



Contaminated Land Appraisals
Brownfield Remediation Solutions
Site Investigation Services
Earthworks Design and Control
Flood Risk Assessments

Mr Paul Stapleton
Geo2 Remediation Ltd
Coniston House
Louisa Street
Idle
Bradford
BD10 8NE

27th March 2023

Ref C578/01/ATS

Dear Paul,

Ref: Shallow Mining Investigation on land off Briestfield Road, Briestfield, Dewsbury, West Yorkshire

1. Introduction

On the instructions of Geo2 Remediation Ltd, G&M Consulting Ltd have carried out an intrusive mining investigation on land off Briestfield Road, Briestfield, Dewsbury, West Yorkshire. The work was carried out in support of a planning application associated with the development of the site with a single agricultural building.

The investigation work was undertaken to provide information on the underlying ground conditions and assess the likelihood of historical shallow mine workings affecting the site. G&M Consulting Ltd (G&M) was present on site during the fieldwork, and this report presents the findings of the investigation.

The site has been subject to a coal mining risk assessment (CMRA), prepared by Rogers Geotechnical Services Ltd, details of which are summarised in Section 2 of this report and a full copy is presented in Attachment A. A review of the Coal Authority (CA) Interactive Map (<http://mapaps2.bgs.co.uk/coalauthority/home.html>), shows the site to lie within a 'development high risk area'.

The site is located to the east of Briestfield Road, on the northern edge of the village of Briestfield, approximately 5 km south-west of Dewsbury town centre, West Yorkshire and is centred at National Grid Reference SE 222 164. The site as a whole is roughly rectangular in shape, approximately 85 m by 40 m, with the long axis aligned east to west; there is a noticeable drop in levels across the site towards the north-east. The site is currently used for agricultural purposes, including the grazing of sheep and the storage of agricultural machinery. The proposed building is to be located adjacent to the southern boundary of the site.

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The comments and opinions presented in this report are based on the findings of a review of available information and ground conditions encountered during the intrusive investigation work. There may be other conditions prevailing on the site which have not been disclosed by this investigation and which have not been taken into account by this report. Responsibility cannot be accepted for conditions not revealed by the investigation. Any diagram or opinion of the possible configuration of ground conditions between exploratory holes is conjectural and given for guidance only and confirmation of intermediate ground conditions should be considered if deemed necessary.

2. CMRA

The CMRA prepared by Rogers Geotechnical Services Ltd should be read in conjunction with this report. A summary of the conclusions from the CMRA are as follows:

Table 1: Geological Data for the Site			
Strata Type	Strata Name ⁶	Previous Name ⁷	Description ³
Superficial Geology	None recorded	-	-
Solid Geology	Pennine Lower Coal Measures Formation	-	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.

There are numerous coal seams that are shown to outcrop within the local area. These seams are summarised as follows:

Table 2: Summary of Coal Seams Within the Vicinity of the Site.			
Seam Name	Seam thickness ^{5*}	Outcrop distance from site ^{6*}	Anticipated depth below site
3 rd Brown Metal Coal	0 – 0.8	On Site	At or near to surface.
Middleton Little Coal (aka Parkgate Coal)	0.2 – 0.9	130m N	Around 15m bgl
Middleton Main Coal	0.2 – 1.8	-	Between 30m and 35m bgl.

*All distances are given as approximations only. It should be noted that coal seam thicknesses vary over relatively short distances

Firstly, it should be appreciated there is an outcrop of a coal seam that is shown to intersect the site. Whilst the seam is not labelled on the 1:50,000 map, given the outcrop pattern of the local geology, it is assumed that this seam could represent the 3rd Brown Metal Coal. However, local records suggest that the identity of Third Brown Metal Coal is somewhat contentious. Over most of the area (Huddersfield) it is consistently present around 15m above the Middleton Little Coal. The seam is usually around 0.3m thick but does deteriorate to carbonaceous mudstone. In view of the above, should the seam be present, it would be expected at or very close to surface level of the site.

It is expected that a band of sandstone known as the Lepton Edge Rock, will be present between the 3rd Brown Metal seam and the next seam; and is commonly present a few meters above the Middleton Little Seam. The sequence varies in thickness between 2m and 11m, however, is expected to be thin and less competent around Bristfield and Grange Moor.

An outcrop of the Middleton Little Coal Seam (aka Parkgate Coal) is present approximately 130m of the site boundary. This seam was commonly extracted for use as coking coal and is typically widespread and of inferior quality. Given the above information, this seam would be expected at a depth of around 15m bgl.

Based on the findings of the CMRA, the following was recommended

In light of the potential risks of instability at the site from the working of shallow coal, it cannot be recommended that development takes place without further investigation to conclusively determine the presence of such workings. This work should include physical drilling methods to explore the ground conditions.

General practice is to undertake rotary openhole boreholes at three locations across the site to mitigate against the potential for drilling through intact columns associated with pillar and stall workings. Furthermore, it is normal to investigate the ground to 30m below ground level; any workings below this depth are unlikely to result in significant instability. However, in this case, the risk of instability is due to shallow workings, therefore, drilling to these depths may not be necessary and the objective should be to ensure that the shallow seams are un-worked or have sufficient competent cover. It may therefore be possible, in the first instance, to undertake one borehole to 30m below the top of the rockhead, with the remaining boreholes proving the depth and continuity of the coal seam(s). In any event, it is considered that approval should be sought with the Local Authority as to the efficacy of this approach.

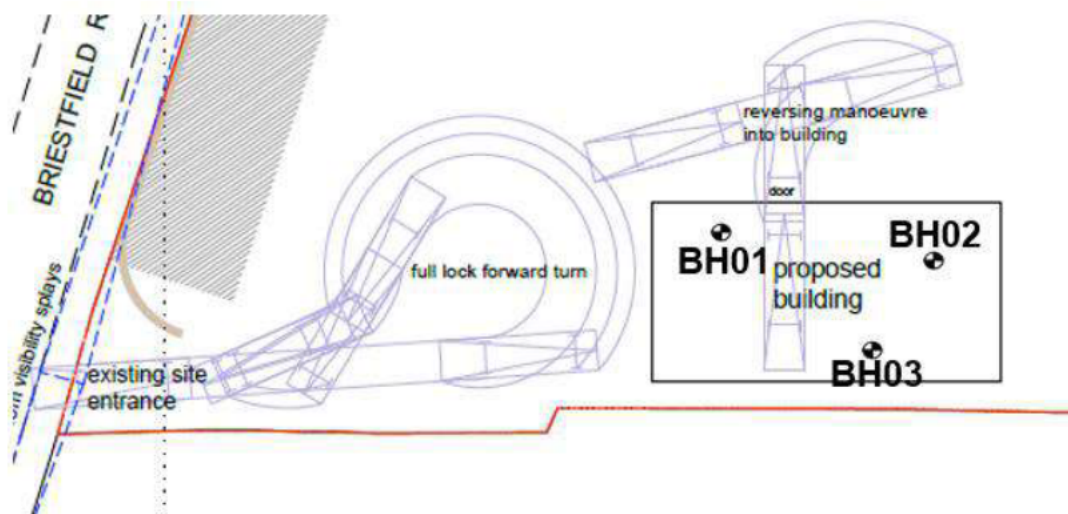
3. Fieldwork

The fieldwork was carried out on the 23rd March 2023. Three rotary open-holes, referenced BH1 to BH3 were drilled to a maximum depth of 30 m below ground level (bgl), to allow logging of the soils and solid strata through examination of flush returns and rate of penetration of the drill bit. Drilling was initially progressed using 150mm diameter augers through the superficial soils, and a casing set into the underlying bedrock, to aid flush returns.

The drilling works were undertaken by Cape using a Beretta T25 tracked rotary drilling rig and carried out under the Terms and Conditions of the Coal Authority Permission No 26361, a copy of which is presented in Attachment B of this report.

Drilling was undertaken using water flush. In accordance with the CA permission, the boreholes were monitored for gases during their advancement. The boreholes were backfilled on completion.

The locations of the exploratory holes are shown below.



4. Ground Conditions

The driller records 'Fill' in BH2 and BH3 to 0.5 m and 1.0 m bgl, underlain by a 'clay yellow brown' to 1.7m and 1.4m respectively. This 'clay yellow brown' was encountered from surface in BH1 to a depth of 1.2 m bgl.

The superficial deposits are underlain in all the boreholes by "*mudstone grey brown clayey*" (drillers description) to depths of between 1.9 m and 2.3 m bgl. A coal seam was encountered beneath this mudstone as follows;

Borehole No	Coal (m) (Thickness)
BH1	1.9 – 2.6 (700 mm)
BH2	2.3 – 3.0 (700 mm)
BH3	2.0 – 2.7 (700 mm)

The coal was underlain in all of the boreholes by a '*mudstone with some silty sandstone bands*' and '*mudstone dark grey*' (drillers description) to depths of between 8.4 m and 8.8 m bgl. These mudstones were underlain by '*sandstone grey*' and '*sandstone grey silty with odd mudstone bands*' (drillers description), which were encountered to the base of BH1 at 30.0 m bgl. A thin band of '*mudstone black with a coal trace*' (drillers description), was encountered between 20.8 m and 21.0 m bgl, within the sandstone sequence.

Based on the geological records and CMRA, it is considered that the shallow seam of coal is likely to be the 3rd Brown Metal coal, such that the thin '*mudstone black with a trace of coal*' (drillers description), encountered at 20.8 m, may possibly be the Middleton Little coal (this was anticipated at around 15m bgl in the CMRA). The Middleton Main coal, indicated in the CMRA to be at a depth of between 30-35m bgl, was not encountered in this investigation

The exploratory hole records are presented in Attachment C of this report.

During the drilling, monitoring of methane, carbon monoxide, hydrogen sulphide and oxygen was undertaken at the borehole surface. No significant concentrations of methane, carbon monoxide or hydrogen sulphide were recorded, as detailed on the attached logs no gases were noted during drilling.

6. Conclusions/Recommendations

On the instructions of Geo2 Remediation Ltd, G&M Consulting Ltd have carried out an intrusive mining investigation on land off Briestfield Road, Briestfield, Dewsbury, West Yorkshire. The work was carried out in support of a planning application associated with the development of the site with a single agricultural building.

