



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

Mr Patrick Townsend
Townsend Planning Consultants
PO Box 788
Wakefield
West Yorkshire
WF1 9UX

12th May 2025

Ref C754/01/ATS

Dear Patrick,

Ref: Shallow Mining Investigation on land off Long Lane, Flockton, Wakefield, West Yorkshire.

1. Introduction

On the instructions of Mr Tom Drake, G&M Consulting Ltd have carried out an intrusive mining investigation on land off Long Lane, Flockton, Wakefield, West Yorkshire. The work was carried out in support of a planning application associated with the development of the site with a building for the stabling of horses; the proposed layout of which is shown on the drawing presented in Attachment A of this report.

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.

A review of the Mining Remediation Authority (MRA) Interactive Map (datamine-cauk.hub.arcgis.com) shows the site to lie within a '*development high risk area*'.

The site is located to the north of Long Lane, approximately 2.4 km south-west of the village of Flockton, approximately 7.5 km south-east of Huddersfield town centre, West Yorkshire and is centred at National Grid Reference SE 218 143. The area of the proposed new stable is rectangular in shape, approximately 12 m by 4 m, with the long axis aligned east to west. This area of the site, which sits in the south-western part of the site as a whole, currently houses a wooden single stable for horses. The rest of the site is formed of grass paddock and semi mature hedge.

The Chestnuts
Brackenhill Road, East Lound,
Haxey, Doncaster. DN9 2LR
Registered in England No. 5806528
VAT No. 772 3112 51

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. Background Information

A review of geological maps for the area show the bedrock geology underlying the site to be formed of mudstone, siltstones and sandstones of the Pennine Lower Coal Measures Formation. An area of infilled ground is shown to the north of the site and is likely associated with the open cast mining of the Middleton Main Coal seam which outcrops locally in the area. A dip of 3° north-east is shown on the geological map, indicating that the seam is likely to be present below the site at shallow depth. No shafts are shown on the site, however a shaft is shown approximately 10m south of the site, on the southern side of Long Lane.

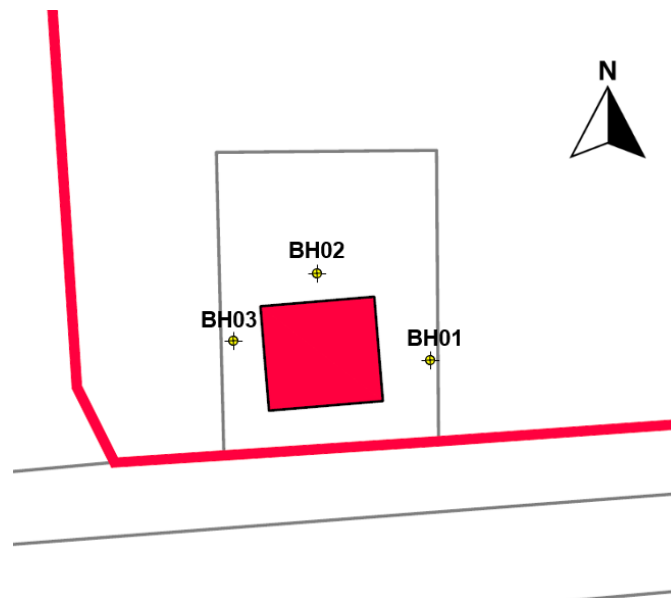
3. Fieldwork

The fieldwork was carried out on the 30th April 2025. Three rotary open-holes, referenced BH01 to BH03 were both drilled to depths of between 10 m and 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 Mining Remediation Authority Permission No 29761, a copy of which is presented in Attachment B of this report.

Drilling was undertaken using water flush. In accordance with the MRA 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 a topsoil or gravel up to 0.4 m, underlain by a 'clay brown grey' to between 1.3 m and 1.4 m bgl in all of the boreholes, which was further underlain by a 'sandstone grey brown silty some mudstone bands' to between 3.8 m and 4.6 m bgl, in BH01 and BH03. This strata appeared to be absent in BH02.

The remaining sequence of bedrock comprised mudstones and interbedded sandstones, to the base of each of the boreholes.

A coal seam was encountered within this sequence as follows;

Borehole No	Coal (m) (Thickness)	Drillers Description
BH01	5.7 – 6.0 (300 mm)	'coal dirty'
BH02	5.7 – 6.1 (400 mm)	'coal dirty'
BH03	5.6 – 6.0 (400 mm)	'coal dirty'

Based on the geological records it is considered that the shallow seam of coal is likely to be the Middleton Main coal.

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.

5. Conclusions/Recommendations

On the instructions of Mr Tom Drake, G&M Consulting Ltd have carried out an intrusive mining investigation on land off Long Lane, Flockton, Wakefield, West Yorkshire. The work was carried out in support of a planning application associated with the development of the site with a building for the stabling of horses

The drilling works were carried out in accordance with the MRA permission 29761.

