GROUNDSMITHS
GEOTECHNICAL ENGINEERS

Completion Report for the Treatment of Mine Workings

LAND OFF HIGHSTONE LANE, WORSBOROUGH, BARNSLEY

Project Ref: GUK-0925-01

PROJECT:

Residential Development

REPORT REFERENCE:

GUK-0925-01/Rp-002

SITE REFERENCE:

Land off Highstone Lane
Worsbrough
Barnsley

CLIENT:

Mr M. Hague

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1 INTRODUCTION

1.1 Appointment

Groundsmiths (UK) Ltd ('Groundsmiths') were appointed by Mr M. Hague (the 'Client') % Demolition & Geotechnical Limited ('D&G') to compile a Completion Report (the 'Report') in relation to a programme of shallow mine workings treatment that was undertaken at the Client's property on Highstone Lane, Worsbrough, Barnsley (herein referred to as the 'Site').

Groundsmiths have prepared this Report for the sole use of the Client that commissioned it in accordance with the agreement under which our services are performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report. Any unauthorised third parties using the information presented do so entirely at their own risk and are duly excluded from any warranty, duty of care or skill.

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1.2 Report Context & Status

An account of the mining legacy assessment and investigation phases for the Site in relation to the Client's development proposals were provided in the previously issued *Treatment of Mine Workings Specification* (the 'Specification') [1]. That document made reference to an initial Coal Mining Risk Assessment prepared by *Design It – Structural Solutions Ltd* in 2023 [2] and further phase of assessment and intrusive ground investigation undertaken in 2025 by *Silkstone Environmental Ltd* ('Silkstone') [3].

It is not the intention of this Report to reproduce the content of previously issued documentation, so reference should be made to them as required, although in summary the following salient details may be given:

1. The Site was noted to be underlain by Carboniferous-age mudstone, siltstone, and sandstone deposits of the Pennine Middle Coal Measures, but specifically undifferentiated mudstone which lies around the Abdy Coal (the 'Abdy');

2. Four rotary open-hole boreholes (BH01 – BH04) were completed along with the excavation of three trial trenches (TP01 – TP03). Borehole BH01 was completed to 30.0m bgl for the purposes of identifying the depth to the Abdy and any other seams below. Data suggested the presence of intact coal of the Abdy from between 1.2-2.3m bgl at that position, with there being no other seam to depth. Borehole BH02 recorded thin (roof) coal and workings in the Abdy from between 2.5m bgl and 3.5m bgl, whilst Borehole BH03 recorded intact coal of the Abdy from between 2.7m bgl and 3.5m bgl, and a separate coal (0.5m thick) from between 7.5m bgl and 8.5m bgl (*this deeper coal was assumed to be the Top Beamshaw*). Borehole BH04 recorded intact coal of the Abdy between 1.8m bgl and 2.8m bgl, and a separate coal (0.2m

thick) between 7.3m bgl and 7.5m bgl (*this deeper coal was assumed to be that of the Top Beams haw, too*);

3. Six adits and a mine shaft were recorded on or immediately adjacent to the Site. Trial excavation TP01 completed at the southern end of the Site recorded supposed evidence of an adit to a thickness of 1.15m, and for it to have been backfilled with grey gravelly clay. Trial excavation TP02, positioned along the western boundary and immediately adjacent to the proposed dwelling, did not record any evidence of any adit and was assumed to be too deep, whilst TP03 reportedly recorded evidence of mine entries 434404-05 and 434404-016;

4. Silkstone indicated in their report that a programme of drill and grout would be required to stabilise the shallow coal workings as identified;

5. Silkstone indicated that treatment of adit 434404-14, located on the edge of the driveway, may need to be completed. They also indicated, given that it could not be located during the investigation, that further works to prove the presence, depth, and direction of adit 434404-13 be completed;

6. Additionally, Silkstone recorded a maximum carbon dioxide concentration of 6.7%v/v (BH-02) and a maximum flow rate of 0.8 l/hr (BH-03). Given the exceedance of the BS8485 [4] upper threshold concentration of 5.0%v/v, precautions in construction to mitigate the ingress of carbon dioxide to the dwelling were identified (NOTE: This Report does not relate to the assessment or monitoring of ground gases, nor does it provided details of any remedial measures that may be required in construction. Any such works as required should be undertaken by others under commission from the Client);

On the basis of the (albeit limited) investigation data, the aforementioned Specification was prepared in relation to the area of proposed built-development (i.e. house footprint and driveway). This specified the programme of grout consolidation to be undertaken, in general accordance with guidelines prescribed in current CIRIA documentation[1], so that betterment of the development's overall stability could be achieved.

The grouting layout to be completed is appended as Figure 0925-01-003 for information. Given the ground investigation data, it was proposed that grouting would commence on a standard 3.0m x 3.0m square grid primary borehole pattern, with this extending to 3.0m beyond each building line wherever possible. Secondary grout borehole positions at 6.0m x 6.0m offset (so 4.24m on the diagonal) were to be completed across the external driveway/access area. It was indicated that where heavily disturbed ground was encountered, and/or where grout takes were found to be high, a tighter grid of treatment holes would be needed. Furthermore, and as indicated on the grout positions plan, additional drilled positions for grout consolidation were proposed subject to where/if adits 013 and 014 were encountered during the works.

[1] Parry, D. and Chiverrell, C. (eds) (2019). Abandoned Mine Workings Manual. C758D. CIRIA, London, UK (ISBN: 978-0-86017-765-4).

As always, the intention of such works is to ensure that no significant surficial disturbance can manifest in the post-treatment phase [2], whilst demonstrating to the LPA that the Site is, or can be made, safe to meet the requirements of the National Planning Policy Framework[3], namely paragraphs 196 and 197 (*'Ground Conditions and Pollution'*), which states (in relation to mining legacy anyway) that planning policies and decisions should ensure that:

> **Para.196:** a) *a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);*
>
> **Para.196:** c) *adequate site investigation information, prepared by a competent person, is available to inform the assessments;*
>
> **Para.197:** *Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner*.

Groundsmiths were subsequently appointed on behalf of the Client by D&G to have some oversight of the treatment works and to compile the validation data presented herein.

1.3 Reporting Limitations

The reporting limitations detailed in Section 5, in addition to any other specific limitations stated in the Report text, shall apply.

[2] Grout consolidation of mine workings is not designed to add or increase ground strength, it is designed to stabilise (bind together) the soils, infill any voids, and prevent the migration of weakness.

[3] Ministry of Housing, Communities & Local Government (2024; amended 7th February 2025). National Planning Policy Framework. https://www.gov.uk/government/publications/national-planning-policy-framework--2, 12th December.

2 DRILLING & GROUTING WORKS

2.1 Ground Conditions & Mining Legacy

Sixty-three on-grid positions were completed, these being indicated on Figure 0925-01-003. The terminal depth for each hole was 10m bgl, with this being typically to between 2.0m and 3.0m below the deepest recorded coal.

A visualisation of the condition of the coals encountered at each of the on-grid positions is shown on Figure 0925-01-004, whilst a summary of the individual drilling records is provided in Table 2.1, below and overleaf. A copy of the complete set of drilling records provided by D&G is given in Appendix A. It should be noted that some regrading and soils excavation works had been undertaken prior to the commencement of drilling, so ground elevations (and therefore the recorded depth to coal(s)) varies across the Site.

Table 2.1 - Summary of Proven Mining Legacy (On-grid)

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^		
			From	To	Aggregate Height	From	To	Thickness
A1	10	No shallow depth coal. Intact coal recorded between 7.3-7.5m bgl						
A2	10	Intact coal recorded between 1.8-2.8m bgl and 6.8-7.0m bgl						
A3	10	Intact coal recorded between 2.0-2.9m bgl and 6.7-6.9m bgl						
A4	10	Intact coal recorded between 0.5-1.5m bgl and 6.3-6.6m bgl						
A5	10	Intact coal recorded between 0.4-1.3m bgl and 6.2-6.5m bgl						
B1	10	No shallow depth coal. Intact coal recorded between 7.5-7.7m bgl						
B2	10	Intact coal recorded between 1.9-3.0m bgl and 6.9-7.1m bgl						
B3	10	Intact coal recorded between 2.0-3.1m bgl and 6.9-7.1m bgl						
B4	10	Intact coal recorded between 0.7-1.7m bgl and 6.5-6.7m bgl						
B5	10	Intact coal recorded between 0.8-1.7m bgl and 6.6-6.8m bgl						
C1	10	No shallow depth coal. Intact coal recorded between 7.5-7.7m bgl						
C2	10	Intact coal recorded between 2.0-3.0m bgl and 7.0-7.2m bgl						
C3	10	Intact coal recorded between 1.8-2.0m bgl. Soft strata recorded 2.0-2.7m bgl. No loss of flush						
C4	10	Intact coal recorded between 0.6-1.4m bgl and 6.6-6.9m bgl						
C5	10	Intact coal recorded between 0.7-1.4m bgl and 6.6-6.8m bgl						
D1	10	No shallow depth coal. Intact coal recorded between 7.6-7.8m bgl						
D2	10	Intact coal recorded between 1.7-2.6m bgl and 6.7-7.1m bgl						
D3	10	Intact coal recorded between 1.5-2.4m bgl and 6.8-7.2m bgl						
D4	10	Intact coal recorded between 0.6-1.4m bgl and 6.7-6.9m bgl						
D5	10	Intact coal recorded between 0.5-1.3m bgl and 6.6-6.8m bgl						
E1	10	Soft strata recorded 2.8-4.0m bg. No loss of flush. Intact coal recorded between 7.7-7.9m bgl						