The drilling works were carried out in accordance with the CA permission 26361.

No evidence of voided or soft strata, broken ground or loss of flush was noted during the drilling of the boreholes.

One seam of intact coal, 700mm thick, was recorded in all of the boreholes between 1.9 m and 2.3 m bgl, within a bedrock sequence of sandstone and mudstones. A possible second seam of coal was encountered between 20.8 m and 21.0 m bgl in BH1, described by the driller as '*mudstone black with a trace of coal*'

Based on the evidence of the three boreholes drilled it does not appear that the site is adversely affected by shallow mine workings within the seams of coal encountered at the locations drilled.

Whilst no mine entries are shown in the immediate vicinity of the site, there is a possibility, although considered to be very low, of unrecorded adits beneath the site. It is therefore recommended that a watching brief is maintained during the development work, and that any natural surfaces exposed during construction of the foundations are examined by a suitably qualified person, for evidence of such entries. If such an entry is encountered work should immediately cease and the Coal Authority notified.

We trust this report and the attachments meet with your approval and are sufficient for your present needs. Your client should submit this document to the local authority for their comment/approval prior to undertaking any development work.

Yours sincerely

Andrew Swinbourne
For and on behalf of **G&M Consulting Ltd**

Attachments



ATTACHMENT A - CMRA

**Environmental
Geotechnical
Specialists**



COAL RISK ASSESSMENT

job number C2143/21/E/3305	date 18.10.21
site address Proposed agricultural building; Bristfield Road Bristfield, Dewsbury, Kirklees, WF12 0NR	
written by C. Mason	checked by C. Campion.
issued by C, Mason	

Rogers Geotechnical Services Ltd

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GEOTECHNICAL
ENVIRONMENTAL



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1.	Site Plan
2.	Coal Authority Report



Report on a Coal Mining Risk Assessment

Location: Proposed agricultural building; Briestfield Road
Briestfield, Dewsbury, Kirklees, WF12 0NR

For: Kirk Braithwaite

Report No. C2143/21/E/3305

Report date: October 2021

For and on behalf of **Rogers Geotechnical Services Ltd**

Charlotte Mason BSc FGS
Geo-environmental Engineer

Charlotte Campion MGeoSci FGS
Geo-environmental Engineer

1. Introduction

It is understood that as part of the planning application at the site¹, a Coal Mining Risk Assessment has been requested by the planning authority. Consequently, a desktop study was commissioned in order to assess the risk to the development from coal mining. This report presents the findings of the study.

2. Geological Desk Study

The geological desk study has been undertaken using the following sources of information.

- British Geological Survey map sheet².
- British Geological Survey *Geology of Britain Viewer*³.
- Coal Authority Consultants Coal Mining Report⁴.
- British Geological Survey *Borehole Records*⁵.

2.1 British Geological Survey Maps and Viewer

The appropriate map sheet for the site and the geology viewer has been examined and the following table presents the indicated geology:

¹ PLANNING APPLICATION: 2021/62/93111/E Proposed agricultural building; Briestfield Road, Briestfield, Dewsbury, Kirklees, WF12 0NR

² Sources: British Geological Survey (NERC) Map Sheet 77; Huddersfield Solid and Drift Editions

³ Sources: British Geological Survey (NERC) Geology of Britain Viewer [online resource from www.bgs.ac.uk]

⁴ Coal Authority Reference: 51002693910001 dated 15th October 2021.

⁵ Sources: British Geological Survey (NERC) Borehole Records [online resource from <http://www.bgs.ac.uk/>]

**Table 1: Geological Data for the Site**

Strata Type	Strata Name ⁶	Previous Name ⁷	Description ³
Superficial Geology	None recorded	-	-
Solid Geology	Pennine Lower Coal Measures Formation	-	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.

On the geological map, there is one dip indicator relevant to the site (i.e. within 500m of the site or within the same fault block) that suggests the solid geology beneath the site dips 2° to the south-east.

There are numerous coal seams that are shown to outcrop within the local area. These seams are summarised as follows:

Table 2: Summary of Coal Seams Within the Vicinity of the Site.

Seam Name	Seam thickness ^{5*}	Outcrop distance from site ^{5*}	Anticipated depth below site
3 rd Brown Metal Coal	0 – 0.8	On Site	At or near to surface.
Middleton Little Coal (aka Parkgate Coal)	0.2 – 0.9	130m N	Around 15m bgl
Middleton Main Coal	0.2 – 1.8	-	Between 30m and 35m bgl.

*All distances are given as approximations only. It should be noted that coal seam thicknesses vary over relatively short distances

Firstly, it should be appreciated there is an outcrop of a coal seam that is shown to intersect the site. Whilst the seam is not labelled on the 1:50,000 map, given the outcrop pattern of the local geology, it is assumed that this seam could represent the 3rd Brown Metal Coal. However, local records suggest that the identity of Third Brown Metal Coal is somewhat contentious. Over most of the area (Huddersfield) it is consistently present around 15m above the Middleton Little Coal. The seam is usually around 0.3m thick but does deteriorate to carbonaceous mudstone. In view of the above, should the seam be present, it would be expected at or very close to surface level of the site.

It is expected that a band of sandstone known as the Lepton Edge Rock, will be present between the 3rd Brown Metal seam and the next seam; and is commonly present a few meters above the Middleton Little Seam. The sequence varies in thickness between 2m and 11m, however, is expected to be thin and less competent around Bristfield and Grange Moor.

An outcrop of the Middleton Little Coal Seam (aka Parkgate Coal) is present approximately 130m of the site boundary. This seam was commonly extracted for use as coking coal and is typically widespread and of inferior quality. Given the above information, this seam would be expected at a depth of around 15m bgl.

⁶ Sources: British Geological Survey (NERC) Map Sheets 77; Huddersfield; Solid and Drift Edition, and Geology of Britain Viewer [online resource from www.bgs.ac.uk]

⁷ Sources: British Geological Survey (NERC) Lexicon of Named Rock Units [online resource from www.bgs.ac.uk]



A sequence of units known as the Middleton cycle are present beneath the Middleton Little Coal and the next seam in the sequence: the Middleton Main. These units vary in thickness between 16m and 20m, and usually comprise coarsening upwards mudstone into sandstone sequences.

The Middleton Main Coal is not shown to outcrop within the area, albeit it is expected to be continuous throughout the district. The seam is recorded to be widespread and consistently developed and of former economic importance. This seam generally forms a single 1m to 1.8m thick bed but often is seen to split. Around Emley and Thornhill the base of the seam undulates forming swilleys in the coal. In view of the above information, this seam would be expected at a depth of around 30m – 35m bgl.

2.2 Coal Authority Mines Report

As part of this study a Coal Authority Consultants Coal Mining Report has been obtained. The report is presented as Appendix 2 and for the purposes of discussion has been summarised below:

Table 3: Summary of the Consultant's Coal Mining Report

Has the report highlighted evidence or potential of:			
Ref	Mining Feature	Yes/No	Comments
1	Underground Coal Mining	Yes	The Wheatley Lime Coal was has been worked beneath he site at a depth of 58m, has an extraction thickness of 0.82m and was last worked in 1841. The Silkstone Coal was has been worked beneath he site at a depth of 92m, has an extraction thickness of 0.61m and was last worked in 1869. The Top Beeston Coal was has been worked beneath he site at a depth of 139m, has an extraction thickness of 0.72 m and was last worked in 1939. The Black Bed Coal was has been worked beneath he site at a depth of 225m, has an extraction thickness of 0.61 m and was last worked in 1945.
2	Probable Unrecorded Shallow Workings	no	-
3	Spine Roadways at Shallow Depth	No	No spine roadway recorded at shallow depth.
4	Mine Entries	No	None recorded within 100m of the enquiry boundary.
5	Abandoned mine plans	Yes	Plans of abandoned mine workings below the site are suggested to be available by the Coal Authority.
6	Outcrops	Yes	The Parkgate Coal outcrops within the site boundary with a bearing of 124°.
7	Geological Faults	No	No faults, fissures or breaklines recorded.
8	Opencast Mines	No	None recorded within 500 metres of the enquiry boundary.
9	Coal Authority Managed Tips	No	None recorded within 500 metres of the enquiry boundary.
10	Site Investigations	No	None recorded within 50 metres of the enquiry boundary
11	Remediated Sites	No	None recorded within 50 metres of the enquiry boundary.
12	Coal Mining Subsidence	No	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 31st 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.
13	Mine Gas	No	None recorded within 500 metres of the enquiry boundary.
14	Mine Water Treatment Schemes	No	None recorded within 500 metres of the enquiry boundary.



15	Future underground mining	No	For further information please see section 3 of the Consultant's Coal Mining Report (ref 51002693910001).
16	Coal mining licensing	No	
17	Court orders	No	
18	Section 46 notices	No	
19	Withdrawal of support notices	Yes	The property is in an area where notices to withdraw support were given in 1944. 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.
20	Payments to owners of former copyhold land	No	The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

It should be noted the report makes reference to the Parkgate Coal Seam (aka Middleton Little Seam) to outcrop on site. This information is contradictory to the 1:50,00 geological data, which suggest that this seam could in fact represent the 3rd Brown metal coal.

In view of the above, whilst there is some discrepancy in between the two datasets, it should be appreciated that both interpretations confirm that shallow coal is expected at or close to surface level. However, the data presented does cause some uncertainty as to the depth of the next seam in the sequence (The Middleton Main Coal) – depending on which seam would be expected at or close to surface level.

2.3 Geological Survey Borehole Records

The British Geological Survey (NERC) keeps borehole records from across Britain which are available for public viewing through their website⁷. As part of this study, the records in the area around the site have been reviewed in order to assist in establishing the geological conditions.

Unfortunately, in this instance, there are no borehole scans available within the vicinity of the site that will assist with this assessment. Whilst there are borehole scans present within 500m to the north, south and east of the site, these boreholes are situated on outcrops topographically above the site. Therefore, these seams are not present within these boreholes. Furthermore, other borehole scans are available at a greater distance to the site within other faulted blocks. However, these are not anticipated to represent comparable ground conditions to those anticipated to be present below the site.