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, between 300 mm and 400 mm thick, was recorded in all of the boreholes between 5.6 m and 5.7 m bgl, within a bedrock sequence of sandstone and mudstones. This seam was described by the driller as 'dirty coal', which may be indicative of a poor quality coal. Based on the published geological records for the area, it is considered that the seam represents the Middleton Main 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.

However, in consideration of the fact that historical opencasting is shown immediately adjacent to the northern boundary of the new build, it is recommended that a watching brief is maintained during the development work, and that all surfaces exposed during construction of the foundations or areas external to the new build, are examined by a suitably qualified person, for evidence of such activity. If evidence of backfilled opencast is encountered within influencing distance of the foundations, work should immediately cease and the Mining Remediation Authority notified and the advice of geotechnical specialists sought.

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.

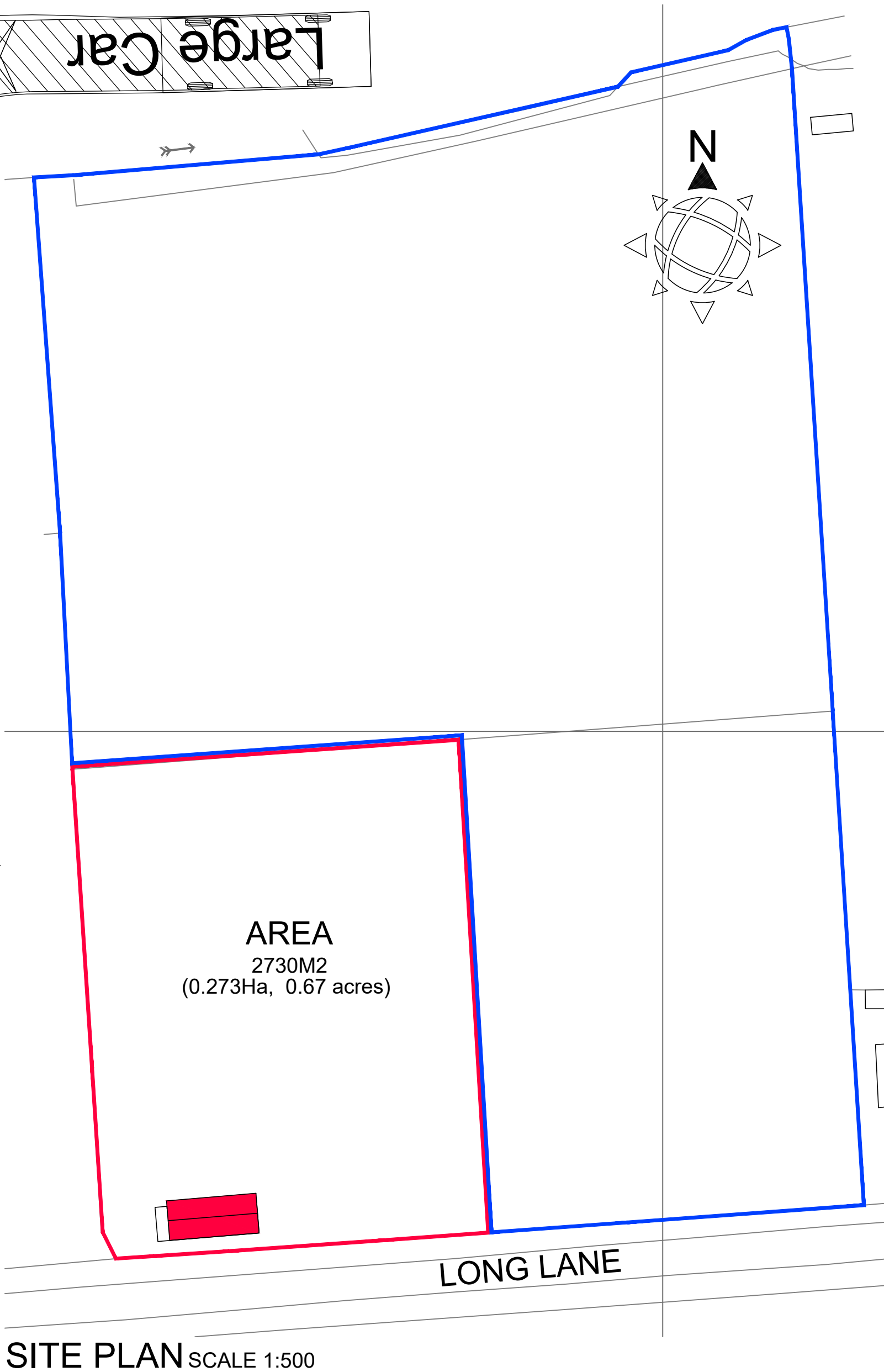
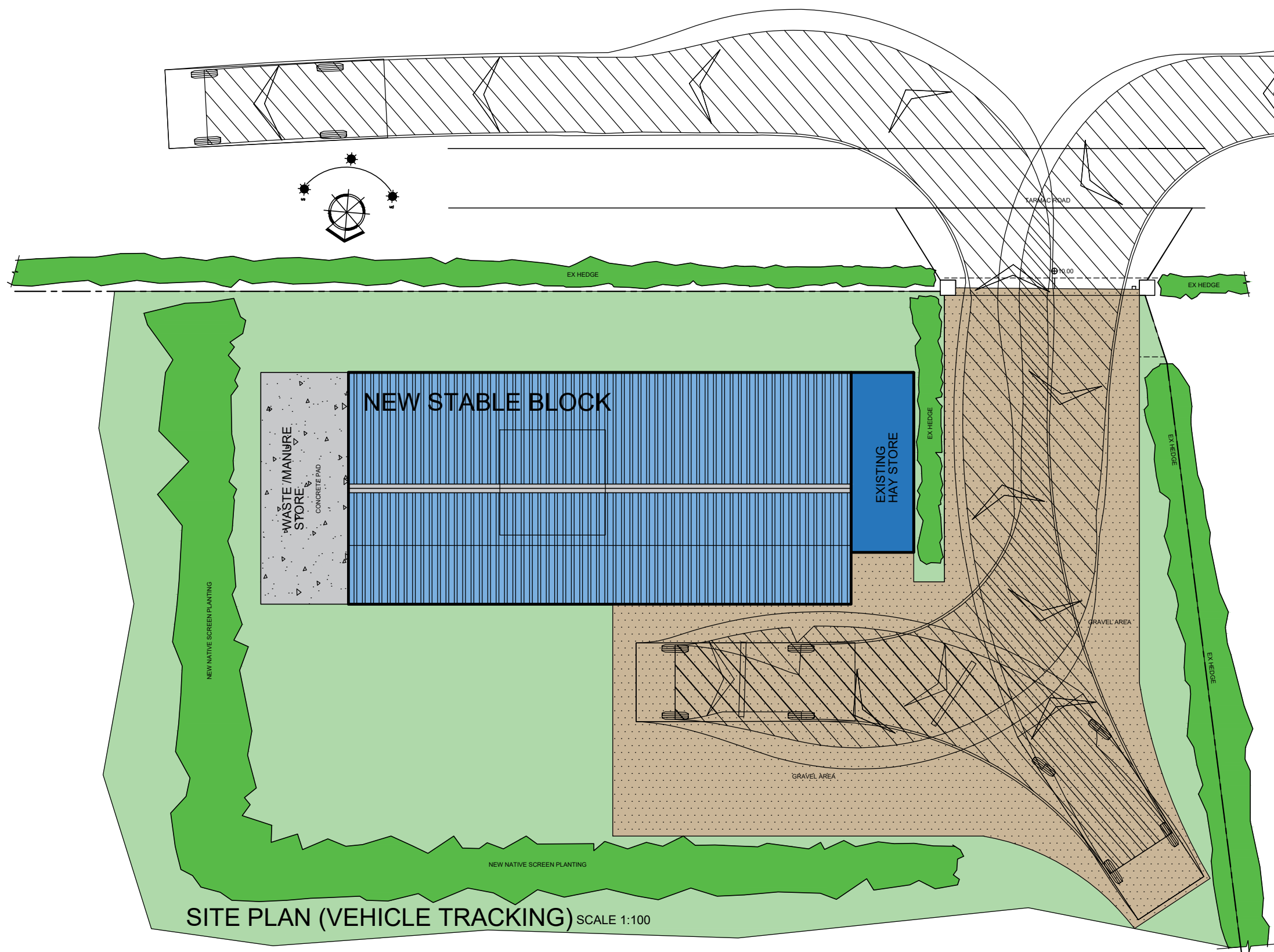
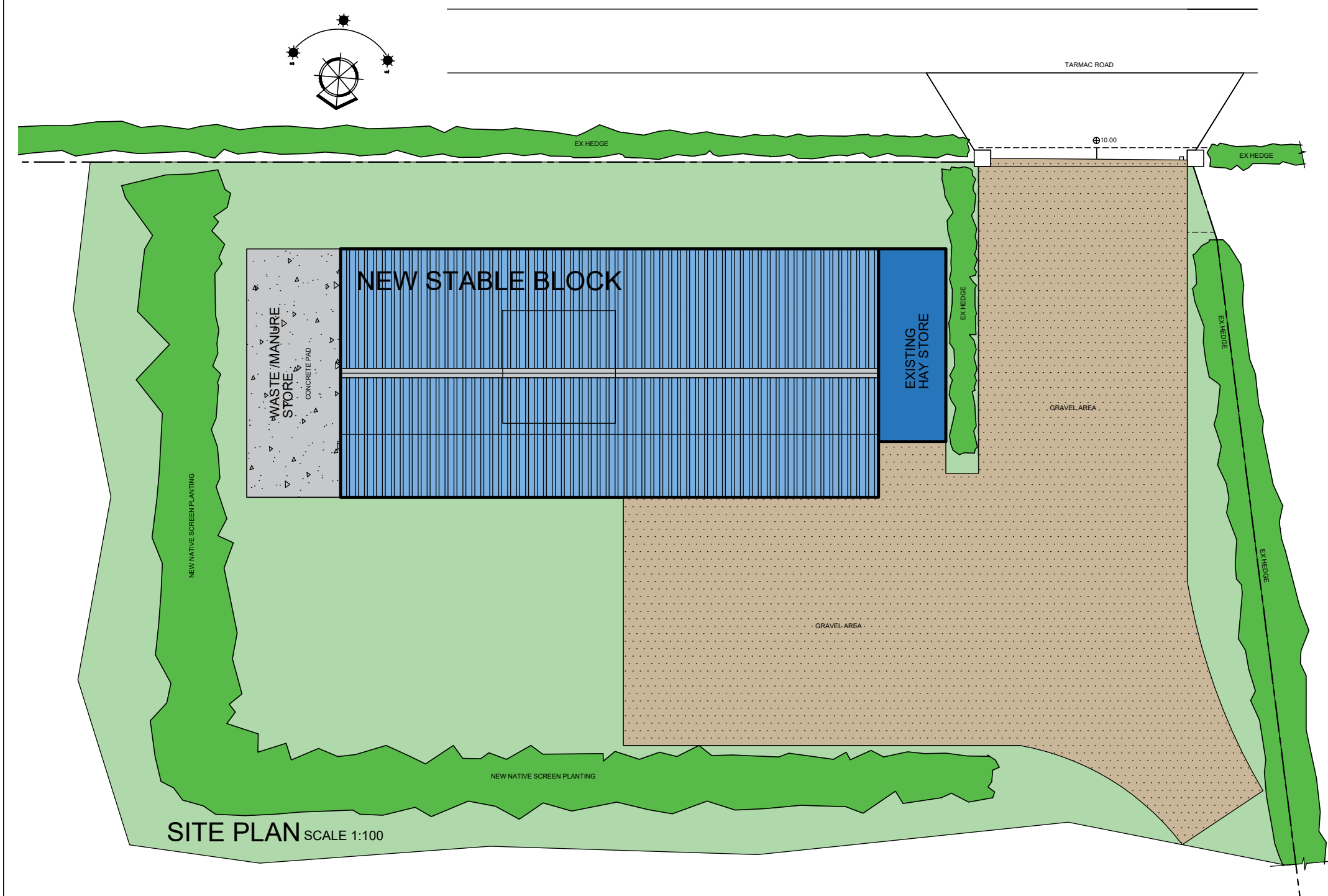
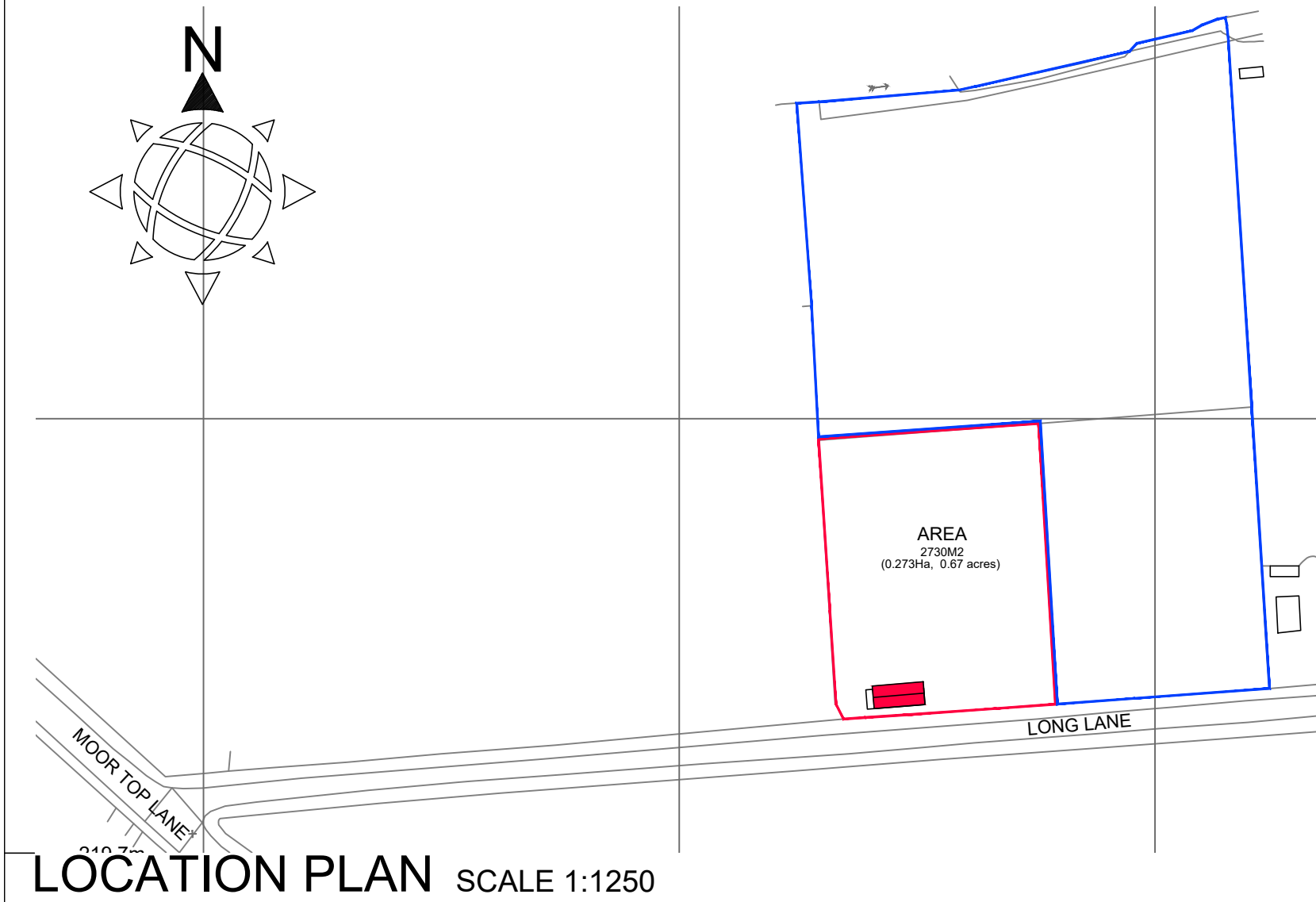
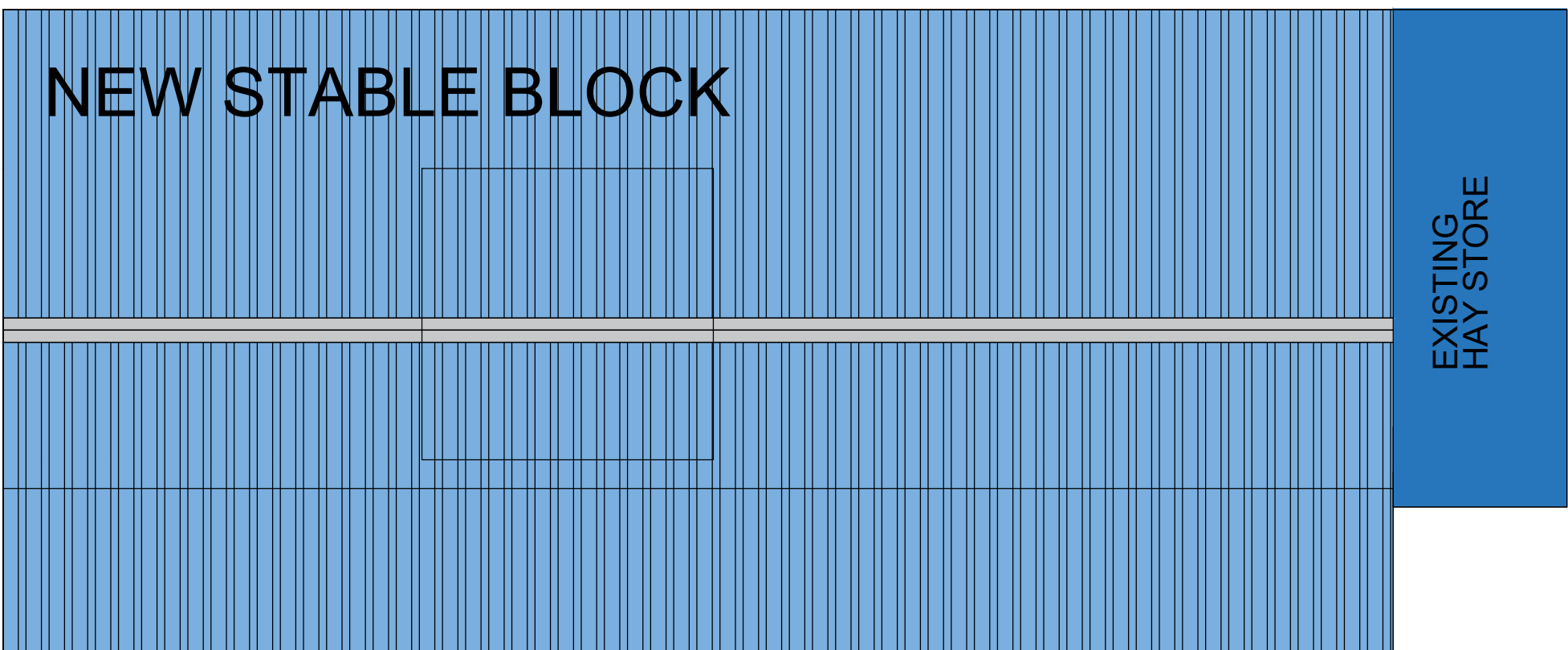
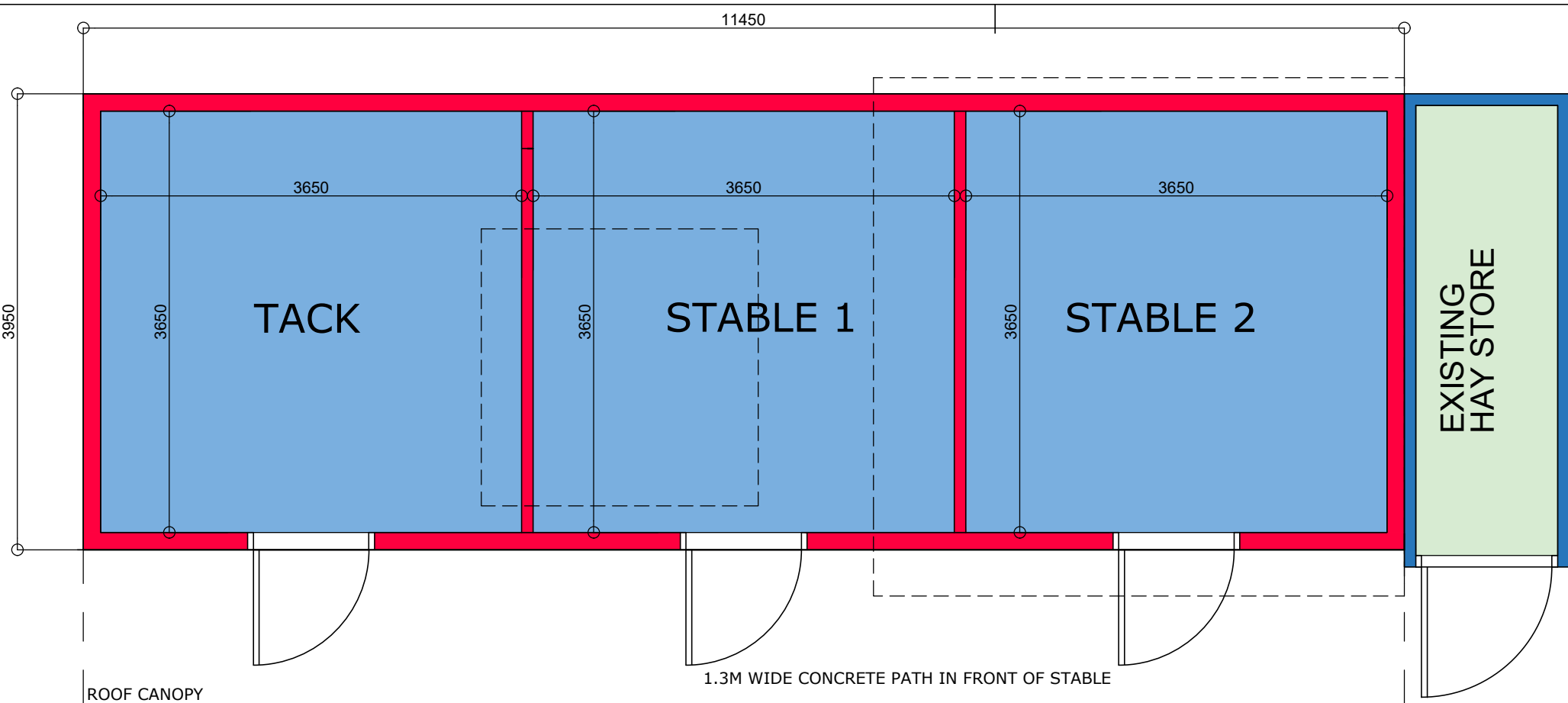
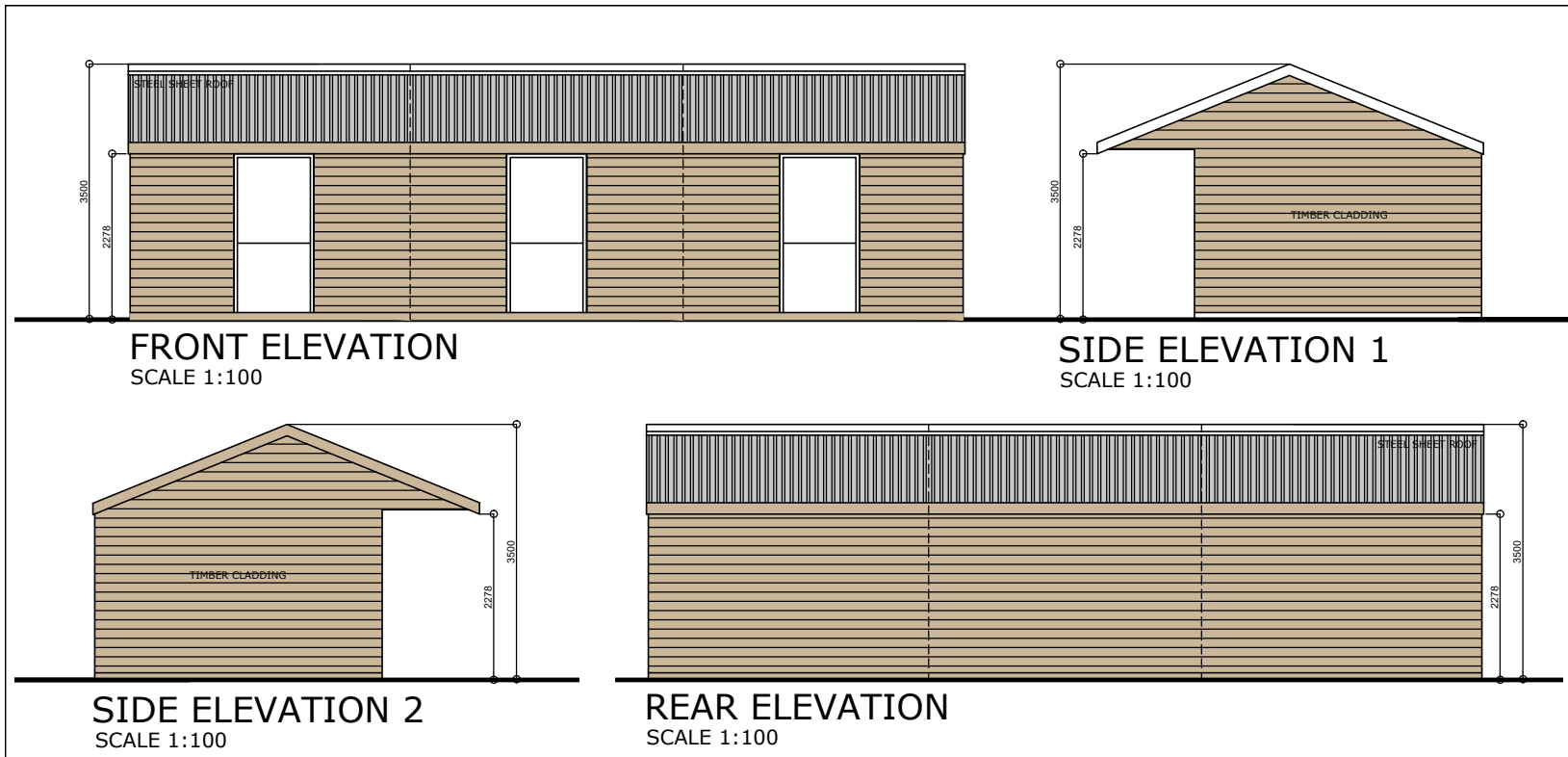
Yours sincerely

