazard | | N | The CA has not received a damage notice or claim for the subject property or any property within 50 metres of the enquiry boundary since 31 st October 1994. |
| Surface mining (opencast workings) | | N | The site is not within the boundary of an opencast site from which coal has been removed by opencast methods. The site is also not within 200m of the boundary of an opencast site within which coal is being extracted by opencast methods. |

For those coal mining issues identified as “yes” a discussion and assessment of the risks, both individually and cumulatively, to the application site and the proposed development are given in the next section.

4. MITIGATION STRATEGY PROPOSED

The Coal Authority Mining Report does not indicate any past underground mining beneath the site, however, it is probable that unrecorded shallow workings may be present that exist at or close to the surface (less than 30m deep).

The Coal Authority Interactive Map Viewer indicates a seam outcrop to the southeast of the site, approximately 200m – 250m southeast, dipping to the northwest. The seam thickness, dip and depth is unknown, as is the depth at which the seam intersects the subject site.

A development high risk area associated with the seam outcrop / probable shallow coal mine workings noted as shallow depth (0-30m) is shown in the southeast of the site in the location of the current access road. The remainder of the site shows probable workings at moderate depth (30m – 100m).

A BGS Borehole is located 198m southwest of the site (SE11NE2), off Wood View. The strata details show 'rockhead' (slaty stone) from 4.15m with no coal noted to the final depth of the borehole (106m begl). The borehole is located in the moderate probable workings area.

Three BGS boreholes are located off Chalwood, approximately 210m – 280m northeast of the site. The boreholes are located marginally north of a shallow probable workings area. All three boreholes were advanced to 20.00m depth with no coal or loss of flush noted by the drillers.

5. CONCLUSION

Published Coal Authority and geological information indicates that the potential for unrecorded probable workings at shallow depth (within 30m) of the surface are limited to the current access road within the south east and therefore this section of the site is within Coal Authority High Risk Development Area. The remainder of the site indicates the potential for unrecorded probable shallow workings to be moderate, at a depth of 30m – 100m from surface and therefore this section of the site is not within the Coal Authority High Risk Development Area.

Based on current development plans, the current access road in the southeast of the site shows no new development with all new builds being located within the area defined as moderate depth for probable workings and outside the Coal Authority High Risk Development Area. On this basis further investigation and mitigation measures should not be required, subject to Coal Authority confirmation, to satisfy the Planning Condition in relation to probable unrecorded shallow workings.

RELEVANT APPENDICES

| | |
|-------------|---|
| Appendix I | Coal Authority Consultants Coal Mining Report, date 4 th November 2022; Ref: 51003322894001 and Summary of Finding Map. |
| Appendix II | British Geological Society Borehole Logs (Wood View and Chalwood) |

Appendix I



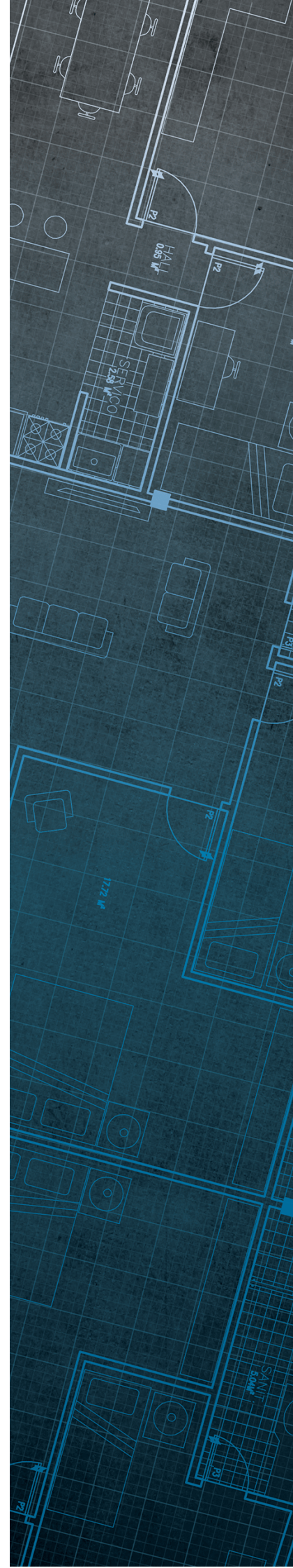
The Coal
Authority

Consultants Coal Mining Report

Former Deighton Centre
Deighton Road
Deighton
Huddersfield
Kirklees
HD2 1JP

| | |
|------------------------|-----------------|
| Date of enquiry: | 4 November 2022 |
| Date enquiry received: | 4 November 2022 |
| Issue date: | 4 November 2022 |

| | |
|-----------------|----------------|
| Our reference: | 51003322894001 |
| Your reference: | C4164 |