Table Contd./

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^			
			From	To	Aggregate Height	From	To	Thickness	
E2	10	Intact coal recorded between 0.5-1.1m bgl and 6.6-6.8m bgl							
E3	10	Intact coal recorded between 0.4-1.1m bgl and 6.6-6.8m bgl							
E4	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-6.9m bgl							
E5	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-6.9m bgl							
F1	10	No shallow depth coal. Soft strata recorded 3.0-4.4m bgl. No loss of flush. No deeper coal							
F2	10	Soft strata at surface. No shallow depth coal. Intact coal recorded between 6.5-6.9m bgl							
F3	10	No shallow depth coal. Intact coal recorded between 6.7-6.9m bgl							
F4	10	Intact coal recorded between 0.6-1.6m bgl and 6.6-7.0m bgl							
F5	10	Intact coal recorded between 0.5-1.4m bgl and 6.6-6.9m bgl							
G1	10	Intact coal recorded between 3.0-4.0m bgl and 7.6-7.8m bgl							
G2	10	Intact coal recorded between 0.9-1.8m bgl and 6.6-6.9m bgl							
G3	10	Intact coal recorded between 0.8-1.5m bgl and 6.7-7.0m bgl							
G4	10	Intact coal recorded between 0.9-1.9m bgl and 6.6-7.0m bgl							
G5	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-7.0m bgl							
H1	10	Intact coal recorded between 3.2-4.2m bgl and 7.6-7.8m bgl							
H2	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-6.9m bgl							
H3	10	Intact coal recorded between 0.6-1.5m bgl and 6.6-6.9m bgl							
H4	10	Intact coal recorded between 0.5-1.4m bgl and 6.5-6.8m bgl							
H5	10	Intact coal recorded between 0.4-1.3m bgl and 6.5-6.8m bgl							
J1	10	Intact coal recorded between 3.4-4.3m bgl and 7.6-7.8m bgl							
J2	10	Intact coal recorded between 0.9-1.9m bgl and 6.2-6.5m bgl							
J3	10	Intact coal recorded between 1.0-2.0m bgl and 6.1-6.5m bgl							
J4	10	Intact coal recorded between 0.6-1.4m bgl and 6.2-6.5m bgl							
J5	10	Intact coal recorded between 0.5-1.4m bgl and 6.2-6.5m bgl							
K1	10	Intact coal recorded between 3.5-4.3m bgl and 7.7-7.9m bgl							
K3	10	Intact coal recorded between 0.8-1.5m bgl and 6.4-6.7m bgl							
K5	10	Intact coal recorded between 1.0-1.9m bgl and 6.1-6.4m bgl							
K9	10	No shallow depth coal. Intact coal recorded between 5.8-6.0m bgl							
K13	10	No shallow depth coal. Intact coal recorded between 5.6-5.9m bgl							
L2	10	Intact coal recorded between 1.2-2.1m bgl and 6.1-6.4m bgl							
L4	10	Intact coal recorded between 1.3-2.1m bgl and 6.0-6.4m bgl							
L6	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
L8	10	No shallow depth coal. Intact coal recorded between 5.7-5.9m bgl							
L10	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							

Table Contd./

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^		
			From	To	Aggregate Height	From	To	Thickness
L12	10	No shallow depth coal. Intact coal recorded between 5.7-5.9m bgl						
M1	10	Intact coal recorded between 3.6-4.4m bgl and 7.6-7.9m bgl						
M3	10	Intact coal recorded between 0.6-1.3m bgl and 6.4-6.7m bgl						
M5	10	Intact coal recorded between 0.8-1.4m bgl and 5.8-6.1m bgl						
M7	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl						
M9	10	No shallow depth coal. Intact coal recorded between 5.6-5.8m bgl						
M11	10	No shallow depth coal. Intact coal recorded between 5.6-5.8m bgl						
M13	10	No shallow depth coal. Intact coal recorded between 5.7-5.9m bgl						

*Including any topsoil, made ground, weathered natural strata, or fractured bedrock above the workings. Thicknesses are based on D&G's observations only.

^^Excluding recorded unsuitable cover thickness. Depth to engineering rockhead from surface is unknown.

2.2 Additional (Infill) Drilling Positions

The following additional boreholes, summarised in Tables 2.2 and 2.3 below and overleaf, were completed to allow for further assessment of the underlying ground conditions to the northern end of the Site and where the suspected mine entries were thought to cross/be.

Table 2.2 - Summary of Proven Mining Legacy (Infill Positions) – Northern Site area

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^		
			From	To	Aggregate Height	From	To	Thickness
AA1	10	No shallow depth coal. Intact coal recorded between 4.7-4.9m bgl						
AA2	10	Intact coal recorded between 2.1-3.0m bgl and 6.8-7.0m bgl						
AA3	10	Intact coal recorded between 2.2-3.2m bgl and 6.9-7.1m bgl						
AA4	10	Intact coal recorded between 1.5-2.3m bgl and 6.6-6.8m bgl						
AA5	10	Intact coal recorded between 1.6-2.4m bgl and 6.6-6.8m bgl						
AB1	10	No shallow depth coal. Intact coal recorded between 4.5-4.8m bgl						
AB2	10	No shallow depth coal. Intact coal recorded between 6.8-7.1m bgl						
AB3	10	No shallow depth coal. Intact coal recorded between 6.9-7.2m bgl						
AB4	10	Intact coal recorded between 1.7-2.5m bgl and 6.8-7.0m bgl						
AB5	10	Intact coal recorded between 1.8-2.6m bgl and 6.8-7.0m bgl						
AC1	10	No shallow depth coal. Intact coal recorded between 4.3-4.5m bgl						
AC2	10	No shallow depth coal. Intact coal recorded between 6.9-7.1m bgl						
AC3	10	No shallow depth coal. Intact coal recorded between 6.8-7.1m bgl						
AC4	10	No shallow depth coal. Intact coal recorded between 6.7-7.0m bgl						

Table Contd./

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^		
			From	To	Aggregate Height	From	To	Thickness
AC5	10	No shallow depth coal. Intact coal recorded between 6.7-7.0m bgl						
AD1	10	No coal recorded. Intact mudstone only						
AD2	10	No shallow depth coal. Intact coal recorded between 6.8-7.0m bgl						
AD3	10	No shallow depth coal. Intact coal recorded between 6.7-6.9m bgl						
AD4	10	Intact coal recorded between 2.4-3.2m bgl. No deeper coal						
AD5	10	Intact coal recorded between 2.5-3.2m bgl. No deeper coal						
AE1	15	No coal recorded. Intact mudstone only						
AE2	10	Intact coal recorded between 3.3-4.1m bgl. No deeper coal						
AE3	10	Intact coal recorded between 3.0-3.6m bgl. No deeper coal						
AE4	10	Intact coal recorded between 2.5-3.2m bgl. No deeper coal						
AE5	10	Intact coal recorded between 1.8-2.5m bgl. No deeper coal						

*Including any topsoil, made ground, weathered natural strata, or fractured bedrock above the workings. Thicknesses are based on D&G's observations only.

^^Excluding recorded unsuitable cover thickness. Depth to engineering rockhead from surface is unknown.