3. Risk Assessment

The risk to the stability of the proposed residential development has been evaluated from the data obtained and with reference to the following ratings and definitions:

- Low - The possibility of instability is unlikely therefore no further action is necessary.
- Moderate - The possibility of instability is likely and further investigation or remedial action may be required.
- High - The possibility of instability is highly likely and further investigation or remedial action will be necessary.

Table 4: Development Specific Risk Assessment

Item	Risk attributed to	Coal Seam(s) Considered	Risk Rating
3.1	Shallow coal workings	3 rd Brown Metal Coal	Moderate
		Middleton Little Coal (aka Parkgate Coal)	Moderate
		Middleton Main Coal	Moderate
3.2	Coal workings at depth	The Coal Authority report indicates numerous deeper coal seams are present beneath the site.	Low
3.3	Mine gas	Shallow coal workings	Moderate

3.1 Risks Posed by Shallow Coal Workings

On the basis of all of the information provided above, it is possible that three named coal seams could be present within 30m of the surface at the site. Whilst these seams may be of limited thickness, the possibility of these seams being worked below the site cannot be ruled out. Historic coal mining activity is evident in the nearby area, including shallow opencast workings. Therefore, it is considered that if coal was known to be close to ground level it could have been removed illicitly via shallow mining methods with relative ease.

It may be noted that guidance available from both the NHBC and the CIRIA publication, SP32 - *construction over abandoned mine workings*, suggests that competent overburden thickness above a coal seam should be greater than 10 times the thickness of a seam plus seam thickness in order that the collapse of workings would pose a low risk to surface structures.

On this basis, assuming a maximum thickness of the coal seams, the table below suggests the thickness of competent overburden required above each seam to mitigate instability at the surface.

Table 5: Required Thickness of Competent Overburden

Seam Name	Seam thickness	Anticipated depth below site	Required thickness of competent overburden.
3 rd Brown Metal Coal	0 – 0.8	At or close to surface level	8.8m
Middleton Little Coal (aka Parkgate Coal)	0.2 – 0.9	At or close to surface level, or around 15m bgl	9.9m



Middleton Main Coal	0.2 – 1.8	Between 15m and 30m bgl	19.8m bgl.
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Firstly, it should be appreciated that both the geological appraisal and the Consultant's Coal Mining Report highlights that a coal seam outcrops on site. There is some ambiguity between the data sets as to which seam this outcrop represents, albeit, both scenarios equate to a seam being present at or close to surface level of the site. Due to the shallow nature of seam, it is unlikely that this seam would have been removed via underground mining methods. That is not to say however, that such a seam might not have been extracted from small scale open-cast workings, bell pits or day-holes. On this basis, it is recommended that careful inspections take place during the development. Should any evidence for day-holes, bell pits or open-cast workings become apparent, works should be halted and the advice of geotechnical specialists sought. As such, a moderate risk rating has been assigned to the shallowest seam, such that further investigation is necessary.

Regardless of nomenclature, given the generalised vertical section for the site, it is reasoned that between 1 and 2 additional coal seams could be present within 30m of the site surface. These seams are likely to be attributed to the Middleton Little Coal seam and the Middle main Coal Seam. However, given the discrepancies in the datasets, it cannot be guaranteed with reasonable certainty the name or depths of the seams. Nonetheless, it should be appreciated that both seams could be of a thickness that would prove economically viable for extraction.

Based on the above information, it is considered that there may not be a sufficient thickness of competent overburden above the seams in order to prevent the risk of instability posed by the presence of any illicit workings. Therefore, a moderate risk rating has been placed on these seams, and further investigation is recommended to prove or disprove the presence of illicit mining activity, seam thicknesses, and seam depths.

3.2 Risks Posed by Coal Workings at Depth

In regard to deeper mining which could affect the site, the property is within a surface area affected by deeper recorded workings. However, due to their extraction thickness, depth below ground level, and time passed since they were last worked, a low risk rating has been assigned, such that no further action is required.

However, should a significant volume of workings be present within the upper seams, such that the thickness of competent cover is affected, this risk level may require re-evaluation.

3.3 Risks Posed by Mine Gas

This assessment has identified that there is potential for shallow mine workings to be present beneath the proposed development. Whilst the Consultants Coal Mining Report has not reported any incidents of mine gas within the vicinity of the development, shallow mining activity represents a credible source of ground gas. As such, a moderate risk rating has been assigned, and further assessment may be required.

Should evidence of workings be proven via further intrusive works, it is strongly recommended that a detailed gas risk assessment is undertaken in accordance with relevant guidance. The risk assessment should take into consideration the current site conditions, and should be subject to reassessment after the formulation and/or completion of any remedial measures and proposed foundation solution. These documents should be prepared by a suitably experienced and qualified specialist.



4. Conclusions

In light of the potential risks of instability at the site from the working of shallow coal, it cannot be recommended that development takes place without further investigation to conclusively determine the presence of such workings. This work should include physical drilling methods to explore the ground conditions.