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

HSP CONSULTING

Enquiry address

Former Deighton Centre
Deighton Road
Deighton
Huddersfield
Kirklees
HD2 1JP


How to contact us

0345 762 6848 (UK)
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200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

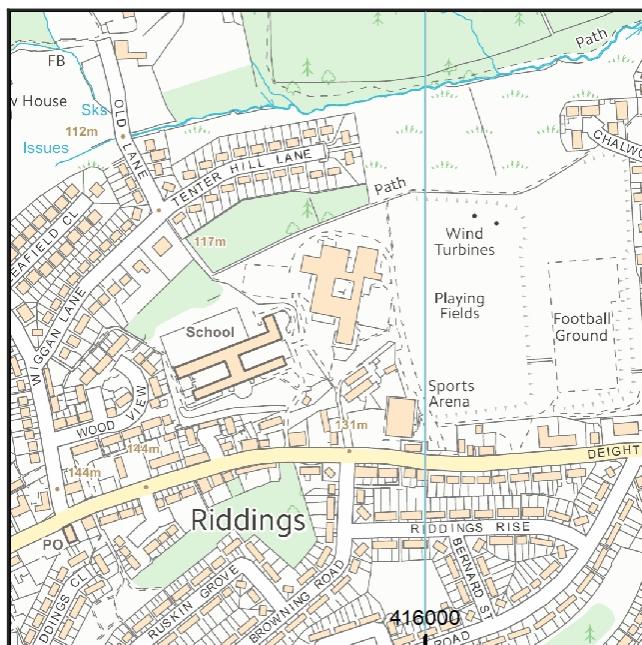
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

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:

| | | |
|--------|------|-------|
| FGB272 | 1801 | 7800 |
| FGB274 | PO0 | 11045 |

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

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.

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

Based on the responses in this report, no further information has been highlighted.

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.

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

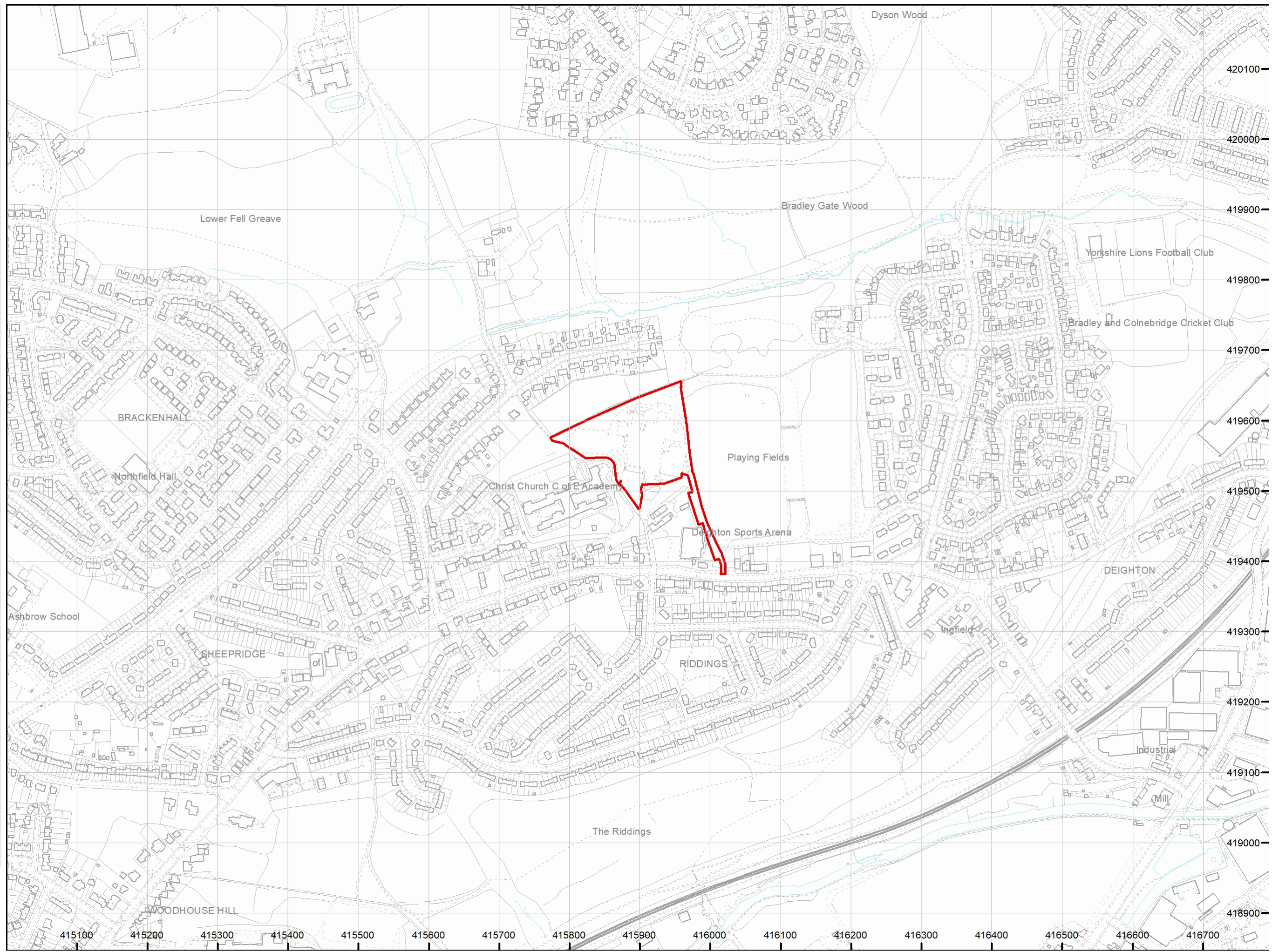
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The 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 

