

**GROUND INVESTIGATION REPORT  
LAND OFF WORKSOP ROAD, MASTIN MOOR  
STAVELEY  
THE DEVONSHIRE GROUP  
GIR-22188-21-434  
OCTOBER 2021**

**IDOM**



GROUND INVESTIGATION REPORT  
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MOOR  
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## **SECTION 1 INTRODUCTION**

- 1.1 The Devonshire Group proposes to redevelop an area of land located adjacent to Worksop Road, in Mastin Moor, Staveley for residential development purposes. The proposed development comprises up to 650 low-rise residential units with private gardens, parking, public open space and associated infrastructure. A residential care facility and Local Centre (including retail, health and leisure facilities) are also proposed.
- 1.2 IDOM Merebrook Limited (IDOM) has been commissioned by The Devonshire Group to undertake site investigation works and to advise on the geotechnical implications of the redevelopment of the site for the proposed end use.
- 1.3 The objectives of the investigation are to:
- i.* Assess surface and sub-surface ground conditions present at the site;
  - ii.* Determine the approximate location of the highwall associated with the opencast mining area;
  - iii.* Confirm the depth and strength / relative density of backfill materials in the opencast mining area;
  - iv.* Locate existing mine entries; and
  - v.* Provide preliminary geotechnical recommendations
- 1.4 A Phase 1 (Non-intrusive Investigation) and a Phase 2a (Preliminary Exploratory Investigation) have previously been undertaken for the subject site, with findings reported in IDOM's Geo-environmental Assessment Report (Ref: GEA-19412-17-201 Rev.A) issued in September 2020.
- 1.5 This report has been prepared for The Devonshire Group for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult The Devonshire Group and IDOM as to the extent to which the findings may be appropriate for their use.

## **SECTION 2 THE SITE**

### **2.1 GENERAL**

- 2.1.1 The site is situated on the southern side of Worksop Road (A619) in Mastin Moor, Staveley and is divided into two areas by Bolsover Road (B6419) which runs approximately north-south. Comprising mainly undulating agricultural land, the site covers an area of approximately 46 hectares, forming a shallow valley which slopes down from ridge lines along Worksop Road to the north and Woodthorpe Road to the south. The highest part of the site is around 119 m AOD in the north-east, whilst the lowest part is the southwest corner at around 56 m AOD.

- 2.1.2 An unnamed watercourse flows in a westerly direction along the base of the valley, whilst perimeter and internal field boundaries comprise a mixture of hedgerows, woodland and stone walls.

## 2.2 **SITE HISTORY**

- 2.2.1 The site has remained largely undeveloped however, the majority of the western field has previously been mined using opencast methods and historical plans indicate that the excavation extended to depths of between 4 and 11 m, shallowing in a north-westerly direction.
- 2.2.2 Anecdotal evidence suggests that some filling occurred adjacent to the watercourse in the southwest corner of the site during the opencast operations.
- 2.2.3 In the eastern field, no development has previously occurred however, there may historically have been minor structures associated with the three mineshafts situated in the area.

## 2.3 **GEOLOGY**

- 2.3.1 Published geological records indicate that superficial deposits are absent from the site, whilst the solid geology consists of the Pennine Middle Coal Measures (PMCM) strata. This formation comprises interbedded mudstones, siltstones and sandstones. A Groundsure report shows a geological fault present on site and three coal seams. Shallow coal seams may be present in the far north and far south of the site.
- 2.3.2 Various mine entries are situated close to or within the development site boundary. Information provided by the Coal Authority gives some details of four mineshafts, one located in the southwest corner of the field on the western side of Bolsover Road and three located in the fields on the eastern side of Bolsover Road.

## **SECTION 3 SITE INVESTIGATION**

- 3.1.1 An intrusive investigation was carried out by IDOM between 4 and 8 October 2021 and comprised the following scope of work:
- i.* Six cable percussion boreholes (MBH1 – MBH6) advanced to a maximum depth of 8.29 metres below ground level (m bgl);
  - ii.* Fifteen machine-dug trial trenches (TT1/2 to TT19/20, TT22, TT24 and TT26) excavated to a maximum depth of 4.8 m bgl to locate the highwall; and
  - iii.* Nine machine-dug trial trenches (TT27 to TT30, TT33, TT39 and TT50 to TT52) excavated to a maximum depth of 2.4 m bgl to locate mineshafts.
- 3.1.2 Trial trenches undertaken to locate mineshafts were as follows:
- i.* Mineshaft 445375-007: – TT27, TT28, TT29 and TT30

- ii.* Mineshaft 445375-008: – TT33
  - iii.* Mineshaft 445375-009: – TT39
  - iv.* Mineshaft 445375-014: - TT50, TT51 and TT52
- 3.1.3 Access to the land immediately south of the eastern field was not possible at the time of the investigation, so excavations could not be carried out at the specific locations of mineshafts 445375-008 and 445375-009. However, trial trenches TT33 and TT39 were carried out close to the hedge line along the southern boundary of the eastern field to check for any evidence of filled or reworked ground.
- 3.1.4 Exploratory hole locations are indicated on Drawing No. 22188-304-001 presented in Appendix 1. Logging of exploratory holes was undertaken by an IDOM Geotechnical Engineer. Exploratory hole logs are contained in Appendix 2.
- 3.1.5 Light cable percussion equipment was used to advance boreholes MBH1 – MBH6. Standard Penetration Tests (SPTs) were performed at approximate 1 metre intervals in the upper 5 m, then every 1.5 m below. The tests involved driving a steel cone tipped series of rods into the ground over a distance of 450 mm using the repeated blows of a 63.5 kg weight allowed to free fall over a distance of 760 mm. The total number of blows required for the final 300 mm penetration (the 'N' value) is recorded on the borehole logs.
- 3.1.6 All boreholes were backfilled with arisings upon completion.
- 3.1.7 A 13 ton 360° tracked excavator was used to excavate the trial trenches. All excavations were backfilled in layers and compacted with the bucket, whilst topsoil and subsoil were placed back at the surface. Backfilled trial trenches were left slightly raised at the surface to allow for some future settlement.

## **SECTION 4 GROUND CONDITIONS**

### **4.1 SURFACE GROUND CONDITIONS**

- 4.1.1 The surface consisted of soft clay topsoil and the remains of a recently harvested crop.

### **4.2 SUB-SURFACE GROUND CONDITIONS - OPENCAST**

- 4.2.1 Ground conditions encountered during the intrusive investigation were found to be generally consistent, with colliery backfill typically being present and natural strata being observed around the perimeter of the opencast backfill.
- 4.2.2 A summary of the ground conditions encountered is presented in Table 1, whilst a more detailed assessment of the strata is contained in the following sections of the report.

Table 1: Summary of Sub-surface Ground Conditions - Opencast

| STRATA                          | DEPTH TO TOP RANGE (m bgl) | THICKNESS RANGE (m) |
|---------------------------------|----------------------------|---------------------|
| Topsoil                         | 0.0                        | 0.20 – 0.55         |
| Made Ground (Opencast Backfill) | 0.20 – 0.40                | 1.12 – 7.50         |
| Clay (Weathered PMCM)           | 0.28 – 0.70                | 0.32 - > 2.15       |
| Sandstone (PMCM)                | 0.35 – 3.30                | > 1.65              |
| Coal (PMCM)                     | 1.95 – 3.00                | 0.55 – 0.65         |
| Mudstone (PMCM)                 | 2.50 – 7.80                | > 1.31              |

#### 4.2.3 Topsoil

- 4.2.3.1 Topsoil was present in each location, ranging in thickness between 0.2 and 0.55 m and was described as soft greyish brown or dark brown silty clay with variable amounts of roots.

#### 4.2.4 Made Ground

- 4.2.4.1 Made ground was typically encountered below topsoil and consisted initially of firm, locally stiff greyish brown, light brown or yellowish brown slightly sandy clay with variable amounts of sandstone, siltstone and mudstone gravel. Below this initial layer, the soil was described as firm, locally soft greyish brown, locally light grey and light brown clay with abundant sandstone, siltstone and mudstone gravel. Locally, angular cobbles of sandstone, siltstone and mudstone were observed, whilst occasional coal fragments or pockets of black gravelly clay were noted at depth.
- 4.2.4.2 Granular made ground generally comprising yellowish brown sandy gravel was present at varying depths in three locations, including trial trench TT3, TT5/6 and TT7/8, whilst in trial trench TT24, light grey / grey clayey gravel and cobbles of siltstone were observed from 3.0 to 4.4 m bgl.
- 4.2.4.3 In trial trench TT24, rare small siltstone boulders were present from 1.4 m bgl, becoming more frequent from 2.7 m bgl, whilst in trial trench TT22, occasional small siltstone boulders were observed between 2.2 and 3.6 m bgl.
- 4.2.4.4 In trial trench TT26, occasional small sandstone boulders (up to 0.6 m diameter) were noted from a depth of 3.2 m bgl.
- 4.2.4.5 At the western end of trial trench TT7/8, some old timbers, metal cable and whole bricks were present at a depth of 1.65 m bgl.
- 4.2.4.6 In trial trench TT4, some concrete boulders (up to 0.8 m diameter) were encountered at depths of between 1.9 and 2.6 m bgl.

- 4.2.5 The boreholes revealed a general deepening of the opencast backfill towards the south and southeast, with the most north-westerly borehole (MBH1) recording a thickness of 5.2 m, whilst the most southerly borehole (MBH3) revealed a thickness of 7.5 m. Remaining boreholes encountered backfill thicknesses of between 5.8 and 6.2 m.
- 4.2.5.1 SPTs performed within made ground encountered in the boreholes recorded 'N' values ranging from 3 to 16, indicative of soft and firm (very low to medium strength) ground conditions. SPTs carried out within deposits of very clayey sand and gravel / gravelly sand revealed in boreholes MBH3 and MBH5 recorded 'N' values of between 7 and 9, indicating loose conditions.
- 4.2.6 Clay (Weathered PMCM)
- 4.2.6.1 This stratum was encountered in four locations adjacent to the north-western and northern sections of highwall and was typically present below topsoil and above sandstone. The soil was described as greyish brown silty clay at the north-west end of trial trench TT11/12, whilst the northern end of trial trench TT13/14 revealed yellowish brown mottled light grey slightly sandy clay. The northern end of trial trenches TT17/18 and TT19/20 revealed the presence of sandy clay varying in colour and containing variable amounts of sandstone gravel.
- 4.2.7 Sandstone
- 4.2.7.1 Sandstone was encountered at relatively shallow depths adjacent to the western, north-western and northern sections of the highwall and was typically described as very weak or weak yellowish brown and light grey fine to medium grained sandstone. Locally, the uppermost layer was completely weathered to a gravelly sand. Sandstone was absent at the western end of trial trench TT7/8.
- 4.2.8 Coal
- 4.2.8.1 Coal was revealed below made ground or sandstone in three locations along the western section of highwall. Soft black peaty coal was observed at the eastern end of trial trench TT1/2 and at the western end of trial trench TT4. In addition, very weak and flaky black coal was encountered at the western end of trial trench TT7/8.
- 4.2.9 Mudstone
- 4.2.9.1 This stratum was encountered at depth below coal in the three locations described above and generally comprised very weak grey, locally dark grey laminated mudstone.
- 4.2.9.2 All six boreholes were terminated within the mudstone at depths ranging from 6.77 to 8.29 m bgl.
- 4.2.9.3 SPTs performed within mudstone encountered in the boreholes were met with refusal, indicating the presence of competent ground conditions.



#### 4.2.10 Groundwater

- 4.2.10.1 Groundwater was encountered in two locations within the opencast backfill. Borehole MBH3 revealed perched groundwater at a depth of 3.9 m bgl within soft cohesive made ground, whilst seepage was noted at 2.65 m in trial trench TT4 and groundwater was observed to bubble up within a layer of gravel and cobbles at a depth of 3.5 m bgl, possibly suggesting water was under pressure in this location. This trench experienced a large sidewall collapse, possibly as a result of the presence of groundwater.

#### 4.3 SUB-SURFACE GROUND CONDITIONS - MINESHAFTS

- 4.3.1 A summary of the ground conditions encountered in the vicinity of the mineshaft locations is presented in Table 2, whilst a more detailed assessment of the strata is contained in the following sections of the report.

Table 2: Summary of Sub-surface Ground Conditions - Mineshafts

| STRATA                | DEPTH TO TOP RANGE (m bgl) | THICKNESS RANGE (m) |
|-----------------------|----------------------------|---------------------|
| Topsoil               | 0.0                        | 0.18 – 0.38         |
| Made Ground           | 0.0 – 0.38                 | 0.58 – 1.92         |
| Clay (Weathered PMCM) | 0.36 – 0.95                | 0.45 - > 1.12       |
| Sandstone (PMCM)      | 1.05 – 1.45                | > 1.25              |
| Mudstone (PMCM)       | 2.10 – 2.20                | > 0.20              |

#### 4.3.2 Topsoil

- 4.3.2.1 Topsoil was present in three of the mineshaft locations, ranging in thickness from 0.18 to 0.38 m and was described as soft greyish brown or dark brown silty clay with variable amounts of roots.

#### 4.3.3 Made Ground

- 4.3.3.1 Made ground was present from ground level in the general area of mineshaft 445375-007 located in eastern field and initially comprised soft black gravelly clay. Below this, a layer of black clayey sandstone and coal gravel containing brick cobbles was observed and this was, in turn, underlain by yellowish brown, locally orange slightly sandy gravelly clay. At the eastern end of trial trench TT28, siltstone cobbles, small boulders and brick cobbles were present between 0.6 and 1.0 m bgl.
- 4.3.3.2 In the vicinity of mineshaft 445375-014 trial trench TT50 revealed the presence of 1.9 m of reworked clay and gravelly clay, whilst TT51 revealed similar reworked soils

below a layer of loose black coal gravel. In the south-east corner of TT51, between 0.4 and 1.7 m bgl, occasional whole and half bricks were observed.

- 4.3.3.3 In trial trench TT52, topsoil was underlain by 0.22 m of reworked slightly gravelly clay, below which was revealed a square concrete slab measuring 3.1 m by 3.1 m. This is believed to represent the cap for mineshaft 445375-014. Plate 1 below shows the location of the concrete slab relative to the site boundary.



Plate 1: Concrete slab forming the cap on mineshaft 445375-014.