Table 2.3 - Summary of Proven Mining Legacy (Infill Positions) – Mine Entry Areas

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^		
			From	To	Aggregate Height	From	To	Thickness
G1/F1	10	Intact coal recorded between 3.0-4.0m bgl and 7.8-8.0m bgl						
E1/F1	10	Intact but soft coal recorded between 2.8-4.0m bgl and from 7.7-8.0m bgl						
D1/E1	10	Intact but soft coal recorded between 2.9-3.9m bgl and from 7.6-8.0m bgl						
D/E2	10	Intact coal recorded between 1.7-2.6m bgl and 6.7-7.0m bgl						
D/E3	10	Intact coal recorded between 1.5-2.3m bgl and 6.8-7.0m bgl						
D5/E4	10	Intact coal recorded between 0.5-1.4m bgl and 6.6-6.8m bgl						
D/E5	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-6.9m bgl						
E/F3	10	No shallow depth coal. Intact coal recorded between 6.7-6.9m bgl						
E3/F4	10	Intact coal recorded between 0.4-1.1m bgl and 6.6-6.9m bgl						
E/F5	10	Intact coal recorded between 0.5-1.3m bgl and 6.6-6.9m bgl						
F/G5	10	Intact coal recorded between 0.7-1.5m bgl and 6.7-7.0m bgl						
E1/F2	10	No shallow depth coal. Intact coal recorded between 6.6-6.9m bgl						
F2/G3	10	Intact coal recorded between 0.8-1.4m bgl and 6.6-6.9m bgl						
F3/G3	10	Intact coal recorded between 0.9-1.5m bgl and 6.6-6.8m bgl						
M2	10	Intact coal recorded between 0.6-1.4m bgl and 6.4-6.7m bgl						
L3	10	Intact coal recorded between 1.2-2.0m bgl and 6.2-6.5m bgl						

Table Contd./

Position on Grid	Drilled Length (m)	Unsuitable Cover Thickness (m)*	Soft / Broken Ground / Void (m)			Rock Cover (m)^^			
			From	To	Aggregate Height	From	To	Thickness	
M3/L4	10	Intact coal recorded between 0.9-1.6m bgl and 6.4-6.7m bgl							
M4	10	Intact coal recorded between 0.8-1.4m bgl and 5.9-6.2m bgl							
L5	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
L6/M6	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
M6	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
L7	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
L8/M7	10	No shallow depth coal. Intact coal recorded between 5.9-6.1m bgl							
M8	10	No shallow depth coal. Intact coal recorded between 5.8-6.1m bgl							
L9	10	No shallow depth coal. Intact coal recorded between 5.7-5.9m bgl							

*Including any topsoil, made ground, weathered natural strata, or fractured bedrock above the workings. Thicknesses are based on D&G's observations only.

^^Excluding recorded unsuitable cover thickness. Depth to engineering rockhead from surface is unknown.

^Cover thickness required assumes 10x the recorded aggregate height of workings in accordance with Parry, D. and Chiverrell, C. (eds) (2019).

The results of the on-grid drilling indicate the presence of a shallow seam of coal, broadly from 1.5-2.0m bgl, and a deeper seam of coal from around 6.0-7.0m bgl. As indicated above, however, there are elevational differences across the Site so there are records that show coal to be much nearer to the surface than would ordinarily have been expected.

The condition of the shallow depth coal appears to be relatively consistent, in that it is unworked and about 1.0m thick, but it is noted that there are numerous positions across the northern, central, and southern parts of the Site where it is absent; clay and/or mudstone was recorded in these positions. The deeper seam, again unworked, is observed to be more consistent (between 0.2-0.3m thick) but there were seven positions where it was not encountered and only mudstone was recorded to terminal depth. There are also a few positions (i.e. AE1 and AD1) where neither the shallow or underlying coal was encountered at all. This data indicates that the coal beneath the Site is variable and likely to have been subject to past geological conditions (e.g. erosion).

Additional investigation/treatment positions across the northern area (n = 25), within the central area (n = 13), and the southern area (n = 12) to confirm/discount the presence of the two mine entries encountered very similar ground conditions to the general on-grid holes. Some localised and sporadic soft strata was recorded, but there was no loss of flushing medium in any of the positions and no soils arisings indicative of backfill, waste coal, or other such historic mining material. Transects completed across the areas defined in green on Figure 0925-01-003 in the Specification recorded intact coal and intact bedrock materials to the terminal depth of 10m bgl.

In total, one hundred and thirteen boreholes were completed across the Site, with records provided by D&G indicating that a total of 1,135m of drilling was undertaken. No voids, broken ground, or other mining-induced weakness was apparent.

2.3 Other Mining Legacy & Geological Features

No significant evidence of displacement because of faulting was noted within the coal seams encountered during the works. The depths to working were largely consistent and appeared to be concomitant with the general dip of the bedrock.

2.4 Ground Gas

Throughout the works, monitoring for ground gases was undertaken by D&G at the drilling rig. Groundsmiths have been informed that no harmful levels of ground gas (i.e. CO_2, CH_4 and/or H_2S) were measured at any time during the works.

2.5 Grouting

With there being no shallow underground mining legacy proven/present, it was expected that grout takes to each of the injection positions would be very low (at or around 0.11 tonnes/hole) and that the provision of grout would be for the purpose of reinstating each hole to finished. That said, the cement used in the grouting/reinstatement operation was Ordinary Portland Cement (OPC) complying with BSEN197-1 [5]. Pulverised Fuel Ash (PFA) was sourced from Uniper UK at Ratcliffe Power Station, Nottinghamshire.

The grout mix used throughout the works was G10. This mix is considered acceptable for the pressure grouting of soft strata, broken ground and localised voids, and for the general infilling of and reinstatement to treatment boreholes. Individual grout takes for each borehole are indicated on the grouting records in Appendix B.

2.6 Validation

With there being no shallow underground mining legacy proven/present, the need for the completion of flow (slump and bleed) testing, cube testing in accordance with BS EN 12390 [6,7,8], and check drilling was not identified. For completeness, however, confirmation certification of the strength profile of the injected grout is provided in Appendix C.

3 CONCLUSIONS

Extensive remedial activities were undertaken by D&G to locate and identify the shallow mining legacy as reported by Silkstone in 2025. Works were undertaken in accordance with the established methodologies prescribed for the treatment of shallow mining legacy, as are routinely undertaken on residential development sites affected by instability/potential instability. It is understood that no objections to the approach to be taken were raised by the regulators or other such third party prior to the undertaking of the works.

Borehole spacings to cover the dwelling and its associated access were as prescribed in the Specification, supplemented further a significant number of positions for the purpose of confirming/discounting the presence of the two mine entries alluded to by Silkstone.

All drilling was taken down through the floor of the deepest underlying coal to competent ground below at 10m bgl.

As indicated herein, a total of one hundred and thirteen positions were completed to facilitate the consolidation works for the Site. All of the borehole positions encountered intact Coal Measures soils to depth, and where present, intact coal. Some localised soft strata was recorded, and some positions had no coal/discontinuous coal, but this is not unusual given the variance that can occur due to geological processes.

There was no reported evidence of shallow mining legacy in any part of the Site. Validation works typically completed to assess the quality and effectiveness of the remedial activities described herein was not therefore required and no such data is presented. On the basis of information provided by D&G, it is considered that the Site may be determined as being safe and stable in accordance with the requirements of the NPPF. Comments and conclusions presented herein are considered reasonable on the basis of the Site-specific information reviewed.

NOTE: All other assessments required to facilitate construction of the development should be completed by others as directed by the Client and lie outside the scope of this Report.

4 REGULATORY APPROVAL

This Report has been compiled in accordance with good practice guidance for the assessment and management of land that has or may be affected by mining legacy.

NOTE: In accordance with NPPF Paragraph 197, responsibility for securing a safe development rests with the developer and/or landowner.

Works undertaken cannot be guaranteed to gain approval by the regulatory authorities, so a copy of this Report should be made available to the relevant organisations for comment prior to undertaking any irrecoverable works associated with the Site.

Where any construction activity has occurred on Site prior to the issuing of this Report and its review by relevant interested parties, all such works will have been completed at the Client's own risk.

5 REPORTING LIMITS

Groundsmiths were not involved with the assessment or implementation of the initial assessments and/or ground investigation works completed by third party consultants, as they were commissioned independently.

It is understood that the MRA issued the requisite permit to facilitate the treatment of mining legacy based upon the ground investigation data and the grouting layout as proposed in the Specification. Groundsmiths were not involved with the procurement of the permit.

Drill and grout operations were completed by D&G under direct commission with the Client. Groundsmiths had no influence over any financial or contractual obligations between D&G and the Client.

It is taken that all Site-specific data provided by D&G is reliable and representative of the ground conditions encountered, and the mitigation measures undertaken. It should be noted that Groundsmiths cannot independently confirm all of the data so verification provided in this Report is given in good faith and is subject to the limitations and constraints imposed by the methods and information sources described. No responsibility can be accepted for errors or omissions in the data provided by D&G or for any defects in their workmanship. On-Site records and observations made by D&G are supplemented herein with Groundsmiths' own records where necessary.

It should be noted that grout consolidation of mine workings is not designed to add or increase ground strength, it is designed to consolidate (bind together) weak soils, infill any voids, and therefore limit the potential for the migration of mining legacy artefacts to the surface.