How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com



Appendix II



British
Geological
Survey

Version 2.0.6.7

BGS ID: 40805 : BGS Reference: SE11NE2
British National Grid (27700) : 415655,419414

[Report an issue with this borehole](#)

<<

< Prev

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Next >

>>

| YORKSHIRE RIVER AUTHORITY - Survey of Existing Boreholes | | | | | |
|--|-------------------|----------------------------------|----------|---------------------|-------------|
| I.G.S. Ref. No <u>SE11NE/2...</u> | | N.G.R. <u>55.71774 1965.1943</u> | | Licence No. | |
| OWNERS NAME <u>Huddersfield Laundry</u> | | | | App No <u>2343</u> | |
| ADDRESS <u>Sharpside, Huddersfield</u> | | | | Authorised Abstract | |
| | | | | 1800 g.p.h. | |
| | | | | 29000 g.p.d. | |
| | | | | 8.0 m.g.a. | |
| STRA TA DETAILS | | Depth | Thick ns | | |
| Clifford Elland Rings | Clay | 7.0" | 7.0" | Dia. | 10" |
| | Shale, stone | 6.1" | 6.1" | Depth | 350ft |
| | Shale | 15.1" | 15.1" | Lining | 10" 4.212ft |
| | Grey Rock | 170.0" | 170.0" | Well sinker | 10ft |
| | Slate | 176.0" | 176.0" | Date | 1914 |
| | Black, white rock | 241.0" | 241.0" | R.W.L. | 128ft |
| | Black Rock | 277.0" | 277.0" | Date | 1914 |
| | Siliceous Rock | 281.0" | 281.0" | | |
| | Black Rock | 287.0" | 287.0" | | |
| | Black Shale | 318.0" | 318.0" | | |
| | Black, white rock | 341.0" | 341.0" | | |
| | Black, white rock | 345.0" | 345.0" | | |
| | Black Shale | 350.0" | 350.0" | | |