- 4.3.3.4 Made ground was absent from trial trenches TT33 and TT39 excavated to the north of the two mineshafts located along the southern boundary of the eastern field.
- 4.3.4 Clay (Weathered PMCM)
  - 4.3.4.1 This stratum was encountered as yellowish brown slightly sandy clay in trial trench TT30 and as sandy clay with some sandstone gravel at the eastern end of TT29. Trial trenches TT33 and TT39 revealed light yellowish brown slightly sandy clay grading into light grey mottled light brown clay.
- 4.3.5 Sandstone
  - 4.3.5.1 Below topsoil, made ground and natural clay, weak light yellowish brown and light grey fine-grained sandstone was encountered at relatively shallow depth in excavations carried out at mineshaft 445375-007.
  - 4.3.5.2 In the northwest corner of trial trench TT27, a old tree stump and timbers were uncovered within sandstone gravel above the sandstone bedrock.
- 4.3.6 Mudstone
  - 4.3.6.1 This stratum was revealed below reworked soils in the vicinity of mineshaft 445375-014 and was described as very weak light grey, locally mottled orange mudstone. Thin bands of dark grey mudstone and orange-brown gravelly clay were also noted locally.

## **SECTION 5 PRELIMINARY GEOTECHNICAL RECOMMENDATIONS**

### **5.1 FOUNDATIONS**

- 5.1.1 As previously indicated in IDOM's original Geo-Environmental Assessment report, any development within the opencast backfill area will require ground treatment and / or deep foundations. Possible options include:
  - i.* Ground improvement (vibro-stone columns or concrete columns);
  - ii.* Dynamic Compaction and rafts; and
  - iii.* Piles.
- 5.1.2 In all other areas of the site traditional strip / trench footings are considered to be acceptable, with footings founding in natural clay or sandstone.
- 5.1.3 The first option in the backfilled area would be the installation of vibro-stone columns or concrete columns to support all load bearing walls, enabling reinforced strip footings to be constructed in the improved ground. This option may not be feasible close to site or field boundaries where existing trees and hedgerows would necessitate deepened footings.

- 5.1.4 In areas where proposed units straddle the highwall, combining foundation options (strip/trench and ground improvement) is not recommended due to the potential for differential settlement. If ground improvement is deemed suitable by a specialist contractor, then stone or concrete columns would need to be installed beneath the entire footprint of each unit straddling the highwall.
- 5.1.5 Based on the findings of the trial trenches excavated through the highwall, the transition from natural undisturbed soils into the backfill generally appears to be very gradual. Along the top of the highwall, undisturbed sandstone bedrock was typically encountered within 1.5 m of the surface beneath a thin wedge of made ground, whilst natural clay was present in two locations along the northern section of highwall. The top of the sandstone was observed to deepen at a shallow angle as trench excavations moved towards the backfill. In one location where natural clay was present (TT13/14), the boundary between the clay and backfill materials was observed to dip steeply towards the south.
- 5.1.6 As expected, the boreholes revealed a general deepening of the backfill towards the south and southeast, with the most north-westerly borehole (MBH1) recording a thickness of 5.2 m, whilst the most southerly borehole (MBH3) revealed a thickness of 7.5 m. Remaining boreholes encountered backfill thicknesses of between 5.8 and 6.2 m.
- 5.1.7 The second option for the backfill would involve dropping heavy weights onto the ground in order to compact and strengthen soils up to depths of 8 m. This would reduce the risk of large long term settlements, enabling reinforced rafts to be constructed on the treated fill. The local authorities would need to be consulted to determine the feasibility of using Dynamic Compaction, as this technique does cause large vibration effects (both airborne and groundborne).
- 5.1.8 A third option would be driven or bored / Continuous Flight Auger (CFA) piles. Driven piles may not be permitted on this site due to the effects of noise/vibrations generated by this technique, therefore bored / CFA piles may be the preferred method.
- 5.1.9 It is recommended that the advice of a specialist contractor be sought in order to determine the most appropriate / cost effective system and to advise on pile diameters, depths and safe working capacity. A guide to safe working loads for individual bored / CFA piles of varying diameter and length is presented in the table below. Pile calculations have been based on assessing skin friction and end bearing resistance in the undisturbed natural strata. No allowance has been made at this stage for any potential drag down (negative skin friction). This should be assessed and allowed for by the designer.
- 5.1.10 The calculations assume a pile penetrating into competent mudstone, whilst only a small contribution from existing fill materials has been allowed for. Calculations have been carried out in accordance with Eurocode 7 (Design Approach 1, Combination 2). Greater safe working capacities would be achievable if piles were



taken to greater depth thereby benefiting from increased skin friction contribution and possible greater end bearing resistance. As discussed, these values are for guidance purposes only and should be verified by a specialist contractor. In addition, the safe working loads given are for individual isolated piles. The group effect should be assessed during the design stage.

Table 3: Safe Working Capacities for bored / CFA Piles

| Pile Diameter (mm) | Length (m) | Safe Working Capacity (kN) |
|--------------------|------------|----------------------------|
| 300                | 8          | 255                        |
|                    | 10         | 290                        |
|                    | 12         | 305                        |
| 450                | 8          | 445                        |
|                    | 10         | 505                        |
|                    | 12         | 525                        |
| 600                | 8          | 680                        |
|                    | 10         | 760                        |
|                    | 12         | 785                        |

- 5.1.11 Boreholes undertaken within the opencast backfill typically revealed variable and locally very soft / soft ground conditions. These conditions suggest that the backfill materials were not placed to an engineered specification. In external areas, if ground improvement or piles are adopted for structures, it is likely that treatment would be required to reduce the risk of large long term settlements, particularly beneath roads and service connections. This could consist of a combination of geogrid reinforcement and stone columns.

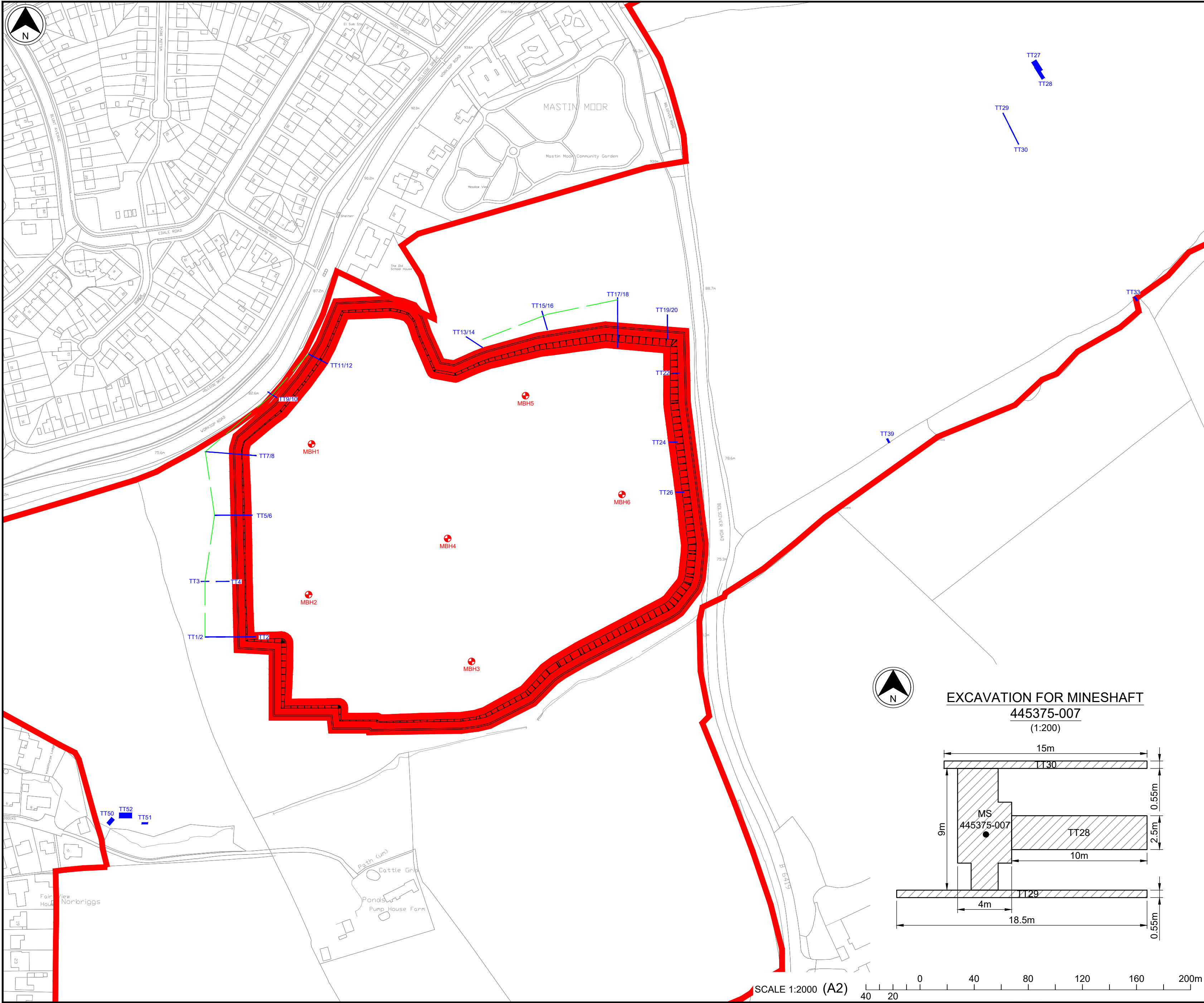
## 5.2 MINESHAFTS

- 5.2.1 A total of four mineshafts are situated within the development site as follows:

- i.* Mineshaft 445375-007 located in the central area of the eastern field
- ii.* Mineshaft 445375-008 located in the middle of the southern boundary just outside the eastern field hedge line
- iii.* Mineshaft 445375-009 located towards the western end of the southern boundary and just outside the eastern field hedge line
- iv.* Mineshaft 445375-014 located in the southwest corner of the westernmost field

- 5.2.2 At the location of mineshaft 445375-014, three trenches were excavated, the third of which (TT52) revealed a square concrete slab measuring 3.1 m by 3.1 m in plan and 180 mm thick below reworked slightly gravelly clay. This is believed to represent the cap for this mineshaft, although information provided by the Coal Authority does not specify that this mineshaft was capped, only that it was filled with 40 mm clean limestone.
- 5.2.3 The cap appeared to be in good condition without significant cracking and sensibly level. There is therefore no evidence of shaft fill loss or subsidence visible from inspection of the cap. The position of the shaft should be recorded within the Health and Safety File for the project but no other actions are recommended in respect of this feature.
- 5.2.4 Despite extensive excavations in the vicinity of mineshaft 445375-007, it was not possible to locate this feature. The general area around the co-ordinates provided formed a slightly raised, gently sloping mound, with the ground surface having a distinctly blackened appearance owing to the presence of coal gravel. This is probably indicative of a mine entry being present in this area, however none of the trenches intercepted any such features or found evidence of the sandstone bedrock surface being broken.
- 5.2.5 This feature is not within a proposed zone for building, however landscaping and path construction is proposed. Based on a typical 45° stand off from competent strata, and a typical depth to competent rock of 2 m, the road boundary between the green landscaped area and housing is considered to provide a suitable cordon of safety for housing constructed beyond.
- 5.2.6 Access to the land immediately south of the eastern field was not possible at the time of the investigation, so excavations could not be carried out at the specific locations of mineshafts 445375-008 and 445375-009. Two trial trenches (TT33 and TT39) were however carried out close to the hedge line along the southern boundary to check for any evidence of filled or reworked ground. Both trenches revealed natural undisturbed soils with no evidence of any made ground.
- 5.2.7 No buildings or roads are proposed in the vicinity of the recorded positions of these mine entries. The nearest constructed features are proposed surface water storage ponds.
- 5.2.8 It is recommended that all excavations for surface water features in the vicinity of these recorded shafts are inspected for evidence of any mine entry/ disturbed ground prior to them being made operational.
- 5.2.9 In general, construction excavations at the site should be conducted in the context of the potential for unrecorded coal mining-related features.

**APPENDIX 1**    ▪    Drawings



**Legend**

- DEVELOPMENT SITE BOUNDARY
- UNDERTAKEN TRIAL TRENCH
- MEREBROOK BOREHOLE WITH LOCATION REFERENCE
- APPROX. TOP OF HIGHWALL

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Client

DEVONSHIRE PROPERTIES

Project

MASTIN MOOR

Dwg Title

UNDERTAKEN  
SITE INVESTIGATION  
LOCATIONS

|                       |               |                                    |
|-----------------------|---------------|------------------------------------|
| Dwg No. 22188-304-001 |               | Revision -                         |
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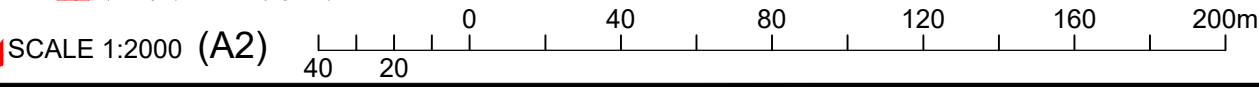
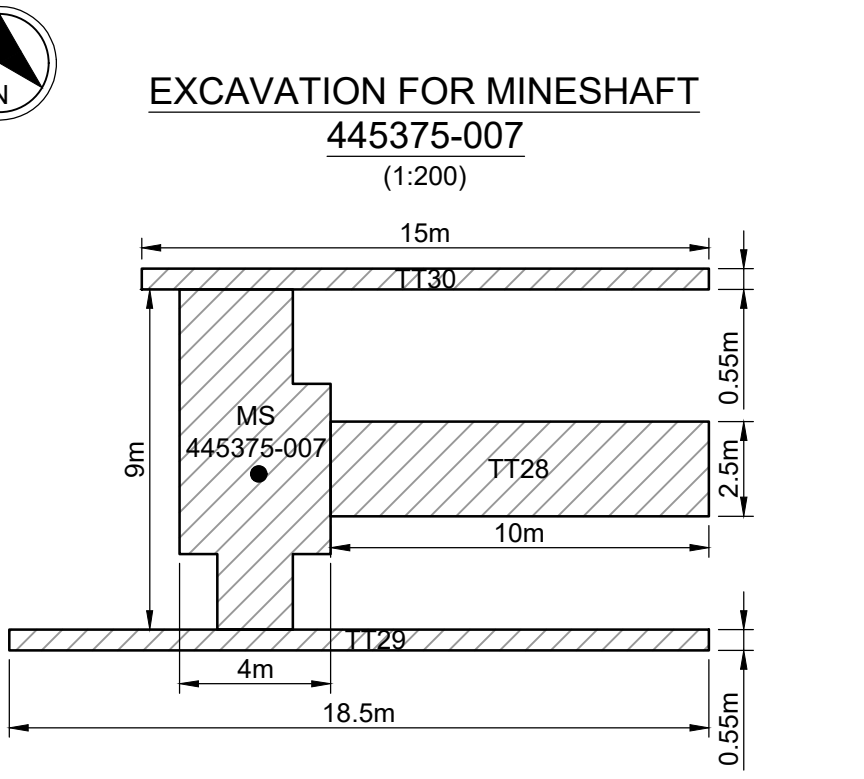
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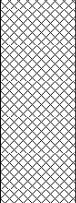


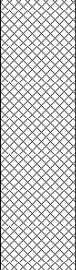
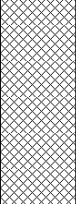