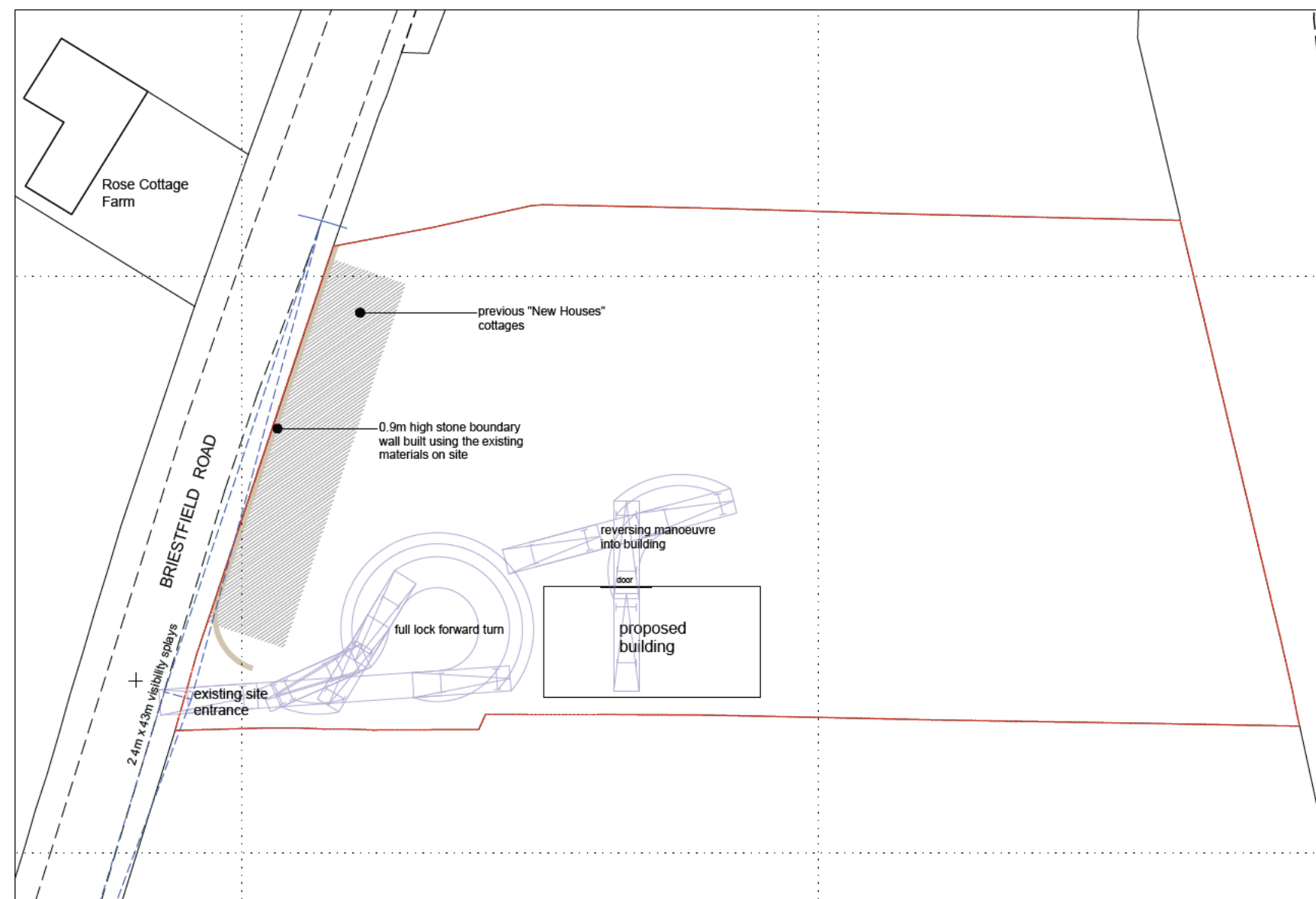
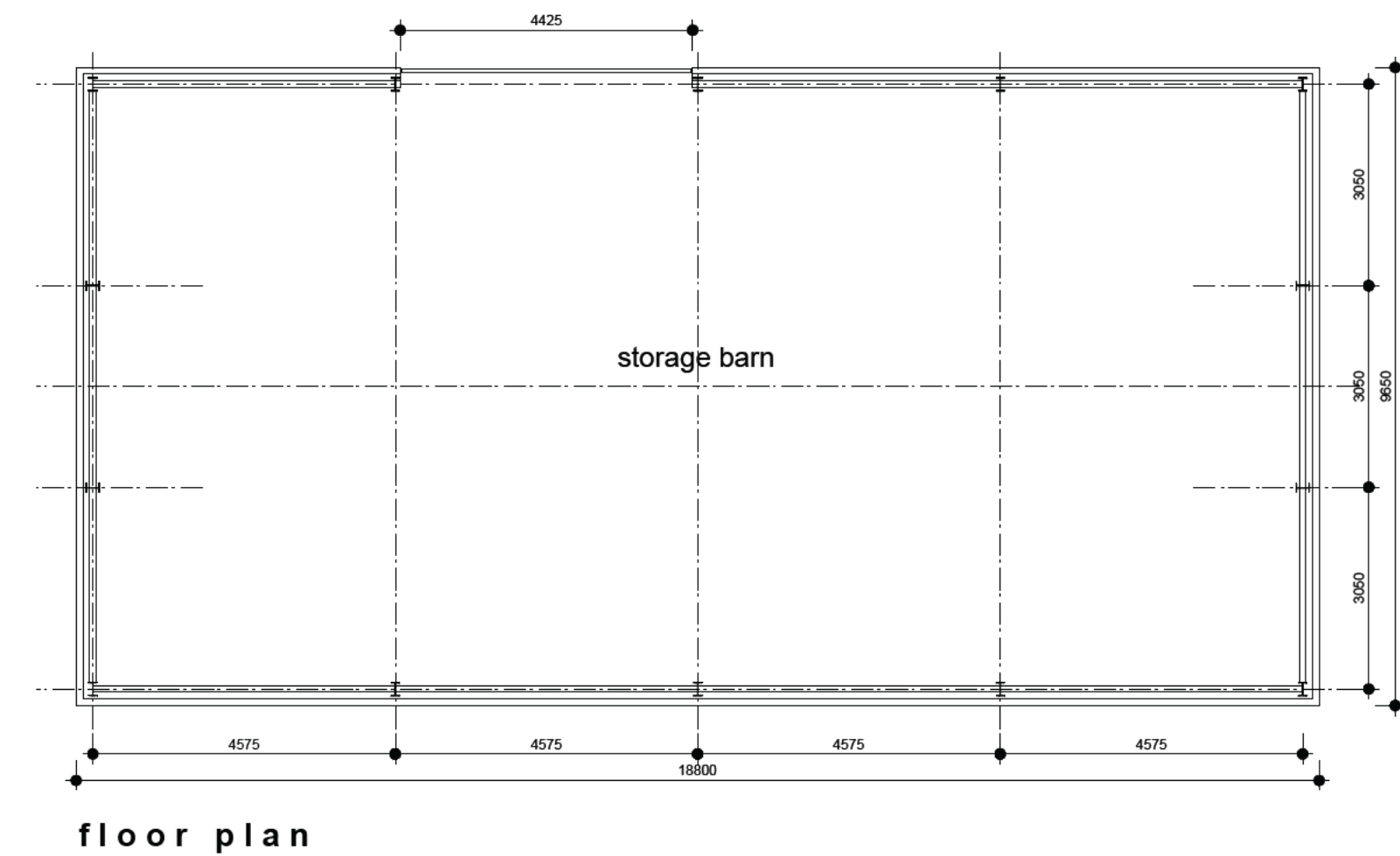
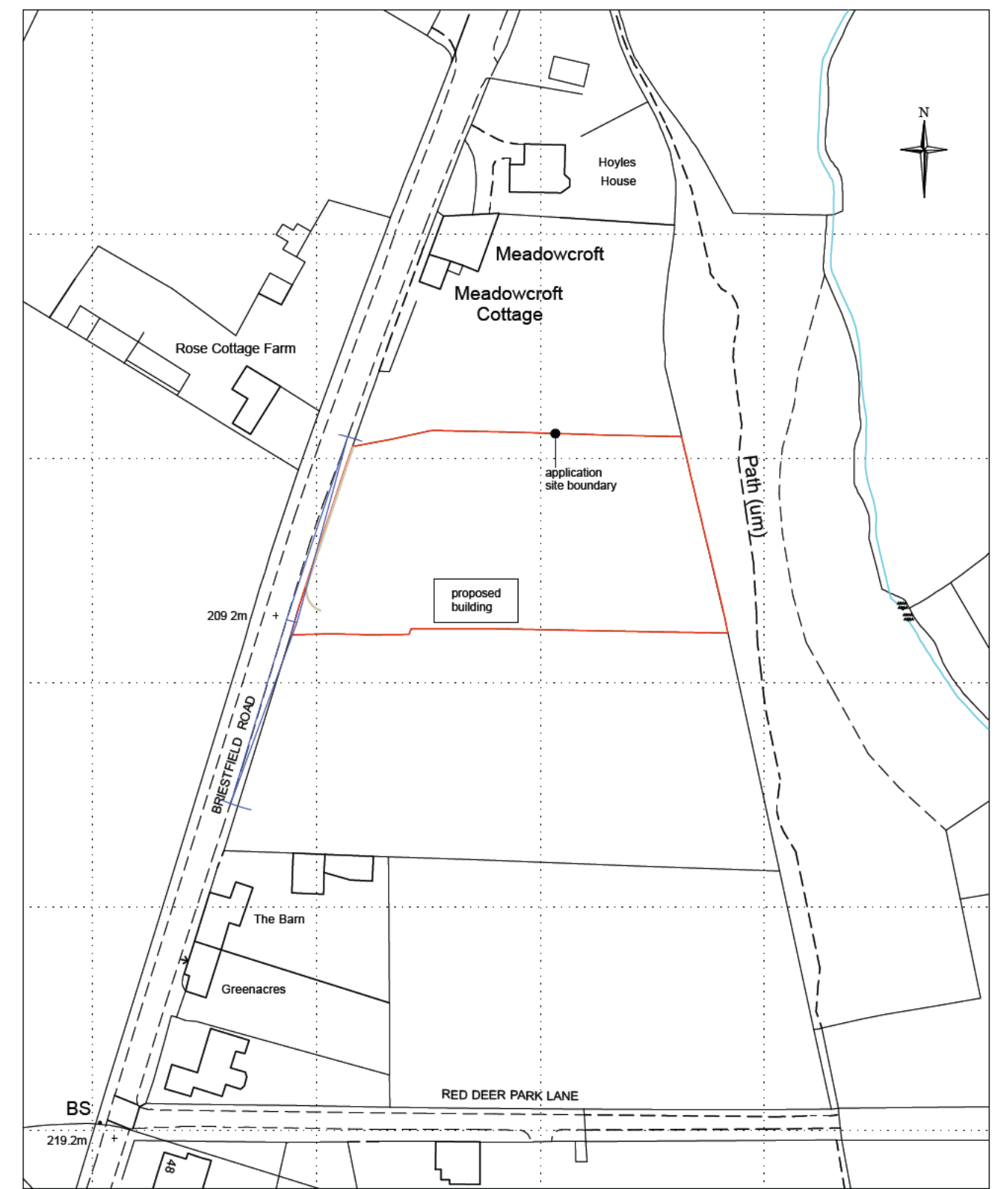
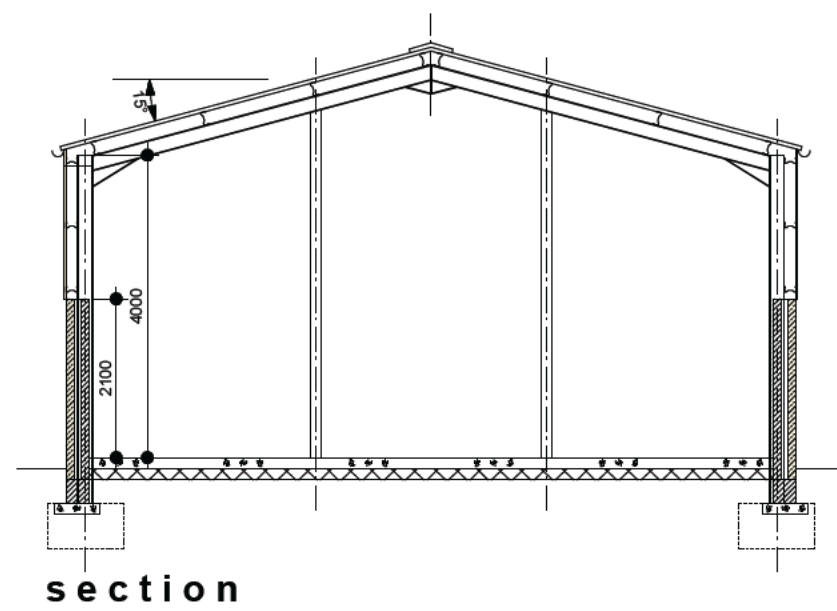
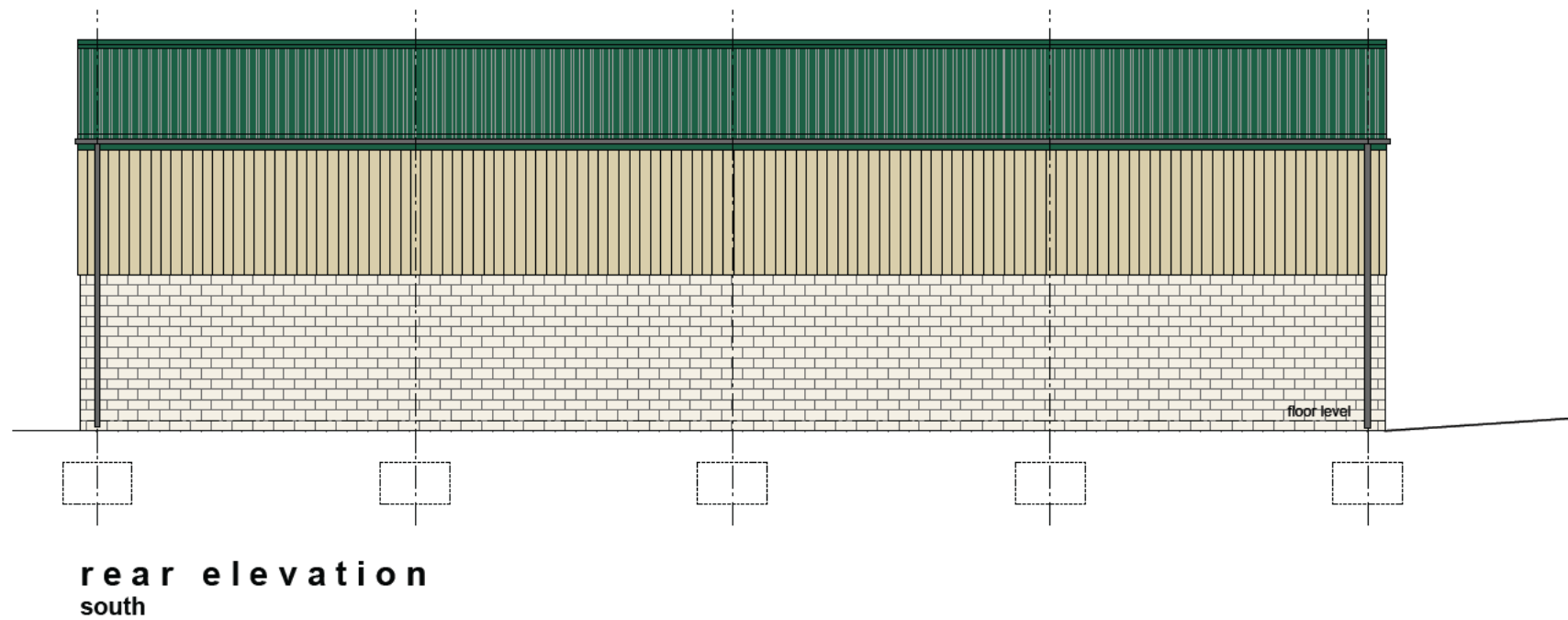
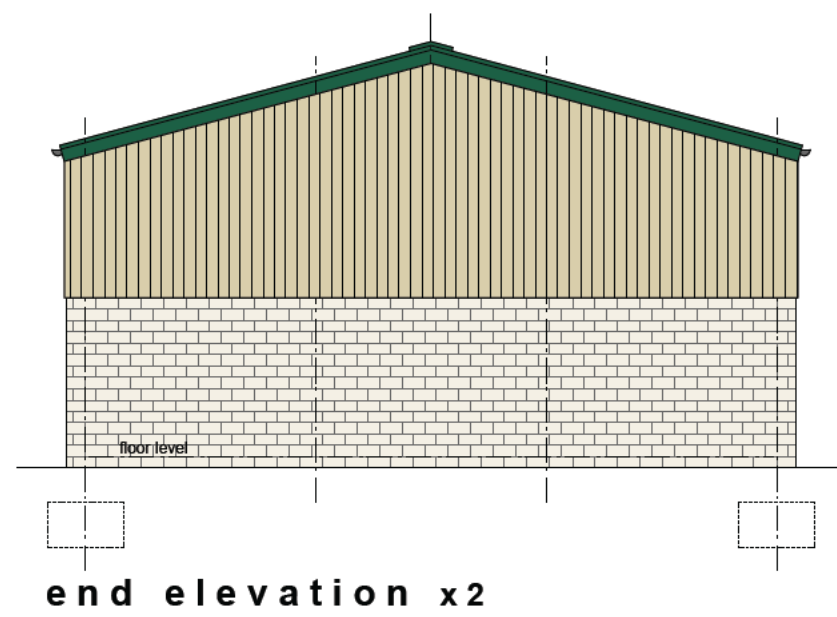
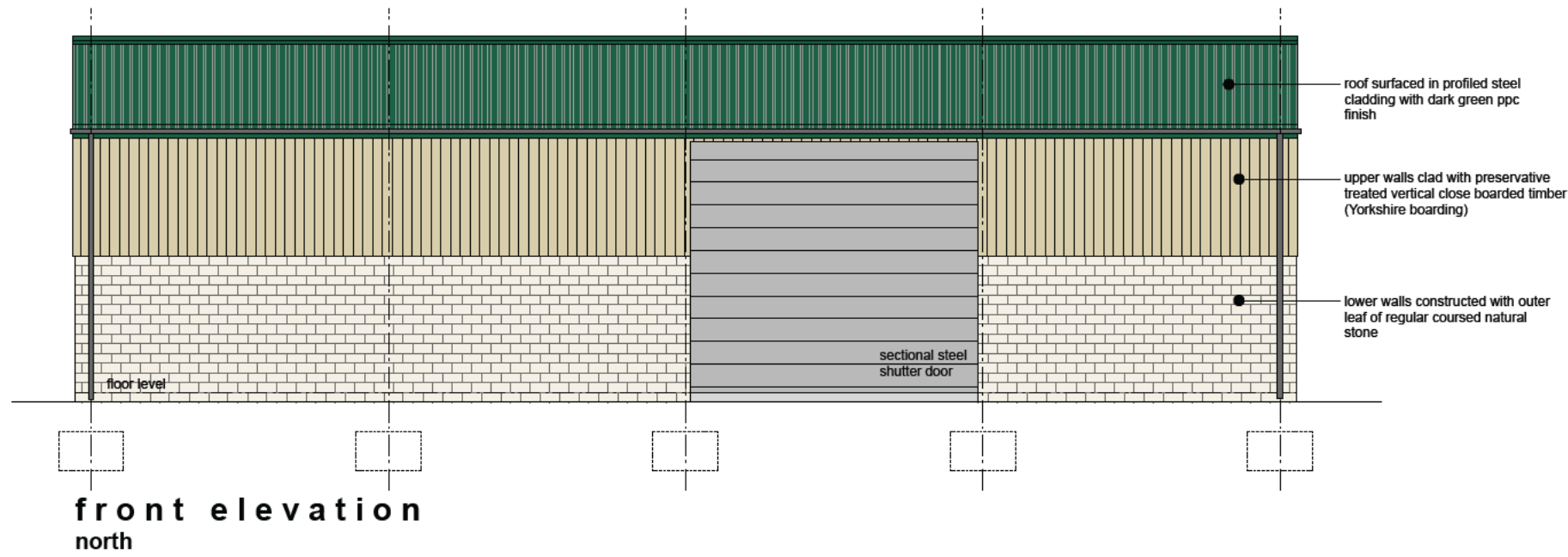
General practice is to undertake rotary openhole boreholes at three locations across the site to mitigate against the potential for drilling through intact columns associated with pillar and stall workings. Furthermore, it is normal to investigate the ground to 30m below ground level; any workings below this depth are unlikely to result in significant instability. However, in this case, the risk of instability is due to shallow workings, therefore, drilling to these depths may not be necessary and the objective should be to ensure that the shallow seams are un-worked or have sufficient competent cover. It may therefore be possible, in the first instance, to undertake one borehole to 30m below the top of the rockhead, with the remaining boreholes proving the depth and continuity of the coal seam(s). In any event, it is considered that approval should be sought with the Local Authority as to the efficacy of this approach.