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

Attachments



ATTACHMENT A - DRAWINGS



  			1. THIS DRAWING AND THE COPYRIGHTS AND PATENTS THEREIN ARE THE PROPERTY OF NYP ARCHITECTURAL SERVICES LLP. REGISTERED IN ENGLAND AND WALES No. 4631338 AND MAY BE USED OR REPRODUCED ONLY UNDER CONTRACT. 2. CONTRACTORS AND SUB-CONTRACTORS MUST CHECK AND AGREE ALL DIMENSIONS BEFORE PREPARING SHOP DRAWINGS OR COMMENCING WORK ON SITE. 3. CONTRACTORS ARE RESPONSIBLE FOR INFORMING THE DESIGNER OF ANY DISCREPANCY DISCOVERED ON THIS DRAWING OR BETWEEN THIS DRAWING AND ANY OTHER RELATED DOCUMENT ISSUED UNDER THE STANDARD FORM OF CONTRACT IN RESPECT OF THE WORK. 4. WRITTEN DIMENSIONS ONLY ARE TO BE USED FROM THIS DRAWING. IF IN ANY DOUBT ASK FOR CLARIFICATION.			Notes.			Revisions.			NYP ARCHITECTURAL SERVICES The Grove, High Street, Dodworth, Barnsley, S75 3RQ. Tel: 01226 200809. E-mail: scott@nypas.co.uk / stephen@nypas.co.uk		
Date	Suffix	Description	Date	Suffix	Description	Date	Suffix	Description	Date	Suffix	Description	Project.	LAND OFF LONG LANE FLOCKTON, EMILY, WAKEFIELD	Client.
												Drawing Title.	PROPOSAL DRAWING	Date.
												Ref.	104-36	Scale.
												Dwg. No.	P01	AS INDICATED
												Rev.	C	