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
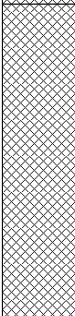
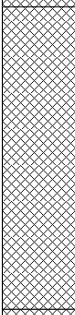
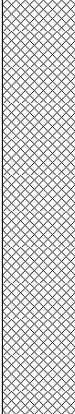





**APPENDIX 2**    ▪    Exploratory Hole Logs



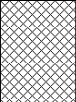
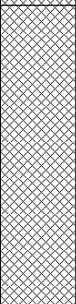
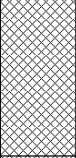
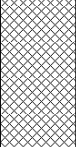
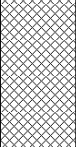





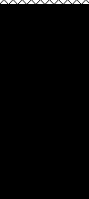
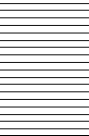
|  |          |                            |             |  |                   |     |     |  |           |                   |  |   |                          |   |
|--|----------|----------------------------|-------------|--|-------------------|-----|-----|--|-----------|-------------------|--|---|--------------------------|---|
| IDOM   |          |                            |             |  |                   |     |     |  |           | Borehole Log      |  |   | Borehole No.             |   |
|  |          |                            |             |  |                   |     |     |  |           |                   |  |   | MBH2                     |   |
|  |          |                            |             |  |                   |     |     |  |           |                   |  |   | Sheet 1 of 1             |   |
| Project Name: Mastin Moor  |          |                            |             |  | Project No. 22188 |     |     |  |           | Co-ords:          |  |   | Scale 1:50               |   |
| Location: Staveley, Chesterfield   |          |                            |             |  |                   |     |     |  |           | Level (m):        |  |   | Logged By DCE            |   |
| Equipment: Cable Percussion drilling rig. 150 mm diameter casing to 2.0 m.   |          |                            |             |  |                   |     |     |  |           | Dates: 05/10/2021 |  |   | Checked By               |   |
| Well   | Wtr Strk | Sample and In Situ Testing |             |  | Coring            |     |     |  | Depth (m) | Level (m)         | Legend   | Stratum Description   |                          |   |
|  |          | Depth (m)                  | Type        | Results  | FI                | TCR | SCR | RQD  |           |                   |  |   |                          |   |
|   |          | 0.40                       | D           |  |                   |     |     |  | 0.40      |                   |    | Soft dark brown silty clay. Some fine roots. TOPSOIL.   |                          |   |
|  |          | 1.00 - 1.45<br>1.00        | D<br>SPT(S) | N=11 (2,2/2,3,3,3)   |                   |     |     |  |           |                   |    | Firm medium strength light brown mottled yellowish brown and orange sandy gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. MADE GROUND.           | 1                        |   |
|  |          | 2.00 - 2.45<br>2.00        | D<br>SPT(S) | N=6 (1,1/1,1,2,2)  |                   |     |     |  |           |                   |    | Between 1.8 and 2.6 m: soft low strength.<br>From 2.0 m: becoming less sandy with some coal gravel.   | 2                        |   |
|  |          | 2.50                       | D           |  |                   |     |     |  | 2.40      |                   |    | Firm medium strength black and greyish brown gravelly laminated clay. Gravel is angular fine to coarse coal. Local thin bands of yellow/orange clay. MADE GROUND.         |                          |   |
|  |          | 3.00 - 3.45<br>3.00        | D<br>SPT(S) | N=10 (3,3/2,2,3,3)   |                   |     |     |  | 3.00      |                   |   | Firm medium strength yellowish brown mottled light grey and greyish brown slightly sandy gravelly clay. Gravel is angular fine to coarse coal and sandstone. MADE GROUND. | 3                        |   |
|  |          | 4.00 - 4.45<br>4.00        | D<br>SPT(S) | N=14 (3,4/3,4,3,4)   |                   |     |     |  |           |                   |  |   |                          | 4 |
|  |          | 5.00 - 5.45<br>5.00        | D<br>SPT(S) | N=5 (1,1/1,1,1,2)  |                   |     |     |  |           |                   |  | From 4.9 m: soft low strength.  | 5                        |   |
|  |          | 6.20                       | D           |  |                   |     |     |  | 6.20      |                   |  | Very weak light grey and grey MUDSTONE. Local bands of dark grey mudstone and black coal.   | 6                        |   |
|  |          | 6.50 - 6.80<br>6.50        | D<br>SPT(S) | 50 (4,11/50 for 150mm)   |                   |     |     |  | 6.80      |                   |  |   |                          | 7 |
|  |          |                            |             |  |                   |     |     |  |           |                   |  |   | End of Borehole at 6.80m | 8 |
|  |          |                            |             |  |                   |     |     |  |           |                   |  | 9   |                          |   |
|  |          |                            |             |  |                   |     |     |  |           |                   |  | 10  |                          |   |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>SPT(C) = Standard Penetration Test (Cone)<br/>SPT(S) = Standard Penetration Test (Split Spoon)</div> |          |                            |             | <div>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)<br/>FI = fracture index<br/>TCR = total core recovery<br/>SCR = solid core recovery<br/>RQD = rock quality designation</div> |                   |     |     | <div>Remarks</div> <div>Coordinates and levels, where indicated, must not be used for design purposes.<br/>The user is responsible for verifying all site and setting out dimensions.<br/>Groundwater was not encountered.</div> |           |                   |  |   |                          |   |

| IDOM   |  |                             |                  |   |                   |     |     |  | Borehole Log |           |  | Borehole No.   |   |
|--|--|-----------------------------|------------------|---|-------------------|-----|-----|--|--------------|-----------|--|--|---|
|  |  |                             |                  |   |                   |     |     |  |              |           |  | MBH3   |   |
|  |  |                             |                  |   |                   |     |     |  |              |           |  | Sheet 1 of 1   |   |
| Project Name: Mastin Moor  |  |                             |                  |   | Project No. 22188 |     |     |  | Co-ords:     |           |  | Scale 1:50   |   |
| Location: Staveley, Chesterfield   |  |                             |                  |   |                   |     |     |  | Level (m):   |           |  | Logged By DCE  |   |
| Equipment: Cable Percussion drilling rig. 150 mm diameter casing to 8.0 m.   |  |                             |                  |   | Dates: 05/10/2021 |     |     |  |              |           |  | Checked By   |   |
| Well   | Wtr Strk   | Sample and In Situ Testing  |                  |   | Coring            |     |     |  | Depth (m)    | Level (m) | Legend   | Stratum Description  |   |
|  |  | Depth (m)                   | Type             | Results   | FI                | TCR | SCR | RQD  |              |           |  |  |   |
|   |  | 0.30                        | D                |   |                   |     |     |  | 0.30         |           |    | Soft dark brown slightly sandy silty clay. Sand is fine. Some fine roots. TOPSOIL.   |   |
|  |  | 1.00 - 1.45<br>1.00         | D<br>SPT(S)      | N=9 (3,3/2,2,2,3)   |                   |     |     |  | 0.90         |           |    | Stiff greyish brown slightly gravelly clay. Gravel is angular fine to medium mudstone. MADE GROUND.  |   |
|  |  | 2.00 - 2.45<br>2.00         | D<br>SPT(S)      | N=8 (5,3/3,2,1,2)   |                   |     |     |  |              |           |    | Firm medium strength greyish brown, locally dark grey gravelly clay. Gravel is angular fine to coarse mudstone and siltstone. MADE GROUND.       | 1 |
|  |  | 3.00 - 3.45<br>3.00         | D<br>SPT(S)      | N=8 (2,2/2,2,2,2)   |                   |     |     |  | 3.00         |           |   | Soft low strength light brown, locally grey slightly sandy gravelly clay. Gravel is angular fine to coarse siltstone and sandstone. MADE GROUND. | 3 |
|  |  | 4.00 - 4.45<br>4.00<br>4.20 | D<br>SPT(S)<br>D | N=7 (2,2/2,1,2,2)   |                   |     |     |  |              |           |  | Loose wet yellowish brown very clayey sand and gravel. Gravel is angular fine to coarse sandstone. MADE GROUND.                                  | 4 |
|  |  | 5.00 - 5.45<br>5.00         | D<br>SPT(S)      | N=7 (1,1/1,2,2,2)   |                   |     |     |  | 5.00         |           |  |  | 5 |
|  |  | 6.00                        | D                |   |                   |     |     |  |              |           |  |  | 6 |
|  |  | 6.50 - 6.95<br>6.50         | D<br>SPT(C)      | N=8 (3,2/2,2,2,2)   |                   |     |     |  |              |           |  |  | 7 |
|  |  | 7.80<br>8.00 - 8.28<br>8.00 | D<br>D<br>SPT(C) | 50 (7,11/50 for 135mm)  |                   |     |     |  | 7.80         |           |  | Very weak grey MUDSTONE.   | 8 |
|  |  |                             |                  |   |                   |     |     |  | 8.29         |           |  | End of Borehole at 8.29m   |   |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>SPT(C) = Standard Penetration Test (Cone)<br>SPT(S) = Standard Penetration Test (Split Spoon) |  |                             |                  | HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm)<br>FI = fracture index<br>TCR = total core recovery<br>SCR = solid core recovery<br>RQD = rock quality designation |                   |     |     | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes.<br>The user is responsible for verifying all site and setting out dimensions.<br>Groundwater was encountered at 3.9 m bgl. |              |           |  |  |   |

|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  |    |                         |  |
|--|---------------------|---------------------------------------|------------------|--|-------------------|------------------------------|----------------|---|----------------------|--------------------------|-------------------------------------|--|----|-------------------------|--|
| <div>IDOM</div>  |                     |                                       |                  |  |                   |                              |                |   |                      | <div>Borehole Log</div>  |                                     |  |    | <div>Borehole No.</div> |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  |    | <div>MBH4</div>         |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  |    | <div>Sheet 1 of 1</div> |  |
| <div>Project Name: Mastin Moor</div>   |                     |                                       |                  |  |                   | <div>Project No. 22188</div> |                |   |                      | <div>Co-ords:</div>      |                                     |  |    | <div>Scale 1:50</div>   |  |
| <div>Location: Staveley, Chesterfield</div>  |                     |                                       |                  |  |                   | <div>Level (m):</div>        |                |   |                      | <div>Logged By DCE</div> |                                     |  |    |                         |  |
| <div>Equipment: Cable Percussion drilling rig. 150 mm diameter casing to 2.0 m.</div>  |                     |                                       |                  |  |                   | <div>Dates: 06/10/2021</div> |                |   |                      | <div>Checked By</div>    |                                     |  |    |                         |  |
| <div>Well</div>  | <div>Wtr Strk</div> | <div>Sample and In Situ Testing</div> |                  |  | <div>Coring</div> |                              |                |   | <div>Depth (m)</div> | <div>Level (m)</div>     | <div>Legend</div>                   | <div>Stratum Description</div>   |    |                         |  |
|  |                     | <div>Depth (m)</div>                  | <div>Type</div>  | <div>Results</div>   | <div>FI</div>     | <div>TCR</div>               | <div>SCR</div> | <div>RQD</div>  |                      |                          |                                     |  |    |                         |  |
| <div></div>  |                     | 0.30                                  | D                |  |                   |                              |                |   | 0.30                 |                          | <div></div>                         | Soft dark brown slightly sandy silty clay. Sand is fine. Some fine roots. TOPSOIL.   |    |                         |  |
|  |                     | 1.00 - 1.45<br>1.00                   | D<br>SPT(S)      | N=7 (2,3/2,1,2,2)  |                   |                              |                |   | 1.10                 |                          | <div></div>                         | Stiff greyish brown, locally grey gravelly clay. Gravel is angular to subangular fine to coarse mudstone and sandstone. MADE GROUND.               | 1  |                         |  |
|  |                     | 2.00 - 2.45<br>2.00                   | D<br>SPT(S)      | N=4 (1,1/1,1,1,1)  |                   |                              |                |   |                      |                          | <div></div>                         | Soft low strength light brown and yellowish brown sandy gravelly clay. Gravel is angular fine to coarse sandstone, coal and mudstone. MADE GROUND. | 2  |                         |  |
|  |                     | 3.00 - 3.45<br>3.00                   | D<br>SPT(S)      | N=7 (1,1/1,2,2,2)  |                   |                              |                |   |                      |                          | <div></div>                         |  | 3  |                         |  |
|  |                     | 4.00 - 4.45<br>4.00                   | D<br>SPT(S)      | N=6 (1,1/1,1,2,2)  |                   |                              |                |   | 4.00                 |                          | <div></div>                         | Soft low strength yellowish brown and grey very gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. MADE GROUND.              | 4  |                         |  |
|  |                     | 5.00 - 5.45<br>5.00                   | D<br>SPT(S)      | N=12 (2,3/2,3,3,4)   |                   |                              |                |   |                      |                          | <div></div>                         | From 5.0 m: some coal gravel.  | 5  |                         |  |
|  |                     | 6.30<br>6.50 - 6.76<br>6.50           | D<br>D<br>SPT(S) | 50 (8,12/50 for 115mm)   |                   |                              |                |   | 6.30<br><br>6.77     |                          | <div></div> <div></div> <div></div> | Very weak grey MUDSTONE. Thin bands of black coal.   | 6  |                         |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          | End of Borehole at 6.77m            | 7  |    |                         |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  | 8  |                         |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  | 9  |                         |  |
|  |                     |                                       |                  |  |                   |                              |                |   |                      |                          |                                     |  | 10 |                         |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>SPT(C) = Standard Penetration Test (Cone)<br/>SPT(S) = Standard Penetration Test (Split Spoon)</div> |                     |                                       |                  | <div>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)<br/>FI = fracture index<br/>TCR = total core recovery<br/>SCR = solid core recovery<br/>RQD = rock quality designation</div> |                   |                              |                | <div>Remarks</div> <div>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.</div> <div>Groundwater was not encountered.</div> |                      |                          |                                     |  |    |                         |  |