Groundsmiths provide no comment or approval with respect to any earthworks activities to be undertaken by the Client within the area this Report relates and how such activities may affect the stability and longevity of the development and its associated infrastructure. By association, Groundsmiths provide no comment or approval with respect to the design, suitability, and/or construction of the foundations to be adopted for the plots this Report relates.

Groundsmiths offer no indemnity for where grout consolidation works could not be successfully completed.

Where opinions expressed in this Report are based on current available guidelines and legislation, no liability can be accepted for the effects of any future changes to such guidelines and legislation.

Where any amendments to the work to be undertaken on-Site have been made, these were based on specific ground conditions encountered by D&G at the time.

This Report does not constitute an invasive plant species survey, general ground investigation to facilitate foundation design, or contamination (soil and ground gas) assessment. Further works to assess these may be required as part of any pre-occupancy planning condition and

should therefore be undertaken by suitably qualified experts under instruction from the Client.

Groundsmiths reserve the right to edit and/or retract any comment or conclusion made in this Report should any further information, with respect to the Site, become available.

Groundsmiths disclaim any obligation to update the Report for events taking place after the time during which the works were carried out.

Groundsmiths accept no responsibility if any further works, as requested by the LPA in the discharge of their duty of care, are not implemented by the Client.

This Report cannot be reassigned to a third party without consultation being made with Groundsmiths. A nominal administration fee will be applicable for each reassignment.

6 INFORMATION SOURCES

The following references have been cited in the production of this Report:

1 Groundsmiths (UK) Ltd (2025). Treatment of Mine Workings Specification. Land off Highstone Lane, Worsbrough, Barnsley. Ref: GUK-0925-01/Rp-001/V1, dated 14th September.

2 Design It – Structural Solutions Ltd (2023). Coal Mining Risk Assessment.

3 Silkstone Environmental Ltd (2025). Updated Phase 2 Coal Mining Risk Assessment. Land at Highstone Lane, Worsbrough, Barnsley, South Yorkshire, S70 6SD. Ref: 24319/P2CMRA/2, dated 28th July.

4 BS8485 (2015+A1:2019) Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings.

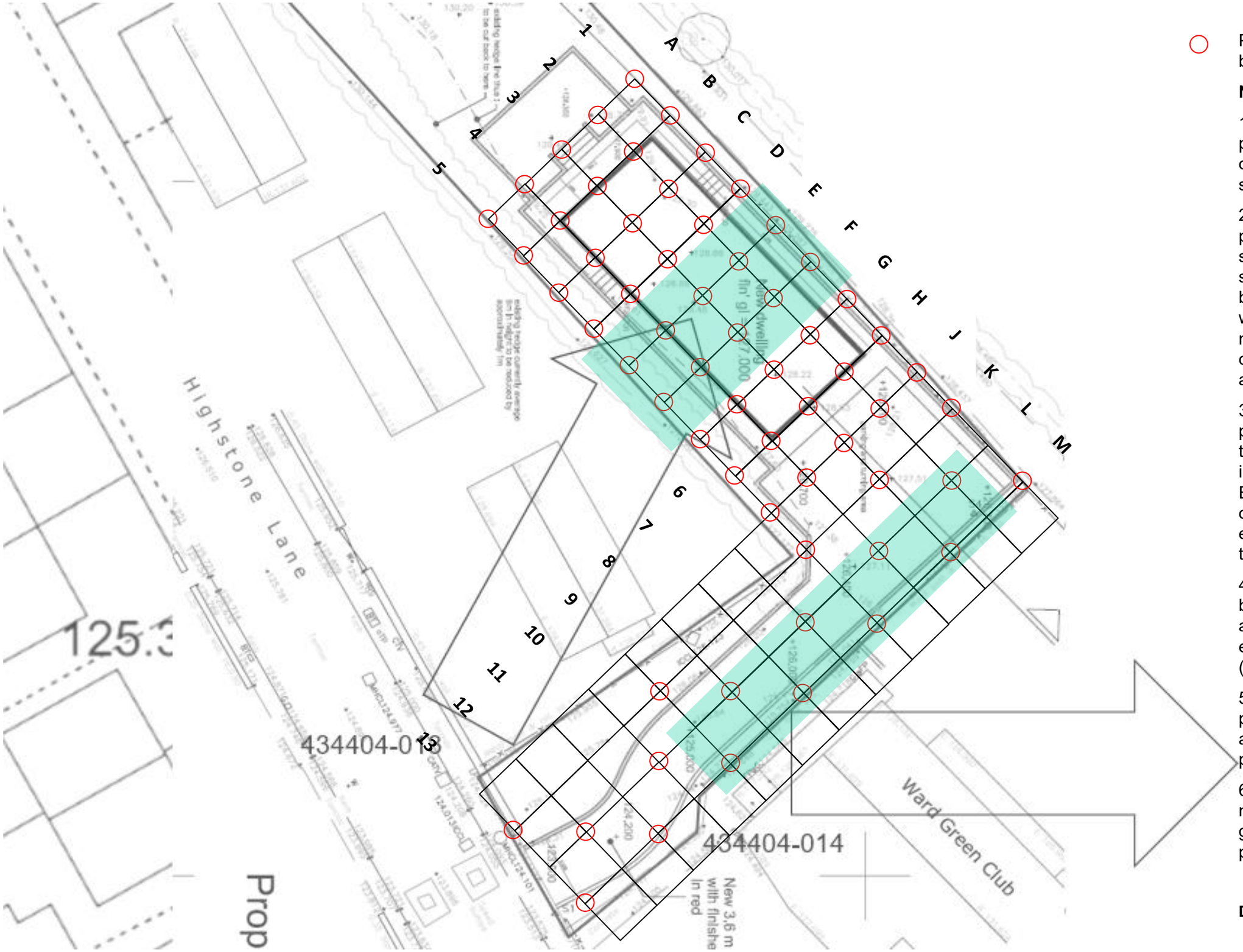
5 BS EN 197-1 (2011: incorporating corrigenda November 2011, October 2015 and February 2019). Cement. Part 1: Specifications and Conformity Criteria for Common Cements.

6 BS EN 12390-2 (2019). Testing Hardened Concrete. Making and Curing Specimens for Strength Testing.

7 BS EN 12390-3 (2019). Testing Hardened Concrete. Compressive Strength of Test Specimens.

8 BS EN 12390-7 (2019). Testing Hardened Concrete. Density of Hardened Concrete.

FIGURES & DRAWINGS



Proposed grout injection borehole positions.

NOTES:

1. Grout injection borehole positions are to be established on site by D&G via coordinated setting out.

2. Primary grout borehole positions are 3m centred square grid pattern beneath the structure, extending to 3m beyond each building line where possible. Some positions may need to be moved or drilled on an angle, subject to any access constraints.

3. Any additional infill grout positions on the grid will need to be established by D&G, and in consultation with the Engineer, during the works if other significant workings are encountered or where grout takes are high.

4. Additional positions may also be required subject to where/if adits 013 and 014 are encountered during the works (in areas highlighted green).