It is of note that Rogers Geotechnical Services would be happy to assist in any further intrusive investigation that may be required.



Appendix 1

Site Plan



This drawing has been prepared specifically for the purpose of obtaining Planning Permission and/or Building Regulation Approval. Its suitability for other purposes, without supplementary details and specifications cannot be guaranteed. The Permissions and/or Approvals are beyond the Architects control, and no guarantee that such will be granted is given or to be inferred by reason of the preparation of this drawing. Only figured dimensions are to be used. All dimensions to be checked on site. This drawing together with the design is the property and copyright of the Architect and must not be reproduced without prior written permission.

P05	Information added for Highways purposes	27.09.21	AS	AS
P04	Proposed building relocated to southern boundary	23.09.21	AS	AS
P03	Proposed building relocated to southern boundary	15.09.21	AS	AS
P02	Drawing updated to client requirements	22.07.21	AS	AS
P01	Drawing originated	19.07.21	AS	AS
rev.	description	date	drawn	approved

A-D-P

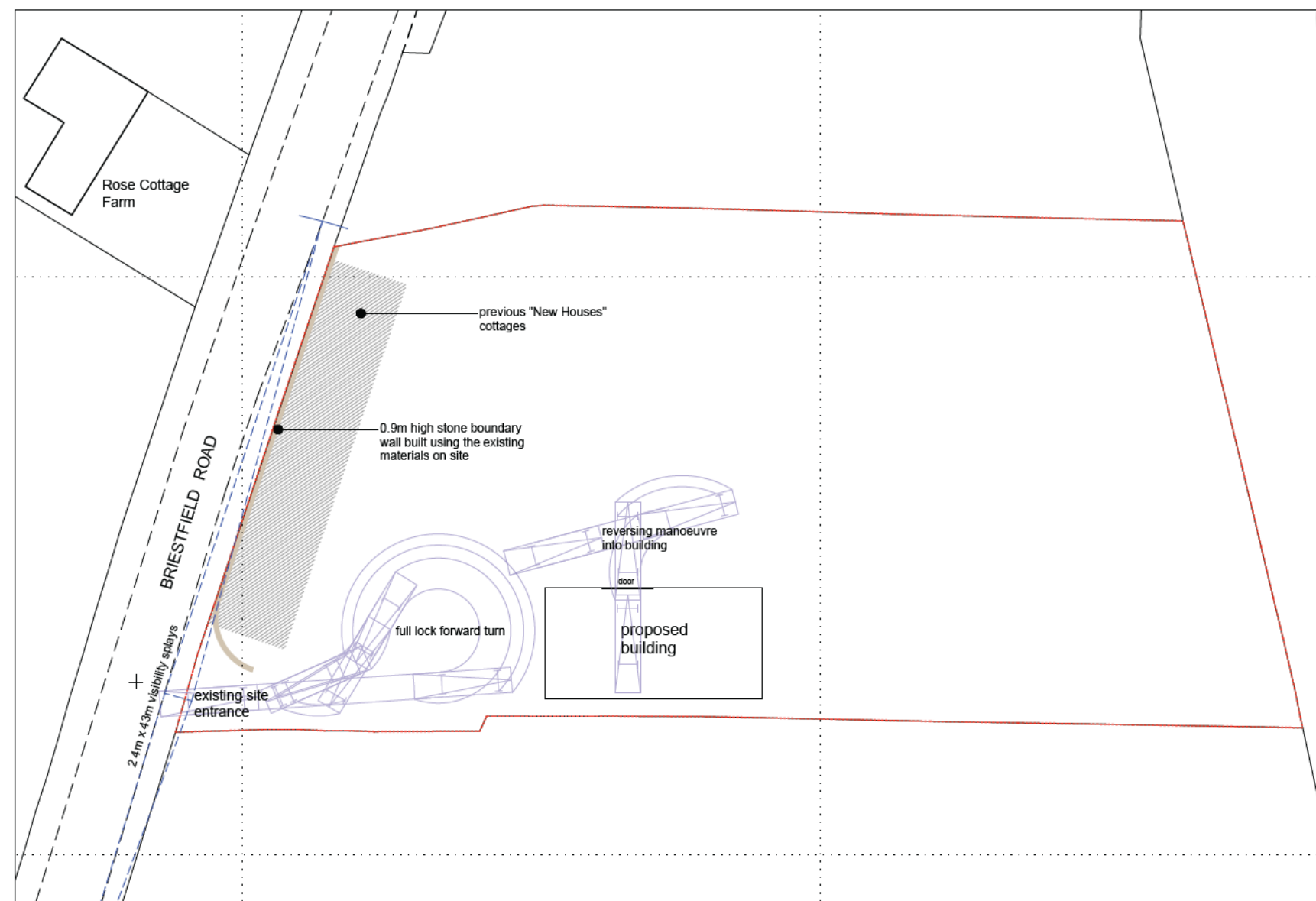
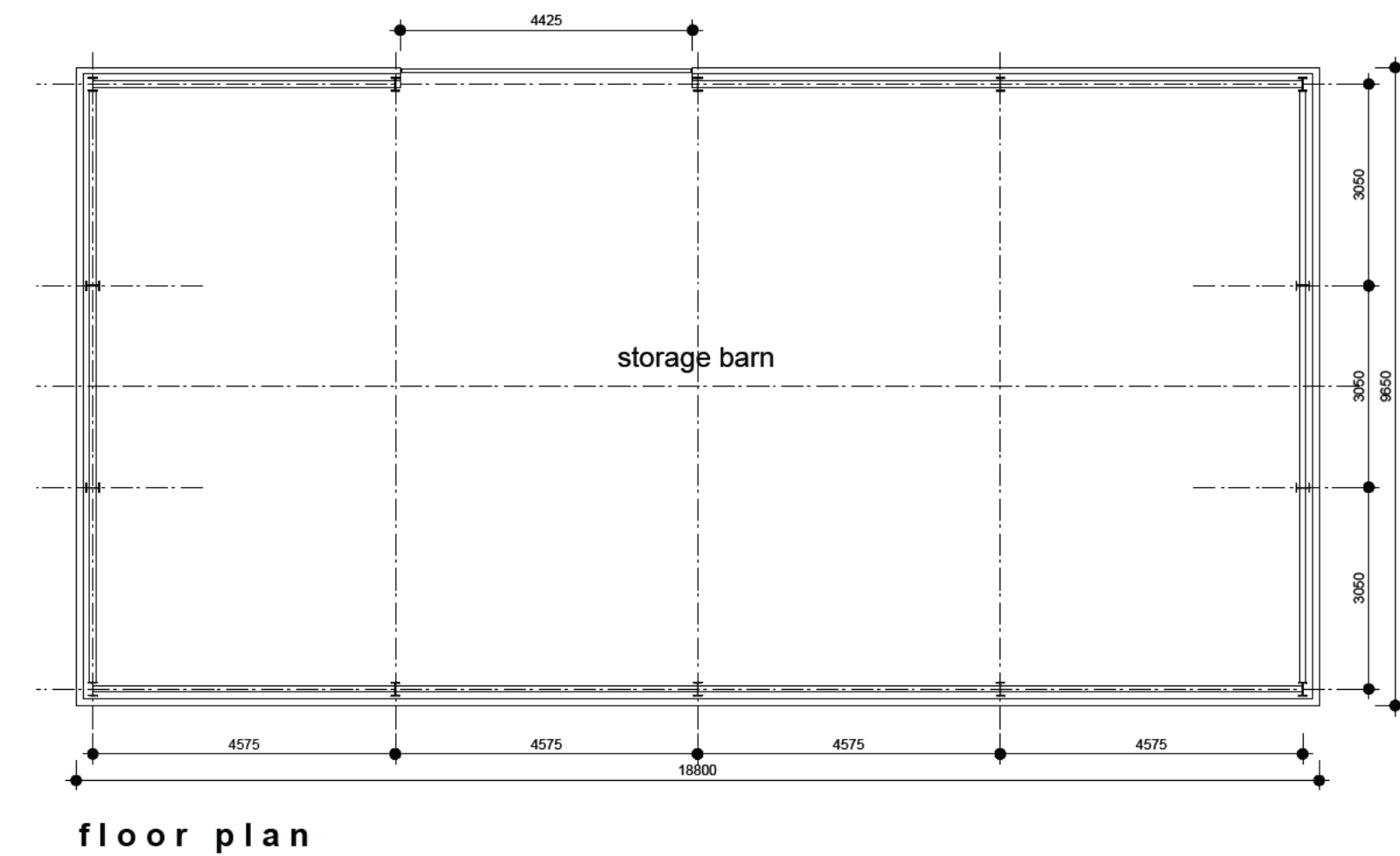
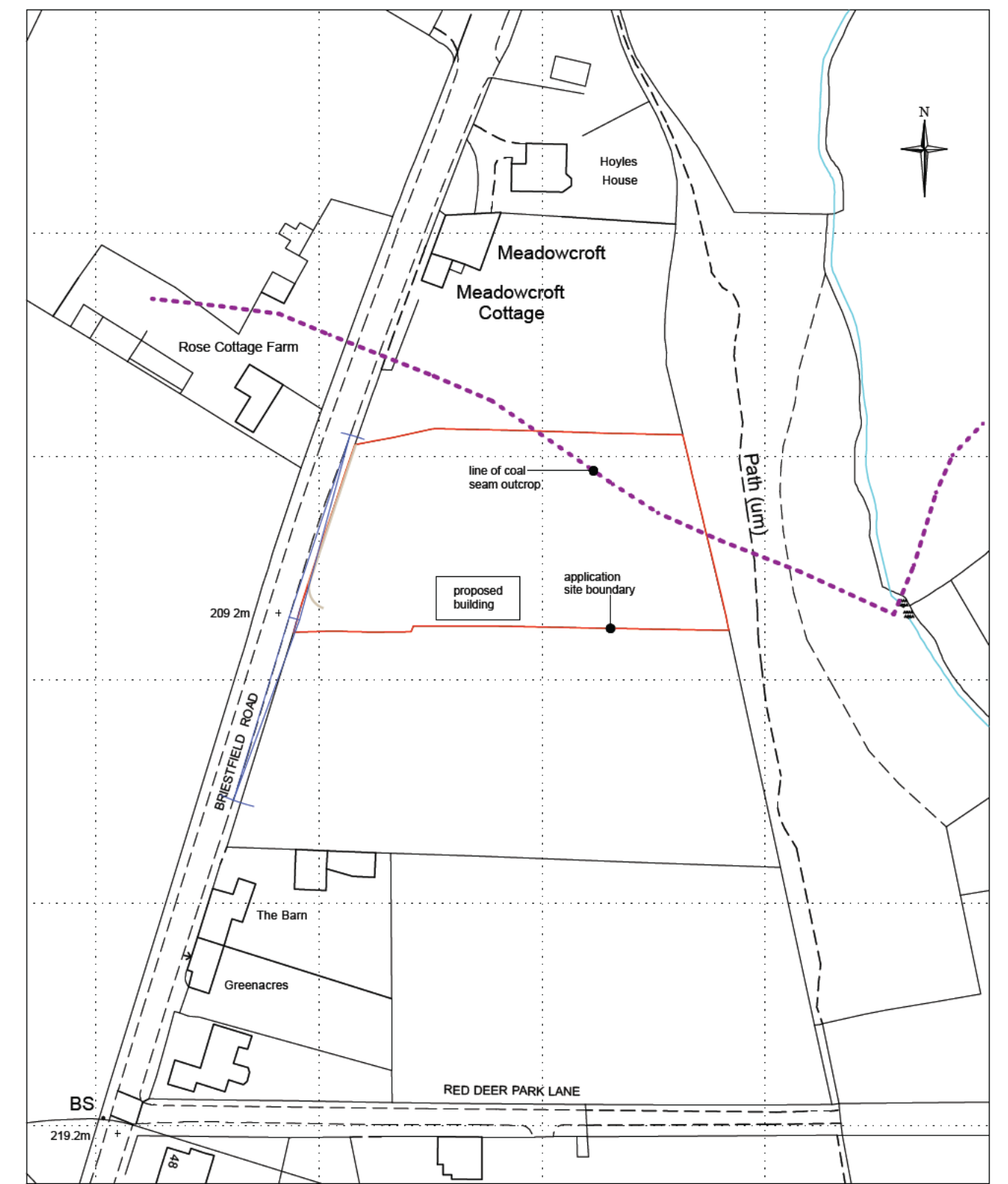
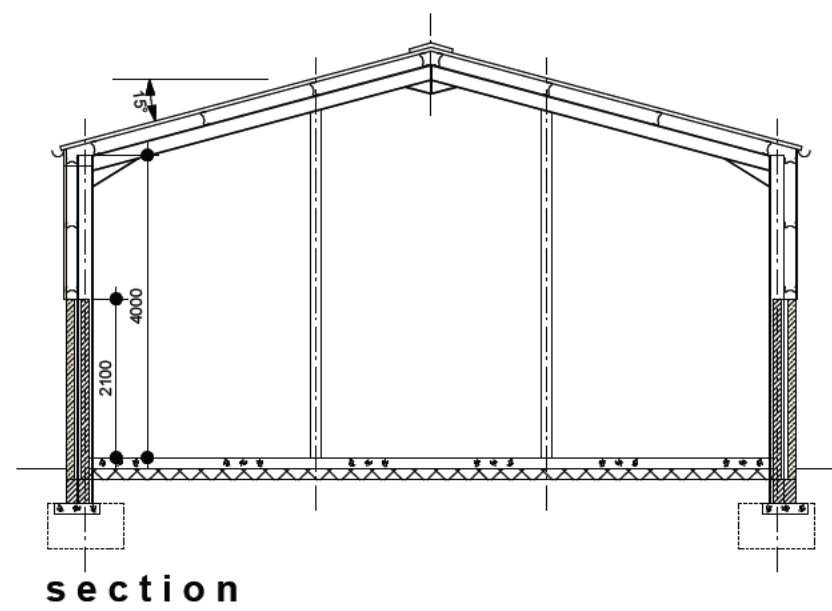
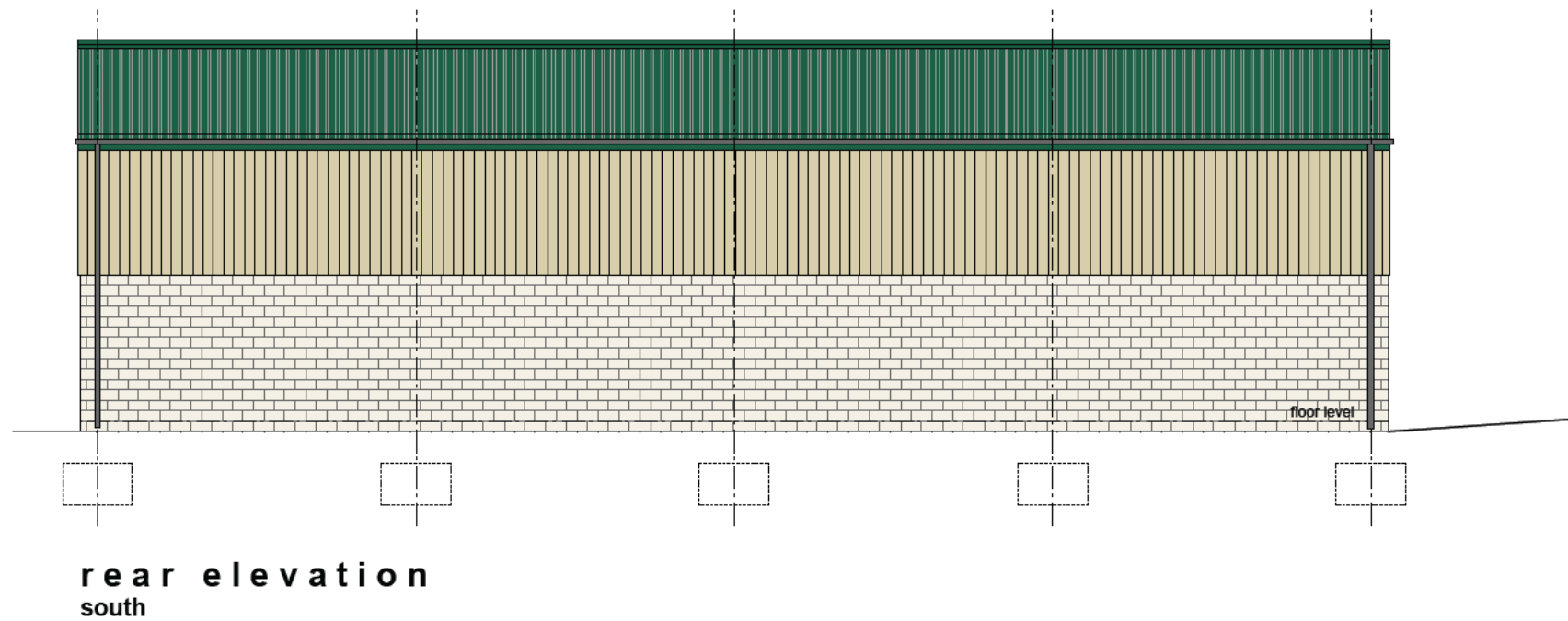
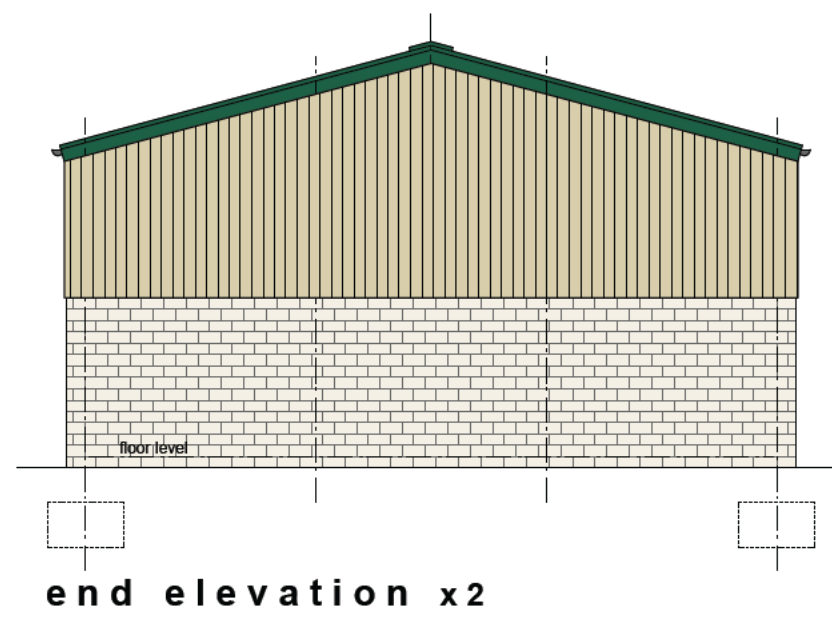
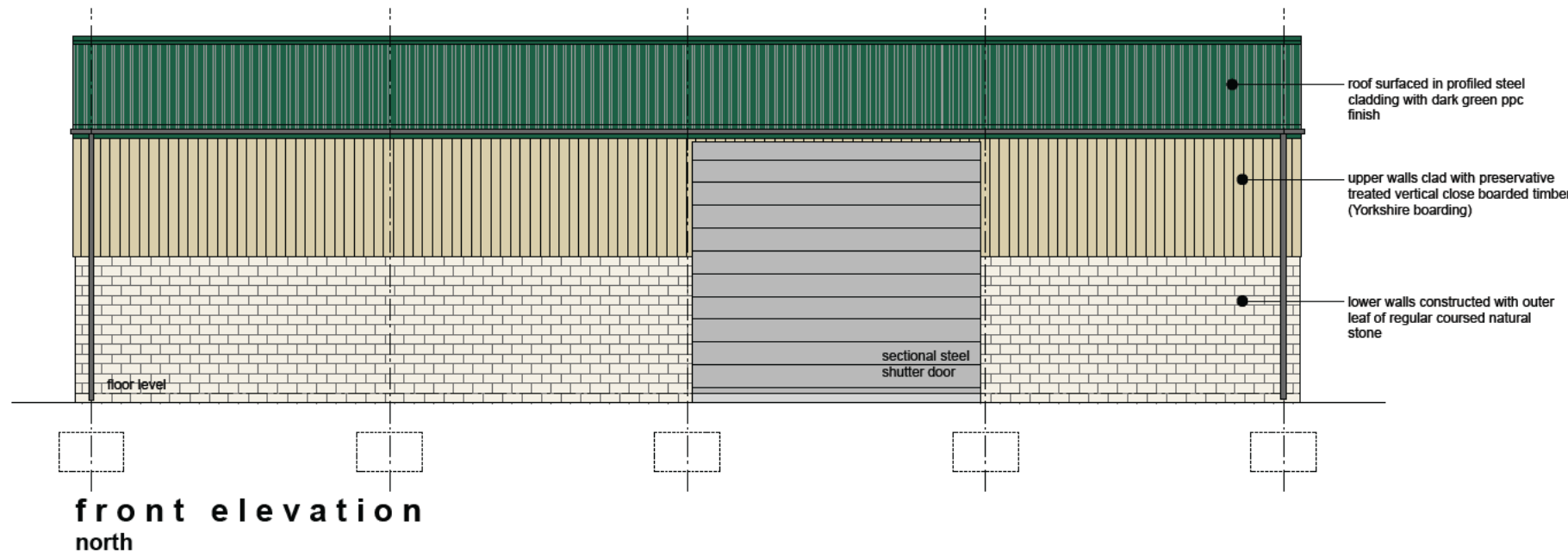
project **proposed agricultural storage barn for hay & straw harvest**
at
land off Bristfield Road, Bristfield
Dewsbury, WF12 0NR
for
Mr Kirk Braithwaite