|  |          |                             |                  |  |                   |     |      |   |                        |                          |  |   |              |              |  |
|--|----------|-----------------------------|------------------|--|-------------------|-----|------|---|------------------------|--------------------------|--|---|--------------|--------------|--|
| <div>IDOM</div>  |          |                             |                  |  |                   |     |      |   |                        | <div>Borehole Log</div>  |  |   |              | Borehole No. |  |
|  |          |                             |                  |  |                   |     |      |   |                        |                          |  |   |              | MBH5         |  |
|  |          |                             |                  |  |                   |     |      |   |                        |                          |  |   |              | Sheet 1 of 1 |  |
| Project Name: Mastin Moor  |          |                             |                  |  | Project No. 22188 |     |      |   |                        | Co-ords:                 |  |   |              | Scale 1:50   |  |
| Location: Staveley, Chesterfield   |          |                             |                  |  | Level (m):        |     |      |   | Logged By DCE          |                          |  |   |              |              |  |
| Equipment: Cable Percussion drilling rig. 150 mm diameter casing to 2.0 m.   |          |                             |                  |  | Dates: 06/10/2021 |     |      |   | Checked By             |                          |  |   |              |              |  |
| Well   | Wtr Strk | Sample and In Situ Testing  |                  |  | Coring            |     |      |   | Depth (m)              | Level (m)                | Legend   | Stratum Description                                   |              |              |  |
|  |          | Depth (m)                   | Type             | Results  | FI                | TCR | SCR  | RQD   |                        |                          |  |   |              |              |  |
| <div></div>  |          | 0.30                        | D                | N=9 (3,3/2,2,3,2)  |                   |     |      |   | 0.30                   |                          | <div></div>  | Soft dark brown silty clay. Some fine roots. TOPSOIL. | <div>1</div> |              |  |
|  |          | 1.00 - 1.45<br>1.00         | D<br>SPT(S)      |  |                   |     |      |   |                        |                          | Stiff greyish brown mottled yellowish brown and dark grey gravelly clay. Gravel is angular fine to medium sandstone and mudstone. MADE GROUND. |   |              |              |  |
|  |          | 2.00 - 2.45<br>2.00         | D<br>SPT(S)      |  |                   |     |      |   |                        |                          | Soft low strength light grey, locally mottled orange gravelly clay. Gravel is angular fine to medium mudstone and siltstone. MADE GROUND.      |   |              |              |  |
|  |          | 3.00 - 3.45<br>3.00         | D<br>SPT(S)      |  |                   |     |      |   |                        |                          |  |   |              |              |  |
|  |          | 4.00 - 4.45<br>4.00         | D<br>SPT(S)      |  |                   |     |      |   |                        |                          |  |   |              |              |  |
|  |          | 5.00 - 5.45<br>5.00         | D<br>SPT(S)      |  |                   |     |      |   |                        |                          |  |   |              |              |  |
|  |          | 6.30<br>6.50 - 6.77<br>6.50 | D<br>D<br>SPT(S) |  |                   |     |      |   | 50 (6,13/50 for 125mm) |                          |  |   |              | 6.30         |  |
|  |          |                             |                  |  |                   |     | 6.78 |   |                        | End of Borehole at 6.78m |  |   |              |              |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>SPT(C) = Standard Penetration Test (Cone)<br/>SPT(S) = Standard Penetration Test (Split Spoon)</div> |          |                             |                  | <div>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)<br/>FI = fracture index<br/>TCR = total core recovery<br/>SCR = solid core recovery<br/>RQD = rock quality designation</div> |                   |     |      | <div>Remarks</div> <div>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.</div> <div>Groundwater was not encountered.</div> |                        |                          |  |   |              |              |  |

|  |          |                            |             |   |                   |     |     |   |  |                         |  |   |  |  |
|--|----------|----------------------------|-------------|---|-------------------|-----|-----|---|--|-------------------------|--|---|--|--|
| <div>IDOM</div>  |          |                            |             |   |                   |     |     |   |  | <div>Borehole Log</div> |  |   | <div>Borehole No.</div>  |  |
|  |          |                            |             |   |                   |     |     |   |  |                         |  |   | <div>MBH6</div>  |  |
|  |          |                            |             |   |                   |     |     |   |  |                         |  |   | <div>Sheet 1 of 1</div>  |  |
| Project Name: Mastin Moor  |          |                            |             |   | Project No. 22188 |     |     |   |  | Co-ords:                |  |   | Scale 1:50   |  |
| Location: Staveley, Chesterfield   |          |                            |             |   |                   |     |     |   |  | Level (m):              |  |   | Logged By DCE  |  |
| Equipment: Cable Percussion drilling rig. 150 mm diameter casing to 6.0 m.   |          |                            |             |   |                   |     |     |   |  | Dates: 07/10/2021       |  |   | Checked By   |  |
| Well   | Wtr Strk | Sample and In Situ Testing |             |   | Coring            |     |     |   | Depth (m)  | Level (m)               | Legend   | Stratum Description                                   |  |  |
|  |          | Depth (m)                  | Type        | Results   | FI                | TCR | SCR | RQD   |  |                         |  |   |  |  |
|   |          | 0.30                       | D           | N=12 (3,3/3,3,3,3)  |                   |     |     |   | 0.30   |                         |    | Soft dark brown silty clay. Some fine roots. TOPSOIL. | <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> |  |
|  |          | 1.00 - 1.45<br>1.00        | D<br>SPT(S) |   |                   |     |     |   |    |                         | Stiff greyish brown mottled yellow and orange sandy gravelly clay. Gravel is angular fine to coarse sandstone. MADE GROUND.                                |   |  |  |
|  |          | 2.00 - 2.45<br>2.00        | D<br>SPT(S) |   |                   |     |     |   |    |                         | Firm medium strength light brown mottled orange and yellow slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone and coal. MADE GROUND. |   |  |  |
|  |          | 3.00 - 3.45<br>3.00        | D<br>SPT(S) |   |                   |     |     |   |   |                         | From 3.0 m: very soft very low strength.   |   |  |  |
|  |          | 4.00 - 4.45<br>4.00        | D<br>SPT(S) |   |                   |     |     |   |  |                         | Very soft very low strength wet greyish brown slightly sandy gravelly clay. Gravel is angular fine to medium sandstone and mudstone. MADE GROUND.          |   |  |  |
|  |          | 5.00 - 5.45<br>5.00        | D<br>SPT(S) |   |                   |     |     |   |  |                         | From 5.0 m: occasional coal gravel.  |   |  |  |
|  |          | 6.00                       | D           |   |                   |     |     |   |  |                         | Very weak dark grey and black MUDSTONE. Local thin bands of yellow/orange sandstone.   |   |  |  |
|  |          | 6.50 - 6.77<br>6.50        | D<br>SPT(S) |   |                   |     |     |   |  |                         |  |   |  |  |
|  |          |                            |             |   |                   |     |     |   |  |                         | End of Borehole at 6.78m   |   |  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>SPT(C) = Standard Penetration Test (Cone)<br>SPT(S) = Standard Penetration Test (Split Spoon) |          |                            |             | HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm)<br>FI = fracture index<br>TCR = total core recovery<br>SCR = solid core recovery<br>RQD = rock quality designation |                   |     |     | <div>Remarks</div> <div>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.</div> <div>Groundwater was not encountered.</div> |  |                         |  |   |  |  |

|   |   |                          |  |              |  |  |  |  |
|---|---|--------------------------|--|--------------|--|--|--|--|
| IDOM  |   |                          |  |              | TRIAL PIT LOG                            |  | TrialPit No<br>TT1/2 East End<br>Sheet 1 of 1  |  |
| Project Name: Land off Worksop Road   |   |                          | Project No.<br>22188                       |              | Co-ords: 445207.00 - 375166.00<br>Level: |  | Date<br>06/10/2021   |  |
| Location: Mastin Moor, Staveley   |   |                          |  |              | Dimensions (m):<br>14.50                 |  | Scale<br>1:25  |  |
| Equipment: 13T Tracked Excavator  |   |                          |  |              | Depth<br>4.10                            |  | Logged<br>DCE  |  |
| Water<br>Strike   | Samples & In Situ Testing   |                          |  | Depth<br>(m) | Level<br>(m)                             | Legend   | Stratum Description  |  |
|   | Depth   | Type                     | Results                                    |              |  |  |  |  |
|   |   |                          |  | 0.25         |  |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |  |
|   |   |                          |  | 0.68         |  |  | Firm yellowish brown and orange brown sandy gravelly clay. Gravel is angular to subangular fine to coarse sandstone. MADE GROUND.  |  |
|   |   |                          |  |              |  |  | Firm, locally stiff greyish brown, locally light brown gravelly clay. Gravel is angular fine to coarse siltstone, mudstone and coal. MADE GROUND.  |  |
|   |   |                          |  |              |  |  | Firm, locally stiff light yellowish brown, locally light brown and greyish brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional sandstone cobbles. MADE GROUND. |  |
|   |   |                          |  | 3.00         |  |   | Soft black peaty COAL.   |  |
| 3.65  |  | Very weak grey MUDSTONE. |  |              |  |  |  |  |
| 4.10  |   | End of Pit at 4.100m     |  |              |  |  |  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |   |                          | Stability<br>Trench sidewalls were stable. |              |  | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br>Groundwater was not encountered. |  |  |



|  |                           |      |         |   |              |   |  |   |  |
|--|---------------------------|------|---------|---|--------------|---|--|---|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG   |  | TrialPit No<br>TT1/2 West End<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445192.00 - 375166.00<br>Level:  |  | Date<br>06/10/2021                            |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>14.50  |  | Scale<br>1:25                                 |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.70   |  | Logged<br>DCE                                 |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend  | Stratum Description  |   |  |
|  | Depth                     | Type | Results |   |              |   |  |   |  |
|  |                           |      |         | 0.20  |              |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |   |  |
|  |                           |      |         | 0.50  |              |   | Firm greyish brown, locally light grey and yellow slightly sandy very gravelly clay. Gravel is angular fine to medium siltstone and mudstone. MADE GROUND.   |   |  |
|  |                           |      |         |   |              |   | Firm greyish brown, locally mottled orange and yellow very gravelly clay. Gravel is angular fine to coarse sandstone, siltstone and mudstone. MADE GROUND.<br><i>At 0.5 m: section of old metal cable.</i> |   |  |
|  |                           |      |         |   |              |   |  |   |  |
|  |                           |      |         | 1.35  |              |   | Weak light yellowish brown fine to medium grained SANDSTONE. Occasional thin orange sandstone bands.   |   |  |
| 1.70   | End of Pit at 1.700m      |      |         |   |              |   |  |   |  |
|  |                           |      |         |   |              | 1   |  |   |  |
|  |                           |      |         |   |              | 2   |  |   |  |
|  |                           |      |         |   |              | 3   |  |   |  |
|  |                           |      |         |   |              | 4   |  |   |  |
|  |                           |      |         |   |              | 5   |  |   |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |   |  |

|   |                           |      |  |              |  |  |  |  |
|---|---------------------------|------|--|--------------|--|--|--|--|
| IDOM  |                           |      |  |              | TRIAL PIT LOG                            |  | TrialPit No<br>TT2<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road   |                           |      | Project No.<br>22188                       |              | Co-ords: 445215.00 - 375166.00<br>Level: |  | Date<br>07/10/2021   |  |
| Location: Mastin Moor, Staveley   |                           |      |  |              | Dimensions (m):<br>29.50<br>0.55         |  | Scale<br>1:25  |  |
| Equipment: 13T Tracked Excavator  |                           |      |  |              | Depth<br>4.60                            |  | Logged<br>DCE  |  |
| Water<br>Strike   | Samples & In Situ Testing |      |  | Depth<br>(m) | Level<br>(m)                             | Legend   | Stratum Description  |  |
|   | Depth                     | Type | Results                                    |              |  |  |  |  |
|   |                           |      |  | 0.20         |  |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |  |
|   |                           |      |  | 0.80         |  |  | Firm, locally stiff greyish brown, locally light grey and light yellowish brown slightly sandy very gravelly clay. Gravel is angular fine to coarse sandstone, siltstone and mudstone. Occasional coal fragments. MADE GROUND. |  |
|   |                           |      |  |              |  |  | Firm greyish brown, locally light grey very gravelly clay. Gravel is angular fine to medium siltstone and mudstone. Occasional angular cobbles. MADE GROUND.   |  |
|   |                           |      |  |              |  |  | Firm greyish brown, locally light grey very gravelly clay. Gravel is angular fine to medium siltstone and mudstone. Local pockets of black and dark grey clay. MADE GROUND.  |  |
|   |                           |      |  | 4.00         |  |  |  |  |
| 4.60  | End of Pit at 4.600m      |      |  |              |  |  |  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      | Stability<br>Trench sidewalls were stable. |              |  | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br>Groundwater was not encountered. |  |  |


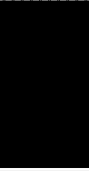
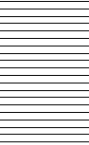
|  |                           |      |                      |   |           |  |   |                                    |  |
|--|---------------------------|------|----------------------|---|-----------|--|---|------------------------------------|--|
| IDom   |                           |      |                      |   |           | TRIAL PIT LOG  |   | TrialPit No<br>TT3<br>Sheet 1 of 1 |  |
| Project Name:<br>Land off Worksop Road   |                           |      | Project No.<br>22188 |   |           | Co-ords: 445192.00 - 375207.00<br>Level:   |   | Date<br>05/10/2021                 |  |
| Location:<br>Mastin Moor, Staveley   |                           |      |                      |   |           | Dimensions (m):<br><div>Depth 1.60</div> <div>0.556.00</div>   |   | Scale<br>1:25<br>Logged DCEChecked |  |
| Equipment:<br>13T Tracked Excavator  |                           |      |                      |   |           |  |   |                                    |  |
| Water Strike   | Samples & In Situ Testing |      |                      | Depth (m)   | Level (m) | Legend   | Stratum Description   |                                    |  |
|  | Depth                     | Type | Results              |   |           |  |   |                                    |  |
|  |                           |      |                      | 0.28  |           | [Pattern]  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |                                    |  |
|  |                           |      |                      | 0.60  |           | [Pattern]  | Firm greyish brown, locally dark brown mottled yellow very gravelly clay. Gravel is angular fine to coarse sandstone, mudstone and coal. MADE GROUND.               |                                    |  |
|  |                           |      |                      | 1.40  |           | [Pattern]  | Yellowish brown sandy gravel. Gravel is angular fine to coarse sandstone. Occasional angular cobbles. Local thin layers of orange brown gravelly clay. MADE GROUND. |                                    |  |
|  |                           |      |                      | 1.60  |           | [Pattern]  | Weak light yellowish brown fine to medium grained SANDSTONE. East end of trench: top of sandstone at 1.8 m.   |                                    |  |
|  |                           |      |                      |   |           |  | End of Pit at 1.600m  |                                    |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |                      | <b>Stability</b><br>Trench sidewalls were stable. |           | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. Top of sandstone sloping to the east at a shallow angle. |   |                                    |  |