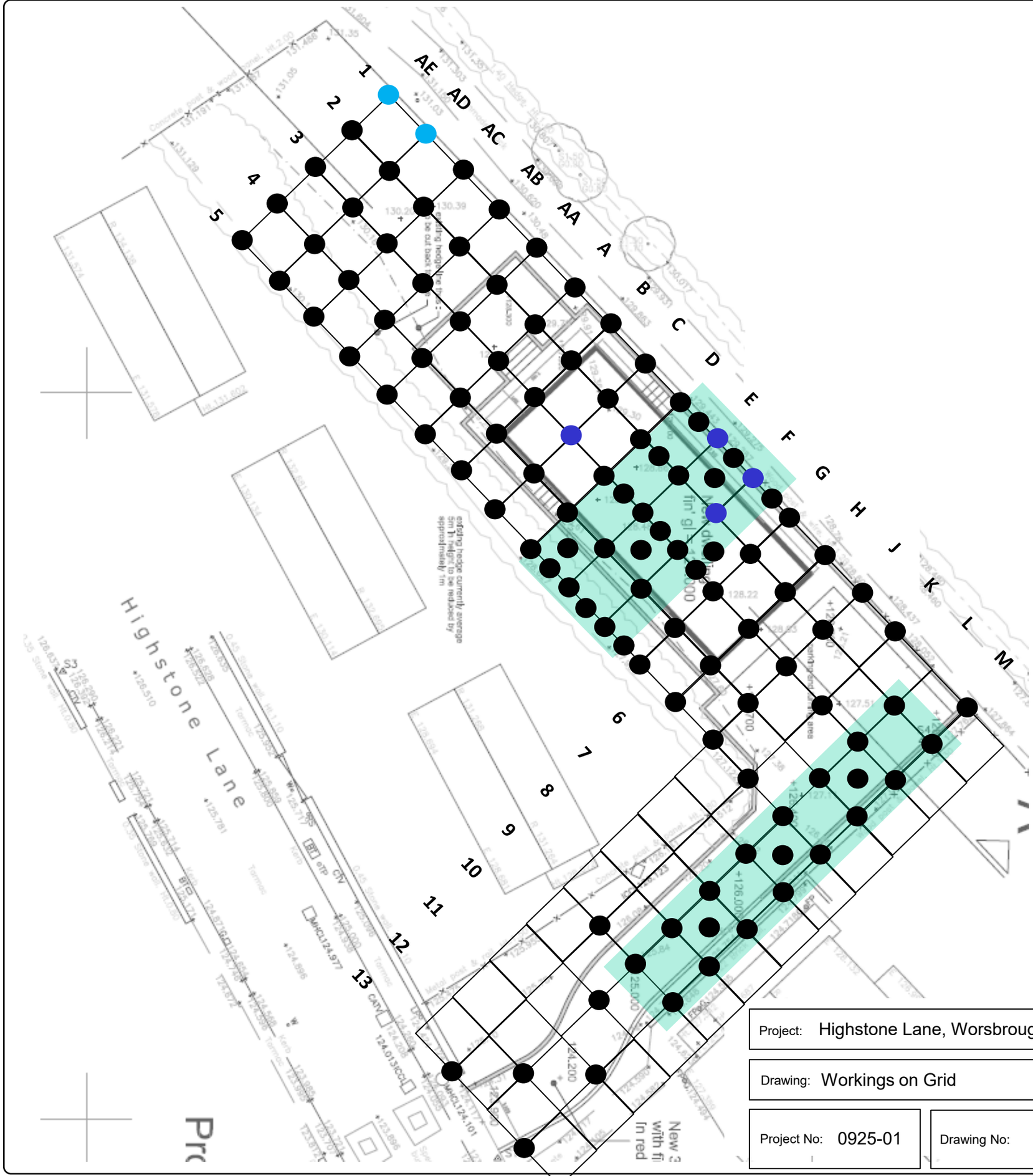
5. Secondary grid boreholes positions for external driveway and parking areas are proposed at 6m offset;

6. Check-drilling positions will need to be established on the grid once all other grout positions have been completed.

Do not scale from this drawing

Source: Peter Dimberline (2023). Proposed site layout showing landscape features. Ref: 2022/03/05, dated September.

Project: Highstone Lane, Worsbrough		Client: Mr M. Hague	
Drawing: Grout Positions Plan		Drawn/Checked: AJS	GROUNDSMITHS GEOTECHNICAL ENGINEERS
Project No: 0925-01	Drawing No: 003	Date: Sept. 2025	



Project: Highstone Lane, Worsbrough		Client: Mr M. Hague	
Drawing: Workings on Grid		Drawn/Checked: AJS	GROUNDSMITHS GEOTECHNICAL ENGINEERS
Project No: 0925-01	Drawing No: 004	Date: Jan. 2026	

APPENDIX A

D&G Drilling Records

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 7 - 10 - 25 | SHEET: 1 OF 2

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
A2	0.00 - 1.80	Clay
	1.80 - 2.80	Coal
	2.80 - 6.80	Mudstone
	6.80 - 7.00	Coal
	7.00 - 10.00	Mudstone
B2	0.00 - 1.90	Clay
	1.90 - 3.00	Coal
	3.00 - 6.90	Mudstone
	6.90 - 7.10	Coal
	7.10 - 10.00	Mudstone
C2	0.00 - 2.00	Clay
	2.00 - 3.00	Coal
	3.00 - 7.00	Mudstone
	7.00 - 7.20	Coal
	7.20 - 10.00	Mudstone
A3	0.00 - 2.00	Clay
	2.00 - 2.90	Coal
	2.90 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
B3	0.00 - 2.00	Clay
	2.00 - 3.10	Coal
	3.10 - 6.90	Mudstone
	6.90 - 7.10	Coal
	7.10 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
C3	0.00 - 1.80	Clay
	1.80 - 2.00	Coal
	2.00 - 2.70	Soft Ground
	2.70 - 10.00	Hard Strata
D2	0.00 - 1.70	Clay
	1.70 - 2.60	Coal
	2.60 - 6.70	Mudstone
	6.70 - 7.10	Coal
	7.10 - 10.00	Mudstone
D3	0.00 - 1.50	Clay
	1.50 - 2.40	Coal
	2.40 - 6.80	Mudstone
	6.80 - 7.20	Coal
	7.20 - 10.00	Mudstone
A4	0.00 - 0.50	Clay
	0.50 - 1.50	Coal
	1.50 - 6.30	Mudstone
	6.30 - 6.60	Coal
	6.60 - 10.00	Mudstone
A5	0.00 - 0.40	Clay
	0.40 - 1.30	Coal
	1.30 - 6.20	Mudstone
	6.20 - 6.50	Coal
	6.50 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	14	140		
PREVIOUS	0	0		
TO DATE	14	140		

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 7.11.25 | SHEET: 2 OF 2

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
B4	0.00 - 0.70	Clay
	0.70 - 1.70	Coal
	1.70 - 6.50	Mudstone
	6.50 - 6.70	Coal
	6.70 - 10.00	Mudstone
B5	0.00 - 0.80	Clay
	0.80 - 1.70	Coal
	1.70 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
C4	0.00 - 0.60	Clay
	0.60 - 1.40	Coal
	1.40 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone
C5	0.00 - 0.70	Clay
	0.70 - 1.40	Coal
	1.40 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D&G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 11-11-25 | SHEET: 1 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
M1	0.00 - 3.60	Clay
	3.60 - 4.40	Coal
	4.40 - 7.60	Mudstone
	7.60 - 7.90	Coal
	7.90 - 10.00	Mudstone
K1	0.00 - 3.50	Clay
	3.50 - 4.30	Coal
	4.30 - 7.70	Mudstone
	7.70 - 7.90	Coal
	7.90 - 10.00	Mudstone
S1	0.00 - 3.40	Clay
	3.40 - 4.30	Coal
	4.30 - 7.60	Mudstone
	7.60 - 7.80	Coal
	7.80 - 10.00	Mudstone
H1	0.00 - 3.20	Clay
	3.20 - 4.20	Coal
	4.20 - 7.60	Mudstone
	7.60 - 7.80	Coal
	7.80 - 10.00	Mudstone
G1	0.00 - 3.00	Clay
	3.00 - 4.00	Coal
	4.00 - 7.60	Mudstone
	7.60 - 7.80	Coal
	7.80 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
F1	0.00 - 3.00	Clay
	3.00 - 4.40	Soft Ground
	4.40 - 10.00	Hard Strata
E1	0.00 - 2.80	Clay
	2.80 - 4.00	Soft Ground
	4.00 - 7.70	Mudstone
	7.70 - 7.90	Coal
	7.90 - 10.00	Mudstone
D1	0.00 - 2.60	Clay
	2.60 - 7.60	Mudstone
	7.60 - 7.80	Coal
	7.80 - 10.00	Mudstone
C1	0.00 - 2.40	Clay
	2.40 - 7.50	Mudstone
	7.50 - 7.70	Coal
	7.70 - 10.00	Mudstone
B1	0.00 - 2.40	Clay
	2.40 - 7.50	Mudstone
	7.50 - 7.70	Coal
	7.70 - 10.00	Mudstone
A1	0.00 - 2.20	Clay
	2.20 - 7.30	Mudstone
	7.30 - 7.50	Coal
	7.50 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	27	270		
PREVIOUS	14	140		
TO DATE	41	410		

D&G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 11-11-25 | SHEET: 2 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
D4	0.00 - 0.60	Clay
	0.60 - 1.40	Coal
	1.40 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
D5	0.00 - 0.50	Clay
	0.50 - 1.30	Coal
	1.30 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
E5	0.00 - 0.70	Clay
	0.70 - 1.50	Coal
	1.50 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
E4	0.00 - 0.70	Clay
	0.70 - 1.50	Coal
	1.50 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
E3	0.00 - 0.40	Clay
	0.40 - 1.10	Coal
	1.10 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
E2	0.00 - 0.50	Clay
	0.50 - 1.10	Coal
	1.10 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
F2	0.00 - 1.70	Soft Ground
	1.70 - 6.50	Mudstone
	6.50 - 6.90	Coal
	6.90 - 10.00	Mudstone
G2	0.00 - 0.90	Clay
	0.90 - 1.80	Coal
	1.80 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone
F3	0.00 - 0.60	Clay
	0.60 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
G3	0.00 - 0.80	Clay
	0.80 - 1.50	Coal
	1.50 - 6.70	Mudstone
	6.70 - 7.00	Coal
	7.00 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