Engineering Limited

R'S DAILY REPORT

LAB

Cm Om



DATE Wed 12, 2023 GEL JOB No 3014
SHEET 1 of 2 BOREHOLE RH123

NO PRODUCTION RECORD

| | | | | | | | | |
|-----------------------------|---------|----|----------------------------------|----|---|----|--------------------------------------|--|
| Run | no move | no | dry drilling | mm | m | to | blaster pl | |
| Run | up | no | | mm | m | to | | |
| Run | down | no | drilling | mm | m | to | blasting | |
| port to/from BHS | 500m | 1 | | mm | m | to | | |
| prewarning water supply | | | core drilling | mm | m | to | discontinue/standpipe (specify when) | |
| valving as per instructions | | | | mm | m | to | | |
| repairs/maintenance | | | running/reshoring/pulling casing | | | to | others (specify in notes) | |
| others (Mudlogging) Dept 2 | | | chiselling | | | to | | |
| (Cementation) Dept 1 | | | undisturbed sampling | | | to | | |
| | | | penetration testing | | | to | | |

DRILLING AND SAMPLING RECORD

| sample no. | type | depth (m bgl) | drilled (m) | recovered (m) | drilling size (mm) | drilling depth (m bgl) | water depth (m bgl) | penetration test (s) | soil description |
|------------|------|---------------|-------------|---------------|--------------------|------------------------|---------------------|----------------------|-------------------------|
| | | from | to | | | | | test drive | |
| | | | | | | | | | BH 3 |
| | | | | | | | | | 0.00 - 2.00m Soft Brown |
| | | | | | | | | | Soil & Sand, clay |
| | | | | | | | | | 2.00m - 16.00m |
| | | | | | | | | | Range to grey/mud |
| | | | | | | | | | Surface |
| | | | | | | | | | 16.00m - 16.30m |
| | | | | | | | | | Dark grey/mudstone |
| | | | | | | | | | 16.30m - 20.00m |
| | | | | | | | | | grey muddy stone |
| | | | | | | | | | BH 2 |
| | | | | | | | | | 0.00m - 1.00m |
| | | | | | | | | | Soft Brown Sand |
| | | | | | | | | | 1.00m - 2.50m |
| | | | | | | | | | Dark grey/mudstone |
| | | | | | | | | | 2.50m - 15.00m |
| | | | | | | | | | grey muddy stone |
| | | | | | | | | | 15.00m - 15.30m |
| | | | | | | | | | Dark grey/mudstone |
| | | | | | | | | | 15.30m - 20.00m |
| | | | | | | | | | grey muddy stone |

remarks

WATER DEPTHS (m bgl)

| a.m. | p.m. | struck at | settled at | other boreholes |
|-----------------------|------|-----------------------------|------------|-----------------|
| depths after striking | | to | to | |
| sample taken at | | before starting water flush | 30 mins | no |
| before pulling casing | | after pulling casing | | a.m. |
| | | | | p.m. |

weather

Se So (misty)

driller

S. Watson

no

H

LER'S DAILY REPORT

Sondern ich Housing Assoc

DATE Wed 1/10/94 GEL JOB No 3049

CHAWOOD, Deighton

SHEET 2 of 2 BOREHOLE KHK

| no. | | hr | | mm | | m | | hr | | hr | |
|------------------------------|----|----------|-------|----|--------------------------------|---|----|-----|----|---------------------------------------|--|
| | | rig move | no. | hr | dry drilling | | mm | m | hr | starter pit | |
| | | rig up | no. | hr | | | mm | m | hr | | |
| hrs | hr | rig down | no. | hr | boring | | mm | m | hr | backfilling | |
| transport to/from site | | | miles | hr | | | mm | m | hr | | |
| laying/awaiting water supply | | | | hr | core drilling | | mm | m | hr | piezometer/standpipe (separate sheet) | |
| awaiting access/instructions | | | | hr | | | mm | m | hr | | |
| repairs/maintenance | | | | hr | running/reaming/pulling casing | | | | hr | others (separate sheets) | |
| others | | | | hr | chiselling | | | | hr | | |
| | | | | hr | undisturbed sampling | | | no. | hr | | |
| | | | | hr | penetration testing | | | no. | hr | | |

[illegible]

| | | | | | | | |
|-----------------------|------|----|-----------------------------|----|------------|---------|-----------------|
| a.m. | p.m. | | struck at | | settled at | | other boreholes |
| depths after striking | 5 | 10 | 15 | 20 | 25 | 30 mins | |
| sample taken at | | | before starting water flush | | | | a.m. |
| before pulling casing | | | after pulling casing | | | | p.m. |

weather

driller

S. WATSON

assistant driller

U W 201 405

| | |
|---------|---------|
| ព័ត៌មាន | ព័ត៌មាន |
|---------|---------|

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