|  |                           |      |         |                      |              |   |   |   |  |
|--|---------------------------|------|---------|----------------------|--------------|---|---|---|--|
| IDOM   |                           |      |         |                      |              | TRIAL PIT LOG                                     |   | TrialPit No<br>TT5/6 East End<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188 |              | Co-ords: 445227.00 - 375256.00<br>Level:          |   | Date<br>05/10/2021  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |                      |              | Dimensions (m):<br>28.00<br>0.55                  |   | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |                      |              | Depth<br>3.10                                     |   | Logged<br>DCE   |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)         | Level<br>(m) | Legend  | Stratum Description   |   |  |
|  | Depth                     | Type | Results |                      |              |   |   |   |  |
|  |                           |      |         | 0.30                 |              |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |   |  |
|  |                           |      |         | 0.60                 |              |   | Firm light yellowish brown and greyish brown gravelly clay. Gravel is angular fine to coarse sandstone and mudstone. Rare whole bricks. MADE GROUND.  |   |  |
|  |                           |      |         |                      |              |   | Firm, locally stiff greyish brown locally light grey very gravelly clay. Gravel is angular to subangular fine to coarse siltstone and mudstone. Occasional angular cobbles. MADE GROUND.                            |   |  |
|  |                           |      |         | 1.90                 |              |   | Yellowish brown clayey sandy gravel. Gravel is angular fine to coarse sandstone. MADE GROUND.   |   |  |
|  |                           |      |         | 2.60                 |              |   | Firm, locally stiff light brown and greyish brown very gravelly clay. Gravel is angular fine to coarse sandstone and mudstone. Occasional small pockets of dark grey and black gravelly clay and coal. MADE GROUND. |   |  |
|  |                           |      |         | 3.10                 |              |   | End of Pit at 3.100m  |   |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         |                      |              | <b>Stability</b><br>Trench sidewalls were stable. |   | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |

|   |                           |      |   |                      |              |   |  |  |  |
|---|---------------------------|------|---|----------------------|--------------|---|--|--|--|
| <div>IDOM</div>   |                           |      |   |                      |              | <div>TRIAL PIT LOG</div>  |  | <div>TrialPit No<br/>TT5/6 West End<br/>Sheet 1 of 1</div> |  |
| Project Name: Land off Worksop Road   |                           |      |   | Project No. 22188    |              | Co-ords: 445199.00 - 375256.00<br>Level:  |  | Date<br>05/10/2021   |  |
| Location: Mastin Moor, Staveley   |                           |      |   |                      |              | Dimensions (m): <div>28.00</div> <div>0.55</div> <div></div>  |  | Scale<br>1:25  |  |
| Equipment: 13T Tracked Excavator  |                           |      |   |                      |              | Depth<br>2.00   |  | Logged<br>DCE  |  |
| Water<br>Strike   | Samples & In Situ Testing |      |   | Depth<br>(m)         | Level<br>(m) | Legend  | Stratum Description  |  |  |
|   | Depth                     | Type | Results   |                      |              |   |  |  |  |
|   |                           |      |   | 0.40                 |              |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |  |  |
|   |                           |      |   | 0.90                 |              |   | Firm dark brown, locally mottled greyish brown and light grey gravelly clay. Gravel is angular to subangular fine to coarse siltstone and mudstone. MADE GROUND. |  |  |
|   |                           |      |   | 1.60                 |              |   | Yellowish brown, locally greyish brown slightly clayey sandy gravel. Gravel is angular fine to coarse sandstone. POSSIBLE MADE GROUND.                           |  |  |
|   |                           |      |   | 1.85                 |              |   | Very weak orange brown fine to medium grained SANDSTONE. Dark brown staining on fracture surfaces.   |  |  |
|   |                           |      |   | 2.00                 |              |   | Weak light greyish brown fine to medium grained SANDSTONE.   |  |  |
|   |                           |      |   | End of Pit at 2.000m |              |   |  |  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      | <b>Stability</b><br>Trench sidewalls were stable. |                      |              | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |  |  |

|  |                           |      |         |   |              |  |   |   |  |
|--|---------------------------|------|---------|---|--------------|--|---|---|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG                            |   | TrialPit No<br>TT7/8 East End<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445230.00 - 375300.00<br>Level: |   | Date<br>05/10/2021                            |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>38.00<br>0.55         |   | Scale<br>1:25                                 |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>4.70                            |   | Logged<br>DCE                                 |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend                                   | Stratum Description   |   |  |
|  | Depth                     | Type | Results |   |              |  |   |   |  |
|  |                           |      |         | 0.35  |              |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |   |  |
|  |                           |      |         | 1.70  |              |  | Firm greyish brown, locally grey very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional cobbles. MADE GROUND.  |   |  |
|  |                           |      |         |   |              |  | Light yellowish brown sandy gravel. Gravel is angular fine to coarse sandstone. Locally some angular sandstone cobbles. MADE GROUND.  |   |  |
|  |                           |      |         |   |              |  | Firm grey and dark grey gravelly silty clay. Gravel is angular fine to medium mudstone. Local pockets of wet clay and dark brown staining. MADE GROUND.   |   |  |
|  |                           |      |         | 4.50  |              |  | End of Pit at 4.700m  |   |  |
| 4.70   |                           |      |         |   |              |  |   |   |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |  |

|  |                           |      |                      |   |  |   |   |  |
|--|---------------------------|------|----------------------|---|--|---|---|--|
| IDOM   |                           |      |                      |   | TRIAL PIT LOG                            |   | TrialPit No<br>TT7/8 West End<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road  |                           |      | Project No.<br>22188 |   | Co-ords: 445192.00 - 375303.00<br>Level: |   | Date<br>05/10/2021  |  |
| Location: Mastin Moor, Staveley  |                           |      |                      |   | Dimensions (m):<br>38.00<br>0.55         |   | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator   |                           |      |                      |   | Depth<br>3.00                            |   | Logged<br>DCE   |  |
| Water<br>Strike  | Samples & In Situ Testing |      |                      | Depth<br>(m)                                      | Level<br>(m)                             | Legend  | Stratum Description   |  |
|  | Depth                     | Type | Results              |   |  |   |   |  |
|  |                           |      |                      | 0.30  |  |    | Firm dry light greyish brown silty clay. Many roots. TOPSOIL.   |  |
|  |                           |      |                      |   |  |   | Light brown and greyish brown clayey sandy gravel. Gravel is angular fine to coarse sandstone. Occasional cobbles. MADE GROUND. |  |
|  |                           |      |                      |   |  |   | At 1.65 m: old timber fragments, metal cable and occasional whole bricks.   |  |
|  |                           |      |                      |   |  |   | Very weak and flakey black COAL. At 6 m from hedgeline, coal gives way to sandy gravel fill.                                    |  |
|  |                           |      |                      |   |  |   | Very weak grey laminated MUDSTONE. Brown staining on fracture surfaces.   |  |
|  |                           |      |                      | 1.95  |  |    | 2   |  |
|  |                           |      |                      | 2.50  |  |    | 3   |  |
|  |                           |      |                      | 3.00  |  |   | End of Pit at 3.00m   |  |
|  |                           |      |                      |   |  |   | 4   |  |
|  |                           |      |                      |   |  |   | 5   |  |
| <p>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</p> |                           |      |                      | <b>Stability</b><br>Trench sidewalls were stable. |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |  |



|   |                           |      |  |              |                         |  |   |  |
|---|---------------------------|------|--|--------------|-------------------------|--|---|--|
| IDOM  |                           |      |  |              | TRIAL PIT LOG           |  | TrialPit No<br>TT9/10<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksoop Road  |                           |      | Project No.<br>22188                       |              | Co-ords: -<br>Level:    |  | Date<br>04/10/2021  |  |
| Location: Mastin Moor, Staveley   |                           |      |  |              | Dimensions (m):<br>8.00 |  | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator  |                           |      |  |              | Depth<br>3.10           |  | Logged<br>DCE   |  |
| Water<br>Strike   | Samples & In Situ Testing |      |  | Depth<br>(m) | Level<br>(m)            | Legend   | Stratum Description   |  |
|   | Depth                     | Type | Results                                    |              |                         |  |   |  |
|   |                           |      |  | 0.35         |                         |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  |
|   |                           |      |  | 1.30         |                         |  | Stiff greyish brown, locally grey gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. MADE GROUND.                 |  |
|   |                           |      |  |              |                         |  | Stiff, locally firm light grey, locally dark grey gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. MADE GROUND. |  |
|   |                           |      |  |              |                         |  | Orange brown, locally yellow gravelly fine to medium SAND. Gravel is angular fine to medium sandstone.                                  |  |
|   |                           |      |  | 3.00<br>3.10 |                         |  | Weak yellowish brown fine to medium grained SANDSTONE.  |  |
| End of Pit at 3.100m  |                           |      |  |              |                         |  |   |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      | Stability<br>Trench sidewalls were stable. |              |                         | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br>Groundwater was not encountered. |   |  |

|                |   |
|----------------|---|
| <b>Remarks</b> |   |
|                | Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions. |
|                | Groundwater was not encountered.  |


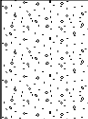
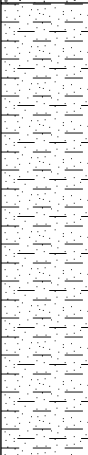
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|--|---------------------------|------|---------|--|---|--------------------------|---|---|--|---|
| IDom   |                           |      |         |  |   | TRIAL PIT LOG            |   | TrialPit No<br>TT11/12<br>Southeast End<br>Sheet 1 of 1 |  |   |
| Project Name: Land off Worksop Road  |                           |      |         | Project No. 22188                          |   | Co-ords: -<br>Level:     |   | Date<br>04/10/2021                                      |  |   |
| Location: Mastin Moor, Staveley  |                           |      |         |  |   | Dimensions (m):<br>16.00 |   | Scale<br>1:25   |  |   |
| Equipment: 13T Tracked Excavator   |                           |      |         |  |   | Depth<br>4.20            |   | Logged<br>DCE   |  |   |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                               | Level<br>(m)  | Legend                   | Stratum Description   |   |  |   |
|  | Depth                     | Type | Results |  |   |                          |   |   |  |   |
|  |                           |      |         | 0.30                                       |   |                          | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |   |  | 1 |
|  |                           |      |         |  |   |                          | Firm yellowish brown mottled light grey very gravelly clay. Gravel is angular to subangular fine to coarse sandstone, siltstone and mudstone. Occasional fragments of ceramic pipe. MADE GROUND.                                      |   |  |   |
|  |                           |      |         | 1.25                                       |   |                          | Firm, locally stiff yellowish brown mottled light grey very gravelly clay. Gravel is angular to subangular fine to coarse sandstone, siltstone and mudstone. MADE GROUND.<br><i>From 1.5 m: local pockets of angular coal gravel.</i> |   |  | 2 |
|  |                           |      |         |  |   |                          |   |   |  |   |
|  |                           |      |         |  |   |                          |   |   |  |   |
|  |                           |      | 4.00    |  | Stiff greyish brown mottled yellow, light grey and dark grey gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. MADE GROUND. |                          |   | 4   |  |   |
|  |                           |      | 4.20    |  | End of Pit at 4.200m  |                          |   |   |  |   |
|  |                           |      |         |  |   |                          |   |   |  | 5 |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | Stability<br>Trench sidewalls were stable. |   |                          | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered.                          |   |  |   |

|  |                           |      |         |   |              |   |  |   |  |
|--|---------------------------|------|---------|---|--------------|---|--|---|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG   |  | TrialPit No<br>TT13/14 North<br>End<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445385.00 - 375388.00<br>Level:  |  | Date<br>04/10/2021                                  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>8.00   |  | Scale<br>1:25                                       |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>2.50   |  | Logged<br>DCE                                       |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend  | Stratum Description  |   |  |
|  | Depth                     | Type | Results |   |              |   |  |   |  |
|  |                           |      |         | 0.35  |              |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |   |  |
|  |                           |      |         |   |              |   | Firm, becoming stiff yellowish brown mottled light grey slightly sandy CLAY. Sand is fine to medium. |   |  |
|  |                           |      |         | 2.50  |              |   | End of Pit at 2.500m   |   |  |
|  |                           |      |         |   |              |   |  |   |  |
|  |                           |      |         |   |              |   |  | 5   |  |
| <p>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</p> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. Boundary between natural clay and made ground dipping steeply to the south. |  |   |  |

|   |                           |      |                      |  |              |  |  |  |      |
|---|---------------------------|------|----------------------|--|--------------|--|--|--|------|
| IDOM  |                           |      |                      |  |              | TRIAL PIT LOG                            |  | TrialPit No<br>TT13/14 South End<br>Sheet 1 of 1 |      |
| Project Name: Land off Worksop Road   |                           |      |                      | Project No.<br>22188                       |              | Co-ords: 445397.00 - 375380.00<br>Level: |  | Date<br>04/10/2021                               |      |
| Location: Mastin Moor, Staveley   |                           |      |                      |  |              | Dimensions (m):<br>8.00                  |  | Scale<br>1:25                                    |      |
| Equipment: 13T Tracked Excavator  |                           |      |                      |  |              | Depth<br>1.80                            |  | Logged<br>DCE                                    |      |
| Water<br>Strike   | Samples & In Situ Testing |      |                      | Depth<br>(m)                               | Level<br>(m) | Legend                                   | Stratum Description  |  |      |
|   | Depth                     | Type | Results              |  |              |  |  |  |      |
|   |                           |      |                      | 0.30                                       |              |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |  |      |
|   |                           |      |                      |  |              |  | Firm light brown and greyish brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional sandstone fragments and cobbles. MADE GROUND.                                     |  |      |
|   |                           |      |                      |  |              |  |  |  | 1.80 |
|   |                           |      | End of Pit at 1.800m |  |              |  |  |  |      |
|   |                           |      |                      |  |              |  | 1  |  |      |
|   |                           |      |                      |  |              |  | 2  |  |      |
|   |                           |      |                      |  |              |  | 3  |  |      |
|   |                           |      |                      |  |              |  | 4  |  |      |
|   |                           |      |                      |  |              |  | 5  |  |      |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      |                      | Stability<br>Trench sidewalls were stable. |              |  | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |      |







|  |                           |      |         |   |              |  |   |  |      |
|--|---------------------------|------|---------|---|--------------|--|---|--|------|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG                            |   | TrialPit No<br>TT15/16 South End<br>Sheet 1 of 1 |      |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445445.00 - 375393.00<br>Level: |   | Date<br>04/10/2021                               |      |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>14.00                 |   | Scale<br>1:25                                    |      |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.50                            |   | Logged<br>DCE                                    |      |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend                                   | Stratum Description   |  |      |
|  | Depth                     | Type | Results |   |              |  |   |  |      |
|  |                           |      |         | 0.30  |              |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  |      |
|  |                           |      |         |   |              |  | Firm greyish brown and light brown gravelly clay. Gravel is angular fine to coarse sandstone, siltstone and mudstone. Occasional angular cobbles. MADE GROUND.  |  |      |
|  |                           |      |         |   |              |  |   |  | 1.50 |
|  |                           |      |         |   |              |  |   |  |      |
|  |                           |      |         |   |              |  | 1   |  |      |
|  |                           |      |         |   |              |  | 2   |  |      |
|  |                           |      |         |   |              |  | 3   |  |      |
|  |                           |      |         |   |              |  | 4   |  |      |
|  |                           |      |         |   |              |  | 5   |  |      |
| <p>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</p> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |      |