DATE: 11 - 11 - 25 | SHEET: 3 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
F4	0.00 - 0.60	Clay
	0.60 - 1.60	Coal
	1.60 - 6.60	Mudstone
	6.60 - 7.00	Coal
	7.00 - 10.00	Mudstone
F5	0.00 - 0.50	Clay
	0.50 - 1.40	Coal
	1.40 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone
G4	0.00 - 0.90	Clay
	0.90 - 1.90	Coal
	1.90 - 6.60	Mudstone
	6.60 - 7.00	Coal
	7.00 - 10.00	Mudstone
G5	0.00 - 0.70	Clay
	0.70 - 1.50	Coal
	1.50 - 6.70	Mudstone
	6.70 - 7.00	Coal
	7.00 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
H5	0.00 - 0.40	Clay
	0.40 - 1.30	Coal
	1.30 - 6.50	Mudstone
	6.50 - 6.80	Coal
	6.80 - 10.00	Mudstone
H4	0.00 - 0.50	Clay
	0.50 - 1.40	Coal
	1.40 - 6.50	Mudstone
	6.50 - 6.80	Coal
	6.80 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 12-11-25 | SHEET: 1 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
H3	0.00-0.60	Clay
	0.60-1.50	Coal
	1.50-6.60	Mudstone
	6.60-6.90	Coal
	6.90-10.00	Mudstone
H2	0.00-0.70	Clay
	0.70-1.50	Coal
	1.50-6.70	Mudstone
	6.70-6.90	Coal
	6.90-10.00	Mudstone
J2	0.00-0.90	Clay
	0.90-1.90	Coal
	1.90-6.20	Mudstone
	6.20-6.50	Coal
	6.50-10.00	Mudstone
J3	0.00-1.00	Clay
	1.00-2.00	Coal
	2.00-6.10	Mudstone
	6.10-6.50	Coal
	6.50-10.00	Mudstone
J4	0.00-0.60	Clay
	0.60-1.40	Coal
	1.40-6.20	Mudstone
	6.20-6.50	Coal
	6.50-10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
J5	0.00-0.50	Clay
	0.50-1.40	Coal
	1.40-6.20	Mudstone
	6.20-6.50	Coal
	6.50-10.00	Mudstone
L2	0.00-1.20	Clay
	1.20-2.10	Coal
	2.10-6.10	Mudstone
	6.10-6.40	Coal
	6.40-10.00	Mudstone
K3	0.00-0.80	Clay
	0.80-1.50	Coal
	1.50-6.40	Mudstone
	6.40-6.70	Coal
	6.70-10.00	Mudstone
M3	0.00-0.60	Clay
	0.60-1.30	Coal
	1.30-6.40	Mudstone
	6.40-6.70	Coal
	6.70-10.00	Mudstone
L4	0.00-1.30	Clay
	1.30-2.10	Coal
	2.10-6.00	Mudstone
	6.00-6.40	Coal
	6.40-10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	22	220		
PREVIOUS	41	410		
TO DATE	63	630		

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

DATE: 12-11-25 | SHEET: 2 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
K5	0.00 - 1.00	Clay
	1.00 - 1.90	Coal
	1.90 - 6.10	Mudstone
	6.10 - 6.40	Coal
	6.40 - 10.00	Mudstone
M5	0.00 - 0.80	Clay
	0.80 - 1.40	Coal
	1.40 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone
K13	0.00 - 1.60	Clay
	1.60 - 5.60	Mudstone
	5.60 - 5.90	Coal
	5.90 - 10.00	Mudstone
M13	0.00 - 1.50	Clay
	1.50 - 5.70	Mudstone
	5.70 - 5.90	Coal
	5.90 - 10.00	Mudstone
L12	0.00 - 1.60	Clay
	1.60 - 5.70	Mudstone
	5.70 - 5.90	Coal
	5.90 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
M11	0.00 - 1.50	Clay
	1.50 - 5.60	Mudstone
	5.60 - 5.80	Coal
	5.80 - 10.00	Mudstone
L10	0.00 - 1.70	Clay
	1.70 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone
K9	0.00 - 1.80	Clay
	1.80 - 5.80	Mudstone
	5.80 - 6.00	Coal
	6.00 - 10.00	Mudstone
M9	0.00 - 1.90	Clay
	1.90 - 5.60	Mudstone
	5.60 - 5.80	Coal
	5.80 - 10.00	Mudstone
L8	0.00 - 1.60	Clay
	1.60 - 5.70	Mudstone
	5.70 - 5.90	Coal
	5.90 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

DATE: 12-11-25 | SHEET: 3 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
M7	0.00 - 1.70	Clay
	1.70 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone
LG	0.00 - 1.80	Clay
	1.80 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

DATE: 14 - 11 - 25 | SHEET: 1 OF 2

EQUIPMENT USED:

BH	DEPTH	STRATA DESCRIPTION
AA1	0.00 - 2.10	Clay
	2.10 - 4.70	Mudstone
	4.70 - 4.90	Coal
	4.90 - 10.00	Mudstone
AB1	0.00 - 2.40	Clay
	2.40 - 4.50	Mudstone
	4.50 - 4.80	Coal
	4.80 - 10.00	Mudstone
AC1	0.00 - 2.10	Clay
	2.10 - 4.30	Mudstone
	4.30 - 4.50	Coal
	4.50 - 10.00	Mudstone
AD1	0.00 - 2.30	Clay
	2.30 - 10.00	Mudstone
AE1	0.00 - 2.10	Clay
	2.10 - 15.00	Mudstone
AE2	0.00 - 2.00	Clay
	2.00 - 3.30	Mudstone
	3.30 - 4.10	Coal
	4.10 - 10.00	Mudstone
AE4	0.00 - 2.50	Clay
	2.50 - 3.20	Coal
	3.20 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
AE3	0.00 - 2.00	Clay
	2.00 - 3.00	Mudstone
	3.00 - 3.60	Coal
	3.60 - 10.00	Mudstone
AE5	0.00 - 1.80	Clay
	1.80 - 2.50	Coal
	2.50 - 10.00	Mudstone
AA5	0.00 - 1.60	Clay
	1.60 - 2.40	Coal
	2.40 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
AA4	0.00 - 1.50	Clay
	1.50 - 2.30	Coal
	2.30 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
AB5	0.00 - 1.80	Clay
	1.80 - 2.60	Coal
	2.60 - 6.80	Mudstone
	6.80 - 7.00	Coal
	7.00 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	13	135		
PREVIOUS	63	630		
TO DATE	76	765		

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

DATE: 14-11-25 | SHEET: 2 OF 2

EQUIPMENT USED:

BH	DEPTH	STRATA DESCRIPTION
AB4	0.00 - 1.70	Clay
	1.70 - 2.50	Coal
	2.50 - 6.80	Mudstone
	6.80 - 7.00	Coal
	7.00 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

DATE: 18-11-25 | SHEET: 1 OF 3

EQUIPMENT USED:

BH	DEPTH	STRATA DESCRIPTION
AC5	0.00-2.30	Clay
	2.30-6.70	Mudstone
	6.70-7.00	Coal
	7.00-10.00	Mudstone
AC4	0.00-2.20	Clay
	2.20-6.70	Mudstone
	6.70-7.00	Coal
	7.00-10.00	Mudstone
AD5	0.00-2.50	Clay
	2.50-3.20	Coal
	3.20-10.00	Mudstone
AD4	0.00-2.40	Clay
	2.40-3.20	Coal
	3.20-10.00	Mudstone
G1/F1	0.00-3.00	Clay
	3.00-4.00	Coal
	4.00-7.80	Mudstone
	7.80-8.00	Coal
	8.00-10.00	Mudstone
E1/F1	0.00-2.80	Clay
	2.80-4.00	Soft Coal trace's
	4.00-7.70	Mudstone
	7.70-8.00	Coal
	8.00-10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
D1/E1	0.00-2.90	Clay
	2.90-3.90	Soft Coal trace's
	3.90-7.60	Mudstone
	7.60-7.80	Coal
	7.80-10.00	Mudstone
AD3	0.00-2.10	Clay
	2.10-6.70	Mudstone
	6.70-6.90	Coal
	6.90-10.00	Mudstone
AD2	0.00-2.00	Clay
	2.00-6.80	Mudstone
	6.80-7.00	Coal
	7.00-10.00	Mudstone
AC3	0.00-2.40	Clay
	2.40-6.80	Mudstone
	6.80-7.10	Coal
	7.10-10.00	Mudstone
AC2	0.00-2.30	Clay
	2.30-6.90	Mudstone
	6.90-7.10	Coal
	7.10-10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	23	230		
PREVIOUS	76	765		
TO DATE	99	995		