**ATTACHMENT B –
MINING REMEDIATION
AUTHORITY PERMIT**



Mining
Remediation
Authority

Permit to Enter or Disturb Mining Remediation Authority Interests

Permit 29761

Name and Address of Permit Holder:

Mr Thomas Drake
Rookery Farm
Healey Road
Ossett
West Yorkshire
WF5 8LS

Site Location:

Land off Long Lane
Flockton
Wakefield

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

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

within the Authority's interests at the identified site location above as shown on the Granted 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: _____ Granted Date: **16th April 2025**

For and on behalf of the Mining Remediation Authority

Nominated Representative: Ruth Griffiths, Permitting Manager;

Mining Remediation Authority, Permitting Office, 200 Lichfield Lane, Mansfield, Notts, NG18 4RG

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

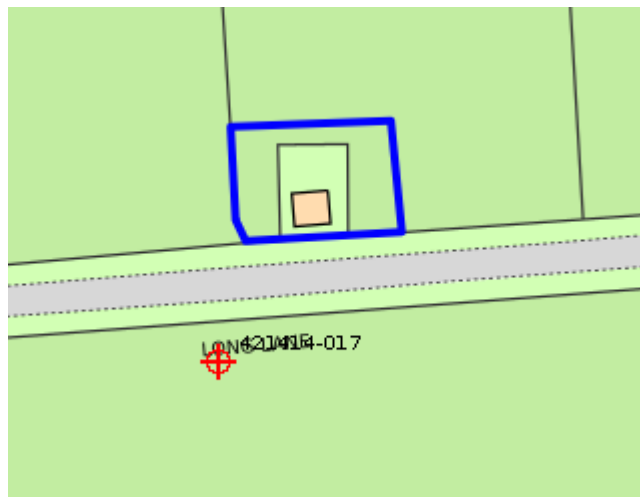


Mining
Remediation
Authority

Granted Permit Boundary

Permit Ref: 29761

Permit Boundary:



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The Mining Remediation Authority is the trading name of the Coal Authority ('TCA') established pursuant to Section 1 of the Coal Industry Act 1994, of 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG. The Coal Authority remains the legal name of the Authority



**ATTACHMENT C –
EXPLORATORY HOLE
RECORDS**

Client: G & M Consulting Ltd	Site: Stables at Long Lane,Flockton Moor, Emley		Cape Site Services unit 2, rear of Castle Buildings Carlton Road, Barnsley, S71 3HX	
Date: 30/04/2025	Method: water flush	Permit No: 29761		
Driller: Ian Wiles			Driller Assistant: Richard Hawkins, Simon Fish, Jonathon Doughty	
			Page No: 1	

Measurements In Meters

BH No:	FROM	TO	THICKNESS	DESCRIPTION
1				
	0	0.3	0.3	Topsoil
	0.3	1.4	1.1	Clay brown grey
	1.4	4.6	3.2	Sandstone grey brown silty some mudstone bands
	4.6	5.7	1.1	Mudstone grey silty
	5.7	6	0.3	Coal dirty
	6	8.2	2.2	Mudstone grey silty
	8.2	16.7	8.5	Sandstone grey silty some mudstone bands hard
	16.7	17.2	0.5	Mudstone black
	17.2	30	12.8	Sandstone grey silty some mudstone bands
2				
	0	0.4	0.4	Straw manure topsoil
	0.4	1.3	0.9	Clay brown grey
	1.3	3.8	2.5	Sandstone grey brown silty
	3.8	5.7	1.9	Mudstone grey silty
	5.7	6.1	0.4	Coal dirty
	6.1	8.4	2.3	Mudstone grey silty
	8.4	10	1.6	Sandstone grey silty some mudstone bands hard
3				
	0	0.2	0.2	Grey gravel
	0.2	1.4	1.2	Clay brown grey
	1.4	3.8	2.4	Sandstone grey brown silty
	3.8	5.6	1.8	Mudstone grey silty
	5.6	6	0.4	Coal dirty
	6	8.6	2.6	Mudstone grey silty
	8.6	10	1.4	Sandstone grey silty some mudstone bands hard