|                                     |                           |      |         |                               |           |  |  |  |  |                 |  |
|-------------------------------------|---------------------------|------|---------|-------------------------------|-----------|--|--|--|--|-----------------|--|
| Project Name: Land off Worksoy Road |                           |      |         | Project No. 22188             |           |  | Co-ords: 445497.00 - 375417.00   |  |  | Date 04/10/2021 |  |
| Location: Mastin Moor, Staveley     |                           |      |         |                               |           |  | Dimensions (m): 37.00  |  |  | Scale 1:25      |  |
| Equipment: 13T Tracked Excavator    |                           |      |         |                               |           |  | Depth 2.20   |  |  | Logged DCE      |  |
| Water Strike                        | Samples & In Situ Testing |      |         | Depth (m)                     | Level (m) | Legend   | Stratum Description  |  |  |                 |  |
|                                     | Depth                     | Type | Results |                               |           |  |  |  |  |                 |  |
|                                     |                           |      |         | 0.30                          |           |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.   |  |  |                 |  |
|                                     |                           |      |         |                               |           |   | Yellow and light grey, locally orange slightly gravelly fine to medium SAND. Gravel is angular fine to medium sandstone.   |  |  |                 |  |
|                                     |                           |      |         |                               |           |  | Firm light grey mottled orange and dark brown sandy CLAY. Sand is fine to medium. Occasional angular to subangular fine to medium sandstone gravel.  |  |  |                 |  |
|                                     |                           |      |         | 2.20                          |           | End of Pit at 2.200m   |  |  |  |                 |  |
|                                     |                           |      |         |                               |           |  |  |  |  |                 |  |
|                                     |                           |      |         | Stability                     |           |  | Remarks  |  |  |                 |  |
|                                     |                           |      |         | Trench sidewalls were stable. |           |  | Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. Boundary between natural clay and made ground dipping to the south at a shallow angle. |  |  |                 |  |




|   |                           |      |         |  |              |  |   |  |  |
|---|---------------------------|------|---------|--|--------------|--|---|--|--|
| IDOM  |                           |      |         |  |              | TRIAL PIT LOG  |   | TrialPit No<br>TT17/18 South End<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road   |                           |      |         | Project No.<br>22188                       |              | Co-ords: 445497.00 - 375380.00<br>Level:   |   | Date<br>04/10/2021                               |  |
| Location: Mastin Moor, Staveley   |                           |      |         |  |              | Dimensions (m):<br>37.00<br>0.55   |   | Scale<br>1:25                                    |  |
| Equipment: 13T Tracked Excavator  |                           |      |         |  |              | Depth<br>2.10  |   | Logged<br>DCE                                    |  |
| Water<br>Strike   | Samples & In Situ Testing |      |         | Depth<br>(m)                               | Level<br>(m) | Legend   | Stratum Description   |  |  |
|   | Depth                     | Type | Results |  |              |  |   |  |  |
|   |                           |      |         | 0.25                                       |              |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  |  |
|   |                           |      |         | 0.50                                       |              |  | Firm greyish brown, locally orange and yellow gravelly clay. Gravel is angular to subangular fine to coarse sandstone, siltstone and mudstone. MADE GROUND.     |  |  |
|   |                           |      |         |  |              |  | Firm greyish brown, locally light brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Locally some angular cobbles. MADE GROUND. |  |  |
|   |                           |      |         | 2.10                                       |              |  | End of Pit at 2.100m  |  |  |
|   |                           |      |         |  |              | 1  |   |  |  |
|   |                           |      |         |  |              | 2  |   |  |  |
|   |                           |      |         |  |              | 3  |   |  |  |
|   |                           |      |         |  |              | 4  |   |  |  |
|   |                           |      |         |  |              | 5  |   |  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      |         | Stability<br>Trench sidewalls were stable. |              | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |  |  |

|  |                           |      |         |   |              |   |   |  |   |
|--|---------------------------|------|---------|---|--------------|---|---|--|---|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG   |   | TrialPit No<br>TT19/20 North End<br>Sheet 1 of 1 |   |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                                      |              | Co-ords: -<br>Level:  |   | Date<br>07/10/2021                               |   |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>18.00  |   | Scale<br>1:25                                    |   |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.30   |   | Logged<br>DCE                                    |   |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)  | Level<br>(m) | Legend  | Stratum Description   |  |   |
|  | Depth                     | Type | Results |   |              |   |   |  |   |
|  |                           |      |         | 0.28  |              |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  | 1 |
|  |                           |      |         | 0.60  |              |  | Firm yellowish brown, locally light brown and greyish brown slightly sandy slightly gravelly CLAY. Sand is fine to medium, gravel is angular to subangular fine to coarse sandstone.  |  |   |
|  |                           |      |         | 0.95  |              |  | Yellowish brown mottled orange and light grey very sandy GRAVEL. Sand is fine to medium, gravel is angular fine to coarse sandstone.  |  |   |
|  |                           |      |         | 1.30  |              |  | Weak yellowish brown and light grey fine to medium grained SANDSTONE.   |  |   |
|  |                           |      |         | End of Pit at 1.300m                                      |              |   |   |  |   |
|  |                           |      |         |   |              |   | 3   |  |   |
|  |                           |      |         |   |              |   | 4   |  |   |
|  |                           |      |         |   |              |   | 5   |  |   |
| <p>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</p> |                           |      |         | <p><b>Stability</b><br/>Trench sidewalls were stable.</p> |              |   | <p><b>Remarks</b><br/>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br/><br/>Groundwater was not encountered.</p> |  |   |






|  |                           |      |                      |   |                          |   |   |  |
|--|---------------------------|------|----------------------|---|--------------------------|---|---|--|
| IDOM   |                           |      |                      |   | TRIAL PIT LOG            |   | TrialPit No<br>TT19/20 South<br>End<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road  |                           |      | Project No.<br>22188 |   | Co-ords: -<br>Level:     |   | Date<br>07/10/2021  |  |
| Location: Mastin Moor, Staveley  |                           |      |                      |   | Dimensions (m):<br>18.00 |   | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator   |                           |      |                      |   | Depth<br>3.50            |   | Logged<br>DCE   |  |
| Water<br>Strike  | Samples & In Situ Testing |      |                      | Depth<br>(m)                                      | Level<br>(m)             | Legend  | Stratum Description   |  |
|  | Depth                     | Type | Results              |   |                          |   |   |  |
|  |                           |      |                      | 0.26  |                          |   | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  |
|  |                           |      |                      | 1.00  |                          |   | Firm light grey and light brown, locally greyish brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional angular cobbles and rare siltstone boulders (up to 0.7 m diameter). MADE GROUND. |  |
|  |                           |      |                      | 1.55  |                          |   | Firm yellowish brown, locally light brown sandy gravelly clay. Gravel is angular to subangular fine to coarse sandstone, siltstone and mudstone. Occasional angular cobbles. MADE GROUND.                                       |  |
|  |                           |      |                      | 3.30  |                          |   | Firm greyish brown, locally light brown slightly sandy very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional angular cobbles. MADE GROUND.  |  |
|  |                           |      |                      | 3.50  |                          |   | Weak light greyish brown fine grained laminated SANDSTONE.  |  |
|  |                           |      |                      |   |                          |   | End of Pit at 3.500m  |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |                      | <b>Stability</b><br>Trench sidewalls were stable. |                          | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |  |

|  |                           |      |                      |   |  |        |   |  |
|--|---------------------------|------|----------------------|---|--|--------|---|--|
| IDOM   |                           |      |                      |   | TRIAL PIT LOG                            |        | TrialPit No<br>TT22<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road  |                           |      | Project No.<br>22188 |   | Co-ords: 445540.00 - 375361.00<br>Level: |        | Date<br>07/10/2021  |  |
| Location: Mastin Moor, Staveley  |                           |      |                      |   | Dimensions (m):<br>5.50                  |        | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator   |                           |      |                      |   | Depth<br>4.50                            |        | Logged<br>DCE   |  |
| Water<br>Strike  | Samples & In Situ Testing |      |                      | Depth<br>(m)                                      | Level<br>(m)                             | Legend | Stratum Description   |  |
|  | Depth                     | Type | Results              |   |  |        |   |  |
|  |                           |      |                      | 0.26  |  |        | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |  |
|  |                           |      |                      | 0.70  |  |        | Firm, locally stiff yellowish brown and greyish brown slightly sandy gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional angular cobbles. MADE GROUND.   |  |
|  |                           |      |                      | 1.20  |  |        | Firm light grey and greyish brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Locally some angular cobbles. MADE GROUND.   |  |
|  |                           |      |                      | 3.60  |  |        | Firm, locally stiff greyish brown and light brown very gravelly clay. Gravel is angular to subangular fine to coarse siltstone and mudstone. Locally some angular cobbles. Local pockets of dark grey gravelly clay. MADE GROUND. |  |
|  |                           |      |                      | 4.50  |  |        | Firm, locally soft greyish brown and light grey gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional angular cobbles. MADE GROUND.  |  |
|  |                           |      |                      |   |  |        | End of Pit at 4.500m  |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |                      | <b>Stability</b><br>Trench sidewalls were stable. |  |        | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered.               |  |

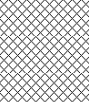
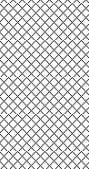
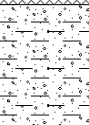

|  |                           |      |         |   |              |  |   |                                     |  |
|--|---------------------------|------|---------|---|--------------|--|---|-------------------------------------|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG                            |   | TrialPit No<br>TT24<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445538.00 - 375310.00<br>Level: |   | Date<br>07/10/2021                  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>6.20<br>0.55          |   | Scale<br>1:25                       |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>4.40                            |   | Logged<br>DCE                       |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend                                   | Stratum Description   |                                     |  |
|  | Depth                     | Type | Results |   |              |  |   |                                     |  |
|  |                           |      |         | 0.30  | 0.88         |  | Soft greyish brown silty clay. Some fine roots. TOPSOIL.  |                                     |  |
|  |                           |      |         |   |              |  | Firm greyish brown and yellowish brown slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. Occasional angular cobbles and rare brick fragments. MADE GROUND.  |                                     |  |
|  |                           |      |         |   |              |  | Firm greyish brown, locally light brown very gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. Occasional angular cobbles. MADE GROUND.  |                                     |  |
|  |                           |      |         |   |              |  | From 1.4 m: rare small siltstone boulders.  |                                     |  |
|  |                           |      |         |   |              |  |   |                                     |  |
|  |                           |      |         |   |              |  |   |                                     |  |
|  |                           |      |         | 2.70  | 3.00         |  | Firm, locally stiff light grey, locally mottled orange and light brown sandy gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. Locally some angular sandstone cobbles and small siltstone boulders. MADE GROUND. |                                     |  |
|  |                           |      |         |   |              |  | Light grey and grey clayey gravel and cobbles. Gravel and cobbles are angular fine to coarse siltstone. Occasional small siltstone boulders. MADE GROUND.   |                                     |  |
|  |                           |      |         |   |              |  |   |                                     |  |
|  |                           |      |         | 4.40  |              |  | End of Pit at 4.400m  |                                     |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered.                     |                                     |  |

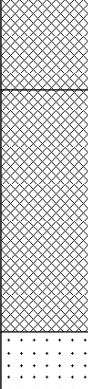


|   |                           |      |  |              |  |  |   |  |
|---|---------------------------|------|--|--------------|--|--|---|--|
| IDOM  |                           |      |  |              | TRIAL PIT LOG                            |  | TrialPit No<br>TT26<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road   |                           |      | Project No.<br>22188                       |              | Co-ords: 445543.00 - 375273.00<br>Level: |  | Date<br>07/10/2021  |  |
| Location: Mastin Moor, Staveley   |                           |      |  |              | Dimensions (m):<br>6.10<br>0.55          |  | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator  |                           |      |  |              | Depth<br>4.80                            |  | Logged<br>DCE   |  |
| Water<br>Strike   | Samples & In Situ Testing |      |  | Depth<br>(m) | Level<br>(m)                             | Legend   | Stratum Description   |  |
|   | Depth                     | Type | Results                                    |              |  |  |   |  |
|   |                           |      |  | 0.24         |  |   | Soft dark brown silty clay. Occasional angular fine to medium sandstone/siltstone gravel. Some fine roots. TOPSOIL.   |  |
|   |                           |      |  | 0.60         |  |  | Firm yellowish brown, locally dark brown slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. Rare angular sandstone cobbles and coal fragments. MADE GROUND.  |  |
|   |                           |      |  | 1.35         |  |  | Firm light brown and greyish brown, locally dark brown slightly sandy very gravelly clay. Gravel is angular fine to coarse sandstone, siltstone and mudstone. MADE GROUND.                        |  |
|   |                           |      |  | 1.90         |  |  | Firm dark brown, locally orange and greyish brown sandy gravelly clay. Gravel is angular to subangular fine to coarse sandstone, siltstone and mudstone. Occasional angular cobbles. MADE GROUND. |  |
|   |                           |      |  | 4.80         |  |  | Firm, locally stiff light grey and grey, locally light brown very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Locally some angular cobbles. MADE GROUND.              |  |
|   |                           |      |  |              |  |  | From 3.2 m: occasional small sandstone boulders (up to 0.6 m diameter).   |  |
|   |                           |      |  |              |  |  | End of Pit at 4.800m  |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      | Stability<br>Trench sidewalls were stable. |              |  | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |  |

|  |                           |      |         |   |              |  |   |                                     |   |
|--|---------------------------|------|---------|---|--------------|--|---|-------------------------------------|---|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG                            |   | TrialPit No<br>TT27<br>Sheet 1 of 1 |   |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445807.00 - 375588.00<br>Level: |   | Date<br>08/10/2021                  |   |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>9.00<br>4.00          |   | Scale<br>1:25                       |   |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>2.30                            |   | Logged<br>DCE                       |   |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend                                   | Stratum Description   |                                     |   |
|  | Depth                     | Type | Results |   |              |  |   |                                     |   |
|  |                           |      |         | 0.28  |              |  | Soft black gravelly clay. Gravel is angular fine to medium coal. Some fine roots. MADE GROUND.  |                                     | 1 |
|  |                           |      |         | 0.60  |              |  | Black clayey gravel. Gravel is angular fine to medium sandstone and coal. Occasional whole bricks and brick cobbles. MADE GROUND.   |                                     |   |
|  |                           |      |         | 1.05  |              |  | Firm yellowish brown, locally orange brown slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone. MADE GROUND.   |                                     |   |
|  |                           |      |         | 1.40  |              |  | Yellowish brown and orange brown clayey sandy GRAVEL. Sand is fine to medium, gravel is angular fine to coarse sandstone.<br><i>From 1.05 m, in northwest corner: old tree stump and old timber sitting on sandstone.</i> |                                     |   |
|  |                           |      |         | 2.30  |              |  | Weak light yellowish brown and light grey fine grained SANDSTONE.   |                                     |   |
|  |                           |      |         |   |              |  | End of Pit at 2.300m  |                                     | 2 |
|  |                           |      |         |   |              |  |   |                                     | 3 |
|  |                           |      |         |   |              |  |   |                                     | 4 |
|  |                           |      |         |   |              |  |   |                                     | 5 |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered.       |                                     |   |