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 18-11-25 | SHEET: 2 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
AB3	0.00 - 2.40	Clay
	2.40 - 6.90	Mudstone
	6.90 - 7.20	Coal
	7.20 - 10.00	Mudstone
AB2	0.00 - 2.30	Clay
	2.30 - 6.80	Mudstone
	6.80 - 7.10	Coal
	7.10 - 10.00	Mudstone
AA3	0.00 - 2.20	Clay
	2.20 - 3.20	Coal
	3.20 - 6.90	Mudstone
	6.90 - 7.10	Coal
	7.10 - 10.00	Mudstone
AA2	0.00 - 2.10	Clay
	2.10 - 3.00	Coal
	3.00 - 6.80	Mudstone
	6.80 - 7.00	Coal
	7.00 - 10.00	Mudstone
D/E2	0.00 - 1.70	Clay
	1.70 - 2.60	Coal
	2.60 - 6.70	Mudstone
	6.70 - 7.00	Coal
	7.00 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
D/E3	0.00 - 1.50	Clay
	1.50 - 2.30	Coal
	2.30 - 6.80	Mudstone
	6.80 - 7.00	Coal
	7.00 - 10.00	Mudstone
DS/E4	0.00 - 0.50	Clay
	0.50 - 1.40	Coal
	1.40 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
D/ES	0.00 - 0.70	Clay
	0.70 - 1.50	Coal
	1.50 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
E/F3	0.00 - 0.60	Clay
	0.60 - 6.70	Mudstone
	6.70 - 6.90	Coal
	6.90 - 10.00	Mudstone
E3/F4	0.00 - 0.40	Clay
	0.40 - 1.10	Coal
	1.10 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 18-11-25 | SHEET: 3 OF 3

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
E/FS	0.00-0.50	Clay
	0.50-1.30	Coal
	1.30-6.60	Mudstone
	6.60-6.90	Coal
	6.90-10.00	Mudstone
F/GS	0.00-0.70	Clay
	0.70-1.50	Coal
	1.50-6.70	Mudstone
	6.70-7.00	Coal
	7.00-10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: C6

DATE: 19-11-25 | SHEET: 1 OF 2

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
E1/F2	0.00 - 1.90	Clay
	1.90 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone
F2/G3	0.00 - 0.80	Clay
	0.80 - 1.40	Coal
	1.40 - 6.60	Mudstone
	6.60 - 6.90	Coal
	6.90 - 10.00	Mudstone
F3/G3	0.00 - 0.90	Clay
	0.90 - 1.50	Coal
	1.50 - 6.60	Mudstone
	6.60 - 6.80	Coal
	6.80 - 10.00	Mudstone
M2	0.00 - 0.60	Clay
	0.60 - 1.40	Coal
	1.40 - 6.40	Mudstone
	6.40 - 6.70	Coal
	6.70 - 10.00	Mudstone
L3	0.00 - 1.20	Clay
	1.20 - 2.00	Coal
	2.00 - 6.20	Mudstone
	6.20 - 6.50	Coal
	6.50 - 10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION
M3/L4	0.00 - 0.90	Clay
	0.90 - 1.60	Coal
	1.60 - 6.40	Mudstone
	6.40 - 6.70	Coal
	6.70 - 10.00	Mudstone
M4	0.00 - 0.80	Clay
	0.80 - 1.40	Coal
	1.40 - 5.90	Mudstone
	5.90 - 6.20	Coal
	6.20 - 10.00	Mudstone
L5	0.00 - 1.70	Clay
	1.70 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone
L6/M6	0.00 - 1.80	Clay
	1.80 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone
M6	0.00 - 1.70	Clay
	1.70 - 5.80	Mudstone
	5.80 - 6.10	Coal
	6.10 - 10.00	Mudstone

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY	14	140		
PREVIOUS	99	995		
TO DATE	113	1135		

D & G UK

DRILLING LOG SHEET

SITE: Highstone lane

CREW INITIALS: | RIG: CG

DATE: 19-11-25 | SHEET: 2 OF 2

EQUIPMENT USED:

LEAD DRILLER INITIALS	LEAD DRILLER SIGNED
D. Dobbs	

BH	DEPTH	STRATA DESCRIPTION
L7	0.00-1.80	Clay
	1.80-5.80	Mudstone
	5.80-6.10	Coal
	6.10-10.00	Mudstone
L8/M7	0.00-1.70	Clay
	1.70-5.90	Mudstone
	5.90-6.10	Coal
	6.10-10.00	Mudstone
M8	0.00-1.70	Clay
	1.70-5.80	Mudstone
	5.80-6.10	Coal
	6.10-10.00	Mudstone
L9	0.00-1.60	Clay
	1.60-5.70	Mudstone
	5.70-5.90	Coal
	5.90-10.00	Mudstone

BH	DEPTH	STRATA DESCRIPTION

BH	CASING DIA	CASING DEPTH

GAS READING	

TOTALS	BH's	DRILL	CASE	CORE
TODAY				
PREVIOUS				
TO DATE				

APPENDIX B

D&G Grouting Records

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 1 OF 2

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY	5.2	19.08		
DELIVERED PREVIOUS	0	0		
DELIVERED TOTAL	5.2	19.08		
TOTAL USED	1.15	11.5		
STOCK ON SITE	4.05	7.58		

DELIVERY TICKET DETAILS

PFA: 129691

CEM: GM109

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
A2	✓			0.11	0.01	0.1		
B2	✓			0.11	0.01	0.1		
C2	✓			0.11	0.01	0.1		
A3	✓			0.11	0.01	0.1		
B3	✓			0.11	0.01	0.1		
C3	✓			0.11	0.01	0.1		
D2	✓			0.11	0.01	0.1		
D3	✓			0.11	0.01	0.1		
A4	✓			0.11	0.01	0.1		
A5	✓			0.11	0.01	0.1		
B4	✓			0.11	0.01	0.1		
B5	✓			0.11	0.01	0.1		
C5	✓			0.11	0.01	0.1		
C4	✓			0.11	0.01	0.1		
M1	✓			0.11	0.01	0.1		
K1	✓			0.11	0.01	0.1		
S1	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES	NO / YES	NO / YES
370 mm	4 %	QTY 8

TODAY TOTAL	12.65	1.15	11.5		
PREVIOUS TOTAL	0	0	0		
TO DATE TOTAL	12.65	1.15	11.5		

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 2 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL USED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
H1	✓			0.11	0.01	0.1		
G1	✓			0.11	0.01	0.1		
F1	✓			0.22	0.02	0.2		
E1	✓			0.22	0.02	0.2		
D1	✓			0.11	0.01	0.1		
C1	✓			0.11	0.01	0.1		
B1	✓			0.11	0.01	0.1		
A1	✓			0.11	0.01	0.1		
D4	✓			0.11	0.01	0.1		
D5	✓			0.11	0.01	0.1		
E5	✓			0.11	0.01	0.1		
E4	✓			0.11	0.01	0.1		
E3	✓			0.11	0.01	0.1		
E2	✓			0.11	0.01	0.1		
F2	✓			0.11	0.01	0.1		
G2	✓			0.11	0.01	0.1		
F3	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 3 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL USED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
G3	✓			0.11	0.01	0.1		
F4	✓			0.11	0.01	0.1		
F5	✓			0.11	0.01	0.1		
G4	✓			0.11	0.01	0.1		
G5	✓			0.11	0.01	0.1		
H5	✓			0.11	0.01	0.1		
H4	✓			0.11	0.01	0.1		
H3	✓			0.11	0.01	0.1		
H2	✓			0.11	0.01	0.1		
J2	✓			0.11	0.01	0.1		
J3	✓			0.11	0.01	0.1		
J4	✓			0.11	0.01	0.1		
J5	✓			0.11	0.01	0.1		
L2	✓			0.11	0.01	0.1		
K3	✓			0.11	0.01	0.1		
M3	✓			0.11	0.01	0.1		
L4	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D - Dobbs	