title **general arrangement**
number **21099D-01-P05**
scale **1:100**
size **A2**

**ARCHITECTURE
& DESIGN
PARTNERSHIP**

The Old Police Station 16 Bridge Lane Holmfirth HD9 7AN
T: 01484 685411 E: hello@adp-architects.com
W: www.adp-architects.com

RIBA 
Chartered Practice



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P06	Line of coal seam outcrop added	12.10.21	AS	AS
P05	Information added for Highways purposes	27.08.21	AS	AS
P04	Proposed building relocated to southern boundary	23.08.21	AS	AS
P03	Proposed building relocated further south	15.08.21	AS	AS
P02	Drawing updated to client requirements	22.07.21	AS	AS
P01	Drawing originated	19.07.21	AS	AS

rev. description date drawn appd

A+DP

project **proposed agricultural storage barn for hay & straw harvest**
at **land off Bristfield Road, Bristfield**
Dewsbury, WF12 0NR
for **Mr Kirk Braithwaite**

title **general arrangement**
number **21099D-01-P06**
scale **1:100**
size **A2**

**ARCHITECTURE
& DESIGN
PARTNERSHIP**

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Appendix 2

Coal Authority Report



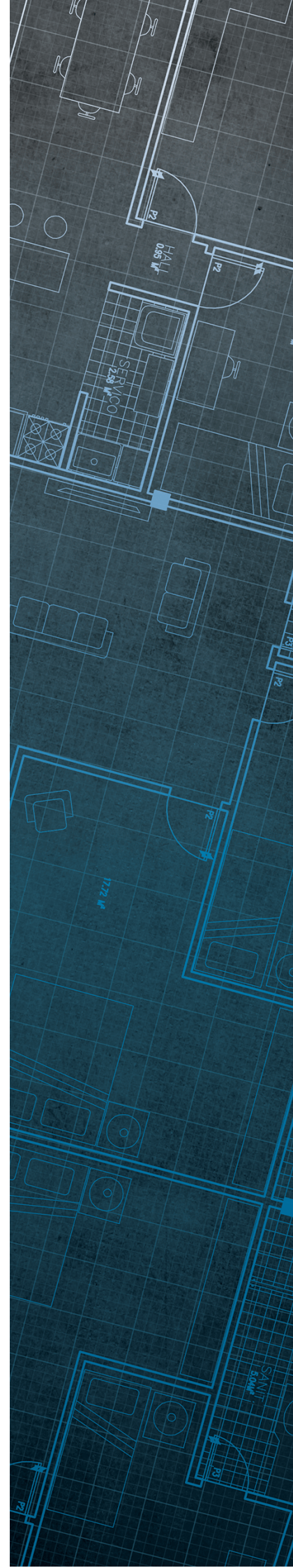
The Coal
Authority

Consultants Coal Mining Report

Briestfield Road
Briestfield
Dewsbury
Kirklees
WF12 0NR

Date of enquiry:	12 October 2021
Date enquiry received:	12 October 2021
Issue date:	12 October 2021