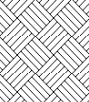

|  |                           |      |         |   |              |   |   |                                     |  |
|--|---------------------------|------|---------|---|--------------|---|---|-------------------------------------|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG   |   | TrialPit No<br>TT28<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445809.00 - 375583.00<br>Level:  |   | Date<br>08/10/2021                  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>10.00  |   | Scale<br>1:25                       |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.60   |   | Logged<br>DCE                       |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend  | Stratum Description   |                                     |  |
|  | Depth                     | Type | Results |   |              |   |   |                                     |  |
|  |                           |      |         | 0.30  |              |  | Soft black gravelly clay. Gravel is angular fine to medium coal. Some fine roots. MADE GROUND.  |                                     |  |
|  |                           |      |         | 0.60  |              |  | Black clayey gravel. Gravel is angular fine to medium sandstone and coal. Occasional whole bricks and brick cobbles. MADE GROUND.   |                                     |  |
|  |                           |      |         | 1.05  |              |  | Firm yellowish brown, locally orange brown slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone. MADE GROUND.<br><i>Between 0.6 and 1.0 m, east end of trench: grey siltstone cobbles, small boulders and occasional brick cobbles.</i> |                                     |  |
|  |                           |      |         | 1.20  |              |  | Yellowish brown and orange brown clayey sandy GRAVEL. Sand is fine to medium, gravel is angular fine to coarse sandstone.<br>Weak light yellowish brown and light grey fine grained SANDSTONE.  |                                     |  |
|  |                           |      |         | 1.60  |              |  | End of Pit at 1.600m  |                                     |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |   | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered.   |                                     |  |



|  |                           |      |         |   |              |  |   |  |   |
|--|---------------------------|------|---------|---|--------------|--|---|--|---|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG  |   | TrialPit No<br>TT29 East End<br>Sheet 1 of 1 |   |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                                      |              | Co-ords: -<br>Level:   |   | Date<br>08/10/2021                           |   |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>18.50   |   | Scale<br>1:25                                |   |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.90  |   | Logged<br>DCE                                |   |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)  | Level<br>(m) | Legend   | Stratum Description   |  |   |
|  | Depth                     | Type | Results |   |              |  |   |  |   |
|  |                           |      |         | 0.35  |              |   | Soft black gravelly clay. Gravel is angular fine to medium coal. Some fine roots. MADE GROUND.  |  | 1 |
|  |                           |      |         | 0.95  |              |   | Firm light grey, locally yellow and dark grey very gravelly clay. Gravel is angular fine to coarse siltstone and mudstone. Occasional angular cobbles. MADE GROUND.   |  |   |
|  |                           |      |         | 1.40  |              |   | Firm yellowish brown slightly sandy slightly gravelly CLAY. Sand is fine to medium, gravel is angular fine to coarse sandstone.   |  |   |
|  |                           |      |         | 1.90  |              |  | Weak light yellowish brown and light grey fine grained SANDSTONE.   |  |   |
|  |                           |      |         | End of Pit at 1.900m                                      |              |  |   |  |   |
|  |                           |      |         |   |              |  | 3   |  |   |
|  |                           |      |         |   |              |  | 4   |  |   |
|  |                           |      |         |   |              |  | 5   |  |   |
| <p>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</p> |                           |      |         | <p><b>Stability</b><br/>Trench sidewalls were stable.</p> |              |  | <p><b>Remarks</b><br/>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br/><br/>Groundwater was not encountered.</p> |  |   |

|                                     |                           |      |  |              |  |   |   |  |
|-------------------------------------|---------------------------|------|--|--------------|--|---|---|--|
| IDom                                |                           |      |  |              | TRIAL PIT LOG  |   | TrialPit No<br>TT29 West End<br>Sheet 1 of 1  |  |
| Project Name: Land off Worksop Road |                           |      | Project No. 22188                          |              | Co-ords: -<br>Level:   |   | Date<br>08/10/2021  |  |
| Location: Mastin Moor, Staveley     |                           |      |  |              | Dimensions (m):<br>18.50   |   | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator    |                           |      |  |              | Depth<br>1.30  |   | Logged<br>DCE   |  |
| Water<br>Strike                     | Samples & In Situ Testing |      |  | Depth<br>(m) | Level<br>(m)   | Legend  | Stratum Description   |  |
|                                     | Depth                     | Type | Results                                    |              |  |   |   |  |
|                                     |                           |      |  | 0.30         |  |  | Soft black gravelly clay. Gravel is angular fine to medium coal. Some fine roots. MADE GROUND.                                    |  |
|                                     |                           |      |  |              |  |   | Firm yellowish brown, locally orange brown slightly sandy gravelly clay. Gravel is angular fine to coarse sandstone. MADE GROUND. |  |
|                                     |                           |      |  |              |  |   | Weak light yellowish brown and light grey fine grained SANDSTONE.   |  |
|                                     |                           |      |  |              |  |   | End of Pit at 1.300m  |  |
|                                     |                           |      |  | 1.10         |  |  |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  | 1.30         |  |  |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      |  |              |  |   |   |  |
|                                     |                           |      | Stability<br>Trench sidewalls were stable. |              | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |   |   |  |

|   |                           |      |         |  |              |                          |  |                                     |   |  |
|---|---------------------------|------|---------|--|--------------|--------------------------|--|-------------------------------------|---|--|
| IDOM  |                           |      |         |  |              | TRIAL PIT LOG            |  | TrialPit No<br>TT30<br>Sheet 1 of 1 |   |  |
| Project Name: Land off Worksop Road   |                           |      |         | Project No.<br>22188                       |              | Co-ords: -<br>Level:     |  | Date<br>08/10/2021                  |   |  |
| Location: Mastin Moor, Staveley   |                           |      |         |  |              | Dimensions (m):<br>15.00 |  | Scale<br>1:25                       |   |  |
| Equipment: 13T Tracked Excavator  |                           |      |         |  |              | Depth<br>1.60            |  | Logged<br>DCE                       |   |  |
| Water<br>Strike   | Samples & In Situ Testing |      |         | Depth<br>(m)                               | Level<br>(m) | Legend                   | Stratum Description  |                                     |   |  |
|   | Depth                     | Type | Results |  |              |                          |  |                                     |   |  |
|   |                           |      |         | 0.24                                       |              |                          | Soft black gravelly clay. Gravel is angular fine to medium coal. Some fine roots. MADE GROUND.   |                                     |   |  |
|   |                           |      |         | 0.58                                       |              |                          | Firm light grey, locally black very gravelly clay. Gravel is angular fine to coarse mudstone and coal. MADE GROUND.  |                                     |   |  |
|   |                           |      |         | 1.45                                       |              |                          | Firm yellowish brown slightly sandy CLAY. Sand is fine to medium.  |                                     |   |  |
|   |                           |      |         | 1.60                                       |              |                          | Weak light yellowish brown and light grey fine grained SANDSTONE. West end of trench: top of sandstone at 1.0 m.   |                                     |   |  |
|   |                           |      |         |  |              |                          | End of Pit at 1.600m   |                                     |   |  |
|   |                           |      |         |  |              |                          |  |                                     | 1 |  |
|   |                           |      |         |  |              |                          |  |                                     | 2 |  |
|   |                           |      |         |  |              |                          |  |                                     | 3 |  |
|   |                           |      |         |  |              |                          |  |                                     | 4 |  |
|   |                           |      |         |  |              |                          |  |                                     | 5 |  |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      |         | Stability<br>Trench sidewalls were stable. |              |                          | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |                                     |   |  |

|  |                           |      |         |   |              |   |   |                                     |  |
|--|---------------------------|------|---------|---|--------------|---|---|-------------------------------------|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG   |   | TrialPit No<br>TT33<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445880.00 - 375416.00<br>Level:  |   | Date<br>08/10/2021                  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>3.60<br>1.30   |   | Scale<br>1:25                       |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>1.40   |   | Logged<br>DCE                       |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend  | Stratum Description   |                                     |  |
|  | Depth                     | Type | Results |   |              |   |   |                                     |  |
|  |                           |      |         | 0.36  |              |  | Soft dark brown silty clay. Occasional angular fine to medium sandstone gravel. Some fine roots. TOPSOIL.   |                                     |  |
|  |                           |      |         |   |              |   | Firm light yellowish brown slightly sandy CLAY. Sand is fine. Some fine roots.  |                                     |  |
|  |                           |      |         |   |              |   | Firm light grey mottled light brown CLAY.   |                                     |  |
|  |                           |      |         |   |              |   | From 1.25 m: becoming dark grey mottled orange.   |                                     |  |
|  |                           |      |         | 1.40  |              |  | End of Pit at 1.400m  |                                     |  |
|  |                           |      |         |   |              |   | 1   |                                     |  |
|  |                           |      |         |   |              |   | 2   |                                     |  |
|  |                           |      |         |   |              |   | 3   |                                     |  |
|  |                           |      |         |   |              |   | 4   |                                     |  |
|  |                           |      |         |   |              |   | 5   |                                     |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |   | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |                                     |  |

|                                     |                           |      |                   |  |  |        |  |                                     |  |
|-------------------------------------|---------------------------|------|-------------------|--|--|--------|--|-------------------------------------|--|
| IDom                                |                           |      |                   |  | TRIAL PIT LOG                            |        |  | TrialPit No<br>TT39<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road |                           |      | Project No. 22188 |  | Co-ords: 445697.00 - 375311.00<br>Level: |        |  | Date<br>08/10/1931                  |  |
| Location: Mastin Moor, Staveley     |                           |      |                   |  | Dimensions (m):<br>3.40                  |        |  | Scale<br>1:25                       |  |
| Equipment: 13T Tracked Excavator    |                           |      |                   |  | Depth<br>1.50                            |        |  | Logged DCE<br>Checked               |  |
| Water Strike                        | Samples & In Situ Testing |      |                   | Depth (m)                                  | Level (m)                                | Legend | Stratum Description  |                                     |  |
|                                     | Depth                     | Type | Results           |  |  |        |  |                                     |  |
|                                     |                           |      |                   | 0.38                                       |  |        | Soft dark brown silty clay. Occasional angular fine to medium sandstone gravel. Some fine roots. TOPSOIL.  |                                     |  |
|                                     |                           |      |                   |  |  |        | Firm light yellowish brown slightly sandy CLAY. Sand is fine. Some fine roots.   |                                     |  |
|                                     |                           |      |                   |  |  |        | Firm light grey mottled light brown CLAY.  |                                     |  |
|                                     |                           |      |                   |  |  |        | End of Pit at 1.500m   |                                     |  |
|                                     |                           |      |                   | 1.20                                       |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   | 1.50                                       |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   |  |  |        |  |                                     |  |
|                                     |                           |      |                   | Stability<br>Trench sidewalls were stable. |  |        | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |                                     |  |

|   |                           |      |         |  |              |                                 |  |  |  |   |
|---|---------------------------|------|---------|--|--------------|---------------------------------|--|--|--|---|
| IDOM  |                           |      |         |  |              | TRIAL PIT LOG                   |  | TrialPit No<br>TT50<br>Sheet 1 of 1  |  |   |
| Project Name: Land off Worksop Road   |                           |      |         | Project No.<br>22188                       |              | Co-ords: -<br>Level:            |  | Date<br>06/10/2021   |  |   |
| Location: Mastin Moor, Staveley   |                           |      |         |  |              | Dimensions (m):<br>5.50<br>3.00 |  | Scale<br>1:25  |  |   |
| Equipment: 13T Tracked Excavator  |                           |      |         |  |              | Depth<br>2.40                   |  | Logged<br>DCE  |  |   |
| Water<br>Strike   | Samples & In Situ Testing |      |         | Depth<br>(m)                               | Level<br>(m) | Legend                          | Stratum Description  |  |  |   |
|   | Depth                     | Type | Results |  |              |                                 |  |  |  |   |
|   |                           |      |         | 0.30                                       |              |                                 | Soft dark brown silty clay. Many fine roots. TOPSOIL.  |  |  |   |
|   |                           |      |         | 1.75                                       |              |                                 | Firm, locally soft orange brown mottled light grey and orange clay. REWORKED / MADE GROUND.  |  |  |   |
|   |                           |      |         |  |              | 2.20                            |  | Firm orange brown slightly sandy very gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. REWORKED / MADE GROUND. |  |   |
|   |                           |      |         |  |              |                                 |  | 2.40   |  | Very weak light grey MUDSTONE. Local thin bands of dark grey mudstone and orange brown gravelly clay. |
|   |                           |      |         |  |              | End of Pit at 2.400m            |  |  |  |   |
| D = small disturbed sample (tub)<br>J = organic sample (amber glass jar)<br>V = volatile sample (amber glass vial)<br>B = bulk bag sample<br>HSV = hand shear vane (kPa)<br>PP = pocket penetrometer (kg.cm2)<br>PID = photoionisation detector (ppm) |                           |      |         | Stability<br>Trench sidewalls were stable. |              |                                 | Remarks<br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br>Groundwater was not encountered. |  |  |   |

|  |                           |      |         |                      |              |   |   |   |  |
|--|---------------------------|------|---------|----------------------|--------------|---|---|---|--|
| IDOM   |                           |      |         |                      |              | TRIAL PIT LOG                                     |   | TrialPit No<br>TT51<br>Sheet 1 of 1   |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188 |              | Co-ords: -<br>Level:                              |   | Date<br>06/10/2021  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |                      |              | Dimensions (m):<br>4.50<br>1:30                   |   | Scale<br>1:25   |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |                      |              | Depth<br>2.20                                     |   | Logged<br>DCE   |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)         | Level<br>(m) | Legend  | Stratum Description   |   |  |
|  | Depth                     | Type | Results |                      |              |   |   |   |  |
|  |                           |      |         | 0.18                 |              |   | Soft dark brown silty clay. Many fine roots. TOPSOIL.   |   |  |
|  |                           |      |         | 0.40                 |              |   | Loose black coal gravel with occasional clods of yellow and orange mottled clay. MADE GROUND.   |   |  |
|  |                           |      |         | 0.65                 |              |   | Firm light grey mottled grey and yellow gravelly CLAY. Gravel is angular fine to coarse sandstone and mudstone. REWORKED / MADE GROUND.<br><i>From 0.4 to 1.7 m in southeast corner: occasional whole bricks and half bricks.</i> |   |  |
|  |                           |      |         |                      |              |   | Firm orange brown, locally greyish brown slightly sandy slightly gravelly clay. Gravel is angular to subangular fine to coarse sandstone and mudstone. REWORKED / MADE GROUND.  |   |  |
|  |                           |      |         | 2.10<br>2.20         |              |   | Very weak light grey mottled orange MUDSTONE.   |   |  |
|  |                           |      |         |                      |              |   | End of Pit at 2.200m  |   |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         |                      |              | <b>Stability</b><br>Trench sidewalls were stable. |   | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |  |