DATE: 19-11-25 SHEET: 4 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL JSED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
K5	✓			0.11	0.01	0.1		
M5	✓			0.11	0.01	0.1		
K13	✓			0.11	0.01	0.1		
M13	✓			0.11	0.01	0.1		
L12	✓			0.11	0.01	0.1		
M11	✓			0.11	0.01	0.1		
L10	✓			0.11	0.01	0.1		
K9	✓			0.11	0.01	0.1		
M9	✓			0.11	0.01	0.1		
L8	✓			0.11	0.01	0.1		
M7	✓			0.11	0.01	0.1		
L6	✓			0.11	0.01	0.1		
AA1	✓			0.11	0.01	0.1		
AB1	✓			0.11	0.01	0.1		
AC1	✓			0.11	0.01	0.1		
AD1	✓			0.11	0.01	0.1		
AE1	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 5 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL USED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
AE2	✓			0.11	0.01	0.1		
AE4	✓			0.11	0.01	0.1		
AE3	✓			0.11	0.01	0.1		
AE5	✓			0.11	0.01	0.1		
AA5	✓			0.11	0.01	0.1		
AA4	✓			0.11	0.01	0.1		
AB5	✓			0.11	0.01	0.1		
AB4	✓			0.11	0.01	0.1		
AC5	✓			0.11	0.01	0.1		
AC4	✓			0.11	0.01	0.1		
AD5	✓			0.11	0.01	0.1		
AD4	✓			0.11	0.01	0.1		
G1/F1	✓			0.11	0.01	0.1		
E1/F1	✓			0.11	0.01	0.1		
D1/E1	✓			0.11	0.01	0.1		
AD3	✓			0.11	0.01	0.1		
AD2	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 6 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL JSED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
AC3	✓			0.11	0.01	0.1		
AC2	✓			0.11	0.01	0.1		
AB3	✓			0.11	0.01	0.1		
AB2	✓			0.11	0.01	0.1		
AA3	✓			0.11	0.01	0.1		
AA2	✓			0.11	0.01	0.1		
D/E2	✓			0.11	0.01	0.1		
D/E3	✓			0.11	0.01	0.1		
DS/E4	✓			0.11	0.01	0.1		
D/E5	✓			0.11	0.01	0.1		
E/F3	✓			0.11	0.01	0.1		
E3/F4	✓			0.11	0.01	0.1		
E/F5	✓			0.11	0.01	0.1		
F/G5	✓			0.11	0.01	0.1		
E1/F2	✓			0.11	0.01	0.1		
F2/G3	✓			0.11	0.01	0.1		
F3/G3	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

D & G UK

GROUTING LOG SHEET

SITE: Highstone lane

CREW INTIALS:

LEAD GROUTER INTIALS	LEAD GROUTER SIGNED
D. Dobbs	

DATE: 19-11-25 SHEET: 7 OF 7

GROUTING METHOD USED: BAGGED GROUT / BULK GROUT

	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
DELIVERED TODAY				
DELIVERED PREVIOUS				
DELIVERED TOTAL				
TOTAL USED				
STOCK ON SITE				

DELIVERY TICKET DETAILS

BH REF	FULL	NOT FULL	P.S.I	GROUT QUAN (T)	CEMENT	BAG GROUT P.F.A	SAND	PEA GRAVEL
M2	✓			0.11	0.01	0.1		
L3	✓			0.11	0.01	0.1		
M3/L4	✓			0.11	0.01	0.1		
M4	✓			0.11	0.01	0.1		
L5	✓			0.11	0.01	0.1		
L6/M6	✓			0.11	0.01	0.1		
M6	✓			0.11	0.01	0.1		
L7	✓			0.11	0.01	0.1		
L8/M7	✓			0.11	0.01	0.1		
M8	✓			0.11	0.01	0.1		
L9	✓			0.11	0.01	0.1		

SLUMP TEST	BLEED TEST	CUBE SAMPLES
NO / YES...	NO / YES...	NO / YES
mm	%	QTY

TODAY TOTAL					
PREVIOUS TOTAL					
TO DATE TOTAL					

APPENDIX C

Laboratory Test Results Summary

SOCOTEC UK Limited
Unit E Broadheath Network Centre
Atlantic Street, Broadheath
Altrincham
WA14 5EW, United Kingdom
Telephone: 01925 286220

Concrete Test Report

TEST REPORT

UKAS TESTING 0001

Project Details

Client:	**DEMOLITION AND GEOTECHNICAL LIMITED**
Client Address:	GRANBY HOUSE HIGH STREET BAWTRY DONCASTER DN10 6BF
Project:	**P251402 - D&G Limited - Granby House, Bawtry, Doncaster**

Report Details

Report No.:	CONC:NOR25-13199-C0001
Report Date:	17/12/2025
Issue No.:	2
Recipients:	Thomas Perks

Field Details and Results

Location in Works: HIGHSTONE LANE **Mix:** G10

Fresh Concrete Sampling performed by third party and not covered under this laboratory's accreditation

Sample ID: NOR25-13199-C0001 **Client Sample ID:** NOR072156

Compressive Strength of test specimens (100 mm Cube)

Making and initial curing of specimens for strength tests performed by third party and not covered under this laboratory's accreditation

Date and Time Made: 19/11/2025 12:25 **Date and Time Received:** 08/12/2025 10:24

Laboratory Test Methods: BS EN 12390-7 - 2019, BS EN 12390-1 - 2021, BS EN 12390-3 - 2019

Specimen ID	Client ID	Age at Test (Days)	Test Date	Width/Depth/ Height (mm)	Density (kg/m³)	Failure Load (kN)	Compressive Strength (N/mm²)	Specified Strength (N/mm²)
018014\A	HL-1	23	12/12/2025	100/100/100	1570	17.8	1.8	
Mass Determination: As Received.								
018014\B	HL-2	23	12/12/2025	100/100/100	1580	15.7	1.6	
Mass Determination: As Received, Specimen Assessment: Polymould.								
018014\C	HL-3	28	17/12/2025	100/100/100	1560	25.8	2.6	
Specimen Assessment: Polymould.								
018014\D	HL-4	28	17/12/2025	100/100/100	1580	21.6	2.2	
Specimen Assessment: Polymould.								

Notes

The following apply unless otherwise stated in specimen notes:

Laboratory curing tank temperature range (°C): 18 to 22.
Specimen appearance as received satisfactory.
Specimens transported within 16 hours of making are classified as deviating from the standard requirements.

BS EN 12390-7 - 2019
Hardened concrete density test carried out in saturated condition.
Volume determined by measurement or designated size. Any fins removed by abrasive stone.
BS EN 12390-3 - 2019
Specimen failure normal, specimen appearance normal.

Signed:

Signed Date: 17/12/2025

Paul Haddock - Project Manager

For and on behalf of SOCOTEC UK Limited
Certified that testing was carried out in accordance with the test methods identified herein. This test report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

SOCOTEC UK Limited
Unit E Broadheath Network Centre
Atlantic Street, Broadheath
Altrincham
WA14 5EW, United Kingdom
Telephone: 01925 286220

Concrete Test Report

TEST REPORT

UKAS TESTING 0001

Project Details

Client:	**DEMOLITION AND GEOTECHNICAL LIMITED**
Client Address:	GRANBY HOUSE HIGH STREET BAWTRY DONCASTER DN10 6BF
Project:	**P251402 - D&G Limited - Granby House, Bawtry, Doncaster**

Report Details

Report No.:	CONC:NOR25-13199-C0002
Report Date:	17/12/2025
Issue No.:	2
Recipients:	Thomas Perks

Field Details and Results

Location in Works: HIGHSTONE LANE **Mix:** G10

Fresh Concrete Sampling performed by third party and not covered under this laboratory's accreditation

Sample ID: NOR25-13199-C0002 **Client Sample ID:** NOR072157

Compressive Strength of test specimens (100 mm Cube)

Making and initial curing of specimens for strength tests performed by third party and not covered under this laboratory's accreditation

Date and Time Made: 19/11/2025 12:26 **Date and Time Received:** 08/12/2025 10:25

Laboratory Test Methods: BS EN 12390-7 - 2019, BS EN 12390-1 - 2021, BS EN 12390-3 - 2019

Specimen ID	Client ID	Age at Test (Days)	Test Date	Width/Depth/ Height (mm)	Density (kg/m³)	Failure Load (kN)	Compressive Strength (N/mm²)	Specified Strength (N/mm²)
018015\A	HL-5	23	12/12/2025	100/100/100	1550	20.7	2.1	
Mass Determination: As Received, Specimen Assessment: Polymould.								
018015\B	HL-6	23	12/12/2025	100/100/100	1560	18.5	1.8	
Mass Determination: As Received, Specimen Assessment: Polymould.								
018015\C	HL-7	28	17/12/2025	100/100/100	1510	21.0	2.1	
018015\D	HL-8	28	17/12/2025	100/100/100	1570	27.1	2.7	

Notes

The following apply unless otherwise stated in specimen notes:

Laboratory curing tank temperature range (°C): 18 to 22.
Specimen appearance as received satisfactory.
Specimens transported within 16 hours of making are classified as deviating from the standard requirements.

BS EN 12390-7 - 2019
Hardened concrete density test carried out in saturated condition.
Volume determined by measurement or designated size. Any fins removed by abrasive stone.

BS EN 12390-3 - 2019
Specimen failure normal, specimen appearance normal.

Signed:

Signed Date: 17/12/2025

Paul Haddock - Project Manager

For and on behalf of SOCOTEC UK Limited
Certified that testing was carried out in accordance with the test methods identified herein. This test report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

GROUNDSMITHS
GEOTECHNICAL ENGINEERS