Our reference:	51002693910001
Your reference:	K Braithwaite



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

A AND DP ARCHITECTURE AND DESIGN
PARTNERSHIP LLP

Enquiry address

Briestfield Road
Briestfield
Dewsbury
Kirklees
WF12 0NR

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

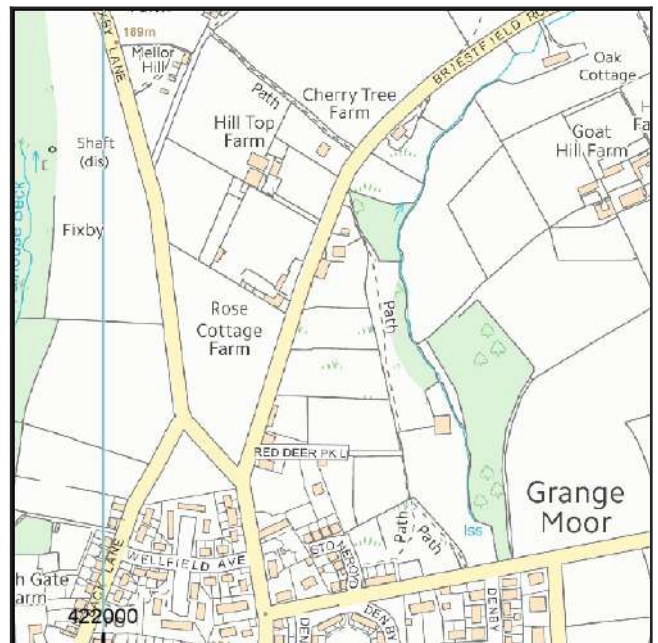
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

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	WHEATLEY LIME	Coal	6O4J	58	Beneath Property	1.6	South-East	82	1841
unnamed	SILKSTONE	Coal	6O4N	92	Beneath Property	2.8	South-East	61	1869
unnamed	TOP BEESTON	Coal	6O4P	139	Beneath Property	2.6	East	71	1939
unnamed	BLACK BED	Coal	6O4Q	225	Beneath Property	2.5	East	61	1945

Probable unrecorded shallow workings

None.

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:

1574	12066	FGB275
10063	5016	NE777
GCR21	FGB18	NE166

Our records show we have more plans than those shown above which could affect the enquiry boundary.

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
PARKGATE	Coal	Yes	Within	N/A	124

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

Please refer to the "Summary of findings" map (on separate sheet) for details of any opencast areas 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 in an area where notices to withdraw support were given in 1944.

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

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.

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

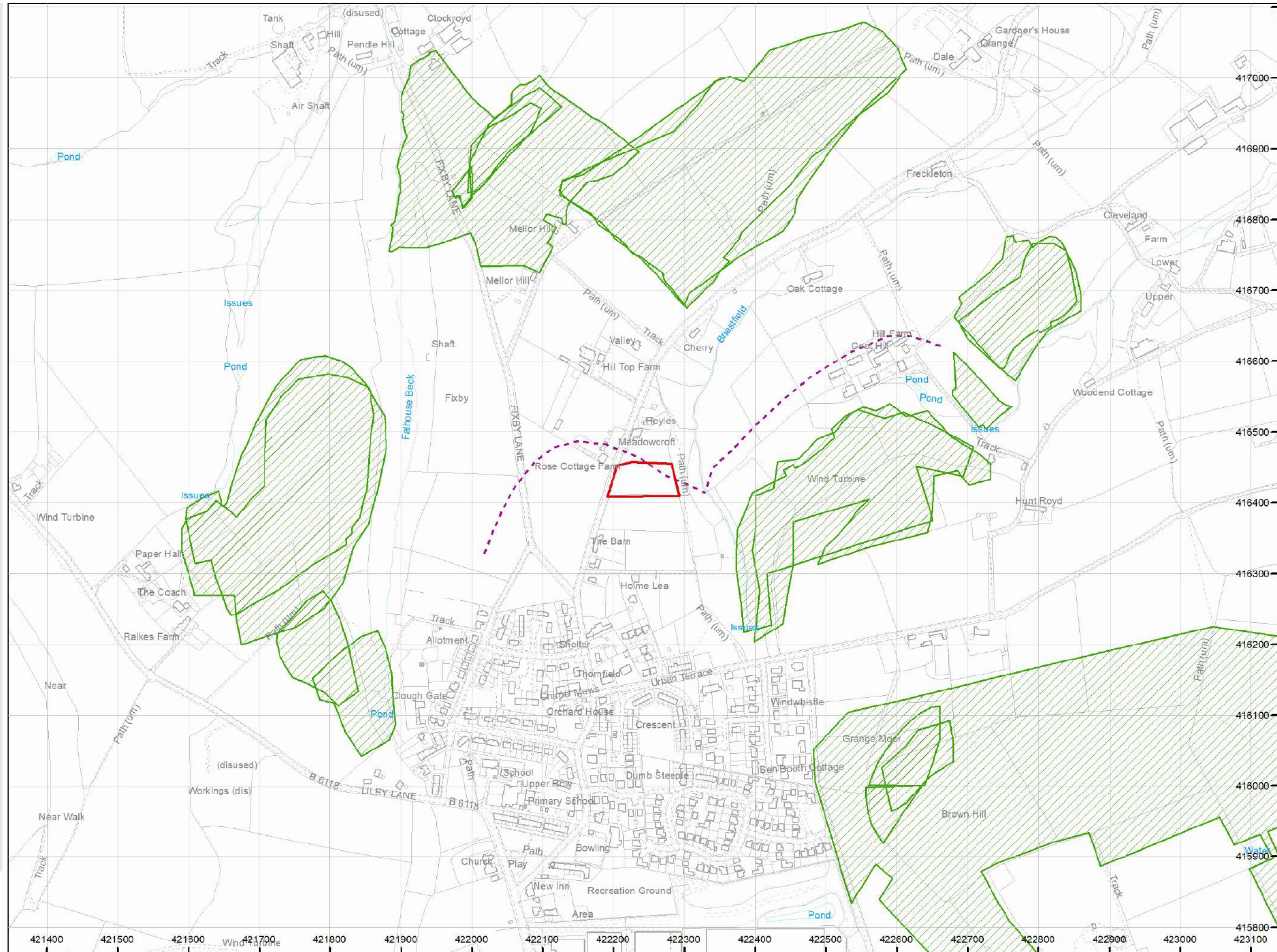
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

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.

Key

Approximate position of the enquiry boundary shown	
Outcrop (Conjectured)	
Unlicensed opencast site	





ATTACHMENT B

COAL AUTHORITY PERMIT



The Coal
Authority

Permit to Enter or Disturb Coal Authority Interests

Permit 26361

Name and Address of Permit Holder:

Mr Kirk Braithwaite
New Connexion House
2 Marsh Lane
Shepley
Huddersfield
HD8 8AE

Site Location:

Land off
Briestfield Road
Briestfield
Dewsbury
WF12 0NR

This certificate hereby grants the above named Permit Holder a Permit to carry out:-

Ground investigation by three boreholes up to 30m deep to determine presence of shallow mine workings

within the Authority's interests at the identified site location above as shown on the Grant Permit Boundary (overleaf) for the period of **12 months** from the granted date shown below. *The granting of this Permit does not constitute advice given by the Authority in relation to the proposed operations. It is the Permit Holder's responsibility to obtain appropriate health, safety, environmental, technical and legal advice.*

Conditions:

- Manned entry (i.e.) into mine entries/workings) is strictly prohibited.
- Water flush
- Gas Monitoring CO, CH₄, CO₂, O₂, H₂S at borehole and rig
- Operators undertaking the work must be in possession of this certificate and the Permit boundary plan at the time of works
- Appropriate borehole sealing without delay and to withstand site level changes

Signed: Stuart Brown Granted Date: 07/03/2023

For and on behalf of The Coal Authority

Nominated Representative: Stuart Brown, Permitting Manager;

The Coal Authority, Permitting Office, 200 Lichfield Lane, Mansfield, Notts, NG18 4RG

Tel: 01623 637450; E-Mail: permissions@coal.gov.uk



The Coal
Authority

Granted Permit Boundary

Permit Ref: 26361

Permit Boundary:



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ATTACHMENT C

DRILLING RECORD

Client: G & M Consulting Ltd	Site: Land off Bristfield Road, Bristfield, Dewsbury. WF12 0NR	Cape Site Services unit 2, rear of Castle Buildings Carlton Road, Barnsley, S71 3HX	
Date: 23/03/2023	Method: water flush	Permit No: 26361	
Driller: Ian Wiles		Driller Assistant: Richard Hawkins, Simon Fish	
		Page No: 1	

Measurements In Meters

BH No:	FROM	TO	THICKNESS	DESCRIPTION
1				
	0	1.2	1.2	Clay yellow grey
	1.2	1.9	0.7	Mudstone grey brown clayey
	1.9	2.6	0.7	Coal
	2.6	8.4	5.8	Mudstone grey with some silty sandstone bands
	8.4	9	0.6	Mudstone dark grey
	9	9.5	0.5	Mudstone grey silty
	9.5	20.8	11.3	Sandstone grey silty with odd mandstone bands
	20.8	21	0.2	Mudstone black with a coal trace
	21	23	2	Sandstone grey silty with odd mandstone bands
	23	23.8	0.8	Sandstone brown
	23.8	30	6.2	Sandstone grey silty with odd mandstone bands
2				
	0	1	1	Fill
	1	1.7	0.7	clay Yellow grey
	1.7	2.3	0.6	Mudstone grey brown clayey
	2.3	3	0.7	Coal
	3	8.8	5.8	Mudstone grey with some silty sandstone bands
	8.8	9.4	0.6	Mudstone dark grey
	9.4	9.9	0.5	Mudstone grey silty
	9.9	10	0.1	Sandstone grey
3				
	0	0.5	0.5	Fill
	0.5	1.4	0.9	clay Yellow grey
	1.4	2	0.6	Mudstone grey brown clayey
	2	2.7	0.7	Coal
	2.7	8.5	5.8	Mudstone grey with some silty sandstone bands
	8.5	9	0.5	Mudstone dark grey
	9	9.6	0.6	Mudstone grey silty
	9.6	10	0.4	Sandstone grey