|  |                           |      |         |   |              |  |   |                                     |  |
|--|---------------------------|------|---------|---|--------------|--|---|-------------------------------------|--|
| IDOM   |                           |      |         |   |              | TRIAL PIT LOG                            |   | TrialPit No<br>TT52<br>Sheet 1 of 1 |  |
| Project Name: Land off Worksop Road  |                           |      |         | Project No.<br>22188                              |              | Co-ords: 445131.00 - 375034.00<br>Level: |   | Date<br>06/10/2021                  |  |
| Location: Mastin Moor, Staveley  |                           |      |         |   |              | Dimensions (m):<br>5.00<br>4.00          |   | Scale<br>1:25                       |  |
| Equipment: 13T Tracked Excavator   |                           |      |         |   |              | Depth<br>0.95                            |   | Logged<br>DCE                       |  |
| Water<br>Strike  | Samples & In Situ Testing |      |         | Depth<br>(m)                                      | Level<br>(m) | Legend                                   | Stratum Description   |                                     |  |
|  | Depth                     | Type | Results |   |              |  |   |                                     |  |
|  |                           |      |         | 0.38  |              |  | Soft dark brown silty clay. Many fine roots. TOPSOIL.   |                                     |  |
|  |                           |      |         | 0.60  |              |  | Firm orange brown slightly sandy slightly gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. REWORKED / MADE GROUND.  |                                     |  |
|  |                           |      |         | 0.78  |              |  | CONCRETE slab (3.1 m x 3.1 m).  |                                     |  |
|  |                           |      |         | 0.95  |              |  | Firm, locally stiff orange brown slightly sandy slightly gravelly clay. Gravel is angular fine to coarse sandstone and siltstone. POSSIBLE MADE GROUND.   |                                     |  |
|  |                           |      |         |   |              |  | End of Pit at 0.950m  |                                     |  |
|  |                           |      |         |   |              |  | 1   |                                     |  |
|  |                           |      |         |   |              |  | 2   |                                     |  |
|  |                           |      |         |   |              |  | 3   |                                     |  |
|  |                           |      |         |   |              |  | 4   |                                     |  |
|  |                           |      |         |   |              |  | 5   |                                     |  |
| <div>D = small disturbed sample (tub)<br/>J = organic sample (amber glass jar)<br/>V = volatile sample (amber glass vial)<br/>B = bulk bag sample<br/>HSV = hand shear vane (kPa)<br/>PP = pocket penetrometer (kg.cm2)<br/>PID = photoionisation detector (ppm)</div> |                           |      |         | <b>Stability</b><br>Trench sidewalls were stable. |              |  | <b>Remarks</b><br>Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.<br><br>Groundwater was not encountered. |                                     |  |



**APPENDIX 3**    ▪    Coal Authority Mine Entry Information

Issued by:

The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG  
Website: [www.groundstability.com](http://www.groundstability.com) Phone: 0345 762 6848

**IDOM MEREBROOK LTD  
CROMFORD MILL  
MILL ROAD  
CROMFORD  
DERBYSHIRE  
DE4 3RQ**

|                                |                          |
|--------------------------------|--------------------------|
| Our reference:                 | <b>51002684740001</b>    |
| Your reference:                | <b>21-889-DCE-22188</b>  |
| Date of your enquiry:          | <b>27 September 2021</b> |
| Date we received your enquiry: | <b>27 September 2021</b> |
| Date of issue:                 | <b>27 September 2021</b> |

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

### **Shaft Plan and Data Sheets**

#### **WORKSOP ROAD, MASTIN MOOR, DERBYSHIRE, S43 3DJ**

I refer to the enquiry dated 27 September 2021, received 27 September 2021, in connection with the above.

As requested I enclose the mine entry data sheet(s) held for the mine entry/entries referred to.

### ***Mine Entry Data***

|                                    |                       |
|------------------------------------|-----------------------|
| Shaft/adit:                        | Shaft                 |
| Reference:                         | 445375-009            |
| Source:                            | Ab plans EM335, EM336 |
| Colliery name:                     | NORBRIGGS             |
| Entry name:                        | Unknown               |
| Date abandoned:                    | Unknown               |
| Depth of superficial deposits (m): | Unknown               |
| Depth of shaft (m):                | Unknown               |
| Diameter of shaft (m):             | Unknown               |
| Probable adit azimuth:             | Not Applicable        |
| Treatment details:                 | Unknown               |
| Conveyance:                        | Not Applicable        |
| Easting:                           | 445697                |
| Northing:                          | 375293                |
| Other information:                 | None                  |

**Mine Entry Data (continued)**

|                                    |                            |
|------------------------------------|----------------------------|
| Shaft/adit:                        | Shaft                      |
| Reference:                         | 445375-008                 |
| Source:                            | 1977 Geological Field Slip |
| Colliery name:                     | Unknown                    |
| Entry name:                        | Unknown                    |
| Date abandoned:                    | Unknown                    |
| Depth of superficial deposits (m): | Unknown                    |
| Depth of shaft (m):                | Unknown                    |
| Diameter of shaft (m):             | Unknown                    |
| Probable adit azimuth:             | Not Applicable             |
| Treatment details:                 | Unknown                    |
| Conveyance:                        | Not Applicable             |
| Easting:                           | 445880                     |
| Northing:                          | 375409                     |
| Other information:                 | None                       |

**Mine Entry Data (continued)**

|                                    |                       |
|------------------------------------|-----------------------|
| Shaft/adit:                        | Shaft                 |
| Reference:                         | 445375-007            |
| Source:                            | Ab plans EM335, EM336 |
| Colliery name:                     | NORBRIGGS             |
| Entry name:                        | Unknown               |
| Date abandoned:                    | Unknown               |
| Depth of superficial deposits (m): | Unknown               |
| Depth of shaft (m):                | Unknown               |
| Diameter of shaft (m):             | Unknown               |
| Probable adit azimuth:             | Not Applicable        |
| Treatment details:                 | Unknown               |
| Conveyance:                        | Not Applicable        |
| Easting:                           | 445807                |
| Northing:                          | 375583                |
| Other information:                 | None                  |

Location map

Approximate position of enquiry



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This plan shows the approximate location of the disused mine entry / entries referred to in the attached mining report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting [www.groundstability.com](http://www.groundstability.com).

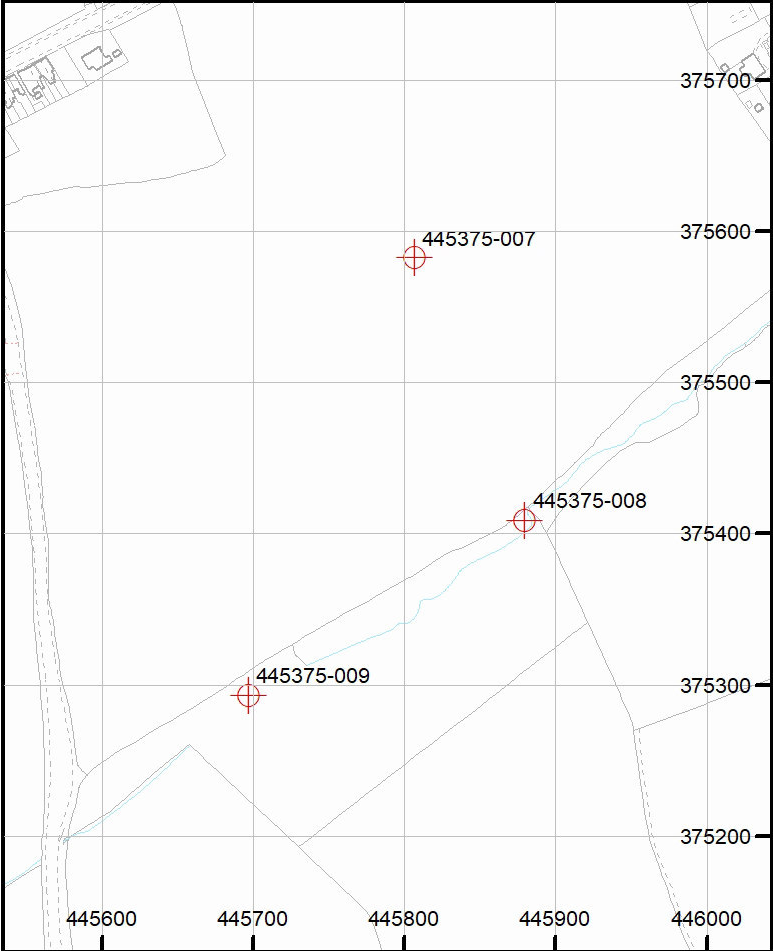
If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wish to examine the source plans from which the information has been taken, these are available to view, free of charge, at our Head Office in Mansfield. To book an appointment please ring 01623 637225. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission of the owner must be sought. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries).

Our emergency telephone number is 01623 646333.

Key

Disused Adit or Mineshaft

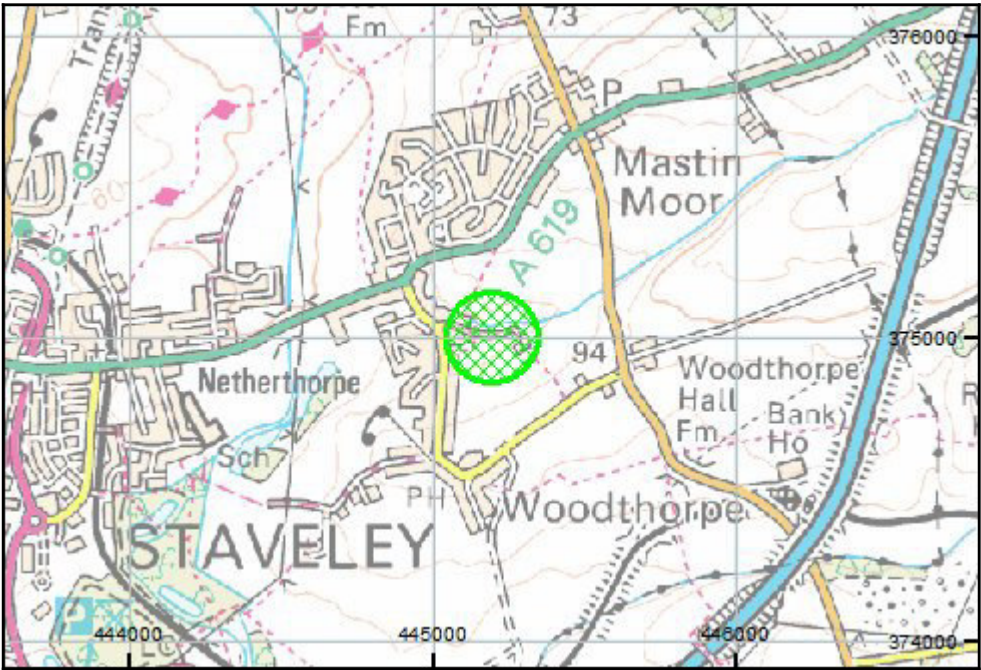


**Mine Entry Data (continued)**

|                                    |  |
|------------------------------------|--|
| Shaft/adit:                        | Shaft  |
| Reference:                         | 445375-014                                   |
| Source:                            | Located                                      |
| Colliery name:                     | Unknown                                      |
| Entry name:                        | Unknown                                      |
| Date abandoned:                    | Unknown                                      |
| Depth of superficial deposits (m): | Unknown                                      |
| Depth of shaft (m):                | 6.1  |
| Diameter of shaft (m):             | 2.4  |
| Probable adit azimuth:             | Not Applicable                               |
| Treatment details:                 | was filled with 40mm clean limestone in 1994 |
| Conveyance:                        | Not Applicable                               |
| Easting:                           | 445131                                       |
| Northing:                          | 375034                                       |
| Other information:                 | None   |

Location map

Approximate position of enquiry



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This plan shows the approximate location of the disused mine entry / entries referred to in the attached mining report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A DTI leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by telephoning 0845 762 6848.

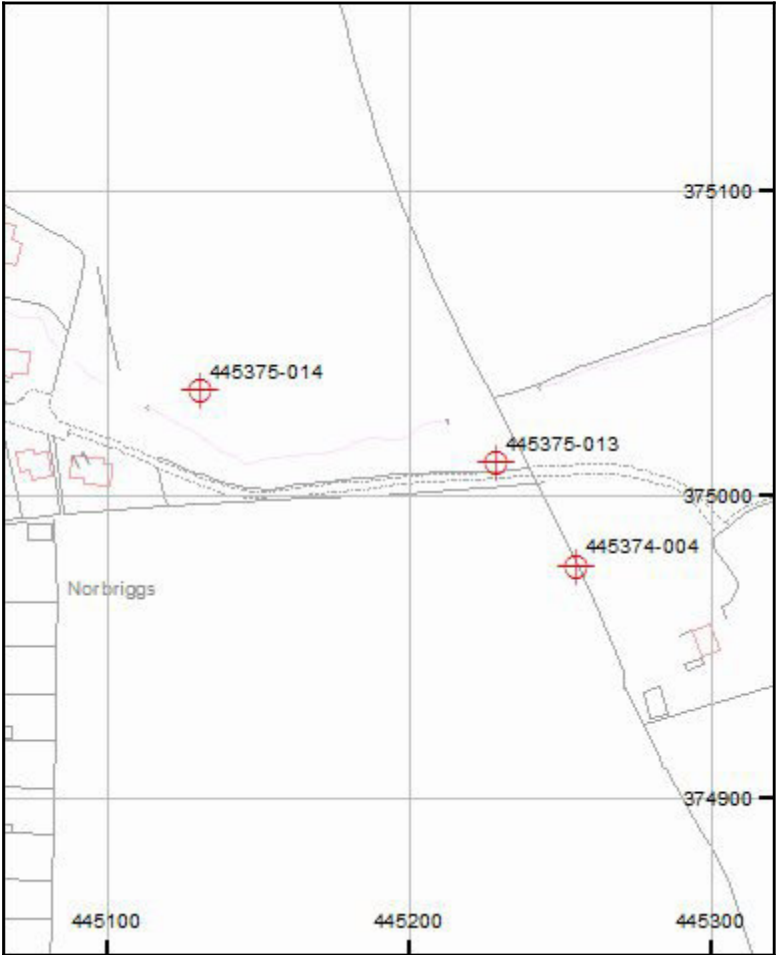
If you wish to discuss the relevance of any of the information contained in the attached report you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wish to examine the source plans from which the information has been taken these are available at our Mansfield office, free of charge by prior appointment, telephone 01623 637235. Should you or your advisor wish to carry out any physical investigations that may enter, disturb or interfere with any disused mine entry the prior permission of the owner must be sought. For coal mine entries the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries).

Our emergency telephone number at all times is 01623 646333.

Key

Disused Adit or Mineshaft





# IDOM

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